HARMONY GROVE VILLAGE

VOLUME 1 OF 2

APPENDIX D

TRAFFIC IMPACT ANALYSIS

VTM 5365; GPA 04-04; MUP 04-012, MUP 04-013, and MUP 04-014;
REZ 04-010; SP 04-03; Log No. 04-08-011; SCH No. 2004071004

for the

DRAFT ENVIRONMENTAL IMPACT REPORT

AUGUST 2006

LINSCOTT
LAW &
GREENSPAN
engineers

TRAFFIC IMPACT ANALYSIS

HARMONY GROVE VILLAGE

County of San Diego, California
July 18, 2006

VTM 5365; GPA 04-04; MUP 04-012; MUP 04-013; MUP 04-014;

REZ 04-010; SP 04-03; LOG NO.04-08-011; SCH # 2004071004

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INFORMATION FOR THE READER

This technical report contains environmental information related to a number of potential project element options or design scenarios. Some of these options/design scenarios comprise part of the Proposed Project and are analyzed in the project environmental impact report (EIR). Other options/design scenarios have been retained within the technical report for purposes of environmental documentation (e.g., in case it becomes necessary to rely upon one or more of these options, or elements thereof, in the future as project planning progresses), but are not carried forward into the EIR as outlined below.

In addition to evaluation of Proposed Project facilities, the following report incorporates discussion of several possible on- and off-site roadway upgrades. Three of the off-site roadway options (A, B and C) are designed to address critical access requirements for the proposed development, with the inclusion of one of these three options mandatory for implementation of the Proposed Project. All three noted roadway options related to critical project access requirements have been retained in this technical study for the reasons noted above, although full discussions of these options are not included in the project EIR. Specifically, only Option B (the extension of new Village Road) comprises part of the Proposed Project in the EIR. Option A (consisting of one scenario of upgrades to Harmony Grove Road) is not being pursued at this time and is not included in the EIR, while Option C (a differing scenario of improvements to Harmony Grove Road) is included in Chapter 5.0 of the EIR as an alternative.

This technical report also evaluates three options to address traffic loading near Avenida del Diablo/Citracado Parkway, including two options involving cul-de-sacs on nearby roadways, as well as a third option involving a raised median on Citracado Parkway to preclude vehicle turn movements onto Avenida Del Diablo. Of these three options, only the described use of a raised median on Citracado Parkway is carried forward into the project EIR as part of the Harmony Grove Village Proposed Project design.

This technical report also addresses design speed options of 30, 35, 40 and 45 mph along on-site portions of Country Club Drive/Village Drive. Of these four design speed options, only the 30, 35 and 40 mph design speeds are carried forward into the project EIR for on-site portions of the roadway, and only the 40 mph design scenario is presented in the EIR for the portion of new Village Road between Harmony Grove Road and Citracado Parkway. The 40 mph design speed has been incorporated into the Harmony Grove Village Proposed Project description (assumed design). Existing conditions, potential impacts and associated mitigation are discussed as applicable in this report for each of the described potential on- and off-site roadway options.

The remaining off-site roadway improvement options involve a number of potential designs to address various speed limit scenarios along portions of Harmony Grove Road and Country Club Drive, as well as options to address traffic loading near the intersection of Avenida del Diablo and Citracado Parkway. Specifically, this technical report evaluates 30, 35, 40 and 45 mph design speeds for off-site segments of Country Club Drive north of the site, as well as 30, 35 and 40 mph design speeds along the off-site portion of Harmony Grove Road abutting the southeastern site boundary. Similar to the above discussion of roadway options A, B and C, full discussions of the potential off-site roadway improvement scenarios related to design speed options for Country Club Drive have not been carried forward into the project EIR. Specifically, of the described scenarios evaluated in this technical report for off-site Country Club Drive, only the 30, 35, and 40 mph design speed options are evaluated in the EIR.

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TRAFFIC IMPACT ANALYSIS

HARMONY GROVE VILLAGE

County of San Diego, California
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VTM 5365; GPA 04-04; MUP 04-012; MUP 04-013; MUP 04-014;
REZ 04-010; SP 04-03; LOG NO 04-08-011; SCH # 2004071004

1.0 INTRODUCTION

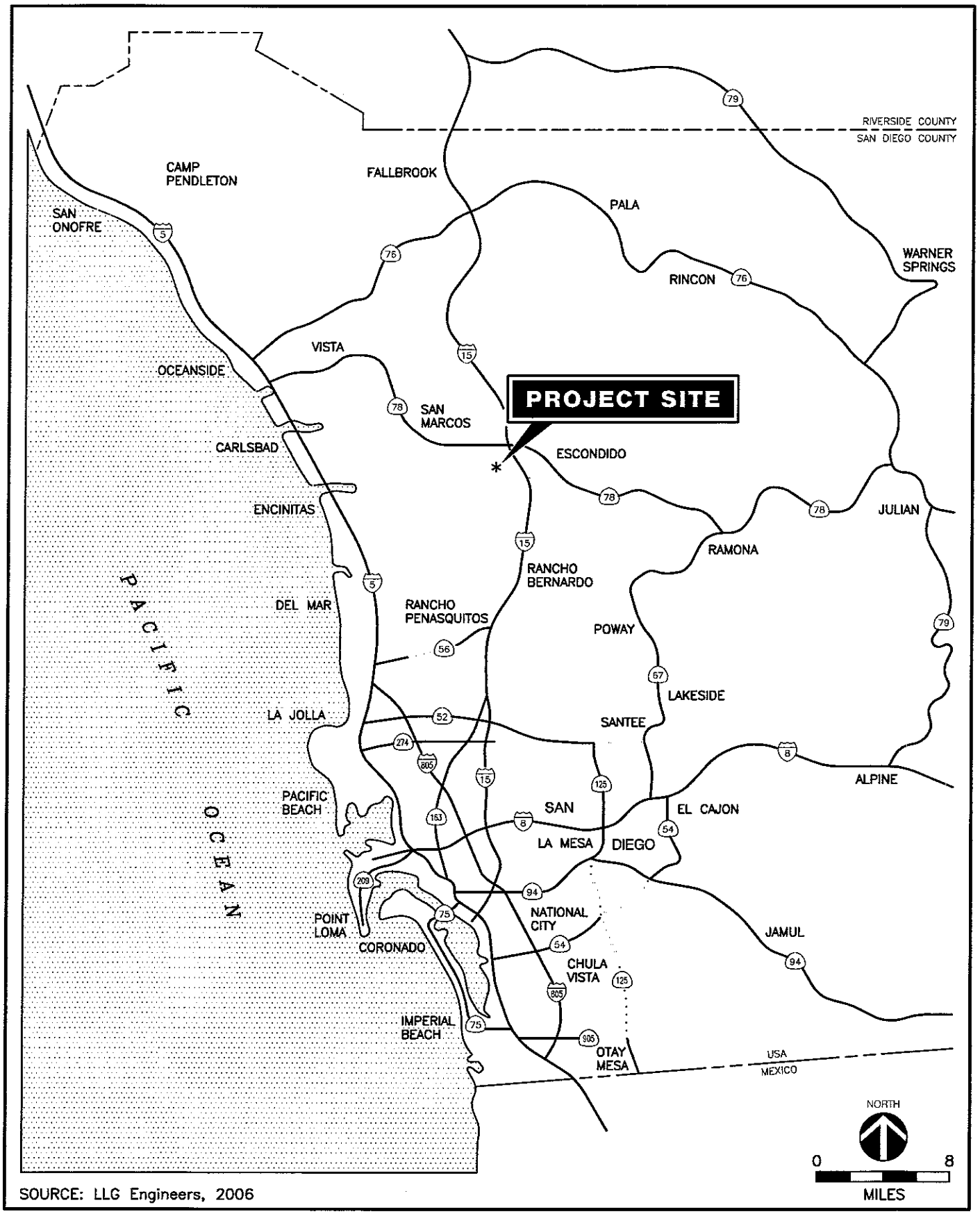
The Harmony Grove Village project is located on a 468-acre site located north of Harmony Grove Road and west of Country Club Drive in San Diego County. The project is proposing to develop 710 residential single-family units, 32 live / work lofts with 16,500 square-feet of retail, a 25,000-square foot village core, an equestrian park, public and private parks, and a fire station. The project also includes the proposed development of a private equestrian facility and 3,500 square feet (SF) of equestrian related retail, south of Harmony Grove.

This traffic study analyzes the potential impacts to the local street network due to the implementation of the project. Four scenarios are assessed in the study; the Existing, Existing + Project, Existing + Project + Cumulative Projects, and Year 2030 scenarios. The three roadway network alternatives were analyzed at an equal level of detail and are discussed further throughout the report.

The following sections are included in this report:

- Project Description
- Existing Conditions
- Analysis Approach & Methodology
- Significance Criteria
- Trip Generation, Distribution& Assignment
- Cumulative Projects
- Analysis of Near-Term Scenarios
- Analysis of Year 2030 Scenarios
- CMP Analysis
- Significance of Impacts & Mitigation Measures

Figure 1–1 is the vicinity map and ***Figure 1–2*** depicts the project area.



SOURCE: LLG Engineers, 2006

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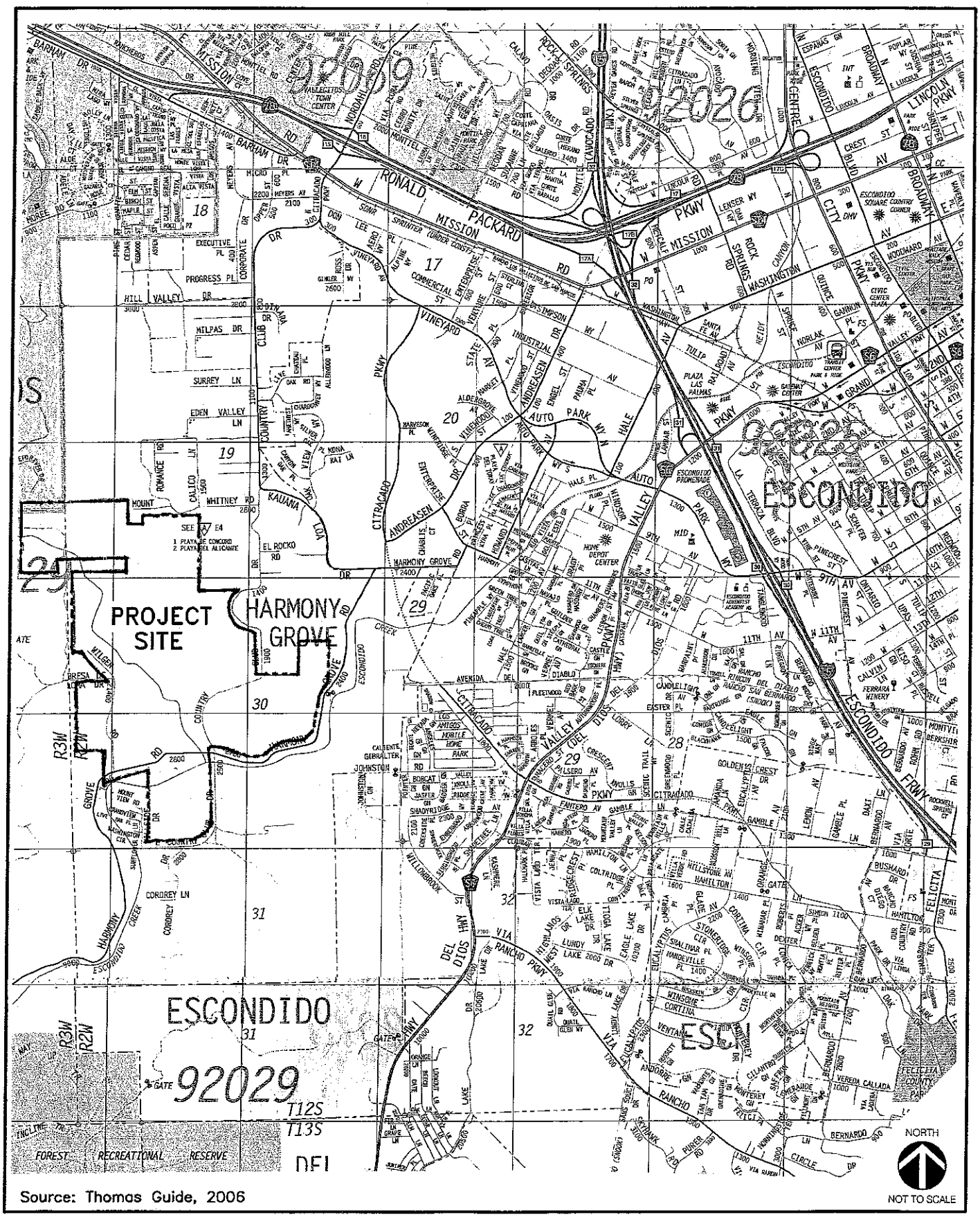
Figure 1-1

Vicinity Map



Source: Thomas Guide, 2006

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Figure 1-2

Project Area Map

2.0 PROJECT DESCRIPTION

2.1 Land Use

The proposed project is located southwest of the City of Escondido in the County of San Diego. The site is located north of Harmony Grove Road and is bound by Country Club Drive and Wilgen Road. A small portion of the units will be located to the east of Country Club Drive. The proposed project would develop Harmony Grove Village as a rural residential community with a small community / commercial core. The proposed project includes the development of 710 residential single-family units, 32 live / work lofts with 16,500 square-feet of retail, a 25,000-square foot village core, an equestrian park, public and private parks, an institutional site (assumed to be a tack and feed store), and a fire station. Harmony Grove Village will be linked by a public street system and a multi-use trail system that accommodates horses, people, and non-motorized bikes.

Figure 2–1 shows a conceptual project site plan.

In addition, a private equestrian facility and 3,500 SF of equestrian related retail are included as part of this project. This facility is located south of Harmony Grove Road and east of Country Club Drive and is proposed to accommodate up to 100 horses for boarding and training. It is anticipated that approximately eight times per year this equestrian facility will host a horse show for up to 120 horses at each show, in addition to the 80 horses boarded on-site. The shows are expected to last approximately three-days over the weekend (primarily on Saturdays and Sundays). Not all of the horses and patrons attending the show will be there on the same day, as the events take place throughout the weekend.

2.2 Project Access

Primary access to the site is provided via Harmony Grove Road and Country Club Drive (see *Figure 2–1*). Entrance # 1 is proposed on Harmony Grove Road just west of Country Club Drive; this entrance is proposed as the primary access for the site. Entrance's # 2 and # 3 are proposed on Country Club Drive just north of Harmony Grove Road. These entrance's will provide access to the entire site west of Country Club Drive including the Village Core and are located north of the Country Club Drive / Harmony Grove Road intersection. Entrance's #3 and # 6 will provide access to the units on the east side of Country Club Drive. The existing Wilgen Road is also proposed to provide access to the project site (entrance # 4). These access points are proposed for all three of the network alternative options described in the following section. The distance between each access point and their adjacent intersections was assessed and all are greater than 300 feet; according to the County of San Diego Public Roads Design Standards for intersections, the centerlines of non-Circulation Element and Circulation Element roadways must be separated by at least 300 feet.

2.3 Proposed Circulation Network Improvements

Due to the limited circulation network in the project vicinity, the project is proposing several different improvements in the area. The project is proposing to reclassify Harmony Grove Road along the project frontage between Wilgen Road and Country Club Drive to a Town Collector roadway, reclassify Country Club Drive between Citracado Parkway and Harmony Grove Road to either a Town Collector, Light Collector, Rural Light Collector, Minor Collector or a Residential Collector, and construct a new roadway called Village Road to connect Harmony Grove Road to Country Club Drive.

Village Road will be classified as either a Rural Light Collector, Minor Collector, or a Residential Collector. It is also proposed to reclassify Harmony Grove Road/Elfin Forest Road as a Rural Light Collector between San Marcos and Escondido, except for the portion listed above.

In addition, three network alternatives were analyzed at an equal level of detail, as discussed below. It is assumed that the described network improvements are built as part of the project. ***Figures 2–2***, ***2–3***, and ***2–4*** show the individual improvements for each option, Option A, B, and C, respectively. Option B is considered the proposed project.

2.3.1 *Option A*

Harmony Grove Road currently intersects with Enterprise Street just west of Andreason Drive. Under Option A, the project is proposing to widen Harmony Grove Road to 4-lanes between the new Village Road and Kauana Loa Drive. In addition, a realignment of Harmony Grove Road in a northeast direction and construction of, and connection to, a short segment of Citracado Parkway is also proposed. A cul-de-sac would be constructed on the existing portion of Harmony Grove Road just east of the new alignment. The benefit of Option A is that traffic would be routed to the four-lane roadways, Andreason Drive and Auto Park Way, away from the more narrow sections of Harmony Grove Road within the City of Escondido. Option A would require a General Plan Amendment (GPA) to the Circulation Element and a Road Vacation. *Figure 2–3* shows the proposed location of the cul-de-sac.

Under Option A, the project is proposing to conduct capacity improvements at the Valley Parkway / Via Rancho Parkway intersection and the Andreason Drive / Auto Park Way intersection. The improvements at the Valley Parkway / Via Rancho Parkway intersection include the provision of a dedicated left-turn lane and a dedicated right-turn lane on the east leg, and the provision of dual through lanes and a dedicated right-turn lane on the south leg. The improvements at the Andreason Drive / Auto Park Way intersection include the provision of an additional left-turn lane on both the north and south legs.

Figure 2-2 shows the proposed improvements for Option A.

2.3.2 *Option B*

Option B consists of constructing a new roadway connecting Harmony Grove Road to an extension of Citracado Parkway. The benefit of constructing a new roadway (Village Road), connecting

Country Club Drive to the extension of Citracado Parkway, is that traffic would be provided with a direct connection to the four-lane Citracado Parkway arterial to then travel north or south. Traffic would be alleviated on the two lane portions of Harmony Grove Road between Country Club Drive and Hale Avenue.

Like Option A, this option includes the provision of a dedicated left-turn lane and a dedicated right-turn lane on the east leg, and the provision of dual through lanes and a dedicated right-turn lane on the south leg at the Via Rancho Parkway / Valley Parkway intersection.

Figure 2-3 shows the proposed improvements for Option B; these improvements are considered to be part of the project.

2.3.3 *Option C*

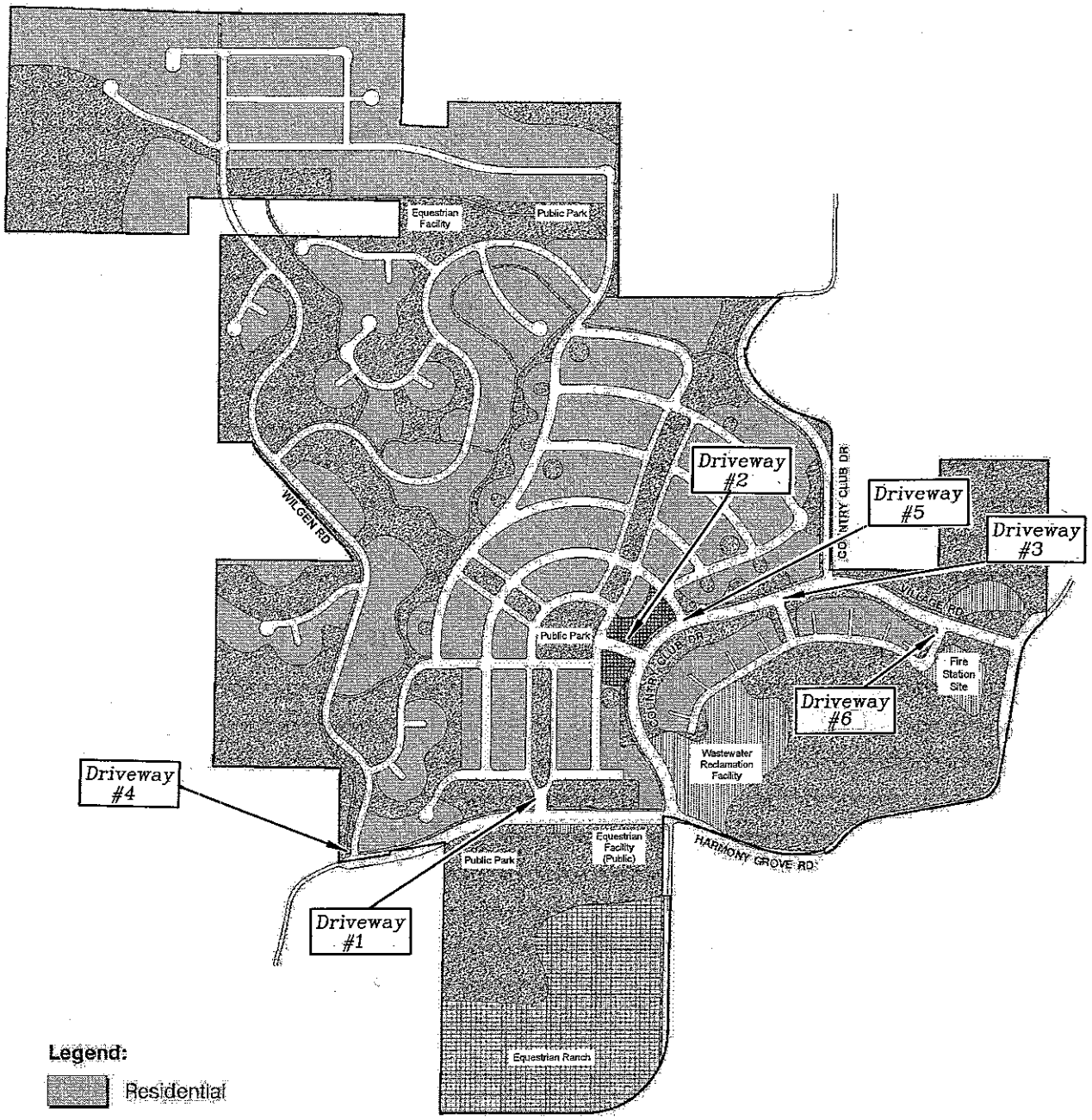
Option C consists of widening Harmony Grove Road to 4-lanes, as proposed for Option A, between Village Road and Kauana Loa Drive. In addition, Option C consists of widening the existing Harmony Grove Road from two lanes to four lanes between Kauana Loa Drive to Hale Avenue.

Like Options A and B, Option C would include the above improvements at the Via Rancho Parkway / Valley Parkway intersection. Option C serves as the plan-to-ground analysis since no new network links (only widening) are proposed.

Figure 2-4 shows the proposed improvements for Option C, these improvements are considered to be part of the project. ***Figure 2–5*** shows the roadway classification and continuity of Harmony Grove Road as it is planned in each of the three options described above.

The proposed Circulation Element classifications for Harmony Grove Road include transitions from two-lane to three-lane sections and from two-lane to four-lane sections. The three-lane sections are proposed to be County Town Collectors, which only includes a two-way-left-turn lane between the two directions of travel. Additional through lanes are not provided. The Town Collector standard is proposed for the portion between Wilgen Road and Country Club Drive given that driveways are proposed on both sides of the road to serve the project. Standard transitions / taper lengths can be designed based on the actual needs on Harmony Grove Road to transition from the two-lane section to a three-lane section.

Providing a three-lane section on Harmony Grove Road between Country Club Drive and the proposed Village Road is *not* recommended. The volumes do not warrant three lanes and the available right-of-way is not sufficient along this section of road to provide the three lanes. Most importantly, there are no significant driveways along this portion of Harmony Grove Road that would benefit from the provision of a two-way-left-turn lane. The transition from a two-lane section to a four-lane section can be accommodated by beginning the widening at Village Road and utilizing standard transition lengths based on the speeds on Harmony Grove Road.



Source: Rick Engineering Co, 2005

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Figure 2-1

Conceptual Site Plan

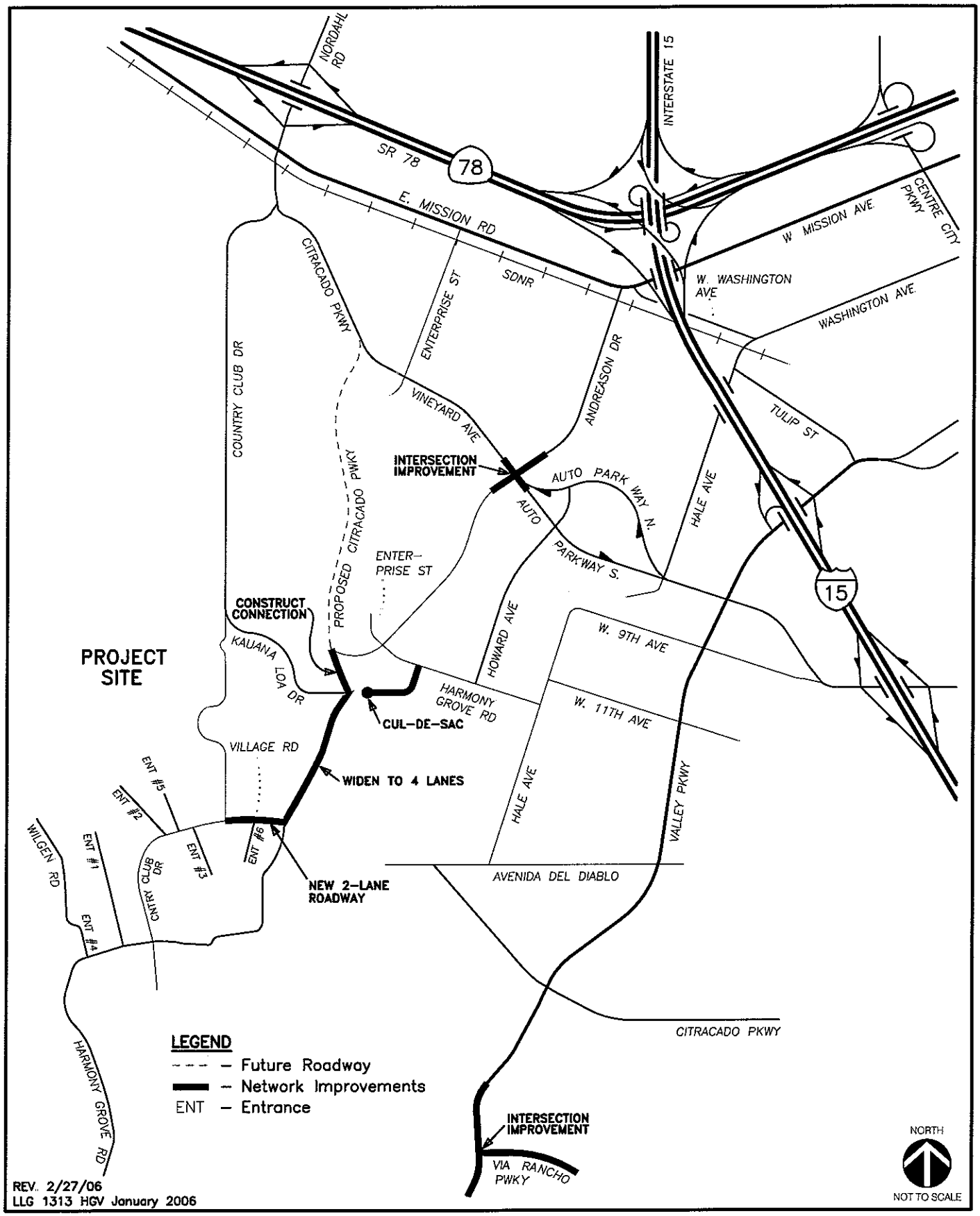

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Figure 2-2

OPTION A: Roadway Network

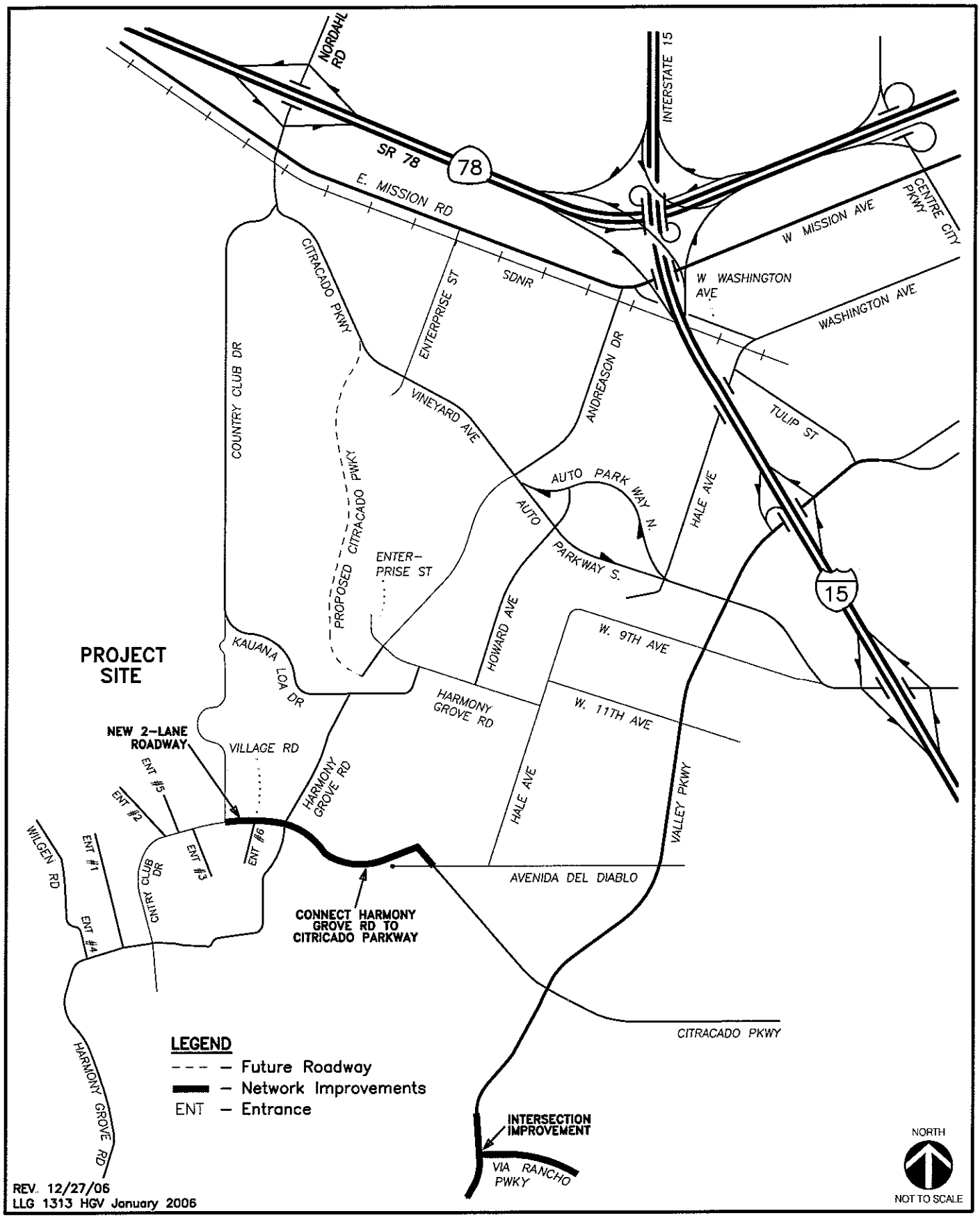

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Figure 2-3

OPTION B: Roadway Network

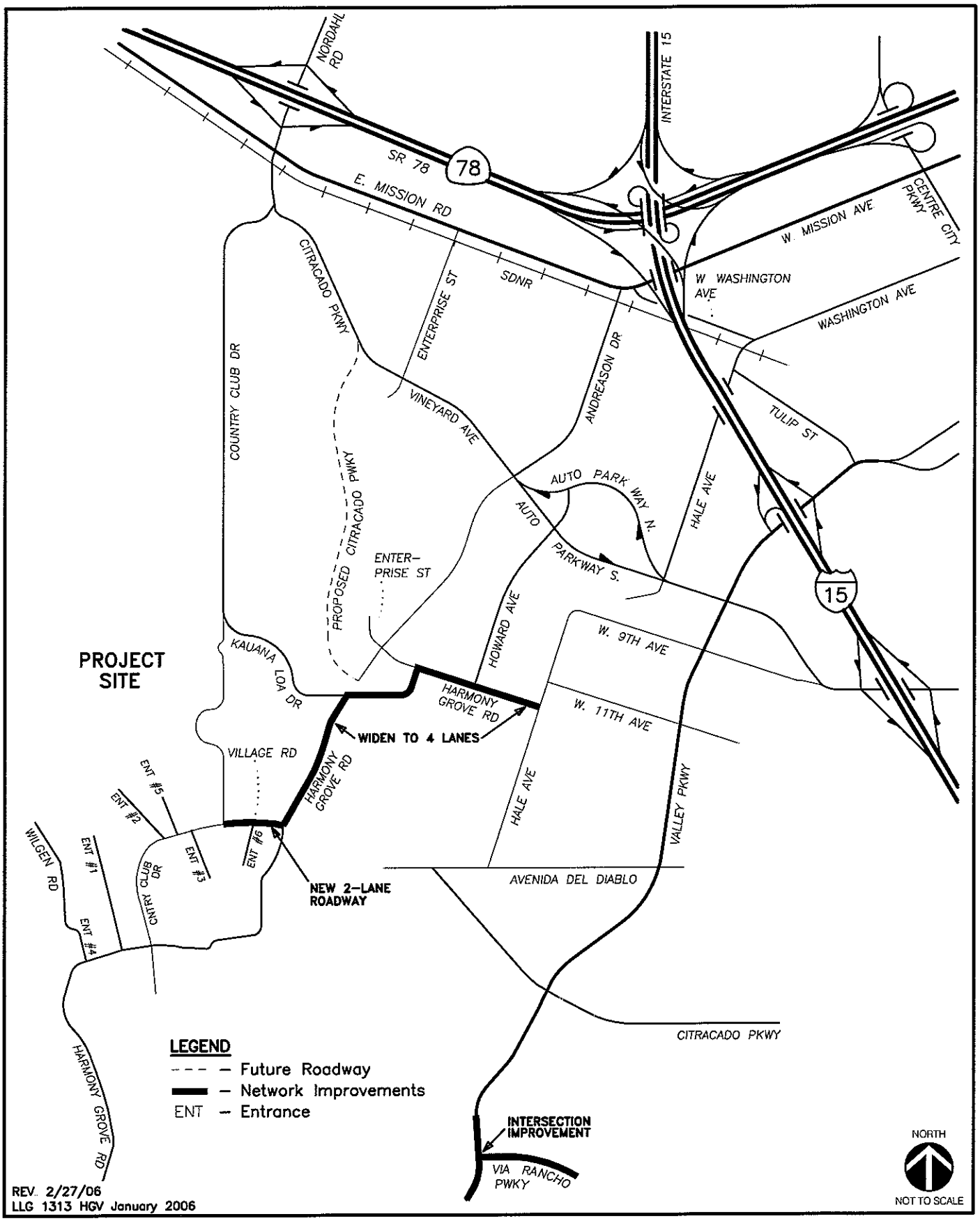

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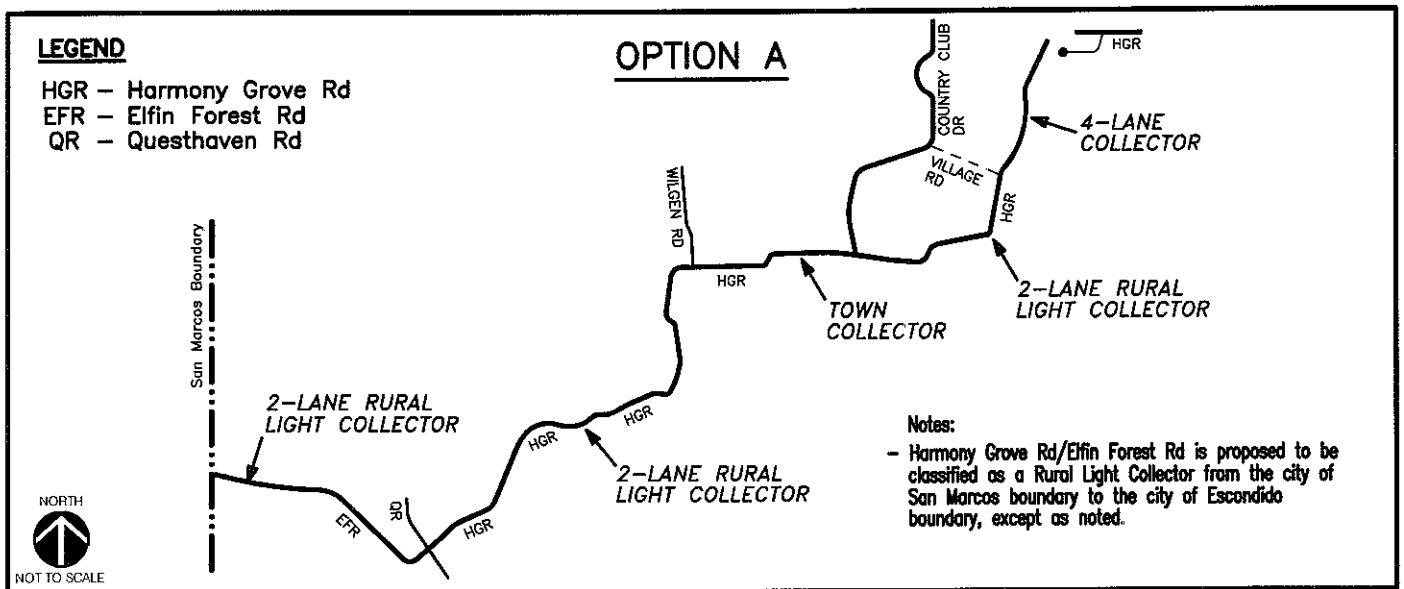
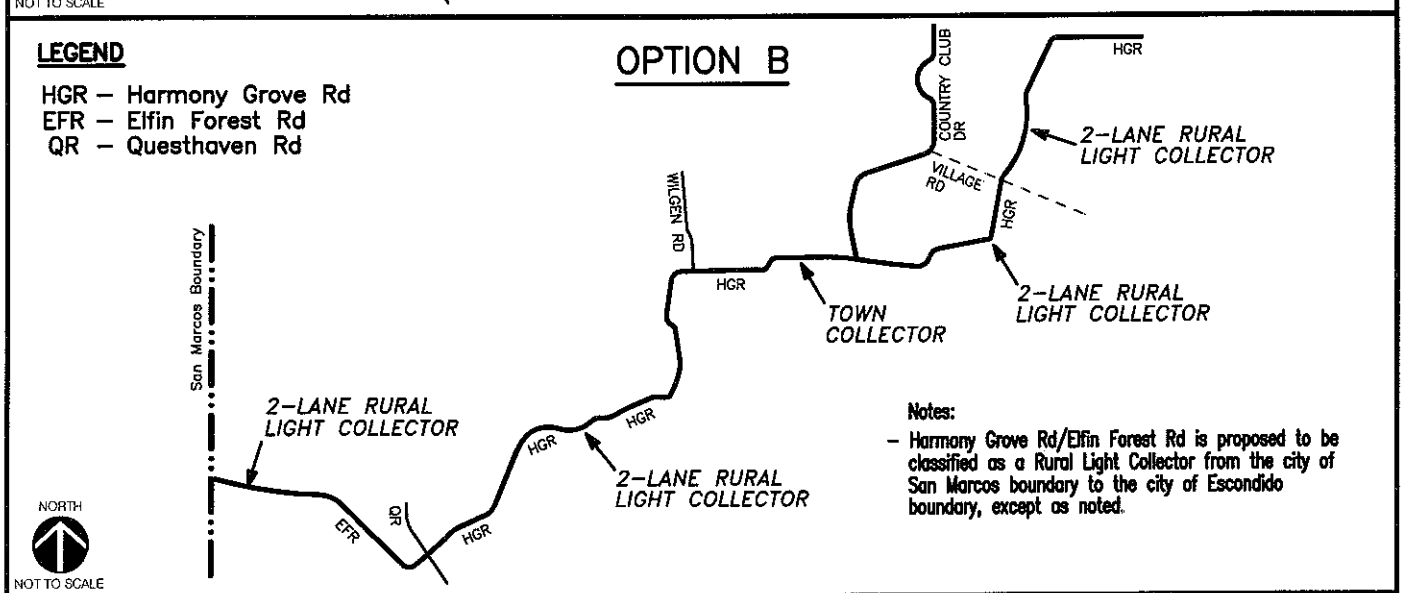
Figure 2-4

OPTION C: Roadway Network





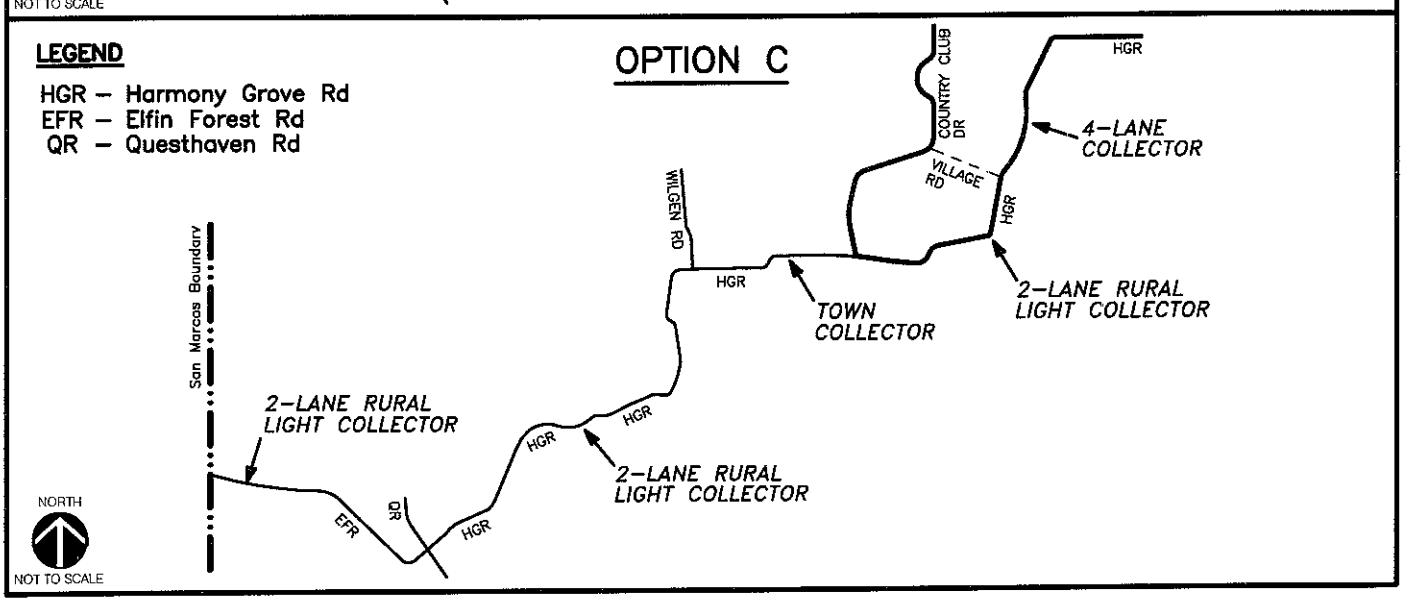


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Figure 2-5

Elfin Forest Rd/Harmony Grove Road Proposed Street Classification

3.0 EXISTING CONDITIONS

3.1 Study Area

The project study area was determined from a Select Zone assignment conducted for this project. The Select Zone assignment is prepared by SANDAG and depicts the project trip assignments on the street network. Segments and key intersections with 25 or more peak hour trips were included in the study area, which is half of the amount set forth by the SANTEC / ITE Traffic Impact Study document (March 2, 2000, pg 4), as requested by the County Department of Public Woks (DPW) at the April 26th meeting. The trip threshold was halved in recognition of the fact that the City of San Diego is planning to cut their significance threshold for LOS F in half. The assignment of project traffic is described later in this report in Section 7.0, Project Trip Generation, Distribution and Assignment.

Based on the above criteria, the following intersections and segments were included in the study. ***Figure 3–1*** depicts the study area segments and intersections listed below.

Intersections

Note: [1] Future intersection

1. Nordahl Road / SR 78 Westbound Ramps
2. Nordahl Road / SR 78 Eastbound Ramps
3. Nordahl Drive / East Mission Road
4. Nordahl Road / Country Club Drive
5. Country Club Drive / Kauana Loa
6. Country Club Drive / Entrance # 3[1]
7. Country Club Drive / Village Road[1]
8. Harmony Grove Road / Village Road[1]
9. Country Club Drive / Entrance # 2[1]
10. Country Club Drive / Harmony Grove Road
11. Harmony Grove / Entrance # 1[1]
12. Wilgen Road / Harmony Grove Road
13. Citracado Parkway / Vineyard Avenue[1]
14. Kauana Loa / Harmony Grove
15. Andreason Drive / Auto Park Way
16. Andreason Drive / Enterprise Road
17. Enterprise Road / Harmony Grove Rd
18. Howard Avenue / Harmony Grove Rd
19. Hale Avenue / Auto Park Way
20. Hale Avenue / West 11th Avenue
21. Hale Avenue / Harmony Grove Road
22. Avenida del Diablo / Citracado Parkway
23. Avenida del Diablo / Hale Avenue
24. Valley Parkway / I-15 NB Ramps
25. Valley Parkway / I-15 SB Ramps

Intersections *(continued)*

26. Valley Parkway / Auto Park Way
27. Valley Parkway / West 9th Avenue
28. Valley Parkway / 11th Street
29. Valley Parkway / Avenida del Diablo
30. Valley Parkway / Citracado Parkway
31. Valley Parkway / Via Rancho Parkway
32. Auto Park Way / W. 9th Avenue
33. I-15 SB Ramps / W. 9th Avenue
34. I-15 NB Ramps / W. 9th Avenue
35. San Elijo Road / Rancho Santa Fe Rd
36. Via Rancho Parkway / I-15 SB Ramps
37. Via Rancho Parkway / I-15 NB Ramps
38. Country Club Drive / Entrance # 5[1]
39. Village Road / Entrance # 6[1]

[1] Proposed Harmony Grove Village Site Entrance.

Segments

- **Harmony Grove Road**
  - Questhaven Road to Wilgen Road
  - Wilgen Road to Country Club Drive
  - Country Club Drive to Village Road
  - Village Road to Kauana Loa
  - Kauana Loa to Enterprise Street
  - Enterprise Street to Howard Avenue
  - Howard Avenue to Hale Avenue

- **Elfin Forest Road**
  - San Elijo Road to Questhaven Road

- **Country Club Drive**
  - Vineyard Avenue to Kauana Loa Drive
  - Kauana Loa Drive to Village Road
  - Village Road to Harmony Grove

- **East Mission Road**
  - West of Nordahl Road

- **Village Road**
  - Country Club Drive to Harmony Grove Road *(does not exist)*
  - Harmony Grove Road to Citracado Parkway *(does not exist, constructed for Option B only)*

Street Segments *(continued)*

- **Kauana Loa**
  - Harmony Grove to Country Club Drive

- **Nordahl Road**
  - North of SR-78
  - SR-78 to Mission Road
  - Mission Road to Country Club Drive

- **Andreason Drive**
  - Vineyard Avenue to Enterprise Street

- **Vineyard Avenue**
  - Country Club Drive to Enterprise Street
  - Enterprise Street to Andreason Drive

- **Auto Park Way**
  - Andreason Drive to Hale Avenue (north)
  - Andreason Drive to Hale Avenue (south)
  - Hale Avenue to Valley Parkway
  - Valley Parkway to West 9th Street

- **Hale Avenue**
  - W. 9th Street to Harmony Grove Road
  - Harmony Grove Road to Avenida Del Diablo

- **West 9th Street**
  - Hale Avenue to Valley Parkway
  - Valley Parkway to Auto Park Way
  - Auto Park Way to I-15

- **Avenida Del Diablo**
  - Citracado Parkway to Hale Avenue
  - Hale Avenue to Valley Parkway

- **Citracado Parkway**
  - Avenida del Diablo to Valley Parkway

- **Via Rancho Parkway**
  - East of Valley Parkway

- **Valley Parkway**
  - Tulip Street to I-15
  - I-15 to Auto Park Way
  - Auto Park Way to West 11th Street

- **Valley Parkway** *(continued)*
  - West 11th Street to Avenida del Diablo
  - Avenida del Diablo to Citracado Parkway
  - Citracado Parkway to Via Rancho Parkway
  - South of Via Rancho Parkway

3.2 Street Network

The project adds traffic to roadways in both the City of Escondido and the County of San Diego. The following is a description of the project area roadways within each jurisdiction. ***Figure 3–2*** shows an existing conditions diagram for the key street segments. ***Figure 3–3*** depicts the existing intersection geometry.

CITY OF ESCONDIDO

Nordahl Road is classified as a four-lane Major Road north of SR 78 (in the City of San Marcos) and a six-lane Major Road south of SR 78. Currently, it is a four-lane divided road from Mission Road to north of SR 78 in the study area. Curb, gutter, sidewalk and a raised median are provided. Parking is not permitted and bike lanes are provided.

The City plans to widen Nordahl Road / Citracado Parkway between Country Club Drive and the SR 78 Eastbound Ramps from the current 4-lanes to 6-lanes. In the northbound direction the third lane will end in a northbound right-turn lane at the Nordahl Road / SR 78 Eastbound Ramps and in the southbound direction, the third lane will end in a southbound right-turn lane at the Citracado Parkway / Country Club Drive intersection. This improvement is currently in the design phase.

Citracado Parkway is classified as a Four-Lane Major Road from East Mission Road to Country Club Drive and south from Vineyard Avenue to Interstate 15. Currently, it is a four-lane road from East Mission Road to Country Club Drive. As explained above, it is planned to widen this segment to a six-lane section. Curb, gutter and sidewalk are provided. The posted speed limit is 40 mph. The sections of Citracado Parkway from Vineyard Road to Avenida Del Diablo and from Scenic Trail to Gamble Lane are not built. The Escondido Research and Technology Center project is conditioned to construct Citracado Parkway between Vineyard Avenue and Andreason Drive. This construction is planned to be completed by the end of 2006.

The planned completion of Citracado Parkway between Andreason Drive and Avenida del Diablo is estimated to occur in 2010; the construction, however, is not funded at this time. All near-term analysis assumes this portion of Citracado Parkway is *not* built. The construction of Citracado Parkway between Vineyard Avenue and Andreason Drive is fully funded and a condition of the ERTC development. The completion of this roadway is therefore assumed in the near-term analysis.

Vineyard Avenue is classified as a Four-Lane Collector. Currently, it is a two-lane road with a center two-way left-turn lane and parking along both curbs. The posted speed limit on Vineyard Drive is 40 mph.

Andreason Drive is classified as a collector on the City of Escondido Circulation Element. It currently generally provides one lane in each direction and is "STOP" controlled at Enterprise Street and signalized at Auto Park Way.

Auto Park Way North / South are classified as Collectors. This is a two-lane one-way pair of streets with curb, gutter and sidewalk. The posted speed limit in the study area is 40 mph.

Howard Avenue is a Two-lane Local Collector with curb, gutter and sidewalk and parking on both sides. This street serves several residential driveways.

Harmony Grove Road (City of Escondido) is classified as a Two-lane Local Collector. Currently, it is a two-lane undivided roadway with dirt shoulders. Parking is not provided and the posted speed limit is 40 mph.

Hale Avenue is classified as a Two-lane Local Collector with curb, gutter and sidewalk provided. There is parking provided and the posted speed limit is 40 mph.

Valley Parkway (City of Escondido) is classified as a Prime Arterial between I-15 and Ninth Avenue, and as a Major Road south of Ninth Avenue. Valley Parkway generally provides six lanes north of Ninth Avenue, four lanes between Ninth Avenue and Eleventh Avenue and two lanes between Via Rancho Parkway and Eleventh Avenue. The posted speed limit in the vicinity of the project is 35 mph north of Eleventh Avenue, 45 mph north of Citracado Parkway and 50 mph south of Citracado Parkway. Bike lanes exist for both directions of travel on West Valley Parkway. Curbside parking is generally not permitted. Bus stops are located intermittently.

Avenida del Diablo is classified as a Local Collector Roadway in the project vicinity. Currently, it is a two-lane undivided roadway with no shoulders. There is no parking provided and there is no posted speed limit. The curb-to-curb width is 30-feet.

COUNTY OF SAN DIEGO

Via Rancho Parkway is classified as a Major Roadway just east of Valley Parkway. Currently, it is a two-lane undivided roadway with dirt shoulders. There is no parking provided and the posted speed limit is 45 mph.

Harmony Grove Road (County of San Diego) is classified as a Collector on the County of San Diego Circulation Element. Harmony Grove Road is currently built as a two-lane undivided roadway with dirt shoulders. Parking is not provided and the posted speed limit is 40 mph.

Country Club Drive is classified as a Collector on the County of San Diego Circulation Element. Currently, it is a two-lane undivided roadway with no shoulders. There is no parking provided and the posted speed limit is 40 mph. The curb-to-curb width is about 30-feet.

Kauana Loa Drive is classified as a Rural Collector Roadway in the project vicinity. Currently, it is a two-lane undivided roadway with no shoulders. There is no parking provided and the posted speed limit is 40 mph. The curb-to-curb width is about 26-feet.

Valley Parkway / Del Dios Highway (County of San Diego) is classified as a Major Roadway south of Avenida del Diablo on the County of San Diego Circulation Element. Valley Parkway is currently built as a two-lane, undivided roadway on this segment. Parking is permitted intermittently and the posted speed limit is 45 mph.

3.3 Existing Traffic Volumes

Existing AM and PM peak hour intersection volumes were collected by LLG in June 2003. The majority of the 24-hour ADT volumes were collected in June 2003 and March 2002.

3.3.1 *Daily Segment Volumes*

Twenty-four hour segment counts were conducted at 10 locations in the study area for a period of three days in 2002 and 2003; these counts included all street segments adjacent to the project site. The street segment volumes that were not among the above ten mentioned were determined based on the assumption that the AM and PM peak hour volumes are 8% and 10%, respectively, of an ADT volume or obtained from the City of Escondido. The average of the 8% and 10% peak hour intersection volumes was calculated to estimate the ADT volumes for the remaining locations. All of the segment volumes that were colleted before 2003 have been factored up by a 2% per year to estimate the 2004 traffic volume. The 2% annual growth factor was based on a review of historical count data in both the City of Escondido and the County of San Diego. Other available ADT volumes from the City of Escondido are also included in ***Table 3–1***, which lists the daily segment volumes on key segments in the project area and the year the counts were conducted. ***Figure 3–4*** depicts the existing twenty-four hour ADT volumes.

3.3.2 *Peak Hour Intersection Turning Movement Volumes*

AM and PM peak hour intersection turning movement counts were conducted manually. ***Figure 3–5*** depicts the existing AM and PM peak hour intersection turning movement volumes.

Appendix A contains the manual turning movement volume count sheets.

TABLE 3–1
EXISTING DAILY TRAFFIC VOLUMES

Segment	Count Year	Source	ADT
Elfin Forest Road			
San Elijo Rd to Questhaven Rd	2005	LLG	5,800
Harmony Grove Road			
Questhaven Rd to Wilgen Rd[b]	2003	LLG	5,100
Wilgen Rd to Country Club Dr.[b]	2003	LLG	5,400
Country Club Dr. to Kauana Loa Dr.	2003	LLG	5,100
Kauana Loa Dr. to Enterprise St.[b]	2004	LLG[cd]	7,000
Enterprise St. to Howard Ave.	2004	ERTC[cde]	8,700
Howard Ave. to Hale Ave.	2004	ERTC[cde]	9,000
Country Club Drive			
Nordahl Rd to Kauana Loa Dr.[b]	2003	LLG	3,700
Kauana Loa Dr. to Village Rd[b]	2003	LLG	1,500
Village Rd to Harmony Grove Rd[b]	2003	LLG	1,500
East Mission Road			
West of Nordahl Rd	2004	LLG[cd]	20,900
Kauana Loa Drive			
Harmony Grove Rd to Country Club Dr.[b]	2003	LLG	1,300
Nordahl Road			
SR-78 to Mission Rd	2004	ERTC[cde]	35,300
Mission Rd to Country Club Dr.	2004	ERTC[cde]	24,100
Andreason Drive			
Vineyard Ave. to Enterprise St.	2004	LLG[cd]	9,300

Footnotes:

a ADT – Average Daily Traffic volumes.

b Segment is located in the County of San Diego. All other segments are located within the City of Escondido

c ADT volumes were estimated based on the average of AM and PM peak hour intersection volumes. The assumption is that the AM peak hour and PM peak hours are 8% and 10% of the ADT volume, respectively. It should be noted that all of the County roadway segments on Elfin Forrest Road, Harmony Grove Road and Country Club Drive are actual counts, not estimated.

d Street segment or intersection (used to estimate ADT volumes) counts older than 2003 were factored up at 2% per year to estimate year 2004 counts. Once again, traffic counts on Elfin Forest Road, Country Club Drive, and Harmony Grove Road near the project site are all actual counts.

e. Escondido Research and Technology Center Traffic Study prepared by LLG on October 9th, 2002

TABLE 3–1 *(CONTINUED)*
EXISTING DAILY TRAFFIC VOLUMES

Segment	Count Year	Source	ADT
Vineyard Avenue			
Country Club Dr. to Enterprise St.	2003	LLG	15,400
Enterprise St. to Andreason Dr.	2004	City of Escondido [c d]	21,600
Auto Park Way			
Andreason Dr. to Hale Ave. (north)	2004	ERTC [c d e]	12,100
Andreason Dr. to Hale Ave (south)	2004	ERTC [c d e]	12,800
Hale Ave. to Valley Pkwy	2004	ERTC [c d e]	29,500
Valley Pkwy to W 9th St	2004	ERTC [c d e]	19,900
Hale Avenue			
W 9th St. to Harmony Grove Rd	2003	LLG	7,100
Harmony Grove Rd to Avenida del Diablo	2003	LLG	4,800
West 9th Street			
Hale Ave to Valley Pkwy	2004	LLG [c d]	9,500
Valley Pkwy to Auto Park Wy	2004	LLG [c d]	10,400
Auto Park Wy to I-15	2004	ERTC [c d e]	34,800
Avenida del Diablo			
Citracado Pkwy to Hale Ave.	2004	LLG [c d]	2,700
Hale Ave. to Valley Pkwy	2004	LLG [c d]	1,100
Citracado Parkway			
Avenida del Diablo to Valley Pkwy	2004	LLG [c d]	2,400
Via Rancho Parkway			
East of Valley Pkwy [b]	2003	LLG	12,700

Footnotes:

a ADT – Average Daily Traffic volumes

b. Segment is located in the County of San Diego All other segments are located within the City of Escondido

c ADT volumes were estimated based on the average of AM and PM peak hour intersection volumes. The assumption is that the AM peak hour and PM peak hours are 8% and 10% of the ADT volume, respectively It should be noted that none of the street segments fronting the project site was estimated based on peak hour volumes.

d. Street segment or intersection (used to estimate ADT volumes) counts older than 2003 were factored up at 2% per year to estimate year 2004 counts Once again, traffic counts on Elfin Forest Road, Country Club Drive, and Harmony Grove Road near the project site are all actual counts.

e Escondido Research and Technology Center Traffic Study prepared by LLG on October 9th, 2002.

TABLE 3–1 *(CONTINUED)*
EXISTING DAILY TRAFFIC VOLUMES

Segment	Count Year	Source	ADT
Valley Parkway			
Tulip St. to I-15	2003	LLG [c]	30,600
I-15 to Auto Park Wy	2004	LLG [c d]	31,200
Auto Park Wy to W. 11th St	2004	LLG [c d]	29,200
W. 11th St to Avenida del Diablo	2003	LLG	26,200
Avenida del Diablo to Citracado Pkwy	2003	LLG	18,600
Citracado Pkwy to Via Rancho Pkwy [b]	2003	LLG	20,400
South of Via Rancho Pkwy [b]	2003	LLG [c d]	18,800

Footnotes:

a. ADT – Average Daily Traffic volumes

b Segment is located in the County of San Diego All other segments are located within the City of Escondido

c. ADT volumes were estimated based on the average of AM and PM peak hour intersection volumes The assumption is that the AM peak hour and PM peak hours are 8% and 10% of the ADT volume, respectively It should be noted that none of the street segments fronting the project site was estimated based on peak hour volumes

d Street segment or intersection (used to estimate ADT volumes) counts older than 2003 were factored up at 2% per year to estimate year 2004 counts. Once again, traffic counts on Elfin Forest Road, Country Club Drive, and Harmony Grove Road near the project site are all actual counts.

e Escondido Research and Technology Center Traffic Study prepared by LLG on October 9th, 2002

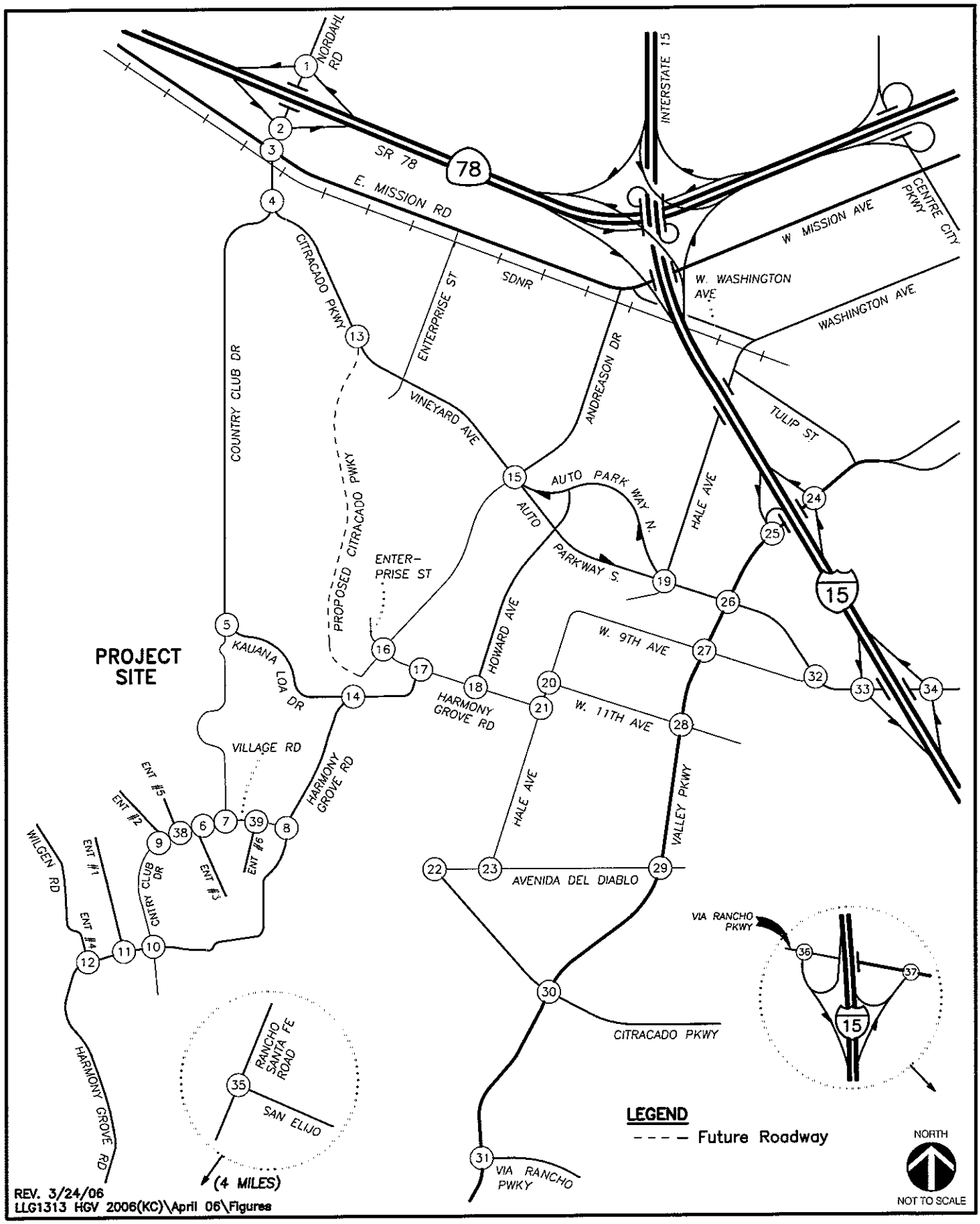

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Figure 3-1

Study Area Intersections

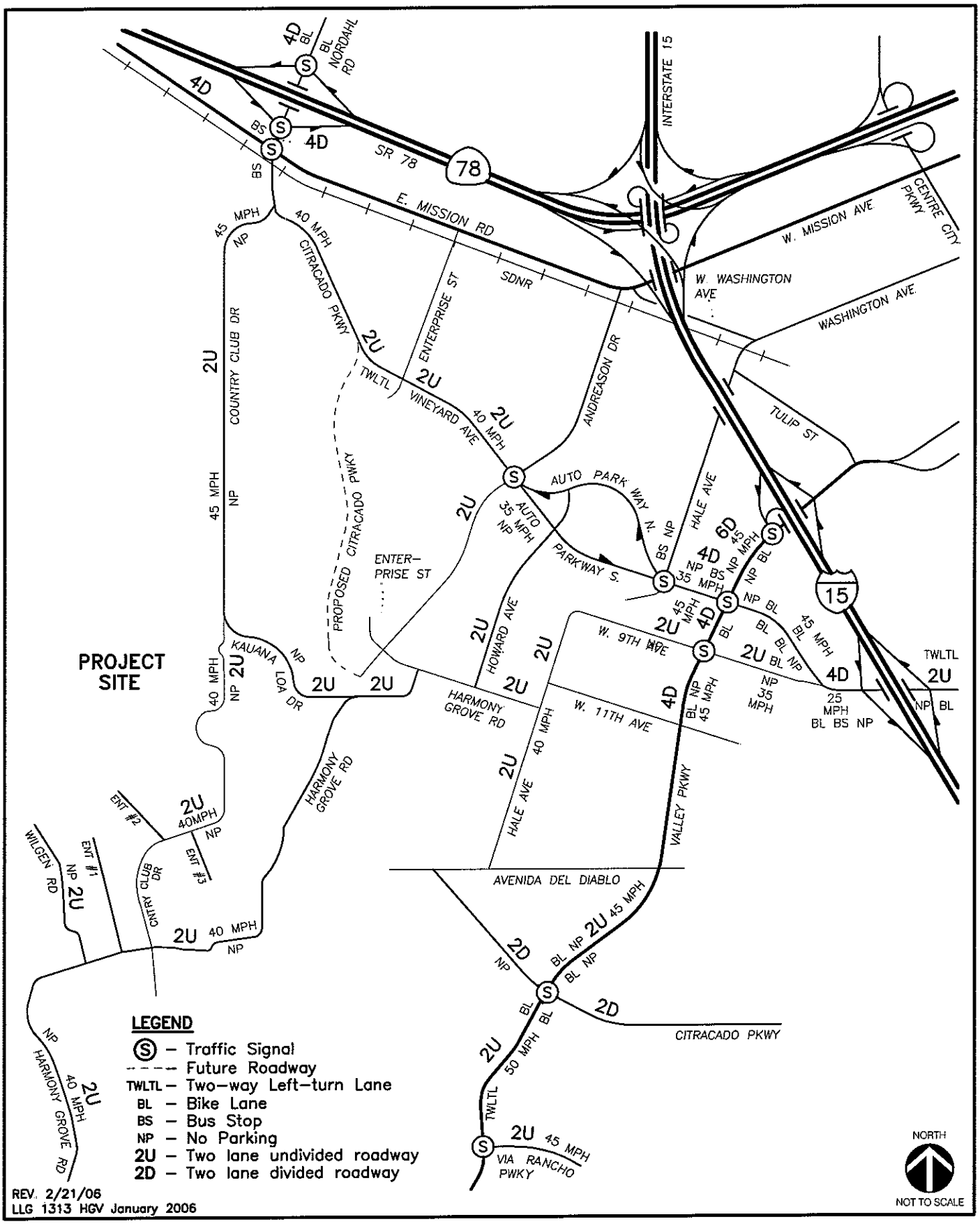

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Figure 3-2

Existing Conditions Diagram (Roadway Network)

Harmony Grove Village

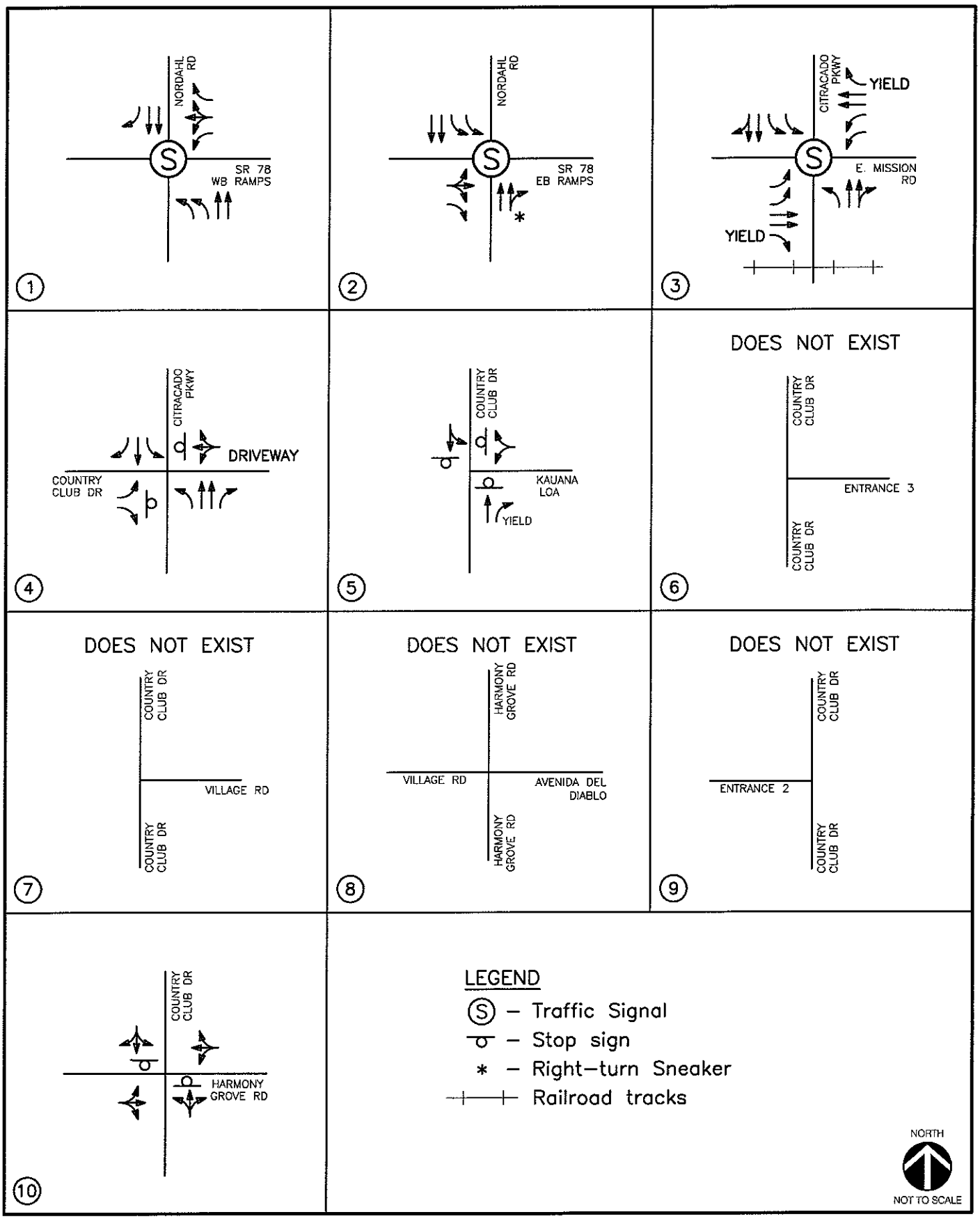

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Figure 3-3

Existing Conditions Diagram (Intersection Geometry)

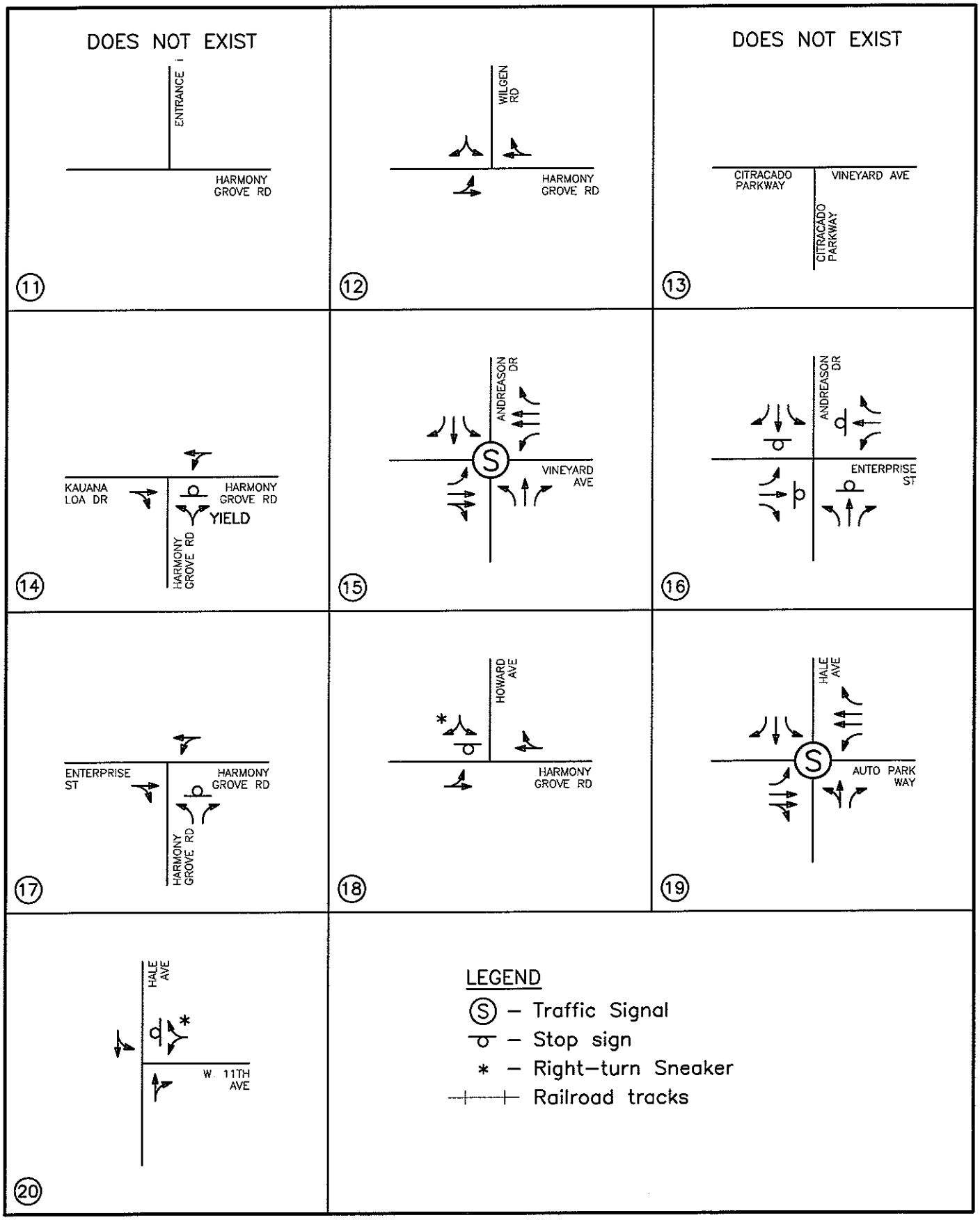

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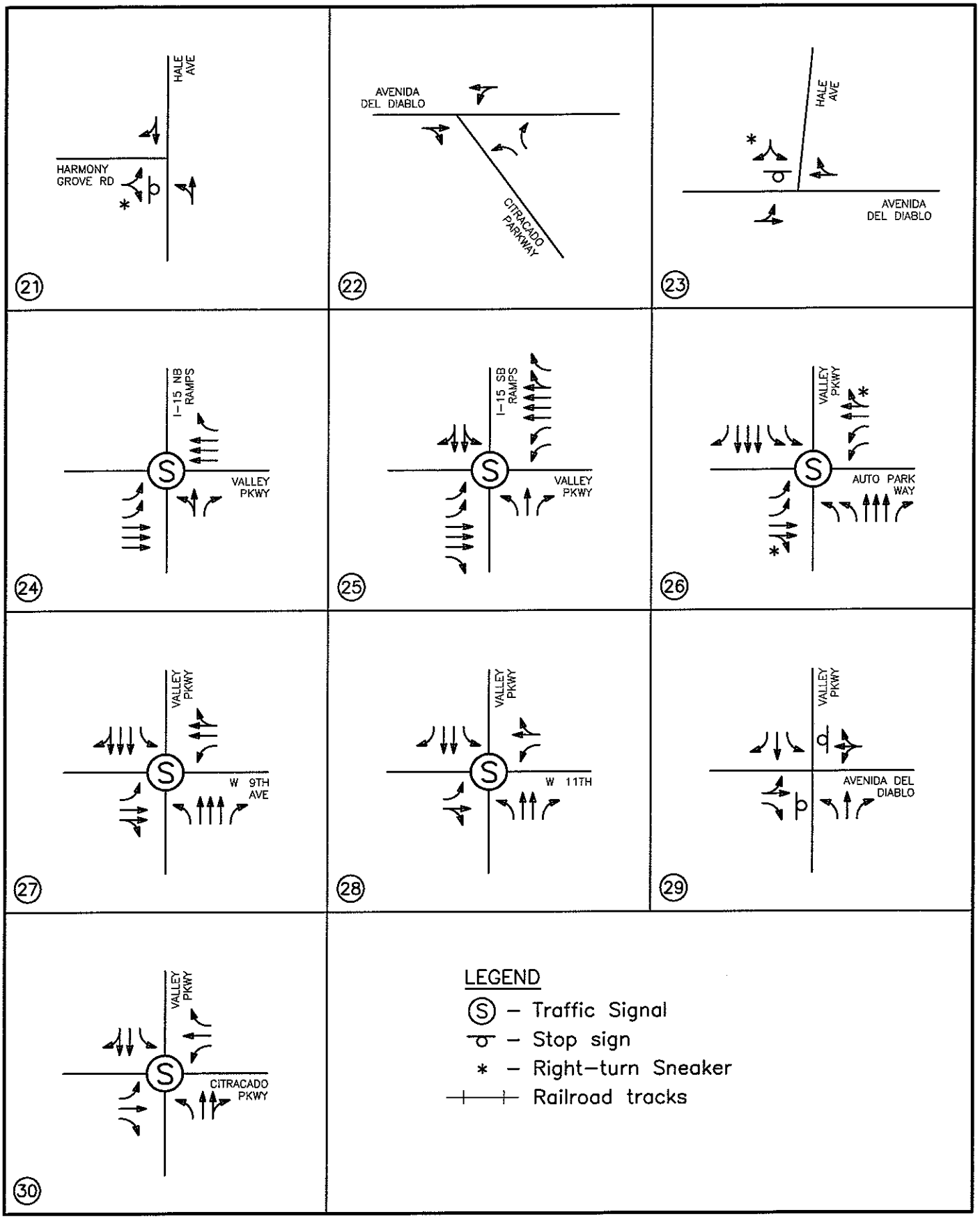
Figure 3-3

Existing conditions diagram (Intersection Geometry)

Harmony Grove Village



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SHEET (3 OF 4)

Figure 3-3

Existing Conditions Diagram (Intersection Geometry)

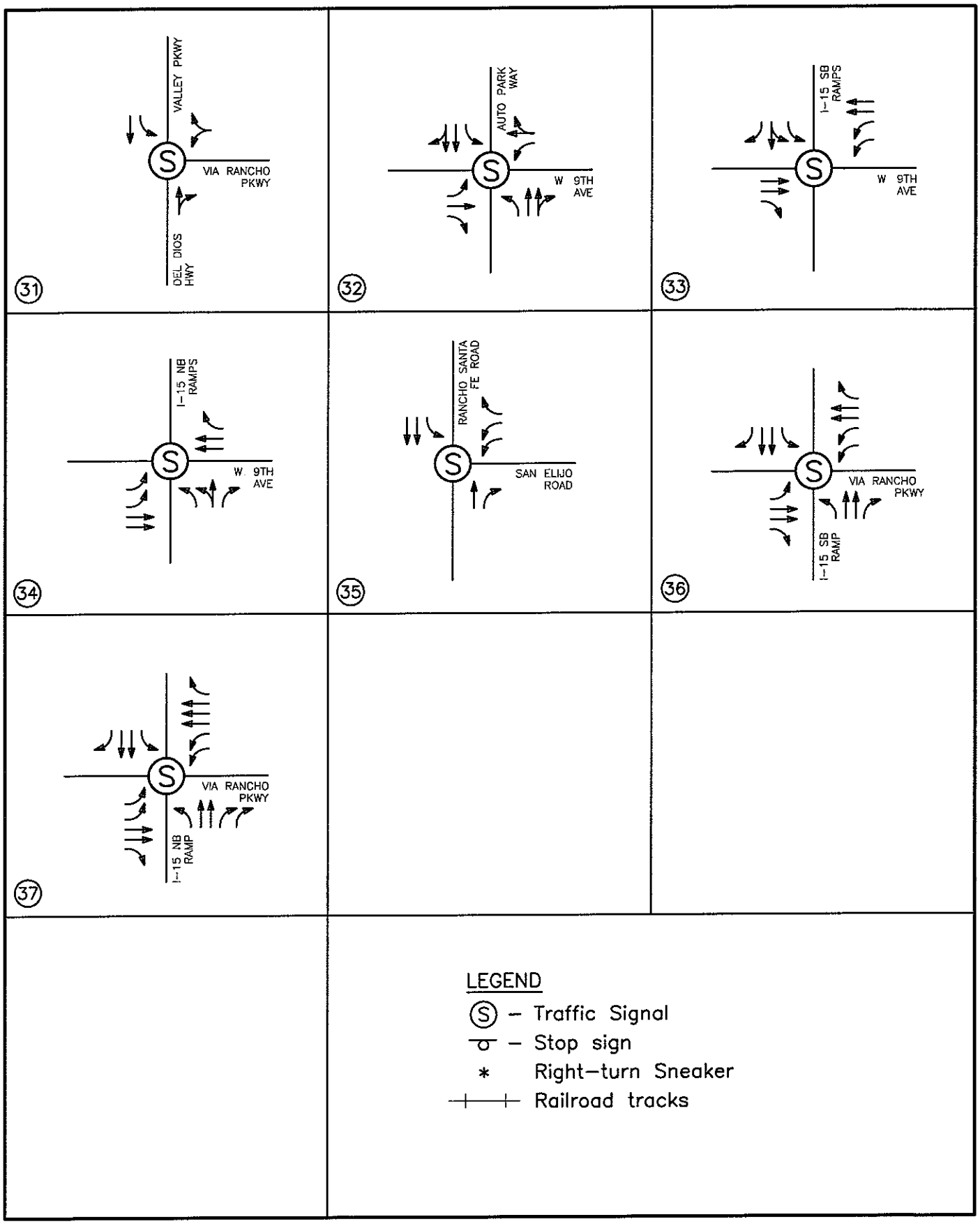

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Figure 3-3

Existing Conditions Diagram (Intersection Geometry)

Harmony Grove Village

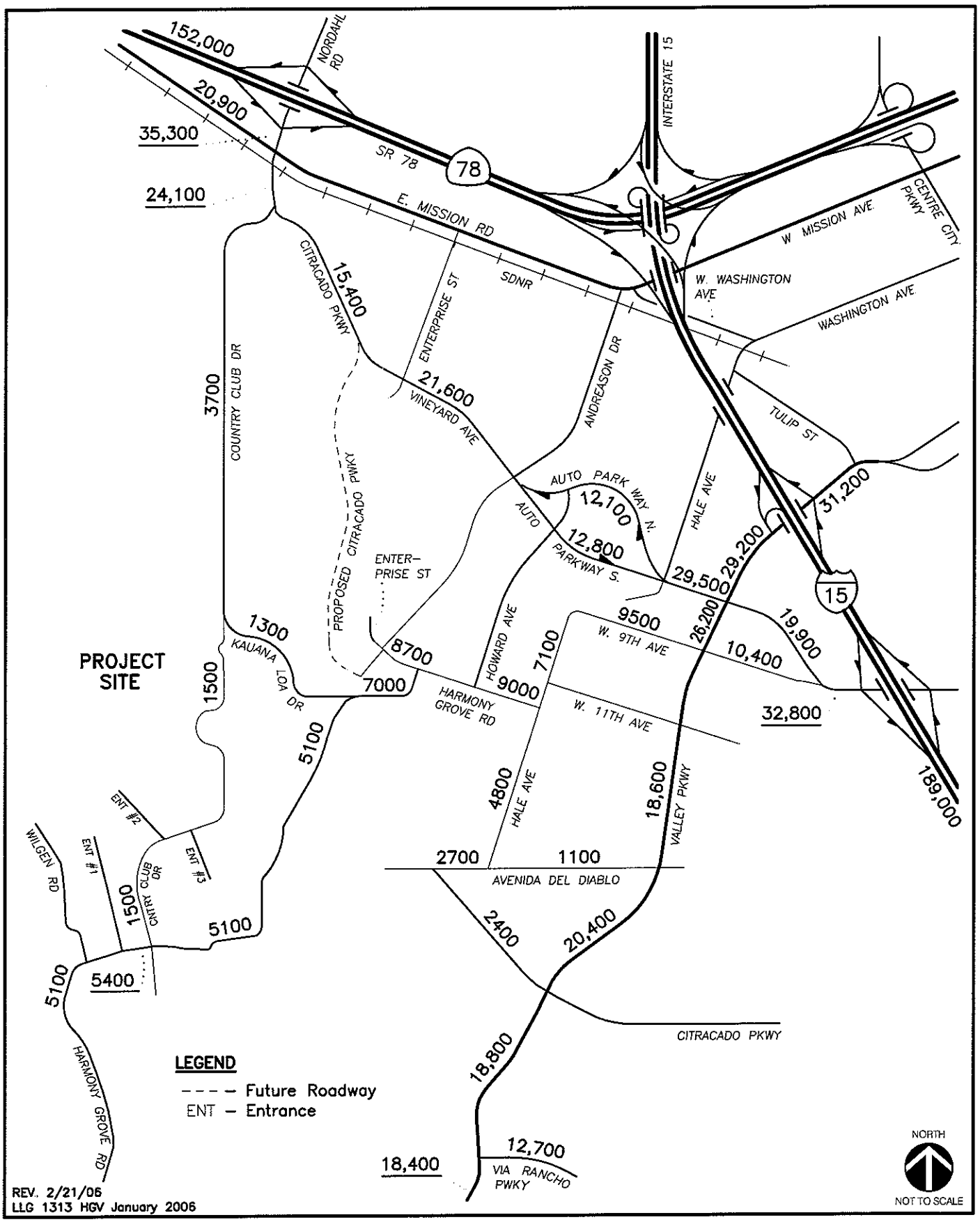

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Figure 3-4

Existing Average Daily Traffic Volumes

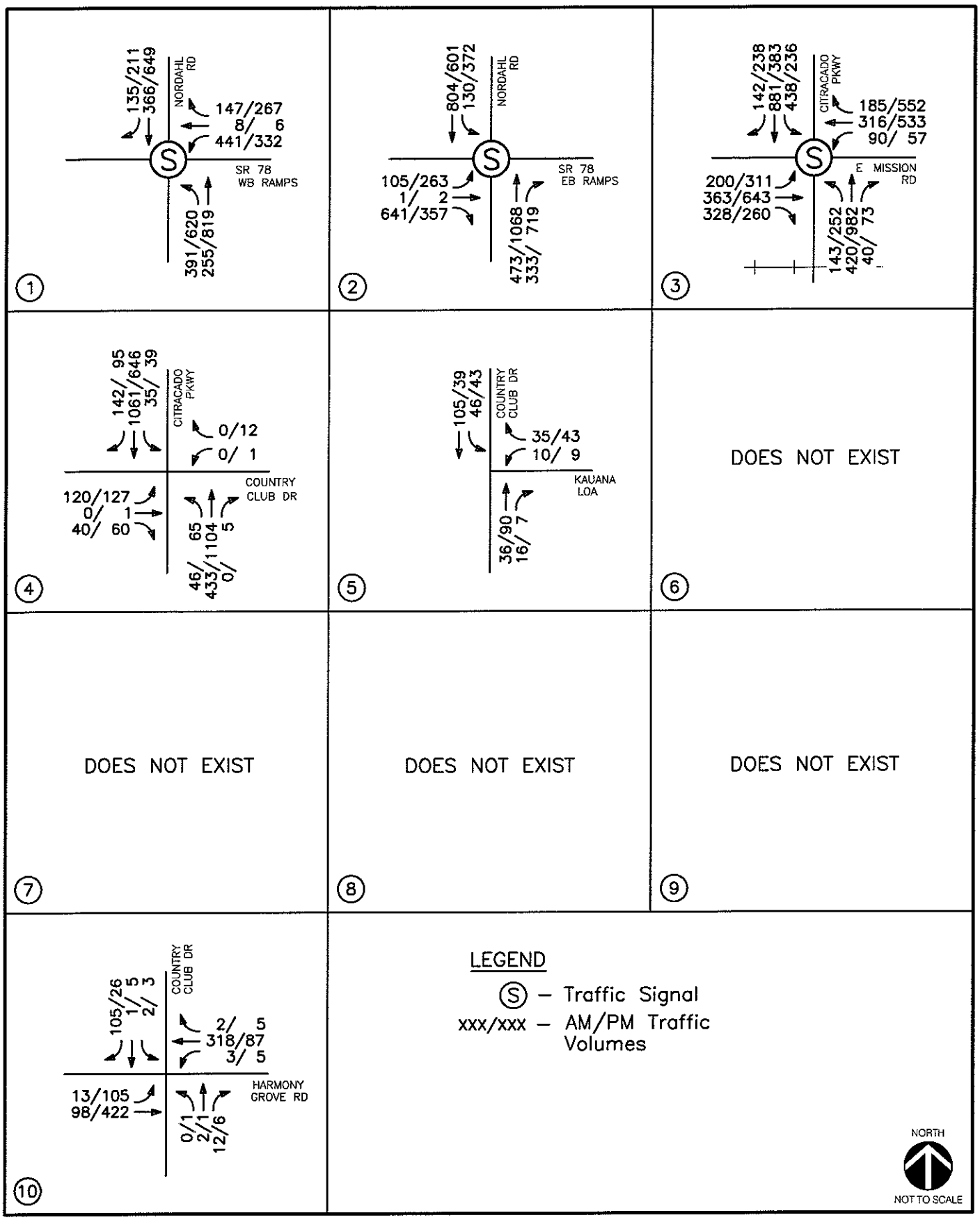

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Figure 3-5

Existing Peak Hour Traffic Volumes

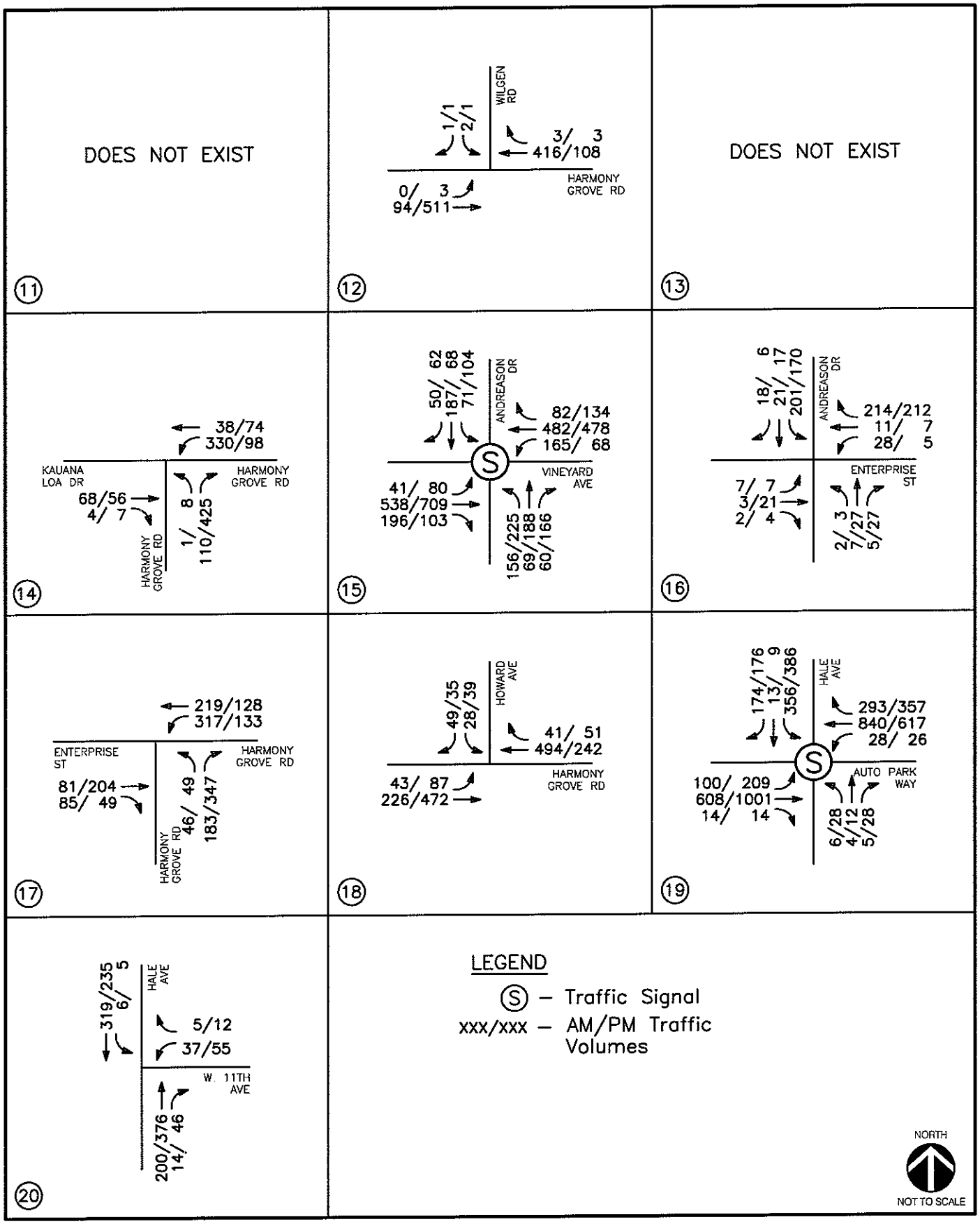

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Figure 3-5

Existing Peak Hour Traffic Volumes

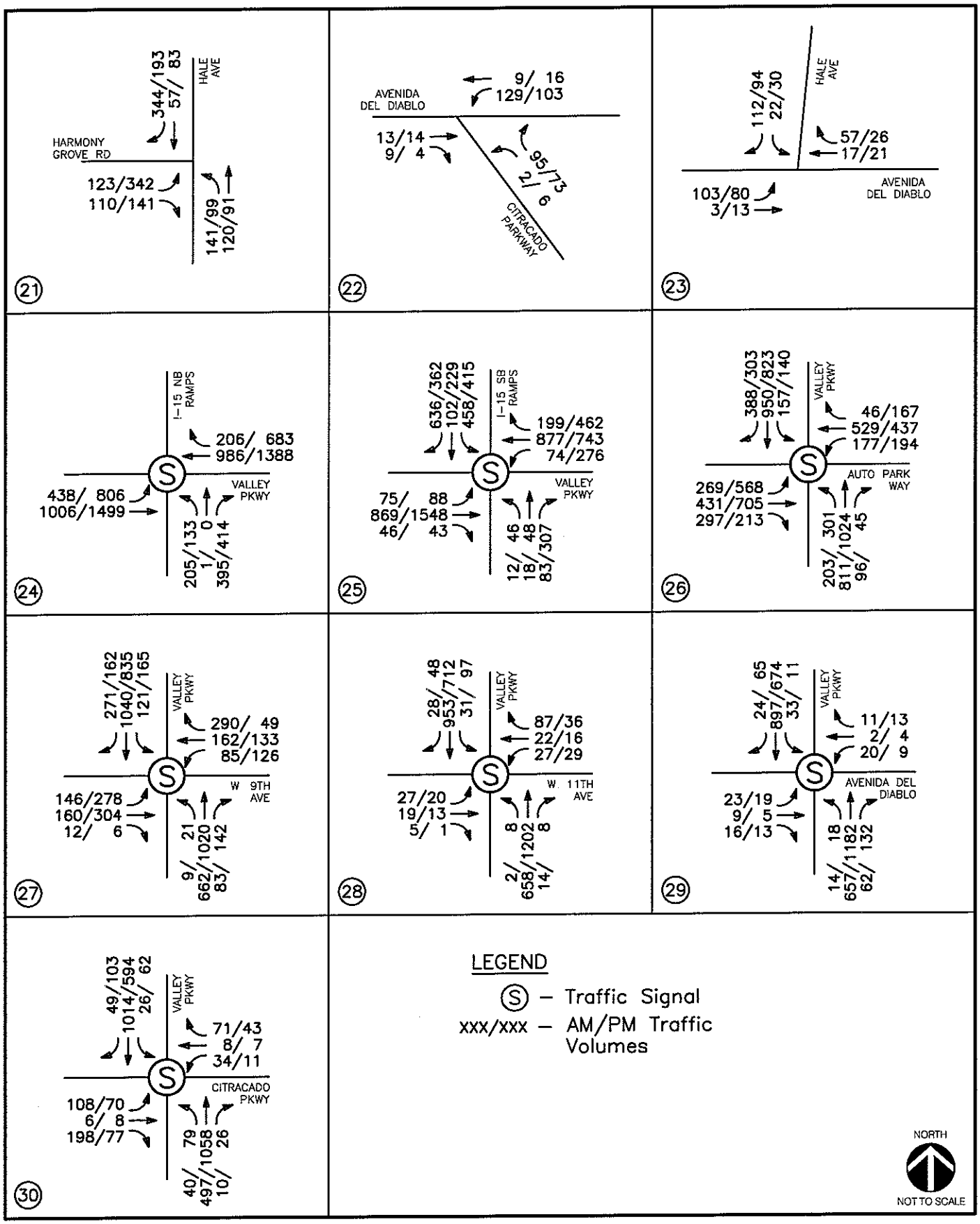

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Figure 3-5

Existing Peak Hour Traffic Volumes

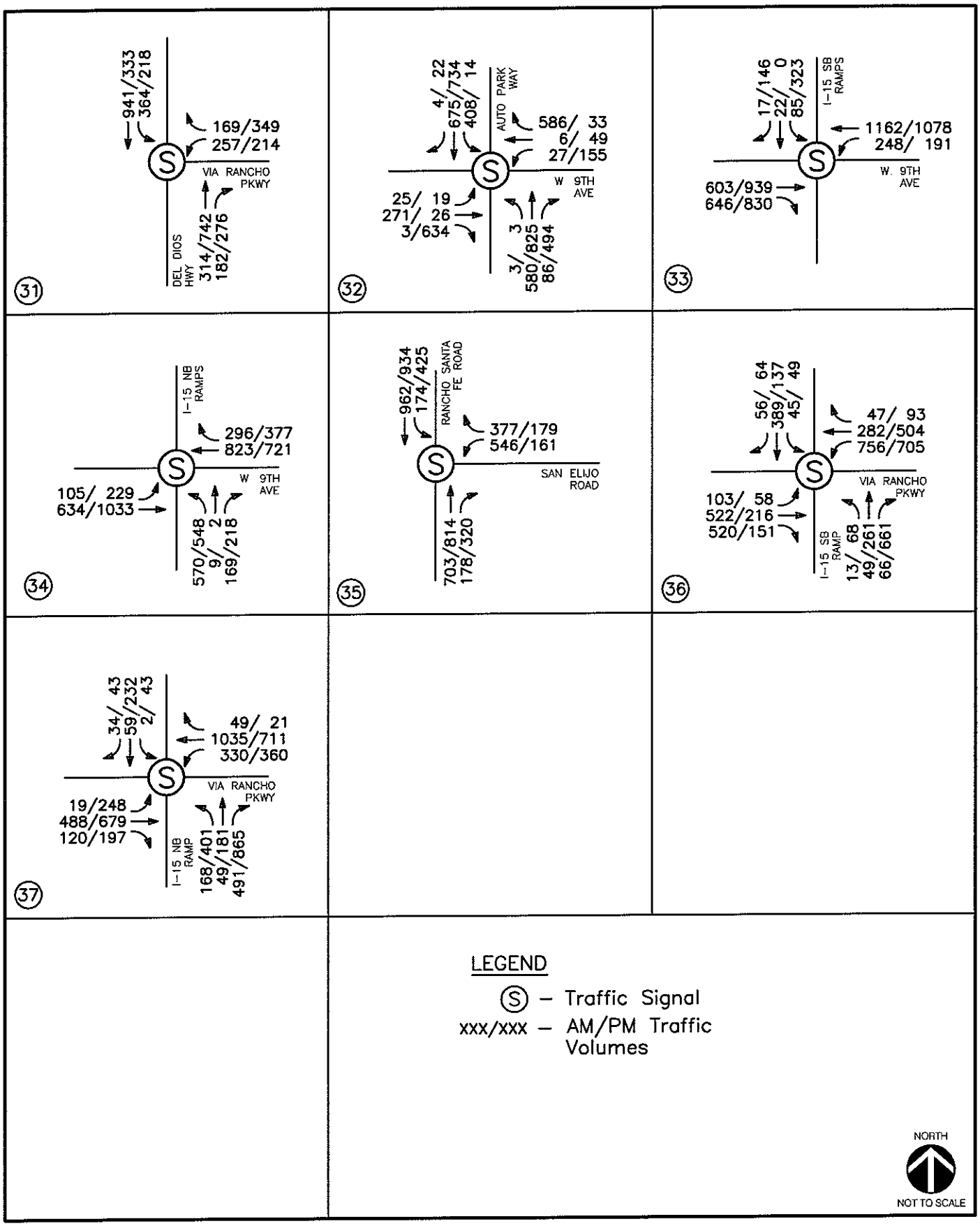

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Figure 3-5

Existing Peak Hour Traffic Volumes

4.0 ANALYSIS APPROACH AND METHODOLOGY

4.1 Analysis Approach

Based on the requirements of the County of San Diego and the City of Escondido, the following scenarios are analyzed in this report.

- Existing
- Option A: Baseline (Harmony Grove Road Cul-de-sac);
- Option A: Baseline + Project (Harmony Grove Road Cul-de-sac);
- Option A: Baseline + Project + Cumulative projects (Harmony Grove Road Cul-de-sac);
- Option B: Baseline (Village Road / Citracado Parkway Connection);
- Option B: Baseline + Project (Village Road / Citracado Parkway Connection);
- Option B: Baseline + Project + Cumulative Projects (Village Road / Citracado Parkway Connection);
- Option C: Baseline (Improvements to Existing Roadway Network);
- Option C: Baseline + Project (Improvements to Existing Roadway Network);
- Option C: Baseline +Project + Cumulative Projects (Improvements to Existing Roadway Network);
- Year 2030

The Baseline was determined by reassigning existing traffic based on the altered travel patterns that would result from the proposed roadway changes described earlier in the report. The analysis assumes that the proposed roadway changes would be constructed prior to their need based on City of Escondido / County of San Diego significance thresholds.

The study area was determined based on a SANDAG Series 10 Select Zone Assignment. All study area intersections and segments listed in Section 3.0 are analyzed in this report.

4.2 Methodology

The traffic study analyzes signalized intersections, unsignalized intersections, street segments, freeway segments, and ramp meters.

The measure of effectiveness for intersection operations is level of service. In the 2000 Highway Capacity Manual (HCM), Level of Service for signalized intersections is defined in terms of delay. The level of service analysis results in seconds of delay expressed in terms of letters A through F. Delay is a measure of driver discomfort, frustration, fuel consumption, and lost travel time.

4.2.1 *Signalized Intersections*

For signalized intersections, level of service criteria are stated in terms of the average control delay per vehicle for a 15-minute analysis period. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. ***Table 4–1*** summarizes the delay thresholds for signalized intersections.

TABLE 4–1
LEVEL OF SERVICE THRESHOLDS FOR SIGNALIZED INTERSECTIONS

Average Control Delay Per Vehicle (Seconds / Vehicle)			Level Of Service
0.0	≤	10.0	A
10.1	to	20.0	B
21.1	to	35.0	C
35.1	to	55.0	D
55.1	to	80.0	E
	≥	80.0	F

Source: Highway Capacity Manual, 2000.

Level of service A describes operations with very low delay, (i.e. less than 10.0 seconds per vehicle). This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

Level of service B describes operations with delay in the range 10.1 seconds and 20.0 seconds per vehicle. This generally occurs with good progression and / or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.

Level of service C describes operations with delay in the range 20.1 seconds and 35.0 seconds per vehicle. These higher delays may result from fair progression and / or longer cycle lengths. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.

Level of service D describes operations with delay in the range 35.1 seconds and 55.0 seconds per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or higher v / c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are more frequent.

Level of service E describes operations with delay in the range of 55.1 seconds to 80.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v / c ratios. Individual cycle failures are frequent occurrences.

Level of service F describes operations with delay in excess of over 80.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with over-saturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high v / c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

The analysis of the Nordahl Road / Mission Road intersection accounts for the railroad crossing on the south leg of the intersection.

4.2.2 *Unsignalized Intersections*

For unsignalized intersections, level of service is determined by the computed or measured control delay and is defined for each minor movement. Level of service is not defined for the intersection as a whole. ***Table 4–2*** depicts the criteria, which are based on the average control delay for any particular minor movement.

TABLE 4–2
LEVEL OF SERVICE THRESHOLDS FOR UNSIGNALIZED INTERSECTIONS

Average Control Delay Per Vehicle (Seconds / Vehicle)	Level Of Service	Expected Delay To Minor Street Traffic
0.0 ≤ 10.0	A	Little or no delay
10.1 to 15.0	B	Short traffic delays
15.1 to 25.0	C	Average traffic delays
25.1 to 35.0	D	Long traffic delays
35.1 to 50.0	E	Very long traffic delays
≥ 50.0	F	Severe congestion

Source: Highway Capacity Manual, 2000.

Level of Service F exists when there are insufficient gaps of suitable size to allow a side street demand to safely cross through a major street traffic stream. This level of service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches. The method, however, is based on a constant critical gap size; that is, the critical gap remains constant no matter how long the side-street motorist waits. LOS F may also appear in the form of side-street vehicles selecting smaller-than-usual gaps. In such cases, safety may be a problem, and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior, which are more difficult to observe in the field than queuing.

In most cases, at Two-Way STOP controlled (TWSC) intersections, the critical movement is the minor street left-turn movement. As such, the minor street left-turn movement can generally be considered the primary factor affecting overall intersection performance. The lower threshold for LOS F is set at 50 seconds of delay per vehicle. There are many instances, particularly in urban areas, in which the delay equations will predict delays of 50 seconds (LOS F) or more for minor street movements under very low volume conditions on the minor street (less than 25 vehicles per hour or vph). Since the first term of the equation is a function only of capacity, the LOS F threshold of 50 seconds / vehicle is reached with a movement capacity of approximately 85 vph or less.

4.2.3 *Street Segments*

The street segments located within the City of Escondido were analyzed on a daily basis by comparing the daily traffic volume (ADT) to the City of Escondido Level of Service Standards - Street Segment Average Daily Vehicle Trip Thresholds. Street segments located within the County of San Diego were compared to the San Diego County Standard Street Classification Table. These tables provide Level of Service estimates based on traffic volumes and roadway characteristics and are shown in ***Appendix B.***

4.2.4 *Freeway Segments*

Level of Service analysis is based on the procedure developed by CALTRANS District 11 based on methods described in the Highway Capacity Manual. The procedure involves comparing the peak hour volume of the mainline segment to the theoretical capacity of the roadway (V / C). Directional and truck factors are also used to calculate the future freeway volumes.

4.2.5 *Ramp Meters*

There are three methods currently accepted by Caltrans to calculate ramp delays and queues, a fixed rate approach, field observations, and a uniform 15-minute maximum delay approach. The fixed rate approach is based solely on the specific time intervals at which the ramp meter is programmed to release traffic. Field observations include observing the queues during the peak hours, when the ramp meters are in operation. Queue lengths and vehicle delays are recorded randomly to obtain an average delay and average queue length. The uniform 15-minute approach is based on the assumption that any demand exceeding 15-minutes will seek an alternative route or will choose to use the ramp during a less busy time period. Effectively, this approach assumes the ramp demand spreads out spatially and temporally if the calculated meter delay is greater than 15-minutes.

The fixed rate methodology is commonly used when ramp meter delays are less than fifteen minutes. As explained above, the uniform methodology is used when ramp meter delays are over fifteen minutes. The results of the fixed rate methodology are theoretical and based on the most restrictive (rate code F) ramp meter rate provided by Caltrans. Given this fact, such an approach is considered conservative and in some cases produces unrealistic queue lengths and delays. In these cases, field observations can be employed and in the past have indicated that the actual ramp meter rate fluctuates during the peak hour discharging more vehicles than the rate used in the calculations. Current ramp meter calculations / methodologies, in general, are not able to account for driver behavior and trip diversion, which reiterates the overestimation inherent in ramp meter analysis.

The Congestion Management Program (CMP) requires a ramp meter analysis but does not contain specific, required methodologies for this analysis. The above methodology for analyzing ramp meters is consistent with Caltrans guidelines.

5.0 SIGNIFICANCE CRITERIA

The following criteria were utilized to determine the significance of project direct and cumulative impacts. If the intersection or street segment is located in the City of Escondido, the City criteria were utilized. If the intersection or street segment is located in the County of San Diego, the County criteria were utilized. The criteria for each jurisdiction are listed below. Significance criteria for freeway mainlines and ramp meters along with standards for Congestion Management Program compliance follow the jurisdictional criteria.

5.1 City of Escondido

5.1.1 *Street Segments*

The City of Escondido has adopted a standard for determining traffic impacts that states that an impact is considered to be a direct significant impact on a street segment when a project degrades the level of service (LOS) to worse than mid-level D and increases the volume / capacity (v / c) ratio by more than 0.02. If the segment already operates at mid-LOS D or worse, a significant cumulative impact is calculated if the v / c increases by more than 0.02 due to the addition of project traffic.

5.1.2 *Signalized Intersections*

A signalized intersection is directly significantly impacted when project traffic degrades the level of service to worse than mid-level D (delay of 45.1 seconds or more). If the intersection is already operating at a LOS worse than mid-level D, a cumulative impact would occur if the project increases the delay by more than 2 seconds.

5.1.3 *Unsignalized Intersections*

An unsignalized intersection is directly significantly impacted when the project traffic degrades the level of service to worse than mid-level D (a delay of 30.1 seconds or more). If the intersection is already worse than mid-level D, a cumulative impact would occur if the project increases the delay by more than 2 seconds. If the project degrades the level of service to LOS E or F, the impact is considered direct.

5.2 County of San Diego

The criteria to determine significant traffic impacts is shown in *Table 5-1*. In general, if project only traffic causes the thresholds in the table to be exceeded, the impacts are determined to be a direct significant impact and if the project together with other cumulative projects causes the thresholds to be exceeded, the impact is determined to be a cumulative significant impact.

The County of San Diego Public Facility Element, Objective 1, Policy 1.2 states that "General Plan Amendments and Rezones shall be reviewed to ensure that any proposed increases in density or intensity of use will not prevent the planned Circulation Element road system from operating at its planned Level of Service at buildout." (Public Facility Element (1993), pg XII-4-19) A comparison between the adopted and proposed project land uses has been conducted and if the proposed project causes degradation in level of service to unacceptable levels, a significant impact would occur.

It should be noted that because 30 mph design speed roadways are not on the Circulation Element, the standard LOS A to F classification is not applied to this type of local roadway. For these roadways, the roadway is shown as operating above or under capacity given anticipated traffic loading. For purposes of the following impact analysis, 30 mph design speed roadways operating above their capacity would be considered significantly impacted.

The amounts in the table are considered to be noticeable to the average driver.

TABLE 5-1
SIGNIFICANCE CRITERIA

Street Segments			
Level of Service	**2-Lane Road**	**4-Lane Road**	**6-Lane Road**
LOS E	200 ADT	400 ADT	600 ADT
LOS F	100 ADT	200 ADT	300 ADT

Intersections		
Level of Service	**Signalized**	**Unsignalized**
LOS E	Delay of 2 seconds	20 peak hour trips on a critical movement
LOS F	Delay of 1 second, or 5 peak hour trips on a critical movement	5 peak hour trips on a critical movement

The County's 1993 Public Facilities Element contains language which states that new development that "would significantly impact congestion on roads at LOS "E" or "F", either currently or as a result of the project, will be denied unless improvements are scheduled to improve the LOS to D."

5.3 Freeway Segments

SANTEC criteria were utilized to determine the significance of freeway impacts. If the project increases the v / c ratio by more than 0 01, the impact is considered significant.

5.4 Ramp Meters

The City of Escondido follows the standards for ramp meters set forth in the "SANTEC / ITE Guidelines For Traffic Impact Studies in the San Diego Region". According to this publication, if the average ramp meter delay during the peak hour is greater than 15 minutes a significant impact is considered if the addition of project traffic increases the ramp metering delay by more than 2 minutes. If the average ramp meter delay is less than 15 minutes with the addition of project traffic then no significant impact is calculated.

5.5 Congestion Management Program

The Congestion Management Program Update (CMP) was adopted in January 2003 by the SANDAG Board, and is intended to directly link land use, transportation and air quality through Level of Service performance. Local agencies are required by statute to conform to the CMP.

The CMP requires an Enhanced CEQA Review for all large projects that are expected to generate more than 2,400 ADT or more than 200 peak hour trips. Since the project is calculated to generate more than 2,400 ADT and over 200 peak hour trips, this level of review is required of the proposed project.

The guidelines for CMP analysis are as follows (Guidelines for Congestion Management Program Transportation Impact Reports for the San Diego Region, 1993):

1) All streets and intersections on CMP principal arterials where the project will add 50 or more peak hour trips in either direction.

2) Mainline freeway locations where the project will add 50 or more peak hour trips in either direction.

This project will add more than 50 new peak hour trips to CMP Freeways, therefore a freeway analysis is included.

6.0 ANALYSIS OF EXISTING CONDITIONS

The following is a discussion of the existing condition operations.

6.1 Daily Segment Operations

Table 6–1 summarizes the daily segment levels of service on key segments. As seen in *Table 6-1*, all key segments are calculated to currently operate at LOS D or better under existing conditions with the exception of the following segments:

- Nordahl Road: SR-78 to Mission Road (LOS E)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS F)
- Vineyard Avenue: Enterprise Street to Andreason Drive (LOS F)
- West 9th Avenue: Auto Park Way to I-15 SB Ramps (LOS E)
- Via Rancho Parkway: east of Valley Parkway (LOS E)
- Valley Parkway: W. 11th Street to Avenida del Diablo (LOS F)
- Valley Parkway: Avenida del Diablo to Citracado Parkway (LOS F)
- Harmony Grove Road from Howard Avenue to Hale Avenue (LOS E)
- Valley Parkway: Citracado Parkway to Via Rancho Parkway (LOS F)
- Valley Parkway: south of Via Rancho Parkway (LOS F)

TABLE 6–1
EXISTING STREET SEGMENT OPERATIONS

Segment	Existing Classification	Capacity at LOS E[a]	ADT[b]	V/C[c]	LOS[d]
Elfin Forest Road					
San Elijo Rd to Questhaven Rd	Rural Collector	16,200	5,800	0.36	C
Harmony Grove Road					
Questhaven Rd to Wilgen Rd[e]	Rural Collector	16,200	5,100	0.31	C
Wilgen Rd to Country Club Dr[e]	Rural Collector	16,200	5,400	0.33	C
Country Club Dr. to Kauana Loa Dr	Rural Collector	16,200	5,100	0.31	C
Kauana Loa Dr to Enterprise St[e]	Local Collector	15,000	7,000	0.47	C
Enterprise St to Howard Ave	Local Collector	15,000	8,700	0.58	B
Howard Ave to Hale Ave	Rural Collector	10,000	9,000	0.90	E

TABLE 6–1 (*CONTINUED*)
EXISTING STREET SEGMENT OPERATIONS

Segment	Existing Classification	Capacity at LOS E[a]	ADT[b]	V/C[c]	LOS[d]
East Mission Road					
West of Nordahl Rd	Major Road	37,000	20,900	0 56	B
Kauana Loa Drive					
Harmony Grove Rd to Country Club Dr[e]	Rural Collector	16,200	1,300	0 08	A
Nordahl Road					
North of SR-78	Major Road	37,000	15,400	0 42	B
SR-78 to Mission Rd	Major Road	37,200	35,300	0 95	E
Mission Rd to Country Club Dr	Major Road	37,200	24,100	0.65	A
Andreason Drive					
Vineyard Ave to Enterprise St	Local Collector	15,000	9,300	0.62	C
Vineyard					
Country Club Dr to Enterprise St	Local Collector	15,000	15,400	1.03	F
Enterprise St to Andreason St	Local Collector	15,000	21,600	1.44	F
Auto Park Way					
Andreason Dr to Hale Ave (north)	Collector	20,000	12,100	0 61	C
Andreason Dr to Hale Ave (south)	Collector	20,000	12,800	0 64	B
Hale Ave to Valley Pkwy	Collector	34,200	29,500	0 86	D
Valley Pkwy to W 9th St	Collector	34,200	19,900	0 58	B
Hale Avenue					
W 9th St to Harmony Grove Rd	Rural Collector	10,000	7,100	0 71	D
Harmony Grove Rd to Avenida del Diablo	Rural Collector	10,000	4,800	0 48	B
West 9th Street					
Hale Ave to Valley Pkwy	Local Collector	15,000	9,500	0.63	C
Valley Pkwy to Auto Park Way	Local Collector	15,000	10,400	0.69	D
Auto Park Wy to I-15	Major Road	34,200	32,800	0.96	E

Footnotes:

a LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).

b. Average Daily Traffic volumes (rounded to the nearest 10)

c Volume to Capacity ratio.

d. Level of Service.

e. Segment is located in the County of San Diego All other segments are located within the City of Escondido

General Notes

Country Club Drive segment analysis is included in Section 14 0

TABLE 6–1 (*CONTINUED*)
EXISTING STREET SEGMENT OPERATIONS

Segment	Existing Classification	Capacity at LOS E[a]	ADT[b]	V/C[c]	LOS[d]
Avenida del Diablo					
Citracado Pkwy to Hale Ave	Local Collector	15,000	2,700	0 18	A
Hale Ave to Valley Pkwy	Local Collector	15,000	1,100	0 07	A
Citracado Parkway					
Avenida del Diablo to Valley Pkwy	Major Road	34,200	2,400	0 07	A
Via Rancho Parkway					
East of Valley Pkwy[e]	Rural Collector	16,200	12,700	0 78	E
Valley Parkway					
Tulip St to I-15	Prime Arterial	60,000	31,200	0.52	C
I-15 to Auto Park Way	Prime Arterial	60,000	29,200	0.49	C
Auto Park Wy to W. 11th St	Prime Arterial	60,000	26,200	0.44	B
W 11th St to Avenida del Diablo	Local Collector	15,000	18,600	1 24	F
Avenida del Diablo to Citracado Pkwy	Local Collector	15,000	20,400	1 36	F
Citracado Pkwy to Via Rancho Pkwy[e]	Rural Collector	16,200	18,800	1 16	F
South of Via Rancho Pkwy[e]	Rural Collector	16,200	18,400	1.14	F

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*)

b Average Daily Traffic volumes (rounded to the nearest 10)

c. Volume to Capacity ratio

d Level of Service

e. Segment is located in the County of San Diego. All other segments are located within the City of Escondido

6.2 Peak Hour Intersection Operations

Tables 6–2 and 6–3 summarize the existing AM and PM peak hour intersection analysis results at the key signalized and unsignalized intersections, respectively.

6.2.1 *Signalized Intersections*

As shown in *Table 6–2*, all signalized intersections are calculated to operate currently at LOS D or better except the following:

- Nordahl Road / SR 78 EB Ramps (LOS E in the PM peak hour);
- Nordahl Road / Mission Road (LOS E in the PM peak hour);
- I-15 NB Ramps / Valley Parkway (LOS E in the PM peak hour);
- I-15 SB Ramps / Valley Parkway (LOS E in the PM peak hour);
- Valley Parkway / Via Rancho Parkway (LOS E in the PM peak hour); and
- I-15 / Via Rancho Parkway (LOS F in the AM peak hour caused by ramp meter delay).

6.2.2 *Unsignalized Intersections*

As shown in *Table 6–3*, the critical movements at all unsignalized intersections are calculated to operate at LOS D or better under existing conditions with the exception of the following intersections:

- Nordahl Road / Country Club Drive (Eastbound approach movement – LOS F in the AM and PM peak hours)
- Valley Parkway / Avenida del Diablo (Eastbound approach movement – LOS F during the AM and PM peak hours).

Appendix C contains the peak hour analysis work sheets for signalized and unsignalized intersections under existing conditions.

TABLE 6–2
EXISTING SIGNALIZED INTERSECTION OPERATIONS

Intersection	Peak Period	Delay[a]	LOS[b]
1 Nordahl Rd / SR-78 WB Ramps	AM	31.7	C
	PM	33 2	C
2. Nordahl Rd / SR-78 EB Ramps	AM	53 1	D
	PM	74.9	E
3. Nordahl Rd / Mission Rd	AM	46.8	D
	PM	77 6	E
15 Andreason Dr / Auto Park Way	AM	35.1	D
	PM	35.7	D
19. Hale Ave / Auto Park Way	AM	27.9	D
	PM	33 5	C
24 Valley Pkwy / I-15 NB Ramps	AM	30.9	C
	PM	55.8	E
25. Valley Pkwy / I-15 SB Ramps	AM	47.5	D
	PM	73 0	E
26. Valley Pkwy / Auto Park Way	AM	38 3	D
	PM	40.2	D
27. Valley Pkwy / West 9th St	AM	37.5	D
	PM	37 4	D
28. Valley Pkwy / W 11th St	AM	8.9	A
	PM	7.2	A

Footnotes:

a. Delay – measured in seconds.

b LOS – Level of Service.

c Intersection is located in the County of San Diego. All other intersections are located in the City of Escondido

TABLE 6–2 (*CONTINUED*)
EXISTING PEAK HOUR SIGNALIZED INTERSECTION OPERATIONS

Intersection	Peak Period	Delay[a]	LOS[b]
30. Valley Pkwy / Citracado Pkwy	AM	26.8	C
	PM	23.8	C
31. Valley Pkwy / Via Rancho Pkwy[c]	AM	31.0	C
	PM	73.6	E
32. West 9th St / Auto Park Wy	AM	39.6	D
	PM	35.4	D
33. West 9th St / I-15 SB Ramps	AM	18.6	B
	PM	20.8	C
34. West 9th St / I-15 NB Ramps	AM	24.7	C
	PM	26.3	C
35. San Elijo Rd / Rancho Santa Fe	AM	27.6	C
	PM	32.2	C
36. Via Rancho Pkwy / I-15 SB Ramps	AM	>80.0	F[d]
	PM	42.2	D
37. Via Rancho Pkwy / I-15 NB Ramps	AM	24.9	C
	PM	35.0	C

Footnotes:

a. Delay – measured in seconds
b. LOS – Level of Service.
c. Intersection is located in the County of San Diego. All other intersections are located in the City of Escondido.
d. LOS F conditions caused by ramp meter delay.

SIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 < 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
> 80.1	F

TABLE 6–3
EXISTING UNSIGNALIZED INTERSECTION OPERATIONS

Intersection	Peak Period	Movement	Delay[a]	LOS[b]
4 Citracado Pkwy / Country Club Dr	AM	EB	>100.0	F
	PM	EB	>100.0	F
5 Country Club Dr / Kauana Loa[c]	AM	All-way	7.9	A
	PM	All-way	7.8	A
6 Country Club Dr / Entrance #3	AM	d	d	d
	PM	d	d	d
7 Country Club Dr / Village Rd[c]	AM	d	d	d
	PM	d	d	d
8 Harmony Grove / Village Rd[c]	AM	d	d	d
	PM	d	d	d
9 Country Club Dr / Entrance #2[c]	AM	d	d	d
	PM	d	d	d
10 Country Club Dr / Harmony Grove[c]	AM	NB	9.4	A
		SB	11.4	B
	PM	NB	13.0	B
		SB	11.2	B
11 Harmony Grove / Entrance #1	AM	d	d	d
	PM	d	d	d
12 Harmony Grove / Wilgen Rd[c]	AM	SB	11.5	B
	PM	SB	11.3	B
13 Vineyard Ave / Citracado Pkwy	AM	d	d	d
	PM	d	d	d
14 Harmony Grove / Kauana Loa	AM	EB	9.3	A
	PM	EB	11.8	B

Footnotes:

a Delay – measured in seconds

b LOS – Level of Service.

c Intersection is located in the County of San Diego. All other intersections are located in the City of Escondido

d Intersection does not exist.

UNSIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 < 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
> 50.1	F

TABLE 6–3 *(CONTINUED)*
EXISTING UNSIGNALIZED INTERSECTION OPERATIONS

Intersection	Peak Period	Movement	Delay[a]	LOS[b]
16. Andreason Dr / Enterprise St	AM	All-way	10.2	B
	PM	All-way	9.9	A
17. Harmony Grove Rd / Enterprise St	AM	NB	14.6	B
	PM	NB	14.2	B
18. Harmony Grove Rd / Howard Ave	AM	SB	14.9	B
	PM	SB	16.6	C
20. Hale Ave / West 11th St	AM	WB	13.0	B
	PM	WB	14.8	B
21. Hale Ave / Harmony Grove Ave	AM	EB	16.0	C
	PM	EB	27.6	D
22. Avenida Del Diablo / Citracado Pkwy	AM	EB	8.8	A
	PM	EB	8.8	A
23. Avenida Del Diablo / Hale Ave	AM	SB	10.4	B
	PM	SB	9.1	A
29. Valley Pkwy / Avenida Del Diablo	AM	EB	>100.0	F
	PM	EB	>100.0	F

Footnotes:

a. Delay – measured in seconds.

b. LOS – Level of Service

UNSIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 < 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
> 50.1	F

6.3 Freeway Segments

Table 6–4 shows the existing peak hour analysis results for the freeway segments in the project area. As shown in *Table 6–4*, all freeway segments in the project area are calculated to operate at LOS D or better with the following exceptions:

- SR-78 west of Nordahl Road eastbound (LOS F(0) during the PM peak hour);
- I-15 south of W. 9th Street southbound (LOS E during the AM peak hour);
- I-15 south of Via Rancho Parkway northbound (LOS F(1) during the PM peak hour);
- I-15 south of Via Rancho Parkway southbound (LOS F(0) during the AM peak hour).

6.4 Ramp Meters

Table 6–5 shows the Existing, Existing + Project, and Existing + Project + Cumulative Projects ramp operations at the key freeway interchanges in the project area. As shown in *Table 6–5*, all ramps are calculated to operate with less than 15 minutes of delay under worst-case conditions except for the following locations:

- I-15 / Valley Parkway Northbound Ramp (PM peak hour);
- I-15 / Via Rancho Parkway Southbound Ramp (AM peak hour).

The project does *not* increase the ramp delays at the freeway interchanges to significant levels with the exception of I-15 / Via Rancho Parkway Southbound Ramp. The significance of this impact will be discussed further in Section 15.0: Significance of Impacts and Mitigation Measures. The freeway ramps are not affected by the street network alternatives (Option A, B or C) and as such, the ramp meter analysis is *not* shown for each option in the following sections. It should be noted that, while some of the signalized ramp intersections are significantly impacted, it does not follow that the ramp meters, which are located at the entrance to the freeway, are also significantly impacted. Ramp meter and intersection analyses are derived from two entirely different methodologies and cannot be conflated. The ramp meter analysis methodology is consistent with Caltrans and CMP guidelines.

TABLE 6–4
EXISTING FREEWAY SEGMENT OPERATIONS

Scenario	Direction	Number of Lanes	Hourly Capacity [a]	ADT[b]	Peak Hour Volume [c]		V/C[d]		LOS[e]	
					AM	PM	AM	PM	AM	PM
Existing										
SR-78										
West of Nordahl Road	EB	3M	6,900	152,000	5,565	8,208	0.806	1.190	D	F(0)
	WB	3M	6,900	152,000	6,275	6,192	0.909	0.897	D	D
I-15										
South of 9th Avenue	NB	5M	11,500	189,000	6,015	9,352	0.523	0.813	B	D
	SB	4M	9,200	189,000	9,023	6,499	0.981	0.706	E	C
South of Via Rancho Parkway	NB	4M + 1A	10,400	218,000	6,938	10,787	0.667	1.037	C	F(0)
	SB	4M	9,200	218,000	10,408	7,496	1.131	0.812	F(0)	D

Footnotes:

a Capacity calculated at 2,300 vehicles per hour per lane and 1,200 vehicles per hour per auxiliary lane (M: Mainline, A: Auxiliary Example: 4M+2A=4 Mainline + 2 Auxiliary)

b Existing ADT Volumes from CALTRANS

c Peak Hour Volume = ((ADT)(K)(D)/Truck Factor) (*Appendix D*)

d V/C = ((ADT)(K)(D)/Truck Factor/Capacity)

e Level of Service

FREEWAY THRESHOLDS

LOS	v/c
A	<0.41
B	0.42-0.62
C	0.63-0.8
D	0.81-0.92
E	0.93-1.00
F(0)	1.01-1.25
F(1)	1.26-1.35
F(2)	1.36-1.45
F(3)	>1.46

TABLE 6–5
RAMP METER OPERATIONS (FIXED RATE METHOD)

Location/Condition	Minimum/ Maximum Rate	Peak Hour Demand	Meter Flow Rate	Excess Demand	Delay (Minutes)	Queue (Feet)
SR-78 / Nordahl Road						
Westbound Ramp (AM Peak Hour)						
Existing	Min	534	619	0	0	0
	Max	534	1,140	0	0	0
Existing + Project	Min	601	619	0	0	0
	Max	601	1,140	0	0	0
Project Increase	Min	67	N/A[d]	0	0	0
	Max	67	N/A	0	0	0
Existing + Project + Cumulative Projects	Min	729	619	110	11	2,750
	Max	729	1,140	0	0	0
Eastbound Ramp (PM Peak Hour)						
Existing	Min	1,093	1,320	0	0	0
	Max	1,093	1,992	0	0	0
Existing + Project	Min	1,110	1,320	0	0	0
	Max	1,110	1,992	0	0	0
Project Increase	Min	17	N/A	0	0	0
	Max	17	N/A	0	0	0
Existing + Project + Cumulative Projects	Min	1,288	1,320	0	0	0
	Max	1,288	1,992	0	0	0

Footnotes:

a. Meter Rates obtained from CALTRANS (*Appendix E*).

b. Delay expressed in minutes.

c. Queue expressed in feet.

d. Not applicable

TABLE 6–5 (CONTINUED)
RAMP METER OPERATIONS (FIXED RATE METHOD)

Location/Condition	Minimum/ Maximum Rate	Peak Hour Demand	Meter Flow Rate	Excess Demand	Delay (Minutes)	Queue (Feet)
I-15 / Valley Parkway						
Northbound Ramp (PM Peak Hour)						
Existing	Min	1,489	950	539	34	13,475
	Max	1,489	1,992	0	0	0
Existing + Project	Min	1,495	950	545	34	13,625
	Max	1,495	1,992	0	0	0
Project Increase	Min	6	N/A[d]	6	0	150
	Max	6	N/A	0	0	0
Existing + Project + Cumulative Projects	Min	1,495	950	545	34	13,625
	Max	1,495	1,992	0	0	0
Southbound Ramp (AM Peak Hour)						
Existing	Min	292	343	0	0	0
	Max	292	570	0	0	0
Existing + Project	Min	314	343	0	0	0
	Max	314	570	0	0	0
Project Increase	Min	22	N/A	0	0	0
	Max	22	N/A	0	0	0
Existing + Project + Cumulative Projects	Min	393	343	50	9	1,250
	Max	393	570	0	0	0

Footnotes:

a Meter Rates obtained from CALTRANS (*Appendix E*)

b Delay expressed in minutes

c Queue expressed in feet

d Not applicable

TABLE 6–5 (CONTINUED)
RAMP METER OPERATIONS (FIXED RATE METHOD)

Location/Condition	Minimum/ Maximum Rate	Peak Hour Demand	Meter Flow Rate	Excess Demand	Delay (Minutes)	Queue (Feet)
I-15 / W. 9th Street						
Northbound Ramp (PM Peak Hour)						
Existing	Min	608	854	0	0	0
	Max	608	1,140	0	0	0
Existing + Project	Min	608	854	0	0	0
	Max	608	1,140	0	0	0
Project Increase	Min	0	N/A[d]	0	0	0
	Max	0	N/A	0	0	0
Existing + Project + Cumulative Projects	Min	608	854	0	0	0
	Max	608	1,140	0	0	0
Southbound Ramp (AM Peak Hour)						
Existing	Min	824	1,085	0	0	0
	Max	824	1,992	0	0	0
Existing + Project	Min	872	1,085	0	0	0
	Max	872	1,992	0	0	0
Project Increase	Min	48	N/A	0	0	0
	Max	48	N/A	0	0	0
Existing + Project + Cumulative Projects	Min	943	1,085	0	0	0
	Max	943	1,992	0	0	0

Footnotes:

a Meter Rates obtained from CALTRANS (*Appendix E*)

b Delay expressed in minutes

c Queue expressed in feet

d Not applicable

TABLE 6–5 *(CONTINUED)*
RAMP METER OPERATIONS (FIXED RATE METHOD)

Location / Condition	Minimum / Maximum Rate	Peak Hour Demand	Flow Rate[a]	Excess Demand	Delay [b] (Minutes)	Queue[c] (Feet)
I-15 / Via Rancho Parkway						
Northbound Ramp (PM Peak Hour)						
Existing	Min	450	838	0	0	0
	Max	450	1,140	0	0	0
Existing + Project	Min	450	838	0	0	0
	Max	450	1,140	0	0	0
Project Increase	Min	0	NA[d]	0	0	0
	Max	0	NA	0	0	0
Existing + Project + Cumulative Projects	Min	471	838	0	0	0
	Max	471	1,140	0	0	0
Southbound Ramp (AM Peak Hour)						
Existing	Min	1,499	907	592	39	14,788
	Max	1,499	2,268	0	0	0
Existing + Project	Min	1,535	907	628	42	15,710
	Max	1,535	2,268	0	0	0
Project Increase	Min	37	NA	37	**2**	923
	Max	37	NA	0	0	0
Existing + Project + Cumulative Projects	Min	1,560	907	653	43	16,318
	Max	1,560	2,268	0	0	0

Footnotes:

a. Meter Rates obtained from CALTRANS (*Appendix E*).

b. Delay expressed in minutes

c. Queue expressed in feet

d. Not applicable

7.0 PROJECT TRAFFIC

7.1 Trip Generation

The estimated traffic generation for Harmony Grove was calculated based on the SANDAG publication of "Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region", April 2002. ***Table 7–1*** summarizes the trip generation calculations for Harmony Grove.

The project is proposing both estate type homes and more standard density single-family detached homes. Based on the SANDAG rates, the estate homes (1–2 dwelling units per acre) were assumed to generate 12 ADT per unit and the single-family homes are assumed to generate 10 ADT per unit. The project is proposing to develop 32-live / work lofts, which are assumed to generate 5 ADT per unit. This is slightly less than the apartment rate since the occupant lives and works in the same location and each unit will have a storefront. The 16,500 square feet of live / work space is comprised of approximately 500 square-foot storefronts associated with each live / work unit. The live / work units are small (i.e. will not generate excessive trips) and work trips are for the most part eliminated. It is for these reasons that the live / work trip rate is assumed to follow more closely with an apartment trip generation rate (6 ADT per unit).

There is no SANDAG or ITE rate for this type of retail space. Based on the very small square footage and the types of retail associated with live / work units (typically service oriented, not retail sales), a rate of one-half of the SANDAG strip commercial rate was considered most accurate.

The project is also proposing to develop a Village Core to serve the residents. The standard specialty commercial rate described in the SANDAG trip generation rate guide is 40 trips per 1,000 square feet. The project, however, proposes a less intensive, local-serving set of commercial uses. The rate was therefore reduced to 30 trips per 1,000 square feet. This reduced rate is *not* based on the mixed-use nature of the project. Instead, the reduced rate is intended to account for the very small size of the proposed retail and the type of goods / services offered (e.g. dry cleaner, office, etc.). Higher generating strip commercial uses (40 trips per 1,000 square feet) are not proposed and fast food facilities will be excluded based on the site zoning. It should be noted that the Select Zone Assignment and the SANDAG Traffic Forecast Traffic Model contain a portion of the project trips that remain internal to the zone and are not distributed onto the roadway network.

Furthermore, the Village Core will be located within walking distance for much of the community and as such, a trip rate reduction was implemented. This is applicable because residents will not have to generate the generally accepted number of trip to complete daily activities; it is possible for residents to walk to and from the commercial portion of the project. To account for the mixed-use nature of the Village Core, a mixed-use trip rate reduction of 10% was assumed for this project. The institutional uses were not, however, included in the mixed-use reduction. The 10% reduction was based on the City of San Diego *Recommended Trip Reductions for Mixed-Use Developments* table (City of San Diego Traffic Manual, pg 4, July 1998) and a specific review of the anticipated project uses.

There is no SANDAG or ITE rate available for an equestrian facility. Therefore, detailed discussions with the developer concerning the uses of the facilities determined the assumed trip generation. An individual project trip generation table was developed for the equestrian facility. The equestrian facility is calculated to generate a worst case ADT of 500 trips. These trips are included in the total trip generation for Harmony Grove. ***Appendix F*** shows the Trip Generation Table for the equestrian facility. About eight times a year, and always on a weekend, a horse show could draw up to 350 patrons. These special events are not quantitatively analyzed since they are infrequent and do not occur on weekdays when commuter traffic is highest.

In addition to the above-described land uses, a two-acre lot reserved for a fire station shall be specifically dedicated for the use by, or donated to, the County for future construction of a fire station for the Elfin Forest / Harmony Grove Fire Department. Absent specific information about the possible facility, some conservative parameters have been developed. An approximately 6,600 square foot four-bay (double-loaded) apparatus facility would accommodate up to eight fire emergency service vehicles. This facility could operate 7 days a week and 24 hours per day. Ancillary structures containing laundry, bathing, sleeping, cooking and administrative uses could also be accommodated on site. A total of 29 fire fighting and administrative staff would generate up to 100 ADT, assuming miscellaneous deliveries and other trips, and a total of 10 fire / emergency calls per day.

As shown in *Table 7-1*, Harmony Grove is calculated to generate a total of 9,290 daily project trips. The project is calculated to generate 730 trips (281 inbound and 449 outbound trips) during the AM peak hour and 915 trips (583inbound and 332 outbound trips) during the PM peak hour.

TABLE 7–1
PROJECT TRIP GENERATION SUMMARY TABLE

Use	Size	Daily Trip Ends		AM Peak Hour				PM Peak Hour			
		Rate[a]	Volume (ADT[b])	% of ADT	In:Out Split	Volume In	Volume Out	% of ADT	In:Out Split	Volume In	Volume Out
Residential:											
Single Family	611 DU	10 / DU	6,110	8%	30:70	147	342	10%	70:30	428	183
Estate	99 DU	12 / DU	1,190	8%	30:70	29	67	10%	70:30	83	36
Live / Work:											
Residential [c]	32 DU	5 / DU	160	8%	30:70	4	9	10%	70:30	11	5
Commercial [d]	16,500 SF	20 / KSF	330	3%	60:40	6	4	9%	50:50	15	15
Commercial / Retail:											
Specialty Retail [e] (Village Core)	25,000 SF	30 / KSF	750	5%	70:30	26	11	9%	50:50	34	34
Equestrian:											
Equestrian Ranch [f]	—	—	500	—	—	38	8	—	—	14	33

General Notes:

Source: Trip generation rates obtained from the SANDAG Brief Guide to Vehicular Traffic Generation Rates for the San Diego Region, April 2002 unless otherwise noted

Footnotes:

a Rate is per measured per trip end.

b Average Daily Traffic (ADT) volumes rounded to the nearest 10

c A live / work rate is not available in the SANDAG trip generation rate publication. Due to the nature of the live / work design, the apartment rate of 6 trips / unit was considered but reduced to 5 trips / unit because many people are expected to live and work in the same location

d The retail rate of 20 trips / 1,000 square feet is used because the proposed retail consists of small, 500 square foot storefronts within the live / work complex. As such, most of the work trips are expected to be eliminated

e The SANDAG Specialty Retail trip rate is 40 trips / 1,000 square feet. The rate for the Village Core specialty retail was reduced because the project is designed to encourage people to walk or bicycle between the residences and the retail stores. Refer also to Section 7.1 of the traffic study for further explanation of this rate.

f There is no SANDAG trip generation rate available for an equestrian facility. The trip generation rates were, therefore, estimated based on the proposed use of the facility. The Equestrian Facility Trip Generation Table is located in *Appendix F*. The table and the associated calculations are discussed further in the body of the report.

TABLE 7–1 *(CONTINUED)*
PROJECT TRIP GENERATION SUMMARY TABLE

Use	Size	Daily Trip Ends		AM Peak Hour				PM Peak Hour			
		Rate	Volume (ADT)	% of ADT	In:Out Split	Volume In	Volume Out	% of ADT	In:Out Split	Volume In	Volume Out
Institutional:											
Fire Station [g]	—	—	100	—	—	10	10	—	—	10	10
Specialty Retail [h]	1.5 acre	270 / acre	400	3%	60:40	7	5	9%	50:50	18	18
Wastewater Reclamation Facility [i]	—	—	10	—	—	1	1	—	—	1	1
Parks:											
Public [j]	12 acres	50 / acre	600	13%	50:50	39	39	9%	50:50	27	27
Private [k]	7 acres	5 / acre	40	4%	50:50	1	0	8%	50:50	1	1
Trails [k]	10 acres	5 / acre	50	4%	50:50	1	1	8%	50:50	2	2
Equestrian Parks	6 acres	5 / acre	30	4%	50:50	1	0	8%	50:50	1	1
Sub-Total	—	—	*10,270*			*310*	*497*			*645*	*366*
Mixed Use Reduction [l]	*10%*	—	*(980)*	—	—	*(29)*	*(48)*	—	—	*(62)*	*(34)*
Total		—	9,290	—	—	281	449	—	—	583	332

General Notes:

Source: Trip generation rates obtained from the SANDAG Brief Guide to Vehicular Traffic Generation Rates for the San Diego Region, April 2002 unless otherwise noted. Traffic generation rates are conservative in order to allow for potential fluctuation prior to final TM approval. The residential and recreational numbers assume more homes and parkland than the current project proposes. In addition, specialty retail was assumed for a lot designated for public uses in order to assume higher loading on weekdays, when roadway capacity is more constrained.

Footnotes:

g. There is no SANDAG trip generation rate available for a fire station. As such, a trip generation rate was calculated using data from a comparable fire station in the City of Poway.

h. A specific use has not been identified for this 1.5 acre site. Based on the potential site uses such as a church or small school, a worst cast trip generation of 400 ADT was assumed for the site.

i. Few trips are expected to be generated by the water reclamation facility. 10 trips per day were estimated to account for the maintenance, management and supervision of the site.

j. The SANDAG public park trip generation rate accounts for an active or developed park (i.e. sporting facilities are provided).

k. The SANDAG neighborhood park trip generation rate accounts for passive or undeveloped park (i.e. no sporting facilities are provided). The AM and PM percentage of ADT was obtained from the corresponding park land use in the City of San Diego Trip Generation Manual (May 2003).

l. Given that the Village Core, parks and specialty retail uses are is designed to serve the residents of Harmony Grove Village, many trips related to activities such as running errands, will not leave the project site. Therefore, a 10 percent mixed-use reduction was applied to account for this phenomenon. The 10% reduction was based on the City of San Diego Recommended Trip Reductions for Mixed-Use Development table (1998) and site-specific land uses. The institutional land uses were not included in the mixed-use trip reduction.

7.2 Comparison of Existing General Plan Land Uses to Proposed Land Uses

Table 7-2 compares the trip generation for the existing General Plan Land Uses with the proposed land uses. As shown in *Table 7-2*, the proposed land uses are calculated to generate 8,486 daily trips with 666 trips during the AM peak hour and 835 trips during the PM peak hour more than that generated by the existing General Plan land uses.

TABLE 7–2
TRIP GENERATION COMPARISON: EXISTING GENERAL PLAN VS PROPOSED PROJECT LAND USES

Use	Size	Daily Trip Ends		AM Peak Hour				PM Peak Hour			
		Rate[a]	Volume (ADT)	% of ADT	In:Out Split	Volume In	Volume Out	% of ADT	In:Out Split	Volume In	Volume Out
Existing General Plan Land Use Designation											
Estate Residential	67 DU	12 / DU	804	8%	30:70	19	45	10%	70:30	56	24
Proposed Project[b]			9,290	—	—	281	449	—	—	583	332
Trip Generation Increase			**8,486**			**262**	**404**			**527**	**308**

General Notes:

Source: Trip generation rates obtained from the SANDAG Brief Guide to Vehicular Traffic Generation Rates for the San Diego Region, April 2002 unless otherwise noted

Footnotes:

a Rate is per measured per trip end

b See *Table 7–1* above

7.3 Trip Distribution

As explained in the Analysis Approach and Methodology section, the trip distribution was developed based on a Select Zone assignment obtained from the SANDAG Series 10 Model. It should be noted that the project traffic distribution was altered for Option A and Option B to reflect the proposed network improvements. The project traffic distribution for each scenario is discussed in more detail later in the report.

8.0 CUMULATIVE PROJECTS

Based on research at both the County of San Diego and the City of Escondido, 21 cumulative projects were chosen for inclusion in the traffic impact analysis. The following is a brief description of each of the cumulative projects included in this analysis.

8.1 Description of Projects

1. **Chablis Court** is planned as a 37,500 SF industrial building on Chablis Court. This project is calculated to generate 600 daily trips, 72 AM peak hour trips (58 inbound and 14 outbound) and 72 PM peak hour trips (14 inbound and 58 outbound).

2. **Executive Place** is a 49,419 SF industrial building located on 2867 and 2869 Executive Place. This project is calculated to generate 791 daily trips, 95 AM peak hour trips (76 inbound and 19 outbound) and 95 PM peak hour trips (19 inbound and 76 outbound).

3. **Andreason / Enterprise** is a 56,974 SF industrial building located at the intersection of Andreason Drive and Enterprise Street. This project is calculated to generate 912 daily trips, 110 AM peak hour trips (88 inbound and 22 outbound) and 110 PM peak hour trips (22 inbound and 88 outbound).

4. **Equipment Wholesale** is a 6,000 SF addition to an existing industrial building located at 2213 Meyers Street. This project is calculated to generate 96 daily trips, 11 AM peak hour trips (9 inbound and 2 outbound) and 12 PM peak hour trips (2 inbound and 9 outbound).

5. **Escondido Research and Technology Center (ERTC)** is a research center comprising of 208 Acres located along the future alignment of Citracado Parkway in Escondido. The project is expected to generate 19,973 daily trips with 2,493 AM peak hour trips (1,297 inbound and 465 outbound) and 2,485 PM peak hour trips (946 inbound and 1,540 outbound).

6. **Dorn Subdivision** is a 34 single-family unit development expected to generate 340 ADT with 8 inbound trips and 19 outbound trips during the AM peak hour and 24 inbound trips and 10 outbound trips during the PM peak hour.

7. **Harmony Grove Industrial Park** is a 13.53-acre industrial development located at the Enterprise Street / Andreason Drive intersection. The project is expected to generate 2706 ADT with 260 inbound and 65 outbound trips during the PM peak hour and 65 inbound and 260 outbound trips during the PM peak hour.

8. **Bernardo Acres** is a proposed 15-unit single-family residential development located south of West 9th Street near I-15 in the City of Escondido. The project is expected to generate 150 ADT with 4 inbound and 8 outbound trips during the AM peak hour and 11 inbound and 5 outbound trips during the PM peak hour.

9. **Terravino** is a proposed 29-unit condominium development. The project is expected to generate 232 ADT with 4 inbound and 15 outbound trips during the AM peak hour and 16 inbound and 7 outbound trips during the PM peak hour.

10. **Harmony Grove Meadows** is a proposed 112-acre, 224 single family residential development. The project is located in the County of San Diego, south and east of Harmony Grove Road. A traffic analysis for this development has not been prepared, however, it is estimated to generate approximately 2,690 ADT with 65 inbound and 151 outbound trips during the AM peak hour and 188 inbound and 81 outbound trips during the PM peak hour.

11. **Gamble Place** is a proposed 4-unit single-family development located on Gamble Place in the City of Escondido. The project is expected to generate 40 ADT with 1 inbound and 2 outbound trips during the AM peak hour and 3 inbound and 1 outbound trips during the PM peak hour.

12. **Via Rancho Parkway** is a proposed 2-unit single-family development located on Via Rancho Parkway in the County of San Diego. The project is expected to generate 20 ADT with 0 inbound and 1 outbound trips during the AM peak hour and 1 inbound and 1 outbound trip during the PM peak hour.

13. **Hunt Property** is a proposed 1-unit single-family development located east of Country Club Drive in the County of San Diego. The project is expected to generate 10 ADT with 0 inbound and 1 outbound trips during the AM peak hour and 1 inbound and 0 outbound trips during the PM peak hour.

14. **City Lights** is a proposed 11-unit single-family residential development located southeast of Harmony Grove Road between Village Drive and Country Club Drive. The project is expected to generate 110 ADT with 3 inbound and 6 outbound trips during the AM peak hour and 7 inbound and 3 outbound trips during the PM peak hour.

15. **Cielo del Norte** is a 186 single-family development located near the intersection of Elfin Forest Road and Harmony Grove Road. The project is expected to generate 2232 daily trips, 179 AM peak hour trips (54 inbound and 125 outbound) and 232 PM peak hour trips (162 inbound and 70 outbound).

16. **Victoria Shangrila** is a 34-unit single-family residential development located west of the project site near Harmony Grove Road. The project is expected to generate 340 ADT with 38 inbound and 19 outbound trips during the AM peak hour and 24 inbound and 10 outbound trips during the PM peak hour.

17. **Anderson TM** is a 6-unit single-family residential development located west of the project site near Harmony Grove Road. The project is expected to generate 60 ADT with 1 inbound and 3 outbound trips during the AM peak hour and 4 inbound and 2 outbound trips during the PM peak hour.

18. **Whispering Hills** is a 10-unit single-family residential development located west of the project site near Harmony Grove Road. The project is expected to generate 100 ADT with 2 inbound and 6 outbound trips during the AM peak hour and 7 inbound and 3 outbound trips during the PM peak hour.

19. **Little Creek** is a 3-unit single-family residential development located west of the project site near Harmony Grove Road. The project is expected to generate 30 ADT with 1 inbound and 2 outbound trips during the AM peak hour and 2 inbound and 1 outbound trips during the PM peak hour.

20. **McDonald Residence** is a 1-unit single-family residential development located west of the project site near Harmony Grove Road. The project is expected to generate 10 ADT with 0 inbound and 1 outbound trips during the AM peak hour and 1 inbound and 0 outbound trips during the PM peak hour.

21. **Christward Ministry** is a proposed 12-unit dormitory located west of the project site near Harmony Grove Road. The project is expected to generate 72 ADT with 1 inbound and 5 outbound trips during the AM peak hour and 5 inbound and 2 outbound trips during the PM peak hour.

8.2 Summary of Cumulative Projects Trips

Table 8–1 shows a summary of each cumulative project. As shown in *Table 8–1*, there is a total of 30,437 daily trips calculated to be generated by the cumulative projects. In the AM peak hour, 3,540 trips will be generated with 2,746 inbound trips and 794 outbound trips and in the PM peak hour, 3,647 trips will be generated with 995 inbound trips and 2,652 outbound trips.

Appendix G contains individual traffic assignments of each cumulative project. ***Figures 8–1 and 8–2*** depict the total cumulative project ADT and AM and PM peak hour intersection volumes, respectively. In order to be conservative, an additional 10% of cumulative traffic was added to account for future unforeseen cumulative projects.

Subsequent to the preparation of the cumulative analysis, additional research was completed to determine potential new cumulative projects. Five small projects were identified generating a total of 450 ADT. The Cielo Azul Project is 30 units and is located about 1 mile west of the site on Harmony Grove Road. The Victoria Garden site is located near the Harmony Grove Road/Elfin Forest intersection and consists of 2 units. The Lexus Project is located on Felicita Road and consists of 3 units. Homeland Estates proposes 9 units and is located on Clarence Lane in Escondido. Grubbs proposes 1 unit and is located on Felicita Road. This small amount of additional ADT is within the 10% Cumulative traffic addition.

TABLE 8–1
CUMULATIVE PROJECTS SUMMARY TABLE

Project	Use	Size	Daily Trip Ends		AM Peak Hour				PM Peak Hour			
			Rate[a]	Volume (ADT[b])	% of ADT	In:Out Split	Volume In	Volume Out	% of ADT	In:Out Split	Volume In	Volume Out
1. Chablis Court	Industrial Building	37,500 SF	16 / SF	600	12%	80:20	58	14	12%	20:80	58	72
2. Executive Place	Industrial Building	53,530 SF	16 / SF	856	12%	80:20	82	21	12%	20:80	82	103
3. Andreason / Enterprise	Industrial Building	56,974 SF	16 / SF	912	12%	80:20	88	22	12%	20:80	88	110
4. Equipment Wholesale	Industrial (Addition)	6,000 SF	16 / SF	96	12%	80:20	9	2	12%	20:80	9	11
5. ERTC	Research Center	208 Acres	–	19,973	–	–	2,125	371	–	–	1,997	2,496
6. Dorn Subdivision	Single Family	34 Units	10 / Unit	340	8%	30:70	8	19	10%	70:30	10	34
7. Harmony Grove Industrial Park	Industrial	13.53 Acres	200 /Acres	2,706	12%	80:20	260	65	12%	20:20	260	325
8. Bernardo Acres	Single Family	15 Units	10 / Unit	150	8%	30:70	4	8	10%	70:30	5	16
9. Terravino	Condominiums	29 Units	8 / Unit	232	8%	20:80	4	15	10%	70:30	7	23
10. Harmony Grove Meadows	Single Family	224 Units	10 / Unit	2,240	8%	30:70	54	125	10%	70:30	67	224
11. Gamble Place	Single Family	4 Units	10 / Unit	40	8%	30:70	1	2	10%	70:30	1	4
12. Via Rancho Parkway	Single Family	2 Units	10 / Unit	20	8%	30:70	-	1	10%	70:30	1	2
13. Hunt Property	Single Family	1 Unit	10 / Unit	10	8%	30:70	-	1	10%	70:30	-	1

General Notes:

Source: Trip generation rates obtained from the SANDAG Brief Guide to Vehicular Traffic Generation Rates for the San Diego Region, April 2002.

Footnotes:

a. Rate is per measured per trip end.

b. Average Daily Traffic (ADT) volumes.

TABLE 8–1 *(CONTINUED)*
CUMULATIVE PROJECTS SUMMARY TABLE

Project	Use	Size	Daily Trip Ends		AM Peak Hour				PM Peak Hour			
			Rate[a]	Volume (ADT[b])	% of ADT	In:Out Split	Volume In	Volume Out	% of ADT	In:Out Split	Volume In	Volume Out
14. City Lights	Single Family	11 Unit	10 / Unit	110	8%	30:70	3	6	10%	70:30	3	11
15. Cielo del Norte	Single Family	154 Units	10 / Unit	1,540	8%	30:70	37	86	10%	70:30	46	154
16. Victoria Shangrila	Single Family	34 Units	10 / Unit	340	8%	30:70	8	19	10%	70:30	10	34
17. Anderson TM	Single Family	6 Units	10 / Unit	60	8%	30:70	1	3	10%	70:30	2	6
18. Whispering Hills	Single Family	10 Units	10 / Unit	100	8%	30:70	2	6	10%	70:30	3	10
19 Little Creek	Single Family	3 Units	10 / Unit	30	8%	30:70	1	2	10%	70:30	1	3
20. McDonald Residence	Single Family	1 Unit	10 / Unit	10	8%	30:70	—	1	10%	70:30	-	1
21. Christward Ministry	Dormitory	12 Units	6 / Unit	72	8%	20:80	1	5	9%	70:30	2	7
TOTAL[C]				**30,437**	—	—	**2,746**	**794**	—	—	**995**	**2,652**

General Notes:

Source: Trip generation rates obtained from the SANDAG Brief Guide to Vehicular Traffic Generation Rates for the San Diego Region, April 2002.

Footnotes:

a. Rate is per measured per trip end.

b. Average Daily Traffic (ADT) volumes.

Note:

The TIA cumulative impacts analysis assumes a total cumulative ADT of 33,481 to account for potential cumulative projects unknown to date and other project applications between the date of the TIA and the date of the EIR certification.

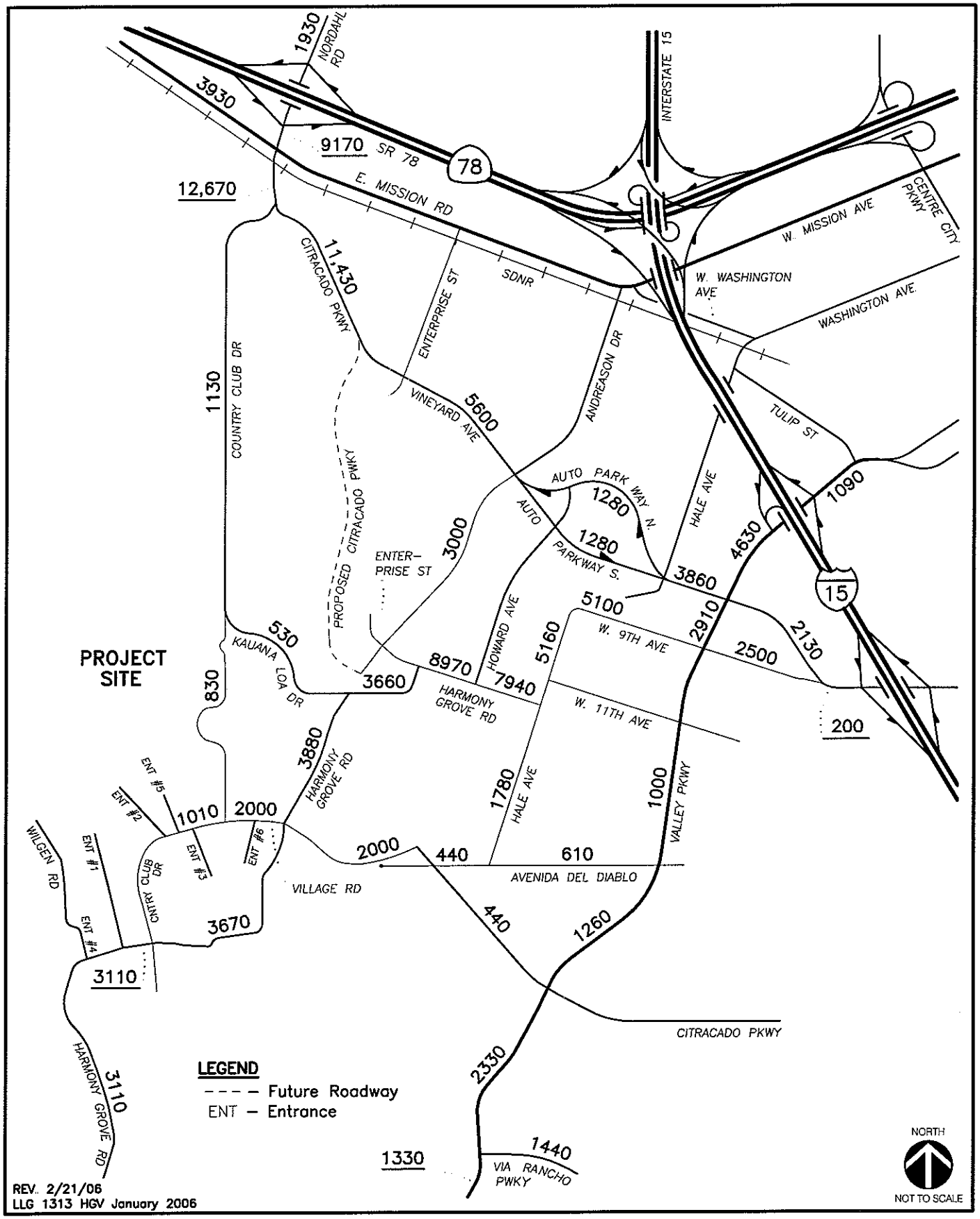

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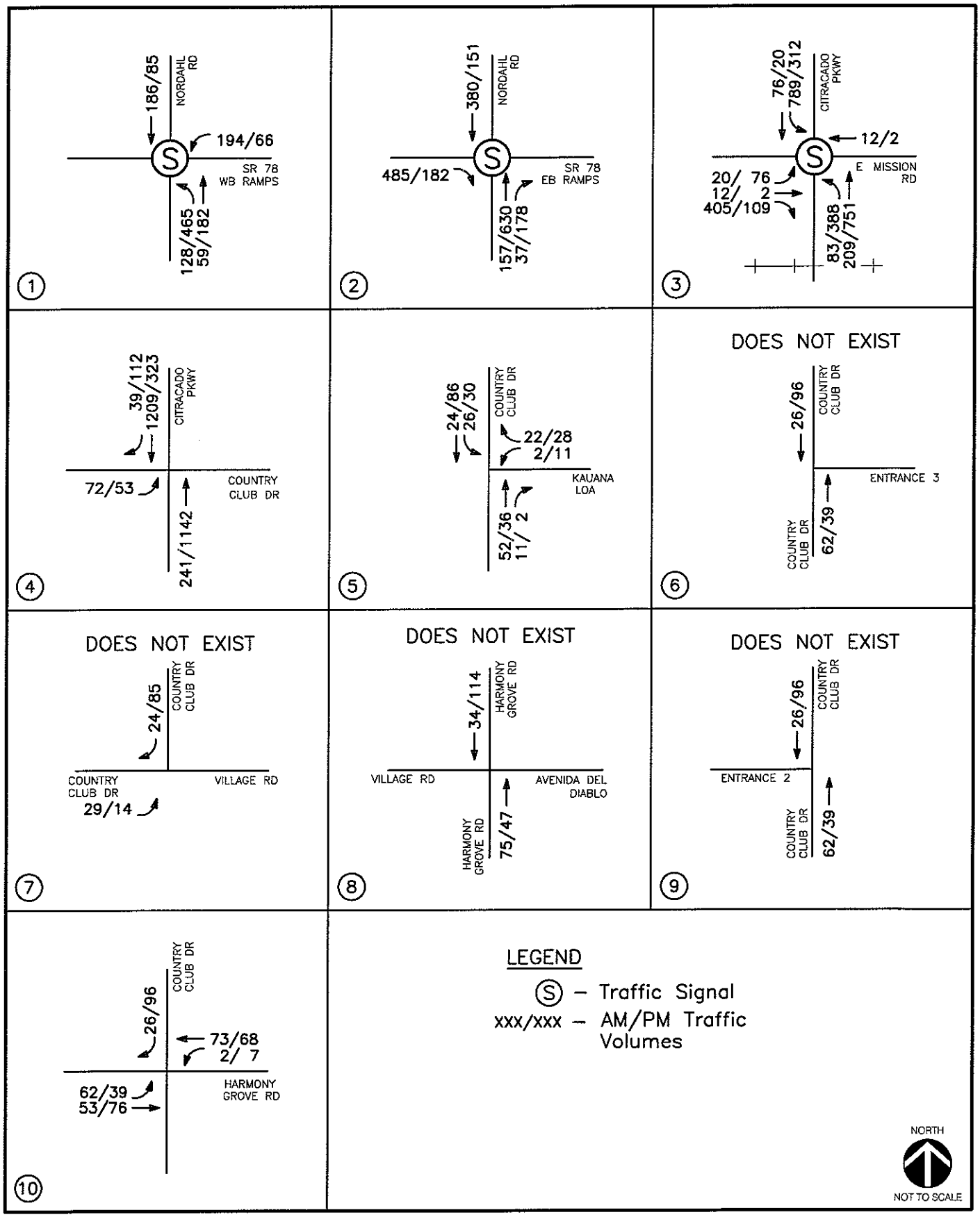
Figure 8-1

Cumulative Project Average Daily Traffic Volumes



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SHEET (1 OF 4)

Figure 8-2

Cumulative Project Peak Hour Traffic Volumes

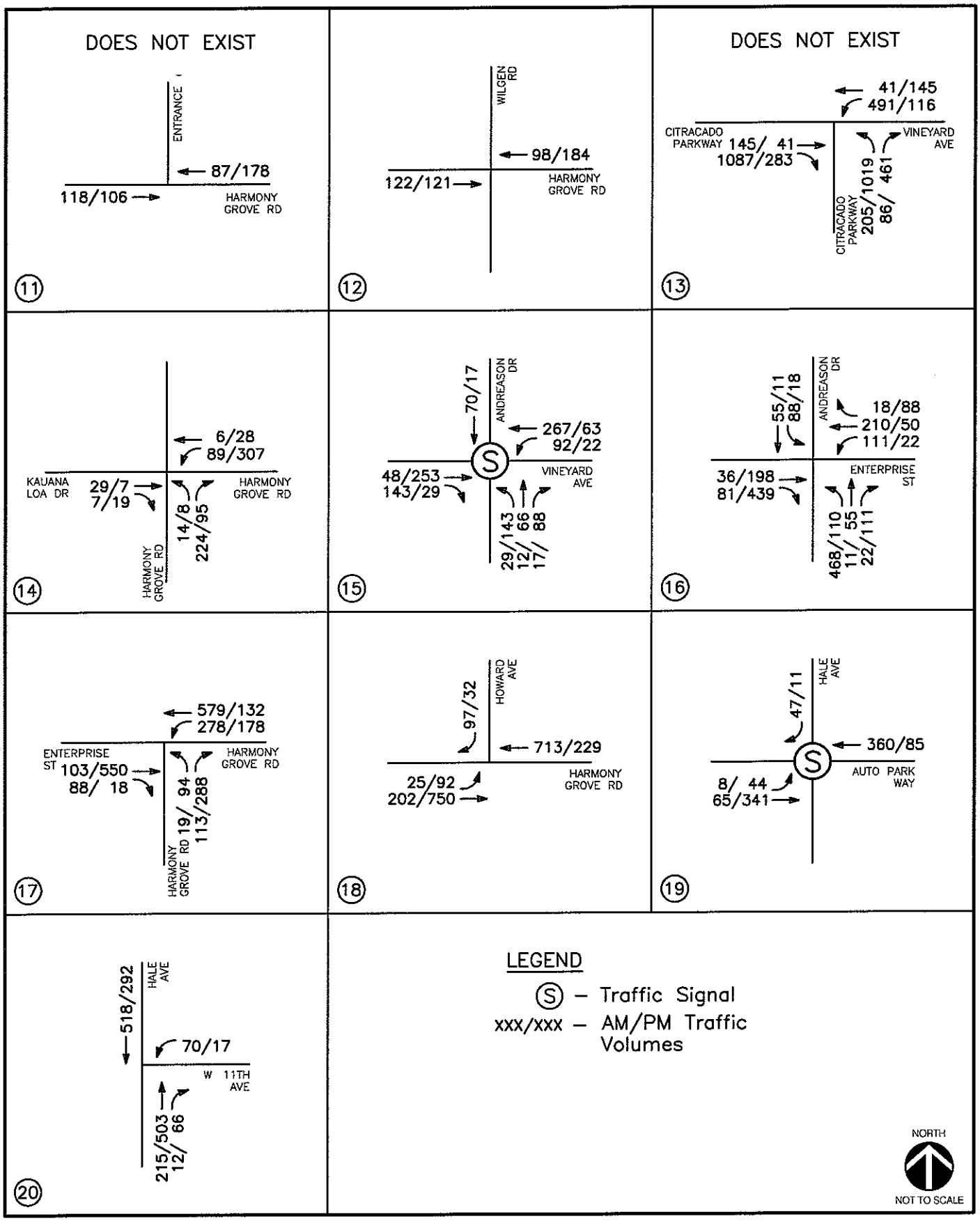

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Figure 8-2

Cumulative Project Peak Hour Traffic Volumes

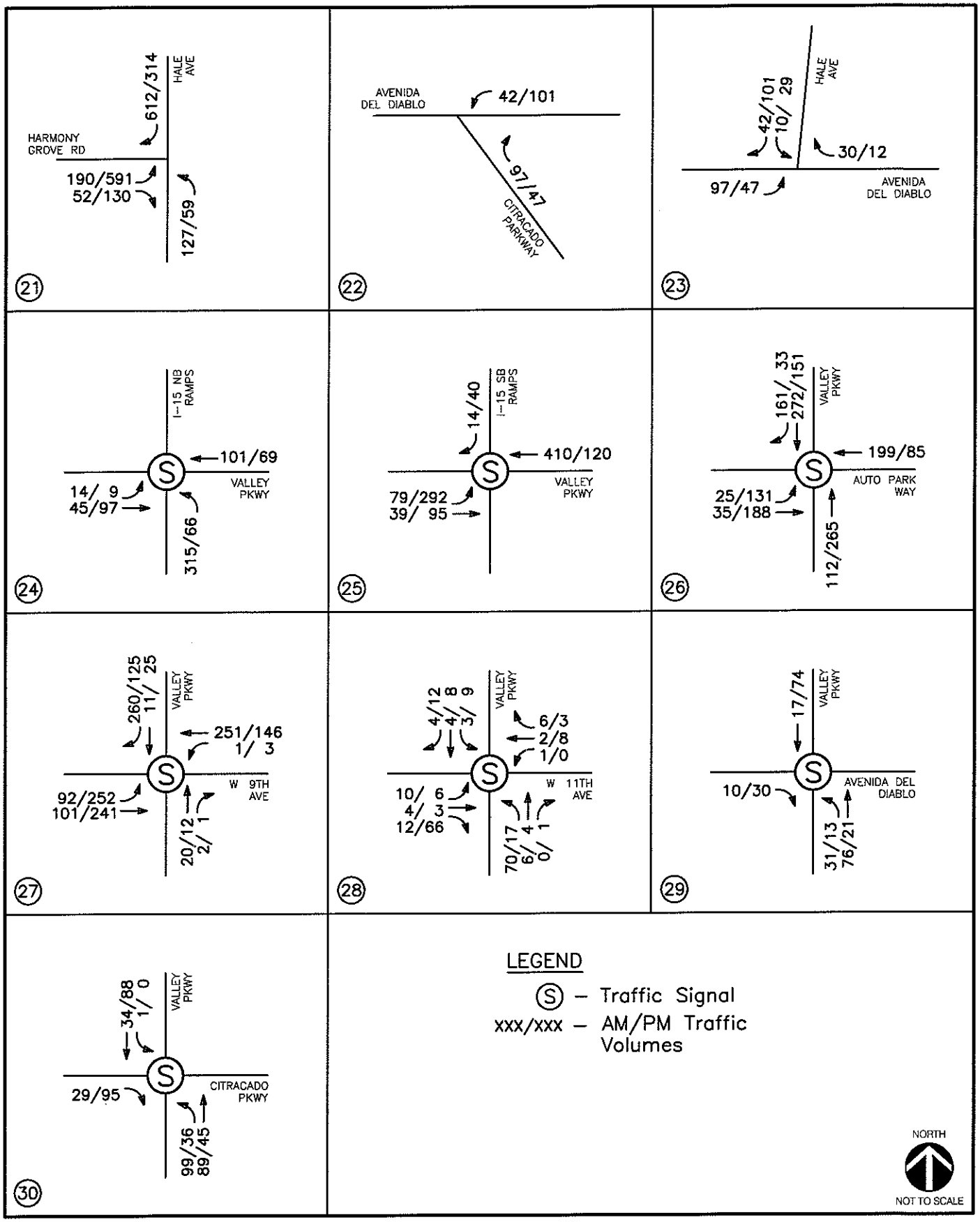

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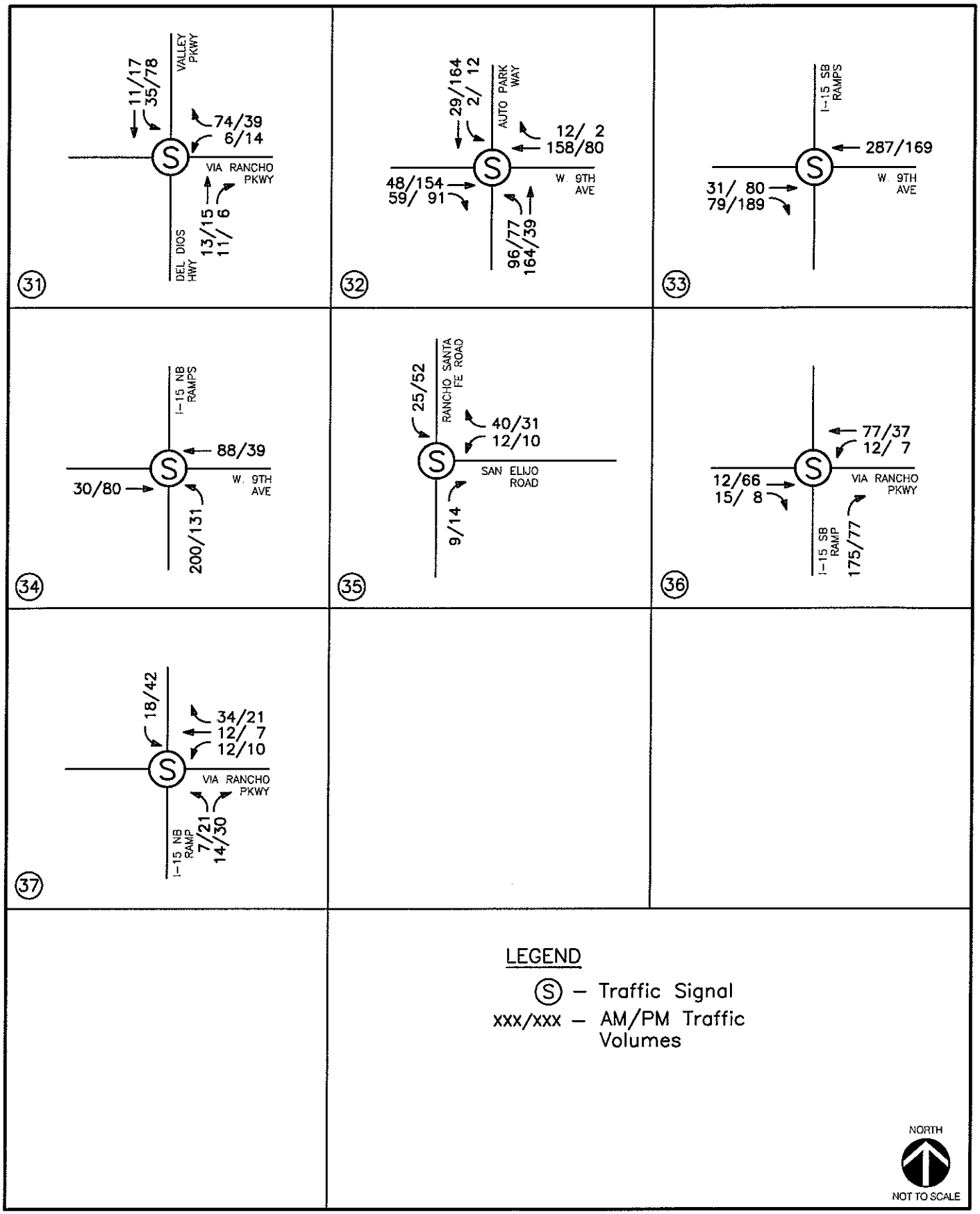
Figure 8-2

Cumulative Project Peak Hour Traffic Volumes



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SHEET (4 OF 4)

Figure 8-2

Cumulative Project Peak Hour Traffic Volumes

9.0 ANALYSIS OF OPTION A (HARMONY GROVE CUL-DE-SAC)

Harmony Grove Road currently intersects with Enterprise Street just west of Andreason Drive. Under Option A, the project is proposing to widen Harmony Grove Road to 4-lanes between the new Village Road and Kauana Loa Drive In addition, a realignment of Harmony Grove Road in a northeast direction and construction of, and connection to, a short segment of Citracado Parkway is also proposed. A cul-de-sac would be constructed on the existing portion of Harmony Grove Road just east of the new alignment.

Under Option A, the project is proposing to conduct capacity improvements at the Valley Parkway / Via Rancho Parkway intersection and the Andreason Drive / Auto Park Way intersection. These improvements are assumed to be part of the project for Option A.

9.1 Option A Baseline (Harmony Grove Cul-de-sac)

The existing traffic volumes were redistributed to represent the altered traffic patterns due to the proposed roadway network changes. All proposed roadway changes are incorporated into the analysis. The redistributed ADT and AM / PM peak hour traffic volumes are shown on ***Figures 9–1 and 9–2***, respectively.

9.1.1 *Segment Operations*

Table 9–1 summarizes the daily segment levels of service on key segments under Option A baseline conditions. As seen in *Table 9-1*, all key segments are calculated to operate at LOS D or better, with the exception of the following segments:

- Nordahl Road: SR-78 to Mission Road (LOS E)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS F)
- Vineyard Avenue: Enterprise Street to Andreason Drive (LOS F)
- West 9th Avenue: Auto Park Way to I-15 SB Ramps (LOS E)
- Via Rancho Parkway: East of Valley Parkway (LOS E)
- Valley Parkway: W. 11th Street to Avenida del Diablo (LOS F)
- Valley Parkway: Avenida del Diablo to Citracado Parkway (LOS F)
- Valley Parkway: Citracado Parkway to Via Rancho Parkway (LOS F)
- Valley Parkway: South of Via Rancho Parkway (LOS F)

A complete analysis of Country Club Drive and Village Road is contained in Section 14, since several classification Options are contemplated for these two roadways.

9.1.2 *Intersection Operations*

Signalized Intersections

Table 9–2 shows the signalized intersection operations under Option A baseline conditions. As seen in *Table 9–2*, all signalized intersections are calculated to operate at LOS D or better, with the exceptions of the following intersections:

- Nordahl Road / SR 78 EB Ramps (LOS E in the PM peak hour)
- Nordahl Road / Mission Road (LOS E in the PM peak hour)
- I-15 NB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 SB Ramps / Valley Parkway (LOS E in the PM peak hour)

- I-15 SB Ramps / Via Rancho Parkway (LOS F in the AM peak hour caused by ramp meter delay)

Unsignalized Intersections

Table 9–3 shows the unsignalized intersection operations under Option A baseline conditions. As seen *in Table 9–3*, the critical movements at all unsignalized intersections are calculated to operate at LOS D or better, with the exception of the following intersections:

- Citracado Parkway / Country Club Drive (Eastbound approach – LOS F in the AM and PM peak hours)
- Valley Parkway / Avenida del Diablo (Eastbound approach – LOS F during the AM and PM peak hours).

Appendix H contains the peak hour analysis work sheets for signalized and unsignalized intersections under Option A baseline conditions.

9.1.3 *Freeway Operations*

The Option A circulation change does not affect the freeway traffic volumes. The operations remain the same as outlined in Section 6.3.

9.1.4 *Ramp Meters*

The Option A circulation change does not affect the ramp volumes. The operations remain the same as outlined in Section 6.4.

9.2 Option A Project Traffic (Harmony Grove Cul-de-sac)

9.2.1 *Project Distribution*

The trip distribution was developed based on a Select Zone assignment obtained from the SANDAG Series 10 Model. The project traffic distribution was altered for Option A based on the proposed network improvements.

Figure 9–3 shows the project traffic distribution for Option A.

9.2.2 *Project Assignment*

The project related ADT and peak hour trips were assigned to the study area segments and intersections based on the distribution percentages shown in *Figure 9–3* and the assumed access plan. ***Figures 9–4*** and ***9–5*** depict the total project traffic ADT and AM / PM peak hour traffic volumes for Option A, respectively.

9.3 Option A Baseline + Project (Harmony Grove Cul-de-sac)

The Option A project traffic was added to Option A baseline traffic volumes and analyzed to determine project impacts to the local circulation system. ***Figures 9–6 and 9–7*** show the ADT and AM / PM peak hour traffic volumes for Option A baseline + project conditions.

9.3.1 *Segment Operations*

Table 9–1 summarizes the daily segment levels of service on key segments under Option A Baseline + Project conditions. *Table 9–1* shows that will the addition of project traffic, all key segments are calculated to operate at LOS D or better with the exception of the following segments:

- Nordahl Road: SR-78 to Mission Road (LOS F)
- Andreason Drive: Vineyard Avenue to Enterprise Street (LOS E)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS F)
- Vineyard Avenue: Enterprise Street to Andreason Drive (LOS F)
- Auto Park Way: Hale Avenue to Valley Parkway (LOS E)
- West 9th Avenue: Auto Park Way to I-15 SB Ramps (LOS E)
- Via Rancho Parkway: East of Valley Parkway (LOS E)
- Valley Parkway: W. 11th Street to Avenida del Diablo (LOS F)
- Valley Parkway: Avenida del Diablo to Citracado Parkway (LOS F)
- Valley Parkway from Citracado Parkway to Via Rancho Parkway (LOS F)
- Valley Parkway: South of Via Rancho Parkway (LOS F)

9.3.2 *Intersection Operations*

Signalized Intersections

Table 9–2 shows the signalized intersection operations under Option A Baseline + Project conditions. *Table 9–2* shows that with the addition of project traffic, all signalized intersections are calculated to operate at LOS D or better, with the exceptions of the following intersections:

- Nordahl Road. / SR 78 EB Ramps (LOS E in the AM peak hour and LOS F in the PM peak hour)
- Nordahl Road / Mission Road (LOS F in the PM peak hour)
- I-15 NB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 SB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 SB Ramps / Via Rancho Parkway (LOS F caused by ramp meter delay)

Unsignalized Intersections

Table 9–3 shows the unsignalized intersection operations under Option A baseline + project conditions. *Table 9–3* shows that with the addition of project traffic, the critical movements at all unsignalized intersections are calculated to operate at LOS D or better, with the exception of the following intersections:

- Citracado Parkway / Country Club Drive (Eastbound approach – LOS F in the AM and PM peak hours)
- Valley Parkway / Avenida del Diablo (Eastbound approach – LOS F during the AM and PM peak hours).

Appendix H contains the peak hour analysis work sheets for signalized and unsignalized intersections under Option A Baseline + Project conditions.

9.3.3 Freeway Operations

Table 9-4 shows the peak hour analysis results for the freeway segments in the project area on freeway segments that have more than 50 peak hour trips. As shown in *Table 9–4*, all freeway segments in the project area are calculated to operate at LOS D or better with the addition of project traffic, except for the following:

- Eastbound West of Nordahl Road (LOS F(0) during the PM peak hour);
- Southbound I-15 south of W. 9th Street (LOS E during the AM peak hour);
- Northbound I-15 south of Via Rancho Parkway (LOS F(0) during the PM peak hour);
- Southbound I-15 south of Via Rancho Parkway (LOS F(0) during the AM peak hour).

9.3.4 *Ramp Meters*

Table 6–5 shows the ramp meter operations with the addition of project traffic at the key freeway interchanges in the project area. As shown in *Table 6–5*, all ramp meters are calculated to operate with less than 15 minutes of delay under worst-case conditions with the addition of project traffic, except for the following:

- I-15 / Valley Parkway Northbound Ramp (Delay range calculated from 0 to 34 minutes of delay during the PM peak hour);
- I-15 / Via Rancho Parkway Southbound Ramp (Delay range calculated from 0 to 42 minutes of delay during the AM peak hour).

9.4 Option A Baseline + Project + Cumulative Projects (Harmony Grove Cul-de-sac)

The Option A cumulative project traffic was added to Option A Baseline + Project traffic volumes and analyzed to determine potential cumulative project impacts to the local circulation system. ***Figures 9–8 and 9–9***show the ADT and AM / PM peak hour traffic volumes for Option A Baseline + Project + Cumulative Project conditions.

9.4.1 *Segment Operations*

Table 9–1 summarizes the daily segment levels of service on key segments under Option A Baseline + Project + Cumulative Project conditions. *Table 9–1* shows that will the addition of cumulative project traffic, all key segments are calculated to operate at LOS D or better with the exception of the following segments:

- Harmony Grove Road: Wilgen Road to Country Club Drive (LOS E)
- Harmony Grove Road: Enterprise Street to Howard Avenue (LOS E)
- Harmony Grove Road: Howard Avenue to Hale Avenue (LOS F)
- Nordahl Road: SR-78 to Mission Road (LOS F)
- Nordahl Road: Mission Road to Country Club Drive (LOS F)
- Andreason Drive: Vineyard Avenue to Enterprise Street (LOS F)

- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS F)
- Vineyard Avenue: Enterprise Street to Andreason Drive (LOS F)
- Auto Park Way: Andreason Drive to Hale Avenue (LOS E)
- Auto Park Way: Hale Avenue to Valley Parkway (LOS F)
- Hale Avenue: W. 9th Street to Harmony Grove Road (LOS F)
- West 9th Street: Hale Avenue to Valley Parkway (LOS E)
- West 9th Street: Valley Parkway to Auto Park Way (LOS E)
- West 9th Avenue: Auto Park Way to I-15 (LOS F)
- Via Rancho Parkway: East of Valley Parkway (LOS E)
- Valley Parkway: W. 11th Street to Avenida del Diablo (LOS F)
- Valley Parkway: Avenida del Diablo to Citracado Parkway (LOS F)
- Valley Parkway: Citracado Parkway to Via Rancho Parkway (LOS F)
- Valley Parkway: South of Via Rancho Parkway (LOS F)

9.4.2 *Intersection Operations*

Signalized Intersections

Table 9–2 shows the signalized intersection operations under Option A Baseline + Project + Cumulative Project conditions. *Table 9–2* shows that with the addition of cumulative project traffic, all signalized intersections are calculated to operate at LOS D or better, with the exceptions of the following intersections:

- Nordahl Road / SR 78 EB Ramps (LOS F in the AM and PM peak hours)
- Nordahl Road / Mission Road (LOS F in the AM and PM peak hours)
- I-15 NB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 SB Ramps / Valley Parkway (LOS E in the AM peak hour and LOS F in the PM peak hour)
- West 9th Street / Auto Park Way (LOS E in the AM peak hour)
- I-15 SB Ramps / Via Rancho Parkway (LOS F in the AM peak hour caused by ramp meter delay)

Unsignalized Intersections

Table 9–3 shows the unsignalized intersection operations under Option A Baseline + Project + Cumulative Project conditions. *Table 9–3* shows that with the addition of cumulative project traffic, the critical movements at all unsignalized intersections are calculated to operate at LOS D or better, with the exception of the following intersections:

- Citracado Parkway / Country Club Drive (eastbound approach – LOS F in the AM and PM peak hours)

- Harmony Grove Road / Village Road (eastbound approach – LOS E in the PM peak hour)
- Harmony Grove Road / Kauana Loa Drive (eastbound approach – LOS F in the AM and PM peak hours)
- Andreason Drive / Enterprise Street (LOS F in the AM and PM peak hours)
- Harmony Grove Road / Enterprise Street (northbound approach – LOS E in the AM peak hour LOS F in the PM peak hour)
- Harmony Grove Road / Howard Avenue (southbound approach – LOS F in the AM and PM peak hours)
- Hale Avenue / West 11th Street (westbound approach – LOS E in the AM peak hour and LOS F in the PM peak hour)
- Harmony Grove Road / Hale Avenue (eastbound approach – LOS F in the AM and PM peak hours)
- Valley Parkway / Avenida del Diablo (eastbound approach – LOS F during the AM and PM peak hours).

Appendix H contains the peak hour analysis work sheets for signalized and unsignalized intersections under Option A Baseline + Project + Cumulative Project conditions.

9.4.3 *Freeway Operations*

Table 9-4 shows the peak hour analysis results for the freeway segments. As shown in *Table 9-4*, with the addition of project and cumulative projects traffic, the following freeway segments in the project area are calculated to operate at LOS E or worse conditions:

- Eastbound SR 78 West of Nordahl Road (LOS F(0) during the PM peak hour);
- Westbound SR 78 west of Nordahl Road (LOS E during the AM and PM peak hours)
- Southbound I-15 south of W. 9th Street (LOS E during the AM peak hour);
- Northbound I-15 south of Via Rancho Parkway (LOS F(0) during the PM peak hour);
- Southbound I-15 south of Via Rancho Parkway (LOS F(0) during the AM peak hour).

9.4.4 *Ramp Meters*

Table 6–5 shows the ramp meter operations with the addition of project traffic at the key freeway interchanges in the project area. As shown in *Table 6–5*, all ramp meters are calculated to operate with less than 15 minutes of delay under worst-case conditions with the addition of cumulative project traffic, except for the following:

- I-15 / Valley Parkway Northbound Ramp (Delay range calculated from 0 to 34 minutes of delay during the PM peak hour)
- I-15 / Via Rancho Parkway Southbound Ramp (Delay range calculated from 0 to 43 minutes of delay during the AM peak hour)

TABLE 9-1
OPTION A: NEAR-TERM STREET SEGMENT OPERATIONS
(WITH HARMONY GROVE ROAD CUL-DE-SAC)

Segment	Existing Classification	Capacity (LOS E)[a]	Baseline Option A[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
Elfin Forest Road													
San Elijo Rd to Questhaven Rd[f]	Rural Collector	16,200	5,800	0.36	C	6,540	0.40	C	0.04	9,650	0.60	D	None
Harmony Grove Road													
Questhaven Rd to Wilgen Rd[f]	Rural Collector	16,200	5,100	0.31	C	5,840	0.36	C	0.05	8,950	0.55	D	None
Wilgen Rd to Country Club Dr.[f]	Town Collector	19,000	5,400	0.28	B	8,190	0.43	C	0.15	11,300	0.59	D	None
Country Club Dr. to Village Rd[f]	Rural Collector	16,200	5,100	0.31	C	7,240	0.45	D	0.14	10,410	0.64	D	None
Village Rd to Kauana Loa Dr.[f]	Collector	34,200	5,100	0.15	A	11,600	0.34	A	0.19	15,480	0.45	B	None
Kauana Loa Dr. to Enterprise St.	Collector	34,200	7,000	0.20	A	13,220	0.39	A	0.19	16,880	0.49	B	None
Enterprise St. to Howard Ave	Local Collector	15,000	8,000	0.53	C	10,320	0.69	D	0.16	**19,290**	**1.29**	**E**	Cumulative
Howard Ave to Hale Ave	Rural Collector	10,000	6,600	0.66	C	8,460	0.85	D	0.19	**16,400**	**1.64**	**F**	Cumulative

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Volume to Capacity ratio.
d. Level of Service.
e. Baseline Option A – redistributed traffic conditions to account for roadway network changes.
f. Segment lies within the County of San Diego. The significance of impacts for County segments is based on the amount of project ADT added to the baseline volumes (see Section 5.0: Significance Criteria, *Table 5–1*), not on the V/C ratio. To review the project ADT volumes see *Figure 9–4*. All other segments are located within the City of Escondido and the significance of impacts is determined based on the V/C in this table.

General Notes:

Since numerous classification options are contemplated for Country Club Drive, a separate stand-alone analysis was prepared for Country Club Drive in Section 14-2.

TABLE 9-1 *(CONTINUED)*
OPTION A: NEAR-TERM STREET SEGMENT OPERATIONS
(WITH HARMONY GROVE ROAD CUL-DE-SAC)

Segment	Existing Classification	Capacity (LOS E)[a]	Baseline Option A[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
East Mission Road													
West of Nordahl Rd	Major Road	37,000	20,900	0.56	B	21,180	0.57	B	0.01	25,110	0.68	C	None
Village Road													
Country Club Dr. to Harmony Grove Rd[f]	Residential Collector	4,500	400	-	-	**4,770**	-	-	0.27	5,770	-	-	Direct
Kauana Loa Drive													
Harmony Grove Rd to Country Club Dr.[f]	Rural Collector	16,200	1,300	0.08	A	1,580	0.10	A	0.02	2,110	0.13	A	None
Nordahl Road													
North of SR-78	Major Road	37,000	15,400	0.42	B	15,770	0.43	B	0.01	17,700	0.48	B	None
SR-78 to Mission Rd	Major Road	37,000	35,300	0.95	E	**37,530**	**1.01**	F	0.06	46,700	1.26	F	Direct
Mission Rd to Country Club Dr.	Major Road	37,000	24,100	0.65	B	26,610	0.72	C	0.07	**39,280**	**1.06**	F	Cumulative

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).

b. Average Daily Traffic volumes (rounded to the nearest 10).

c. Volume to Capacity ratio.

d. Level of Service.

e. Baseline Option A – redistributed traffic conditions to account for roadway network changes.

f. Segment lies within the County of San Diego. The significance of impacts for County segments is based on the amount of project ADT added to the baseline volumes (see Section 5.0: Significance Criteria, *Table 5–1*), not on the V/C ratio. To review the project ADT volumes see *Figure 9–4*. All other segments are located within the City of Escondido and the significance of impacts is determined based on the V/C in this table.

g. Residential Collector roadways classified as LOS C+ if volume is less than 4,500 ADT and C- if volume is more than 4,500 ADT.

TABLE 9-1 *(CONTINUED)*
OPTION A: NEAR-TERM STREET SEGMENT OPERATIONS
(WITH HARMONY GROVE ROAD CUL-DE-SAC)

Segment	Existing Classification	Capacity (LOS E)[a]	Baseline Option A[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
Andreason Drive													
Vineyard Ave to Enterprise St.	Local Collector	15,000	9,300	0.62	C	**12,740**	**0.85**	**E**	0.23	15,740	1.05	F	Direct
Vineyard Avenue													
Country Club Dr. to Enterprise St.	Local Collector	15,000	15,400	1.03	F	15,590	1.04	F	0.01	27,020	1.80	F	None
Enterprise St. to Andreason St.	Local Collector	15,000	21,600	1.44	F	21,600	1.44	F	0.00	27,200	1.81	F	None
Auto Park Way													
Andreason Dr. to Hale Ave (north)	Collector	20,000	13,400	0.67	C	**14,700**	**0.74**	**D**	0.06	15,980	0.80	E	Cumulative
Andreason Dr. to Hale Ave (south)	Collector	20,000	13,700	0.69	C	**15,000**	**0.75**	**D**	0.06	16,280	0.81	E	Cumulative
Hale Ave to Valley Pkwy	Collector	34,200	30,000	0.88	D	**32,600**	**0.95**	**E**	0.07	36,460	1.07	F	Direct
Valley Pkwy to W. 9th St.	Collector	34,200	20,900	0.61	B	22,110	0.65	B	0.04	24,240	0.71	C	None
Hale Avenue													
W. 9th St. to Harmony Grove Rd	Rural Collector	10,000	6,000	0.60	C	6,280	0.63	C	0.03	**11,440**	**1.14**	**F**	Cumulative
Harmony Grove Rd to Avenida del Diablo	Rural Collector	10,000	4,800	0.48	B	6,190	0.62	C	0.14	**7,970**	**0.80**	**D**	Cumulative
West 9th Street													
Hale Ave to Valley Pkwy	Local Collector	15,000	8,500	0.57	C	8,690	0.58	C	0.01	13,790	0.92	E	None
Valley Pkwy to Auto Park Way	Local Collector	15,000	10,000	0.67	C	10,190	0.68	D	0.01	12,690	0.85	E	None
Auto Park Wy to I-15	Major Road	34,200	32,800	0.96	E	34,190	1.00	E	0.04	**38,510**	**1.13**	**F**	Direct

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).
b. Average Daily Traffic volumes (rounded to the nearest 10). c. Volume to Capacity ratio. d. Level of Service.
e. Baseline Option A – redistributed traffic conditions to account for roadway network changes.

TABLE 9-1 *(CONTINUED)*
OPTION A: NEAR-TERM STREET SEGMENT OPERATIONS
(WITH HARMONY GROVE ROAD CUL-DE-SAC)

Segment	Existing Classification	Capacity (LOS E)[a]	Baseline Option A[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
Avenida del Diablo													
Citracado Pkwy to Hale Ave	Local Collector	10,000	2,700	0.27	B	3,350	0.34	B	0.07	3,790	0.38	B	None
Hale Ave to Valley Pkwy	Local Collector	10,000	1,100	0.11	A	1,840	0.18	A	0.07	2,450	0.25	A	None
Citracado Parkway													
Avenida del Diablo to Valley Pkwy	Major Road	34,200	2,400	0.07	A	3,050	0.09	A	0.02	3,490	0.10	A	None
Via Rancho Parkway													
East of Valley Pkwy[f]	Rural Collector	16,200	12,700	0.78	E	**13,720**	**0.85**	**E**	0.07	15,160	0.94	E	Direct
Valley Parkway													
Tulip St. to I-15	Prime Arterial	60,000	31,200	0.52	C	31,850	0.53	C	0.01	32,940	0.55	C	None
I-15 to Auto Park Way	Prime Arterial	60,000	29,200	0.49	B	30,590	0.51	C	0.02	35,220	0.59	C	None
Auto Park Wy to W. 11th St.	Prime Arterial	60,000	26,200	0.44	B	26,290	0.44	B	0.00	29,200	0.49	B	None
W. 11th St. to Avenida del Diablo	Local Collector	15,000	18,600	1.24	F	18,600	1.24	F	0.00	19,600	1.31	F	None
Avenida del Diablo to Citracado Pkwy	Local Collector	15,000	20,400	1.36	F	21,140	1.41	F	0.05	**22,400**	**1.49**	**F**	Cumulative
Citracado Pkwy to Via Rancho Pkwy[f]	Rural Collector	16,200	18,800	1.16	F	**20,190**	**1.25**	**F**	0.09	22,520	1.39	F	Direct
South of Via Rancho Pkwy[f]	Rural Collector	16,200	18,400	1.14	F	**18,770**	**1.16**	**F**	0.02	20,100	1.24	F	Direct

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Volume to Capacity ratio.
d. Level of Service.
e. Baseline Option A – redistributed traffic conditions to account for roadway network changes.
f. Segment lies within the County of San Diego. The significance of impacts for County segments is based on the amount of project ADT added to the baseline volumes (see Section 5.0: Significance Criteria, *Table 5–1*), not on the V/C ratio. To review the project ADT volumes see *Figure 9–4*. All other segments are located within the City of Escondido and the significance of impacts is determined based on the V/C in this table.

TABLE 9-2
OPTION A: NEAR TERM SIGNALIZED INTERSECTION OPERATIONS
(WITH HARMONY GROVE ROAD CUL-DE-SAC)

Intersection	Peak Period	Baseline Option A[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
		Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
1 Nordahl Rd / SR-78 WB Ramps	AM	31.7	C	32.2	C	0.5	37.2	D	None
	PM	33.2	C	34.5	C	1.3	61.7	E	
2 Nordahl Rd / SR-78 EB Ramps	AM	53.1	D	**65.8**	**E**	12.7	> 100.0	F	Direct
	PM	74.9	E	**98.5**	**F**	23.6	> 100.0	F	
3 Nordahl Rd / Mission Rd	AM	46.8	D	**50.4**	**D**	3.6	> 100.0	F	Direct
	PM	77.6	E	**91.3**	**F**	13.7	> 100.0	F	
15 Andreason Dr / Auto Park Way	AM	35.1	D	42.2	D	7.1	53.9	D	None
	PM	35.7	D	41.6	D	5.9	54.1	D	
19 Hale Ave / Auto Park Way	AM	29.0	C	29.1	C	0.1	30.6	C	None
	PM	34.3	C	34.6	C	0.3	37.7	D	
24. Valley Pkwy / I-15 NB Ramps	AM	30.9	C	31.1	C	0.2	36.5	D	None
	PM	55.8	E	55.9	E	0.1	57.3	E	
25. Valley Pkwy / I-15 SB Ramps	AM	47.5	D	49.6	D	2.1	**60.0**	**E**	Cumulative
	PM	73.0	E	76.4	E	3.4	**87.7**	**F**	
26. Valley Pkwy / Auto Park Way	AM	37.3	D	37.9	D	0.6	43.0	D	None
	PM	40.7	D	42.2	D	1.5	50.2	D	
27. Valley Pkwy / West 9th Ave	AM	32.6	C	32.8	C	0.2	37.5	D	None
	PM	34.7	C	34.9	C	0.2	44.8	D	
28. Valley Pkwy / W. 11th Ave	AM	8.9	A	9.3	A	0.4	13.0	B	None
	PM	7.2	A	7.4	A	0.2	10.5	B	

General Notes:

Bold and shading indicate a significant impact

Footnotes:

a Baseline Option A – redistributed traffic conditions to account for roadway network changes

b Delay – measured in seconds

c LOS – Level of Service

SIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 < 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
> 80.1	F

TABLE 9-2 *(CONTINUED)*
OPTION A: NEAR TERM SIGNALIZED INTERSECTION OPERATIONS
(WITH HARMONY GROVE ROAD CUL-DE-SAC)

Intersection	Peak Period	Baseline Option A[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
		Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
30. Valley Pkwy / Citracado Pkwy	AM	26.8	C	28 0	C	1 2	33 6	C	None
	PM	23 8	C	25 0	C	1 2	27 1	C	
31 Valley Pkwy / Via Rancho Pkwy[d]	AM	28 2	C	30.2	C	2.0	34 7	C	None
	PM	31.6	C	34 5	C	2.9	38 9	D	
32 West 9th St / Auto Park Wy	AM	44.4	D	44 5	D	0 1	74 8	E	None
	PM	26 6	C	27.2	C	0 6	31 9	C	
33. West 9th St / I-15 SB Ramps	AM	18.6	B	19.6	B	1.0	22 1	C	None
	PM	20.8	C	21 6	C	0.8	32 6	C	
34 West 9th St / I-15 NB Ramps	AM	24 7	C	27 9	C	3 2	27.9	C	None
	PM	26 3	C	27.5	C	1 2	29.7	C	
35. San Elijo Rd / Rancho Santa Fe	AM	27.6	C	28.3	C	0.7	32 0	C	None
	PM	32.2	C	33 9	C	1.7	43 1	D	
36 Via Rancho Pkwy / I-15 SB Ramps	AM	>80 0	F[e]	>80 0	F[e]	>2.0	**>80.0**	**F[e]**	Cumulative
	PM	42.2	D	44.6	D	2 4	**45.6**	**D**	
37 Via Rancho Pkwy / I-15 NB Ramps	AM	24.9	C	24 9	C	0.0	25 8	C	None
	PM	35 0	C	35 5	D	0.5	37 6	D	

General Notes:

Bold and shading indicate a significant impact.

Footnotes:

a Baseline Option A – redistributed traffic conditions to account for roadway network changes.
b Delay – measured in seconds
c. LOS – Level of Service
d. Intersection is located in the County of San Diego All other intersections are located in the City of Escondido
e. LOS F conditions caused by ramp meter delay

SIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 < 10 0	A
10 1 to 20 0	B
20 1 to 35 0	C
35 1 to 55 0	D
55 1 to 80.0	E
> 80 1	F

TABLE 9-3
OPTION A: NEAR TERM UNSIGNALIZED INTERSECTION OPERATIONS
(WITH HARMONY GROVE ROAD CUL-DE-SAC)

Intersection	Peak Period	Minor Street Approach	Baseline Option A[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
			Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
4. Citracado Pkwy / Country Club	AM	EB	>100 0	F	>100.0	F	> 2 0	**> 100.0**	**F**	Cumulative
	PM	EB	>100 0	F	>100 0	F	>2 0	**> 100.0**	**F**	
5. Country Club Dr / Kauana Loa Drive[d]	AM	All-way	7 9	A	8 8	A	0 8	9.7	A	None
	PM	All-way	7 8	A	9.0	A	1.2	10.8	B	
6 Country Club Dr / Entrance #3[d]	AM	WB	e	e	10.6	B	—	11.1	B	None
	PM	WB	e	e	10.3	B	—	10.6	B	
7. Country Club Dr / Village Rd[d]	AM	All-way	6 9	A	9.6	A	2 7	10 0	B	None
	PM	All-way	7 7	A	10 4	B	2.7	11 3	B	
8. Harmony Grove / Village Rd[d]	AM	EB	11 6	B	16.6	C	5.0	19.3	C	Direct[f]
	PM	EB	12.7	B	**21.1**	**C**	7 4	36.6	E	
9 Country Club Dr / Entrance #2[d]	AM	EB	e	e	13 3	B	—	17 1	C	None
	PM	EB	e	e	13.8	B	—	17.0	C	
10 Country Club Dr / Harmony Grove[d]	AM	NB	9.4	A	14.0	B	4.6	19 4	C	None
		SB	11.4	B	13.1	B	1 7	15 6	C	
	PM	NB	13 0	B	21 1	C	8 1	33 7	D	None
		SB	11 2	B	15 2	C	4 0	19 0	C	
11 Harmony Grove / Entrance #1[d]	AM	SB	e	e	17.2	C	—	23.4	C	None
	PM	SB	e	e	19 5	C	—	31.4	D	
12. Harmony Grove / Wilgen Rd[d]	AM	SB	11 5	B	14.5	B	3 0	18 1	C	None
	PM	SB	11.3	B	16.2	C	4 9	24 4	C	
13. Vineyard Ave / Citracado Pkwy[g]	AM	—	e	e	1 7	A	—	48.9	D	None
	PM	—	e	e	2.0	A	—	51.3	D	

General Notes:

Bold and shading indicate a significant impact

Footnotes:

a Baseline Option A – redistributed traffic conditions to account for roadway network changes
b Delay –measured in seconds
c LOS – Level of Service
d Intersection is located in the County of San Diego. All other intersections are located in the City of Escondido
e Intersection does not exist
f Direct impact assumed because the construction of this intersection is a result of the project
g Intersection assumed to be signalized because signalization is a condition of the Escondido Research and Technology study

UNSIGNALIZED DELAY/LOS THRESHOLDS

Delay	LOS
0 0 < 10 0	A
10 1 to 15 0	B
15 1 to 25 0	C
25.1 to 35 0	D
35 1 to 50 0	E
> 50 1	F

TABLE 9-3 *(CONTINUED)*
OPTION A: NEAR TERM UNSIGNALIZED INTERSECTION OPERATIONS
(WITH HARMONY GROVE ROAD CUL-DE-SAC)

Intersection	Peak Period	Minor Street Approach	Baseline Option A[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
			Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
14 Harmony Grove / Kauana Loa Drive	AM	EB	13.0	B	26.2	D	13.2	92.4	F	Direct
	PM	EB	14.1	B	**35.0**	**D**	20.9	> 100.0	F	
16. Andreason Dr / Enterprise St	AM	All-way	13.5	B	28.4	D	14.9	**> 100.0**	**F**	Cumulative
	PM	All-way	9.9	A	20.0	C	10.1	**> 100.0**	**F**	
17 Harmony Grove Rd / Enterprise St	AM	NB	9.8	A	11.0	B	1.2	42.6	E	None
	PM	NB	10.2	B	11.6	B	1.4	> 100.0	F	
18 Harmony Grove Rd / Howard Ave	AM	SB	11.5	B	13.6	B	2.1	**> 100.0**	**F**	Cumulative
	PM	SB	12.9	B	16.3	C	3.4	**65.5**	**F**	
20. Hale Ave / West 11th St	AM	WB	10.1	B	10.4	B	0.3	36.4	E	None
	PM	WB	11.4	B	12.0	B	0.6	50.0	F	
21 Hale Ave / Harmony Grove Ave	AM	EB	10.5	B	11.6	B	1.1	**> 100.0**	**F**	Cumulative
	PM	EB	12.6	B	17.1	C	4.5	**> 100.0**	**F**	
22 Avenida Del Diablo / Citracado Pkwy	AM	NB	8.8	A	8.9	A	0.1	9.4	A	None
	PM	NB	8.8	A	8.9	A	0.1	9.2	A	
23. Avenida Del Diablo / Hale Ave	AM	SB	9.1	A	9.6	A	0.5	10.7	B	None
	PM	SB	9.1	A	9.7	A	0.6	10.5	B	
29 Valley Pkwy / Avenida Del Diablo	AM	EB	>100.0	F	>100.0	F	>2.0	**> 100.0**	**F**	Cumulative
	PM	EB	>100.0	F	>100.0	F	>2.0	**> 100.0**	**F**	
38 Country Club Dr/ Entrance # 4	AM	SB	e	e	9.1	A	—	10.5	B	None
	PM	SB	e	e	11.2	B	—	13.9	B	
39. Village Rd / Entrance # 6	AM	NB	e	e	4.2	A	—	4.2	A	None
	PM	NB	e	e	4.4	A	—	4.4	A	

General Notes:

Bold and shading indicate a significant impact

Footnotes:

a. Baseline Option A – redistributed traffic conditions to account for roadway network changes
b. Delay measured in seconds
c. LOS – Level of Service

UNSIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 < 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
> 50.1	F

TABLE 9–4
NEAR-TERM FREEWAY SEGMENT OPERATIONS

Freeway and Segment	Direction, Number of Lanes & Capacity [a]			Existing [b]		V/C [c]		LOS [d]		Existing + Project		V /C		LOS		V/C Delta		Significant	
				AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
SR 78																			
West of Nordahl Road	EB	3M	6,900	5565	8208	0.806	1.190	D	F(0)	5616	8283	0.814	1.200	D	**F(0)**	0.008	0.010	No	Yes
	WB	3M	6,900	6275	6192	0.909	0.897	D	D	6333	6249	0.918	0.906	D	D	0.009	0.009	No	No
I-15																			
South of 9th Avenue	NB	5M	11,900	6015	9352	0.523	0.813	B	D	6066	9431	0.527	0.820	B	D	0.004	0.007	No	No
	SB	4M	9,200	9023	6499	0.981	0.706	E	C	9099	6553	0.989	0.712	E	C	0.008	0.006	No	No
South of Via Rancho Parkway	NB	4M+1A	10,400	6938	10787	0.667	1.037	C	F(0)	7016	10907	0.675	1.049	C	**F(0)**	0.008	0.012	No	Yes
	SB	4M	9,200	10408	7496	1.131	0.812	F(0)	D	10523	7580	1.144	0.824	**F(0)**	D	0.013	0.012	Yes	No

General Notes:

Bold and shading – represents a significant impact.

Footnotes:

a. Capacity calculated at 2,300 vehicles per hour per lane and 1,200 vehicles per hour per auxiliary lane (M: Mainline, A: Auxiliary Example: 4M+2A=4 Mainline + 2 Auxiliary)

b. Peak Hour Volume = ((ADT)(K)(D)/Truck Factor) (*Appendix D*).

c. V/C = ((ADT)(K)(D)/Truck Factor/Capacity).

d. Level of Service.

FREEWAY THRESHOLDS

LOS	v/c
A	<0.41
B	0.42-0.62
C	0.63-0.8
D	0.81-0.92
E	0.93-1.00
F(0)	1.01-1.25
F(1)	1.26-1.35
F(2)	1.36-1.45
F(3)	>1.46

TABLE 9–4 *(CONTINUED)*
NEAR-TERM FREEWAY SEGMENT OPERATIONS

Freeway and Segment	Direction, Number of Lanes & Capacity [a]			Existing + Project [b]		V /C [c]		LOS [d]		Existing + Project + Cumulative		V /C		LOS		V/C Delta		Significant	
				AM	PM	AM	AM	PM	AM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
SR 78																			
West of Nordahl Road	EB	3M	6,900	5616	8283	0.814	1.200	D	F(0)	6081	8445	0.881	1.224	D	**F(0)**	0.067	0.024	No	**Yes**
	WB	3M	6,900	6333	6249	0.918	0.906	D	D	6461	6714	0.936	0.973	**E**	**E**	0.018	0.067	**Yes**	**Yes**
I-15																			
South of 9th Avenue	NB	5M	11,900	6066	9431	0.527	0.820	B	D	6266	9562	0.545	0.831	B	D	0.018	0.011	No	No
	SB	4M	9,200	9099	6553	0.989	0.712	E	C	9178	6742	0.998	0.733	E	C	0.009	0.021	No	No
South of Via Rancho Parkway	NB	4M+1A	10,400	7016	10907	0.675	1.049	C	F(0)	7037	10958	0.677	1.054	C	F(0)	0.002	0.005	No	No
	SB	4M	9,200	10523	7580	1.144	0.824	F(0)	D	10550	7595	1.147	0.826	F(0)	D	0.003	0.002	No	No

General Notes:

Bold and shading – represents a significant impact.

Footnotes:

a. Capacity calculated at 2,300 vehicles per hour per lane and 1,200 vehicles per hour per auxiliary lane (M: Mainline, A: Auxiliary Example: 4M+2A=4 Mainline + 2 Auxiliary)

b. Peak Hour Volume = ((ADT)(K)(D)/Truck Factor) (*Appendix D*).

c. V/C = ((ADT)(K)(D)/Truck Factor/Capacity).

d. Level of Service.

FREEWAY THRESHOLDS

LOS	v/c
A	<0.41
B	0.42-0.62
C	0.63-0.8
D	0.81-0.92
E	0.93-1.00
F(0)	1.01-1.25
F(1)	1.26-1.35
F(2)	1.36-1.45
F(3)	>1.46

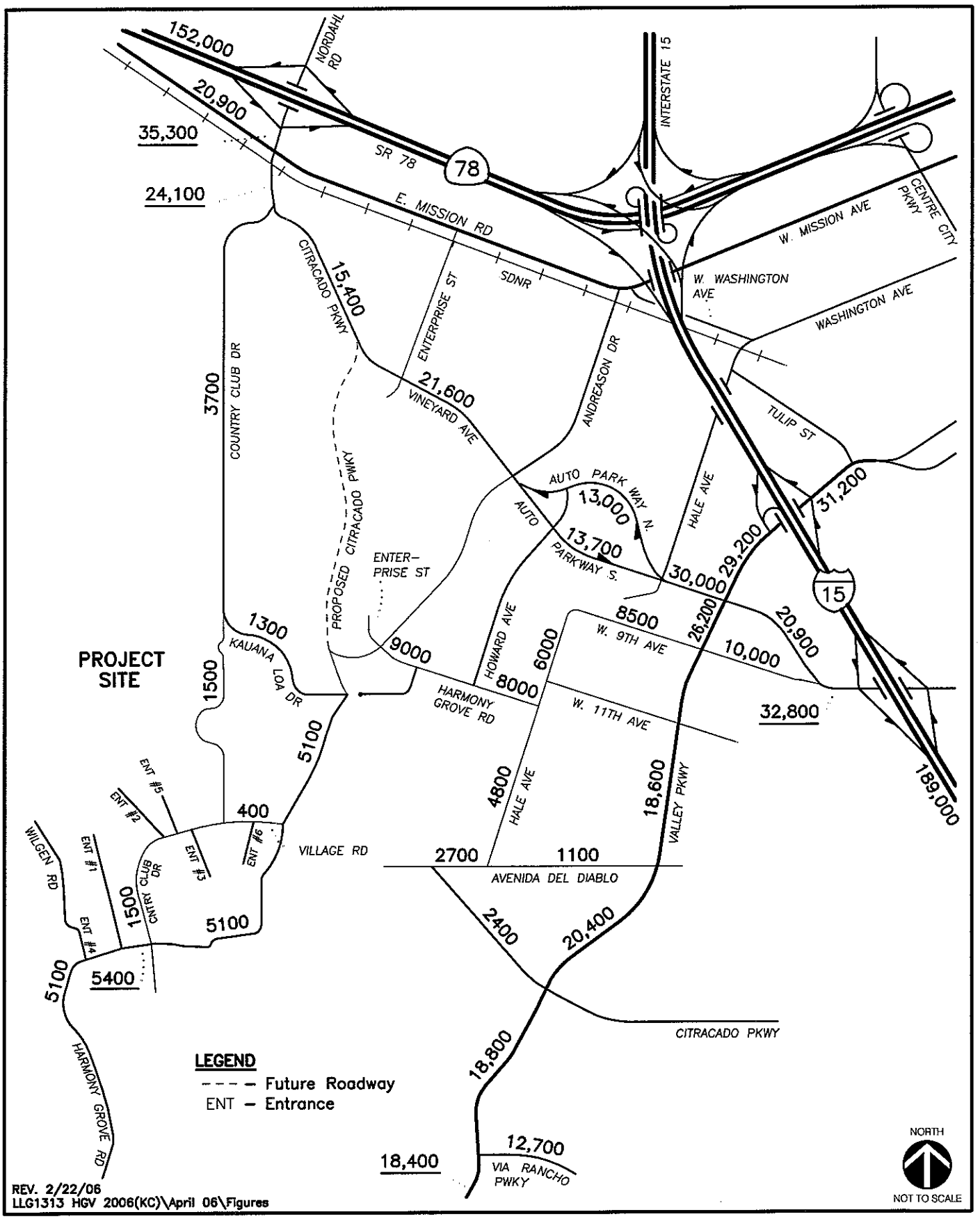

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Figure 9-1

OPTION A: Baseline Average Daily Traffic Volumes

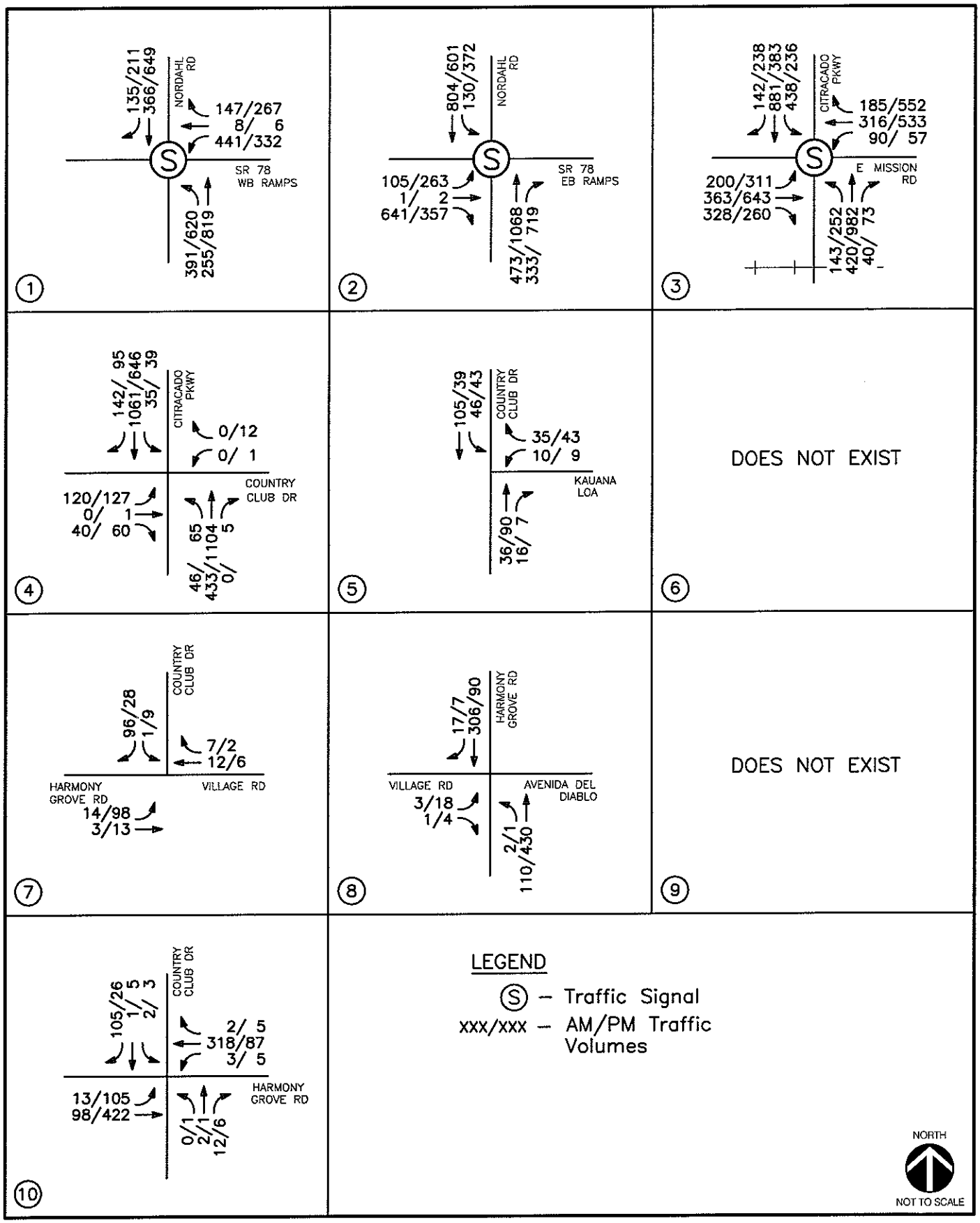

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Figure 9-2

OPTION A: Baseline Peak Hour Traffic Volumes

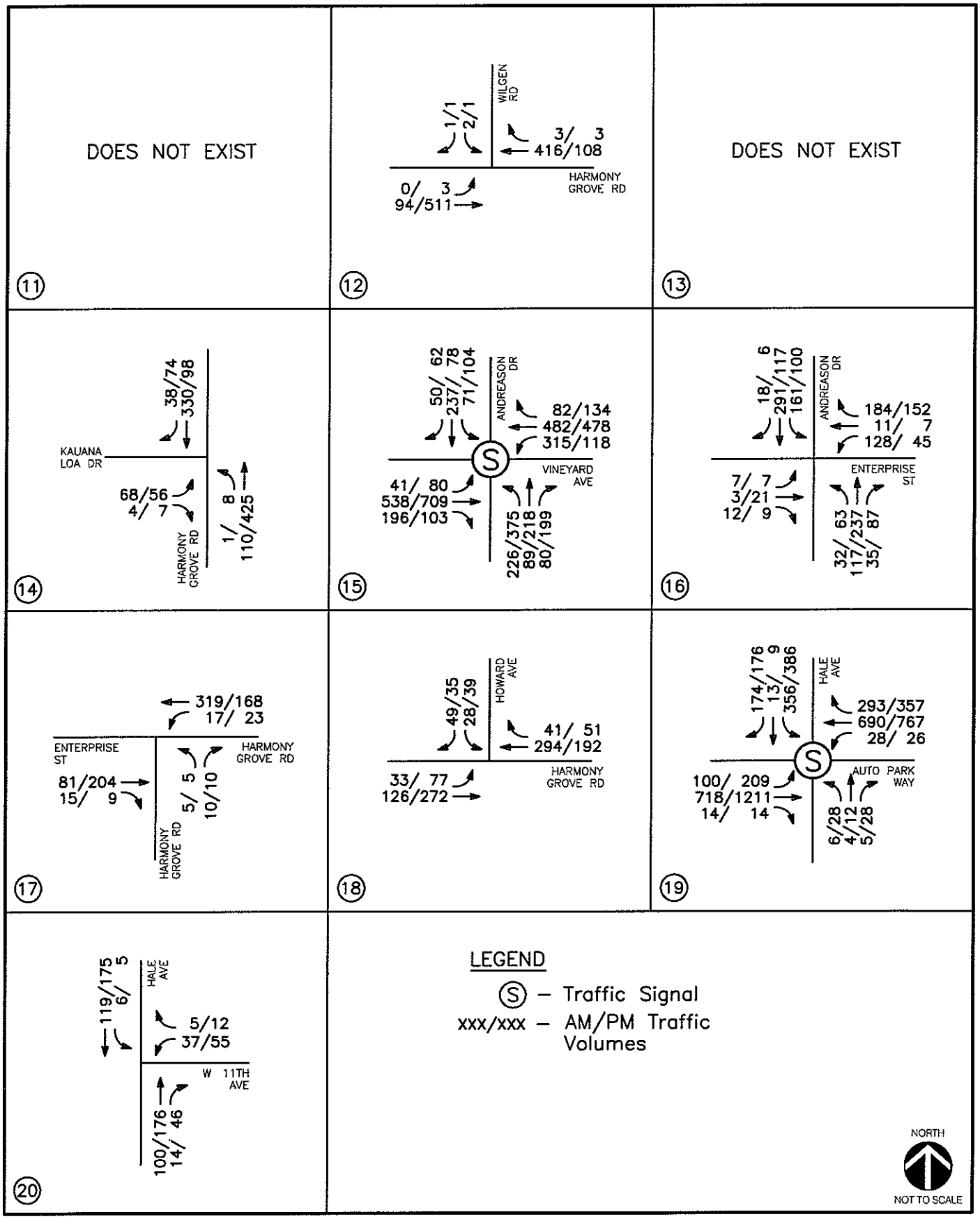

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Figure 9-2

OPTION A: Baseline Peak Hour Traffic Volumes

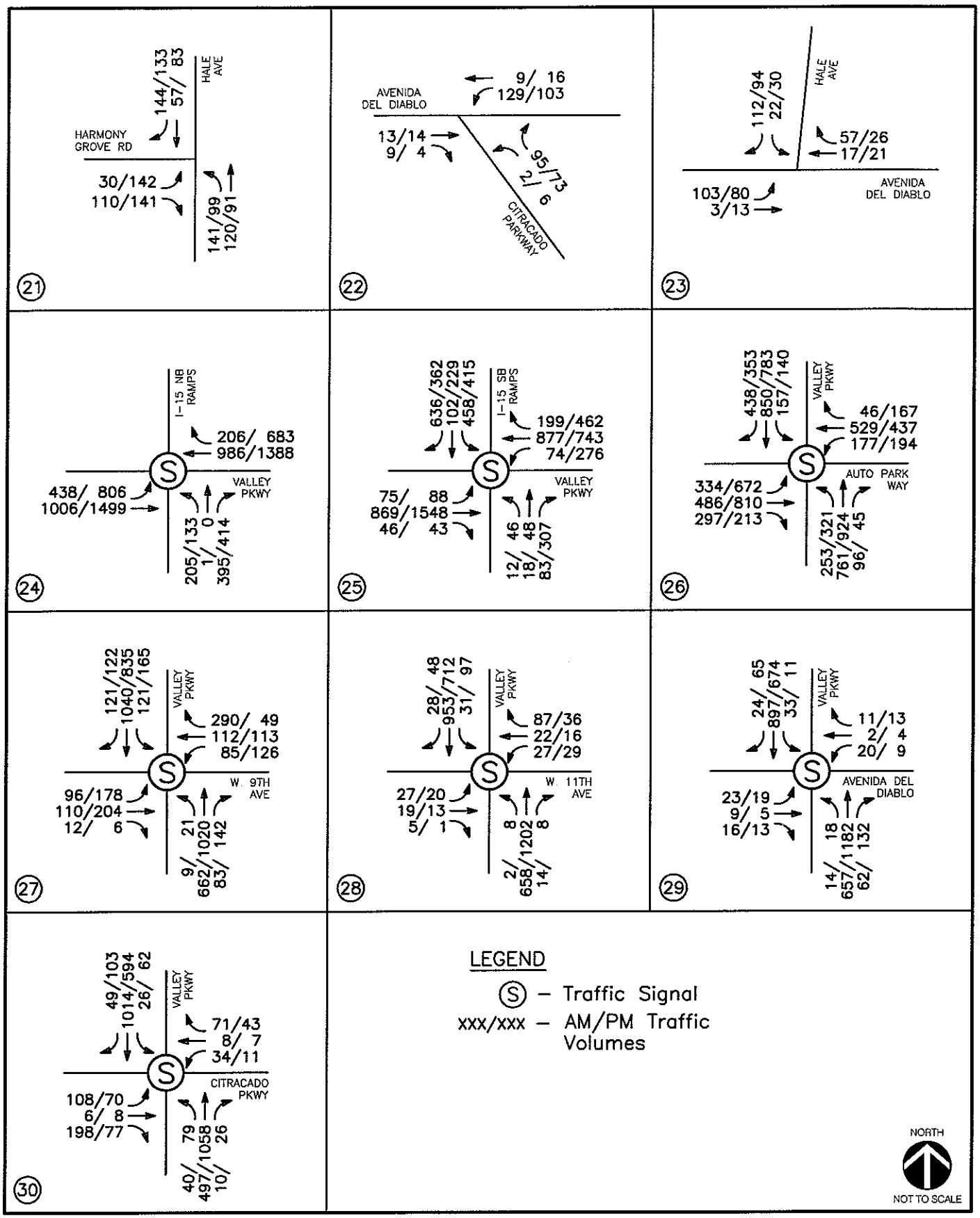

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Figure 9-2

OPTION A: Baseline Peak Hour Traffic Volumes

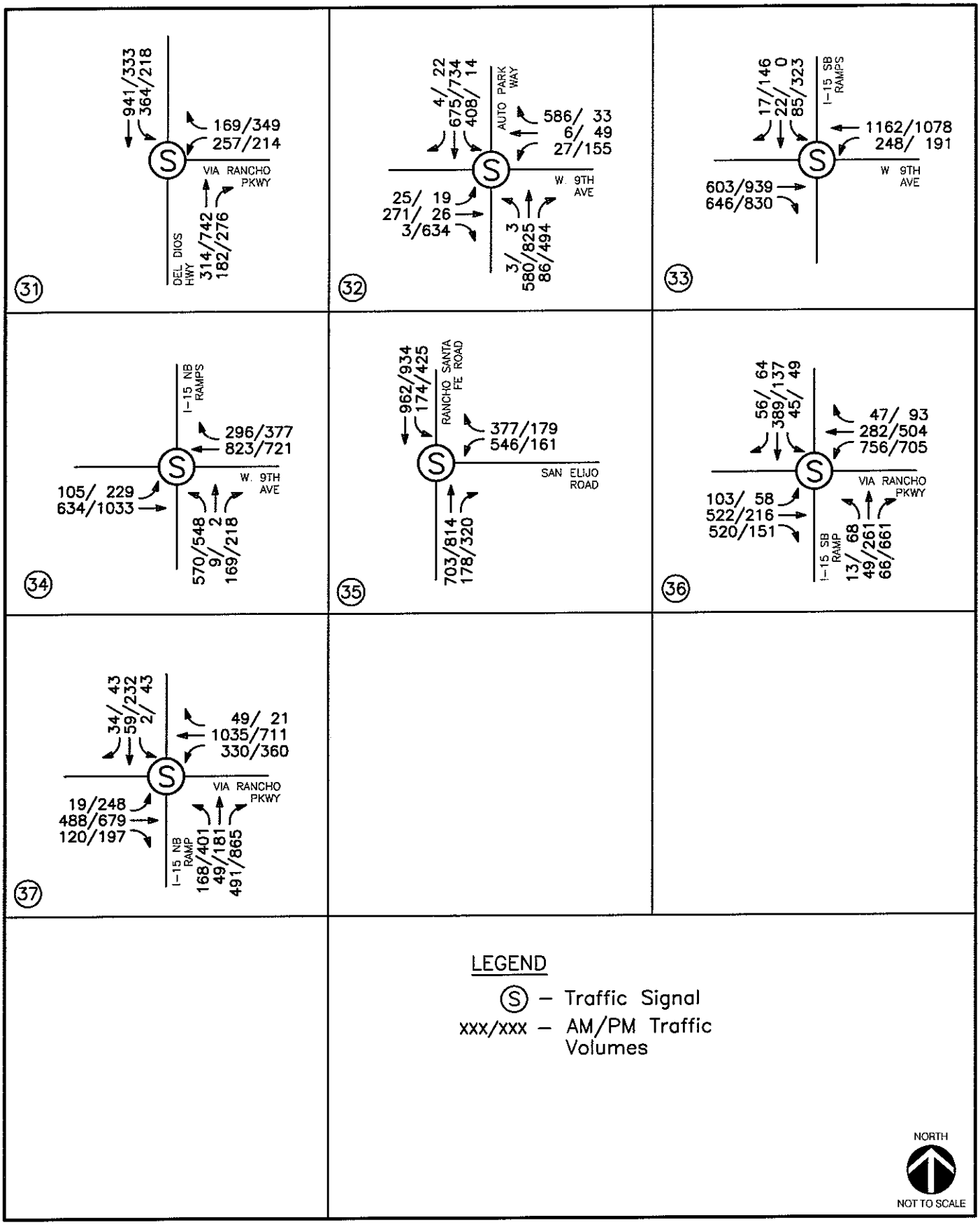

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Figure 9-2

OPTION A: Baseline Peak Hour Traffic Volumes

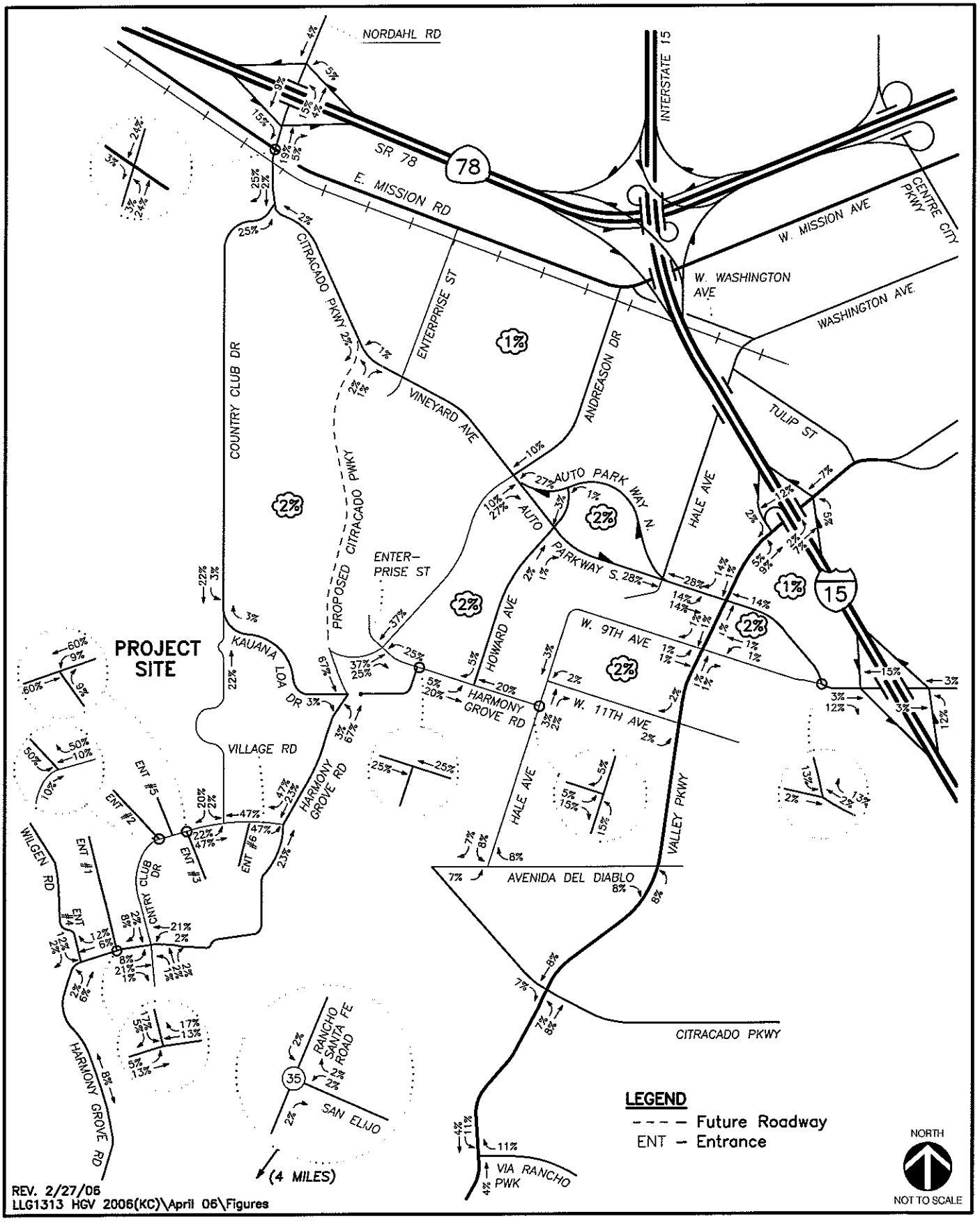

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Figure 9-3

OPTION A: Regional Traffic Distribution

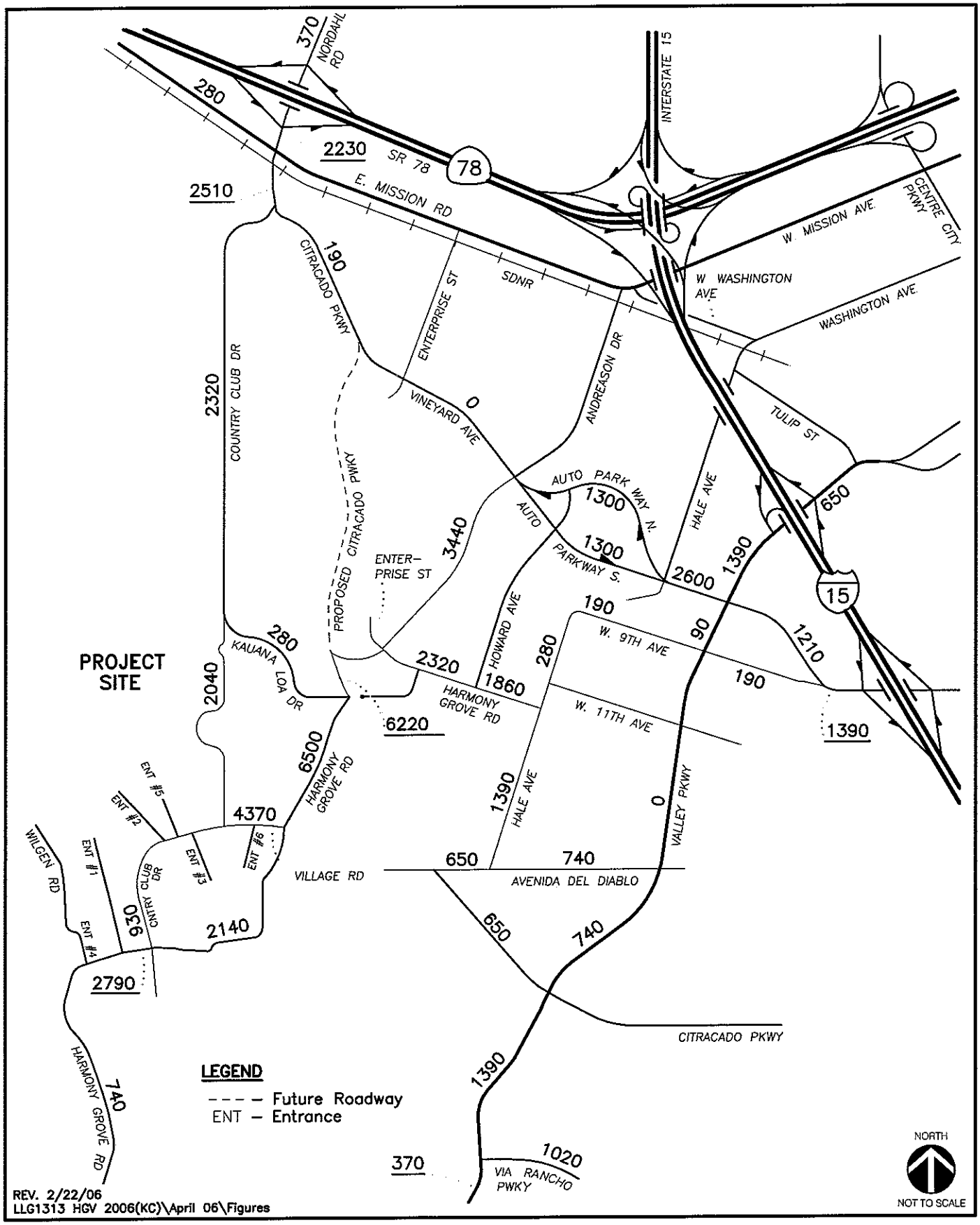

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Figure 9-4

OPTION A: Project Average Daily Traffic Volumes

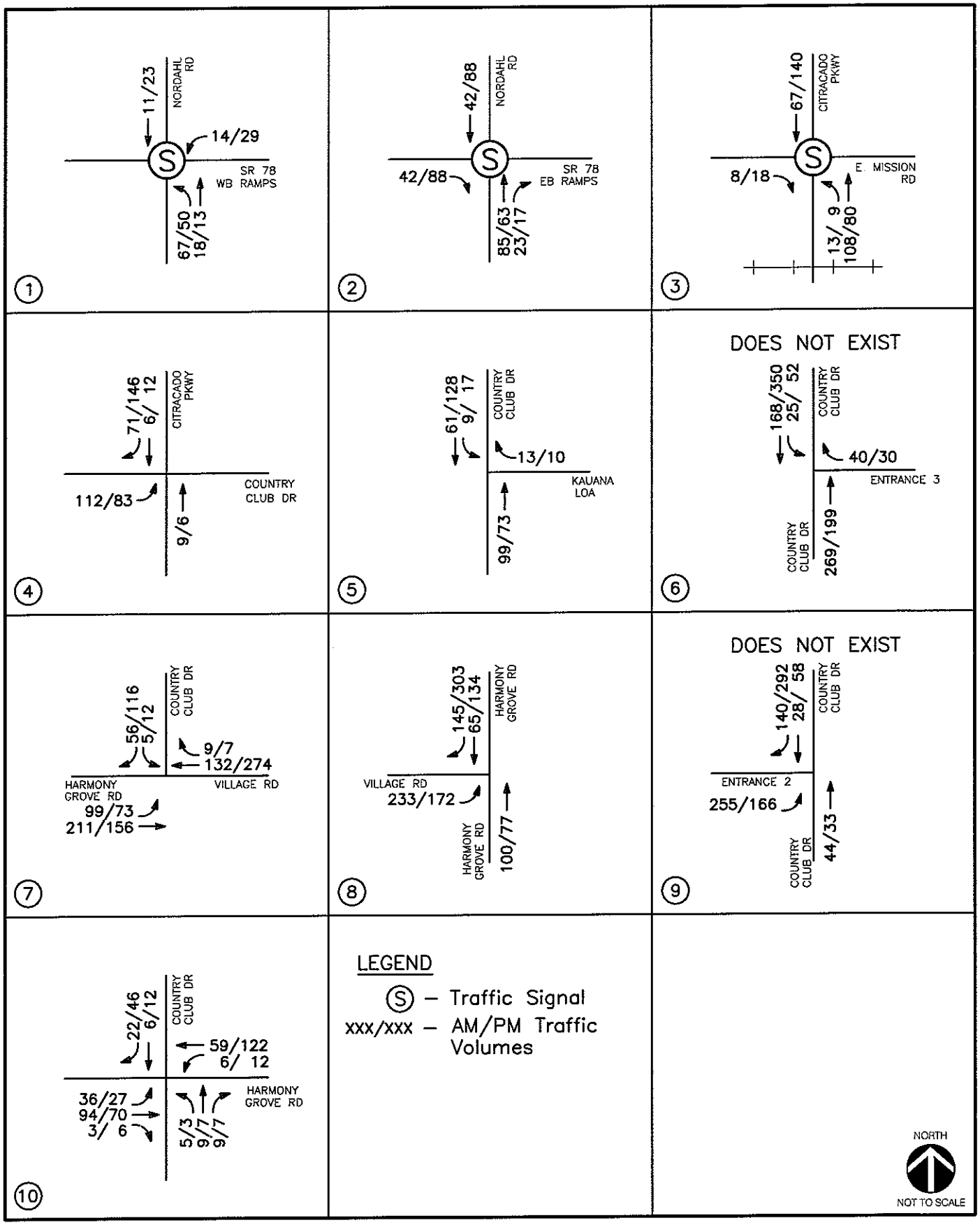

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Figure 9-5

OPTION A: Project Peak Hour Traffic Volumes

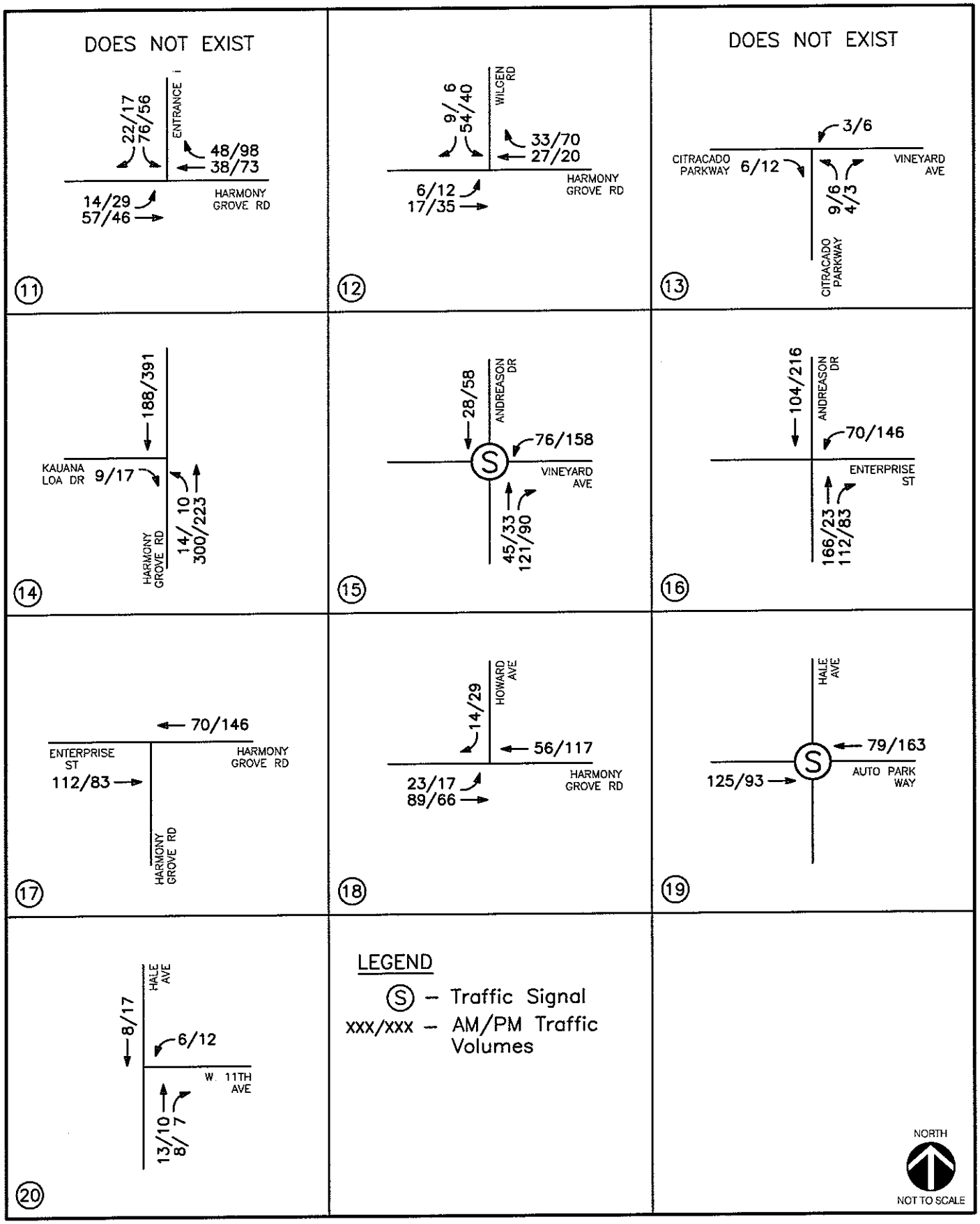

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Figure 9-5

OPTION A: Project Peak Hour Traffic Volumes

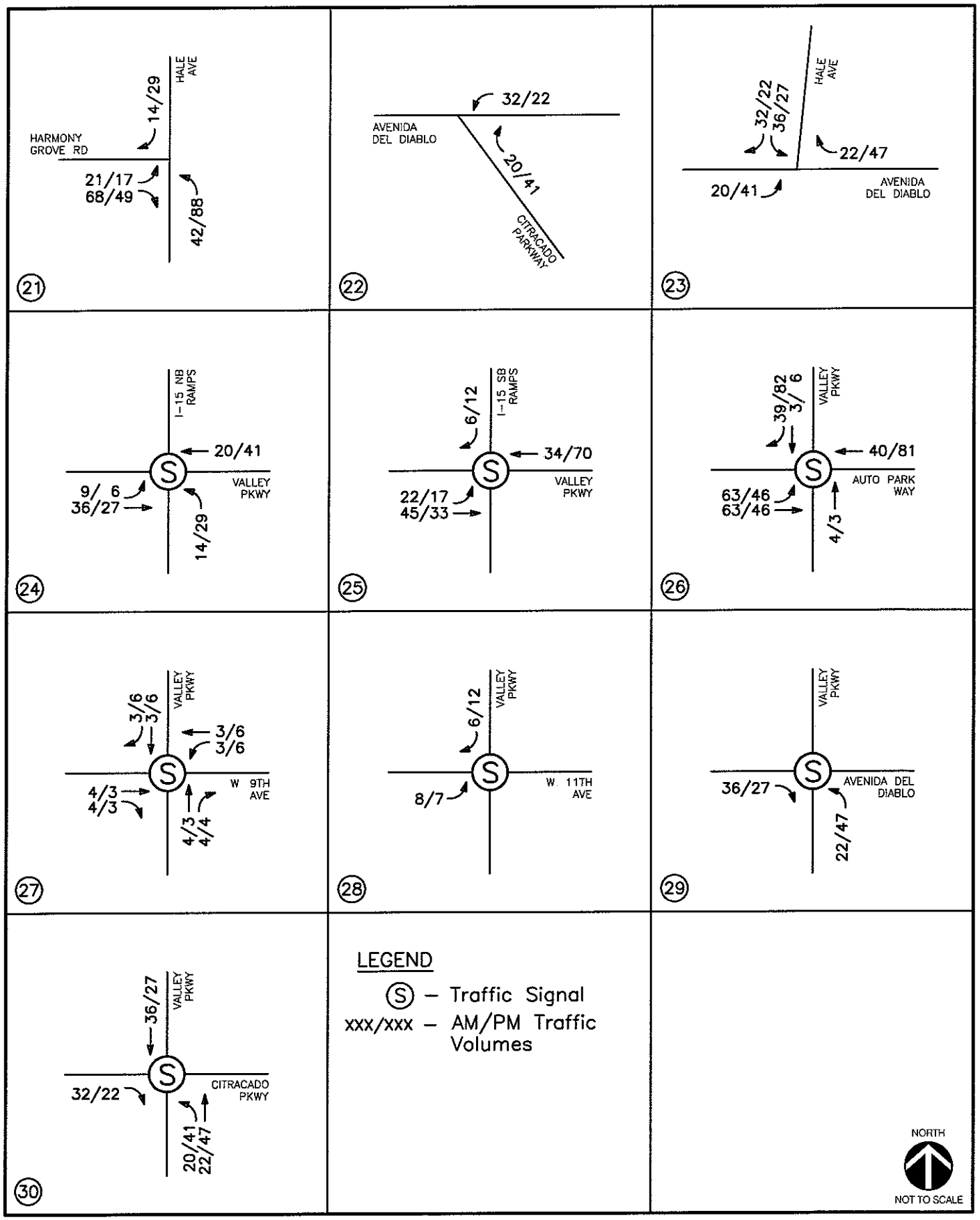

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Figure 9-5

OPTION A: Project Peak Hour Traffic Volumes

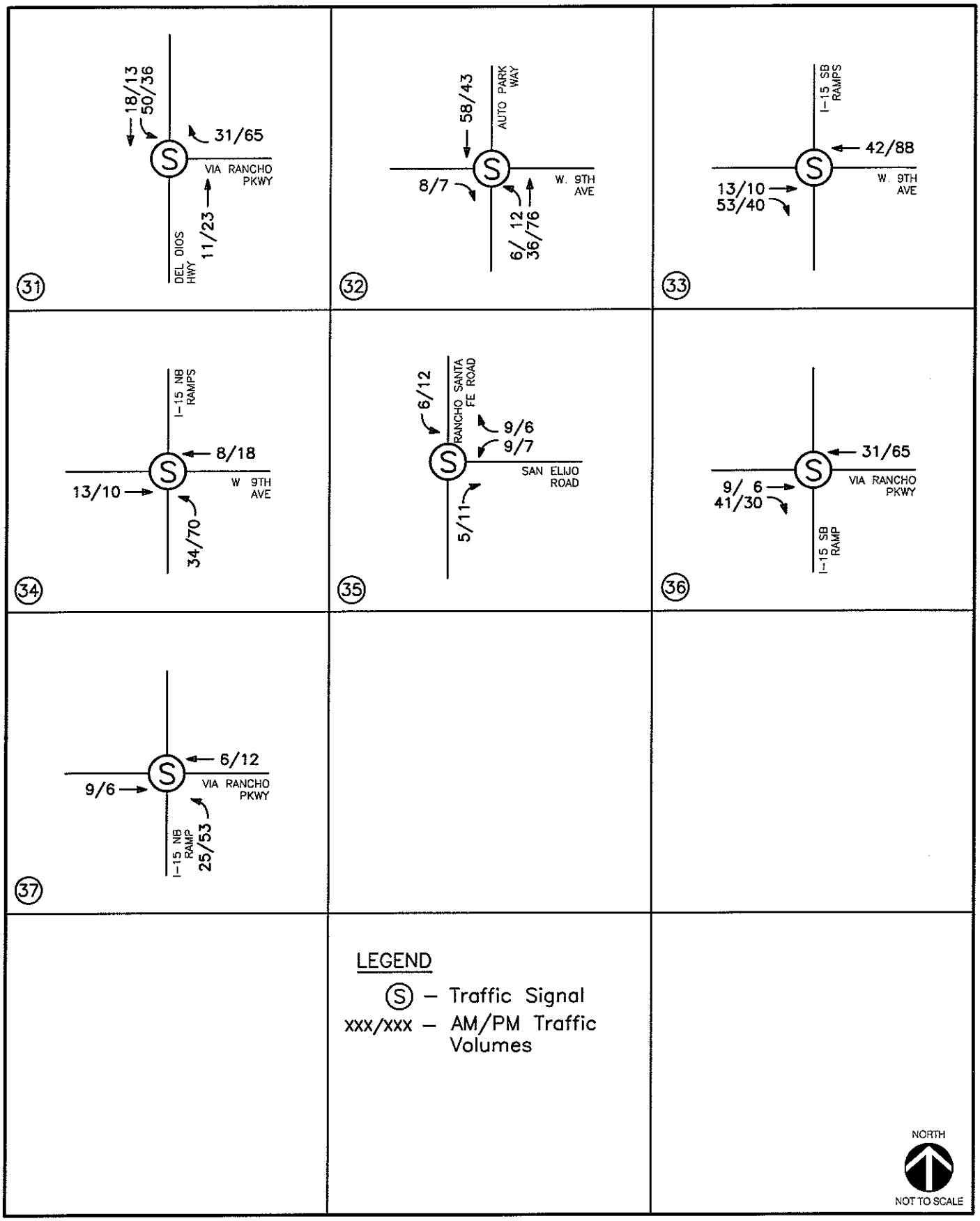

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Figure 9-5

OPTION A: Project Peak Hour Traffic Volumes

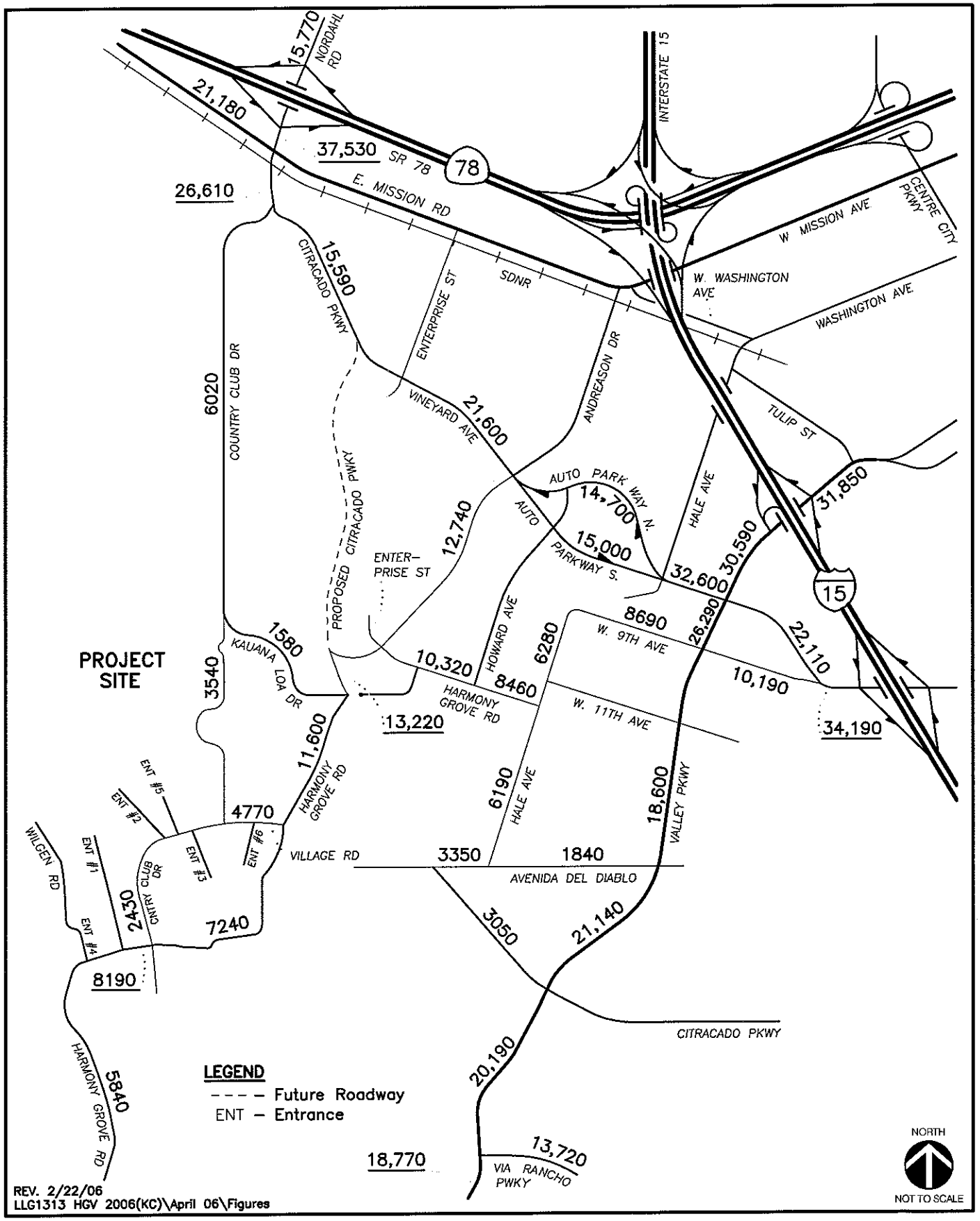

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Figure 9-6

OPTION A: Baseline + Project Average Daily Traffic Volumes

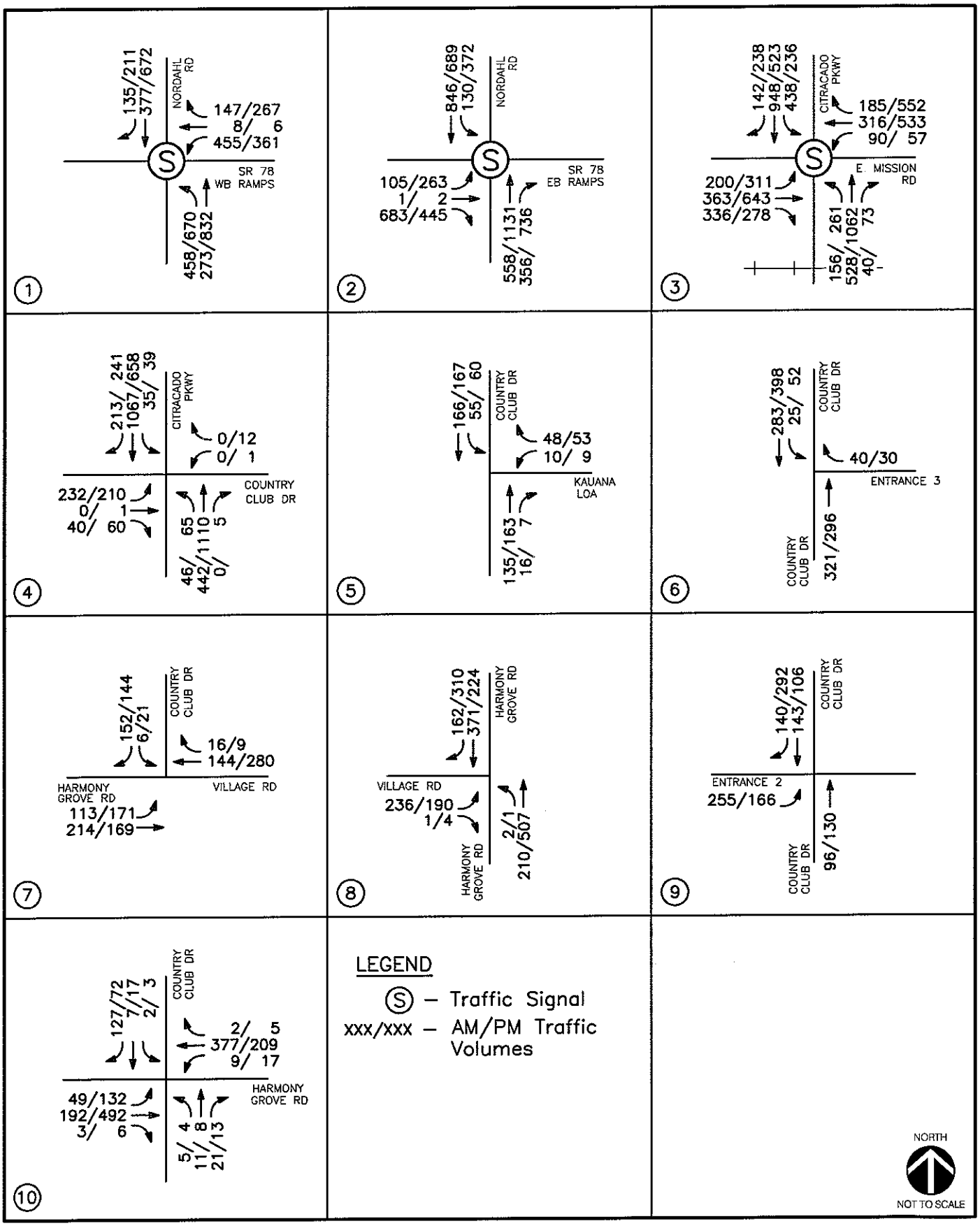

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Figure 9-7

OPTION A: Baseline + Project Peak Hour Traffic Volumes

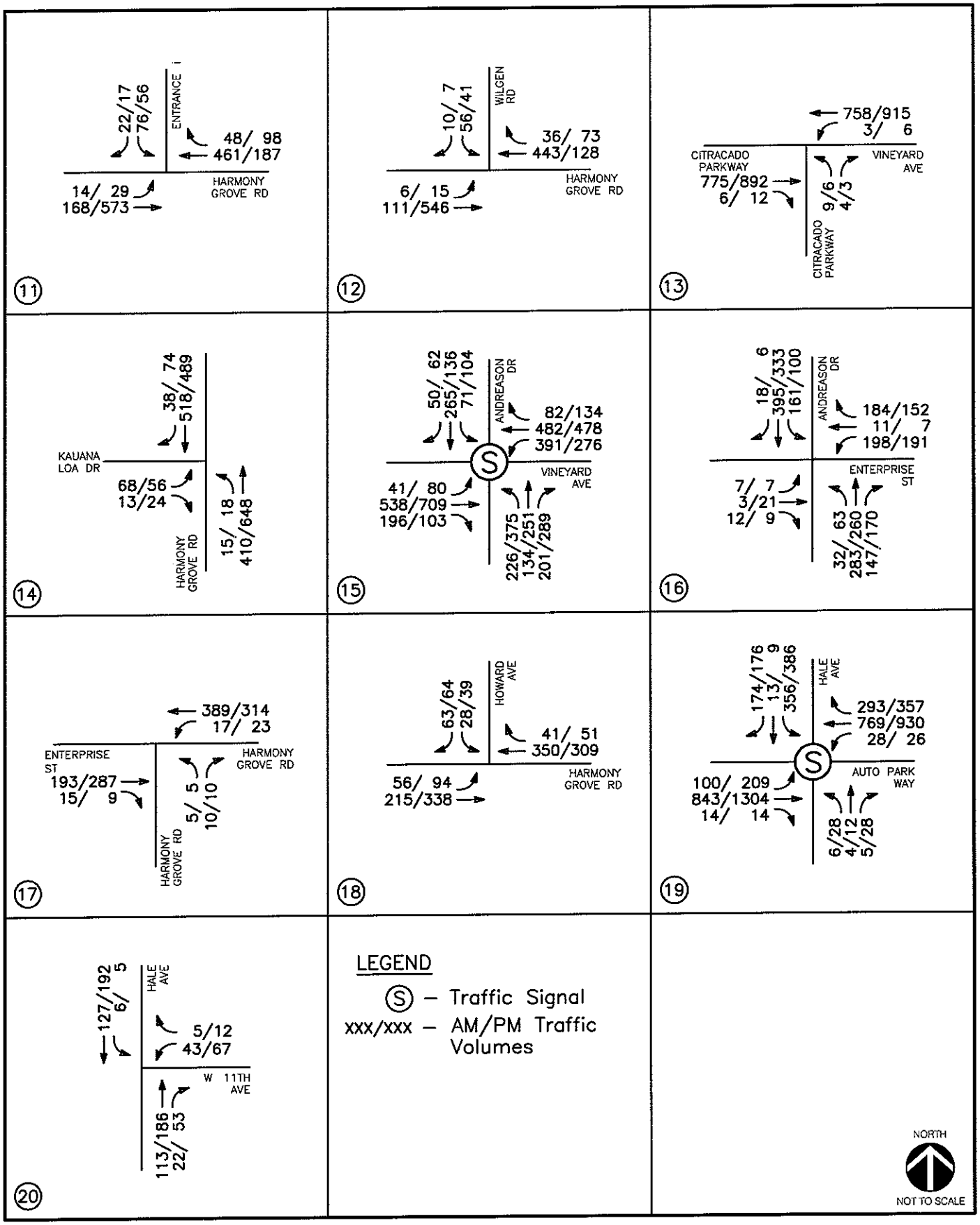

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Figure 9-7

OPTION A: Baseline + Project Peak Hour Traffic Volumes

Harmony Grove Village

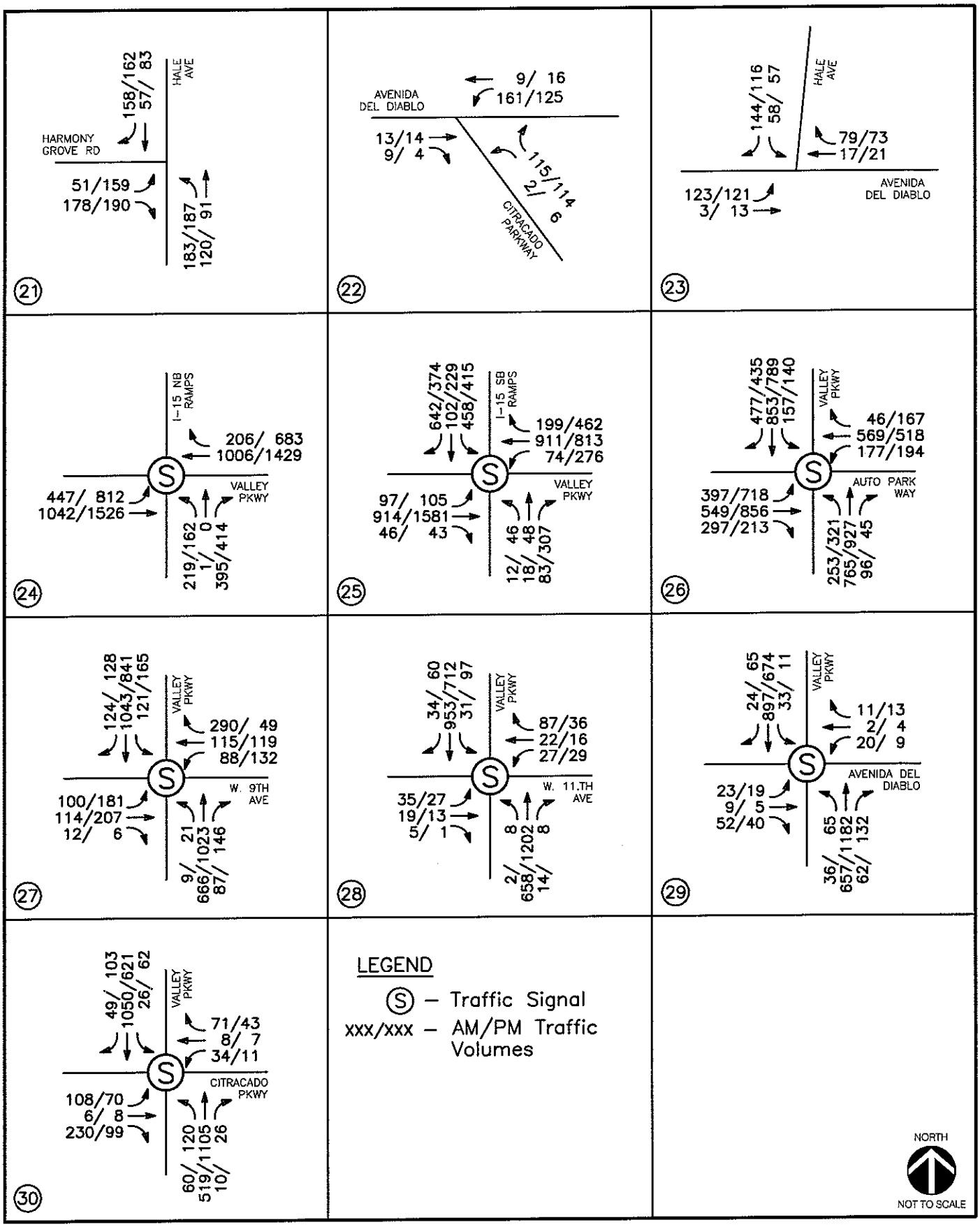

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Figure 9-7

OPTION A: Baseline + Project Peak Hour Traffic Volumes

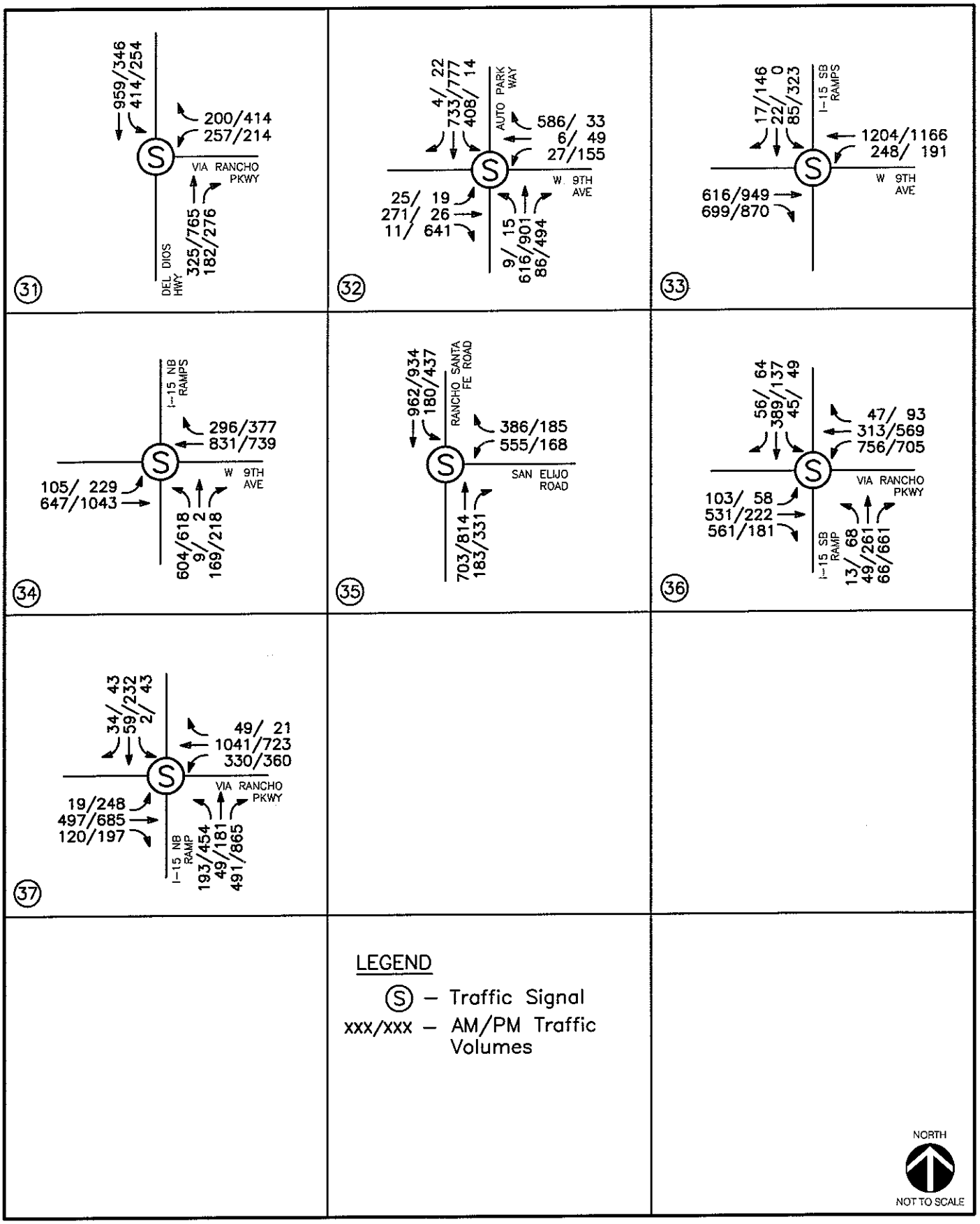

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Figure 9-7

OPTION A: Baseline + Project Peak Hour Traffic Volumes

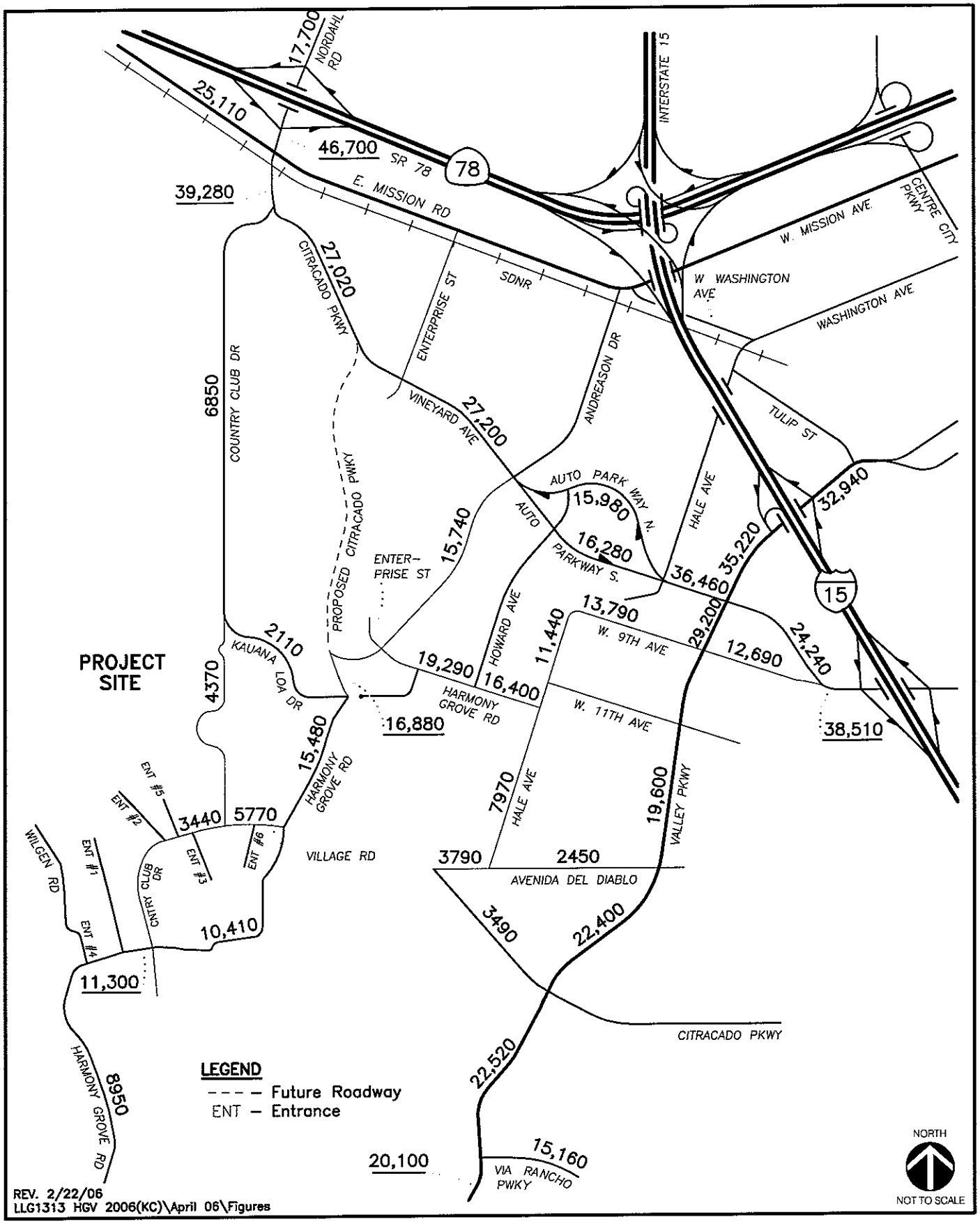

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Figure 9-8

OPTION A: Baseline + Project + Cumulative Average Daily Traffic Volumes

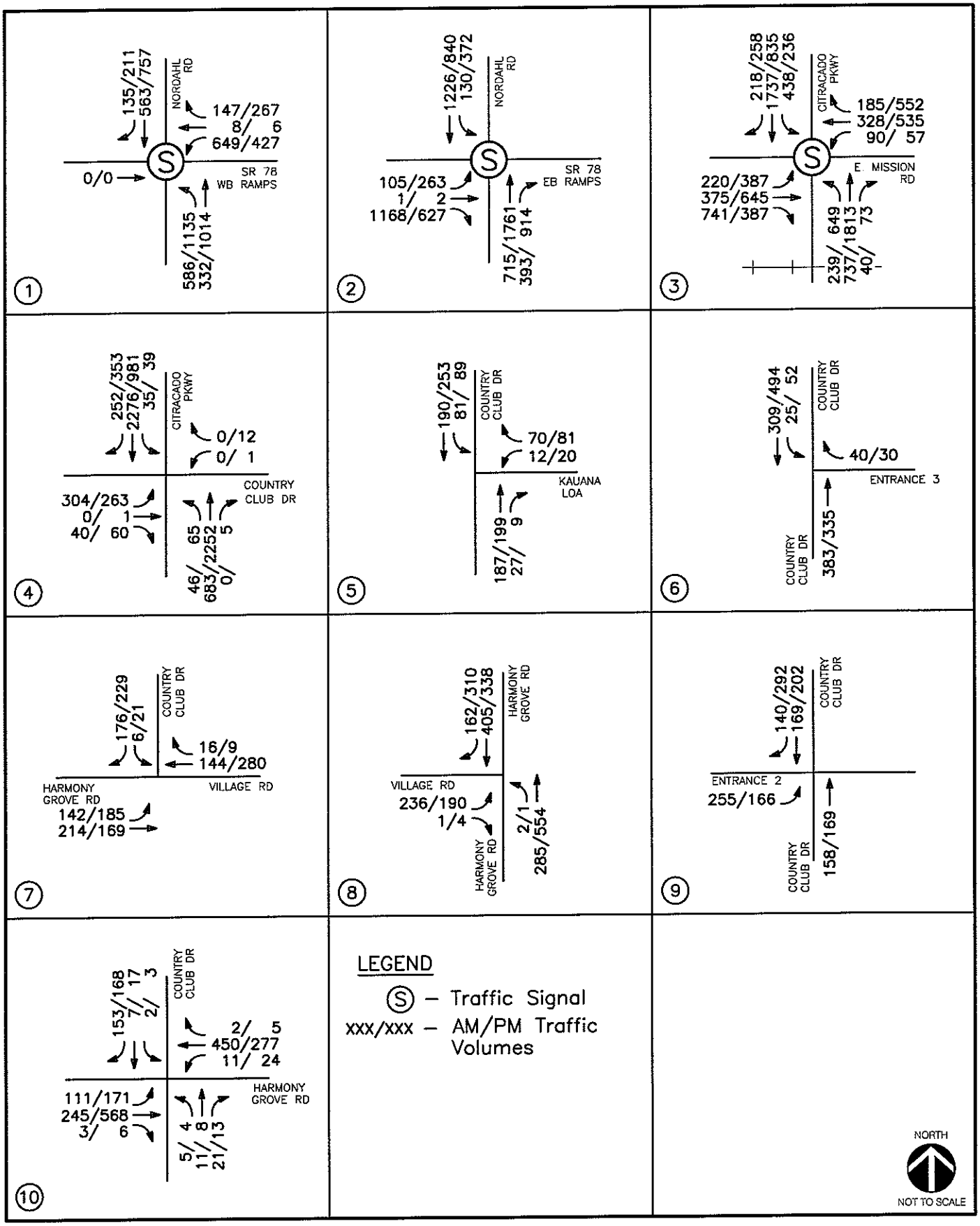

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Figure 9-9

OPTION A: Baseline + Project + Cumulative Peak Hour Traffic Volumes

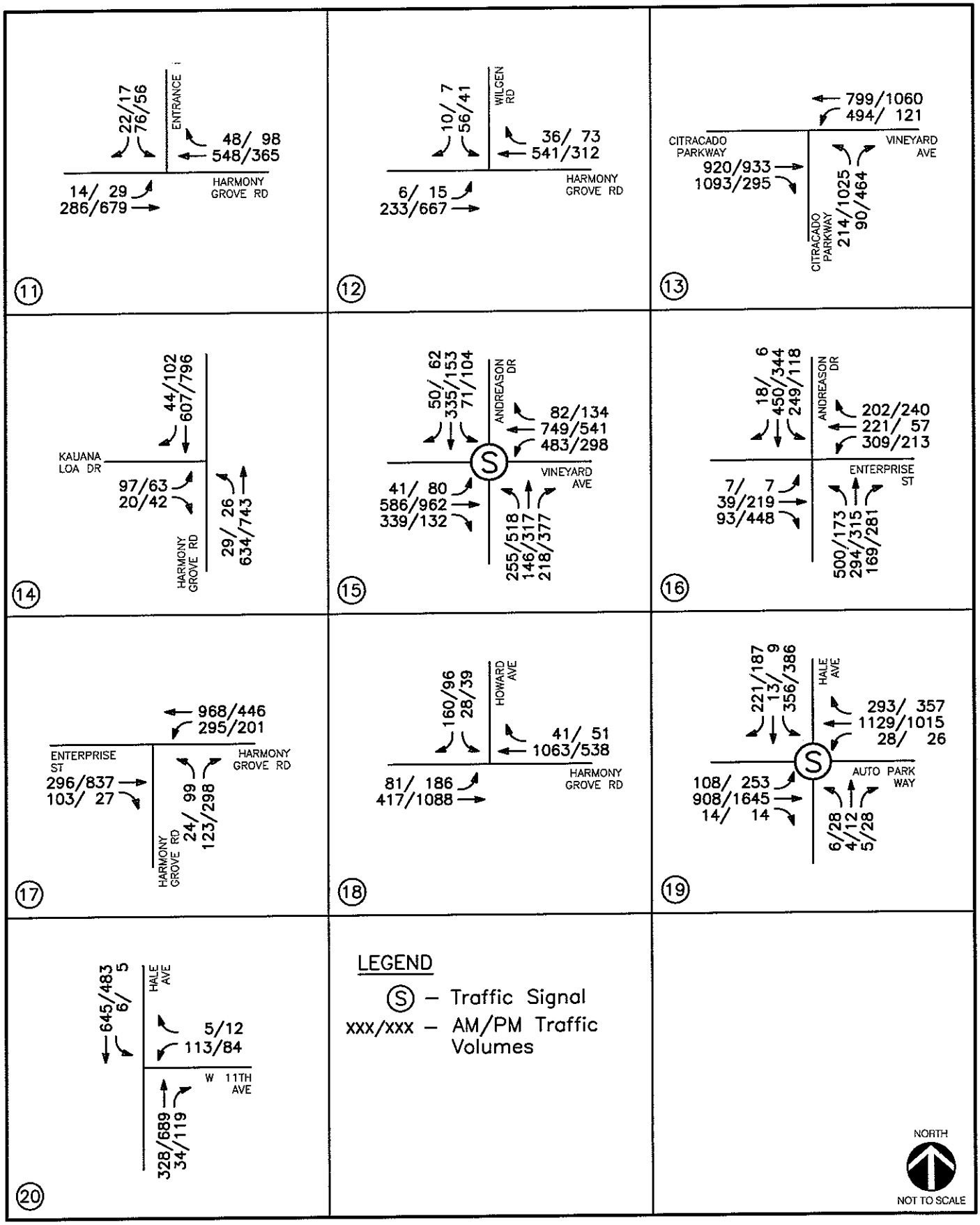

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Figure 9-9

OPTION A: Baseline + Project + Cumulative Peak Hour Traffic Volumes

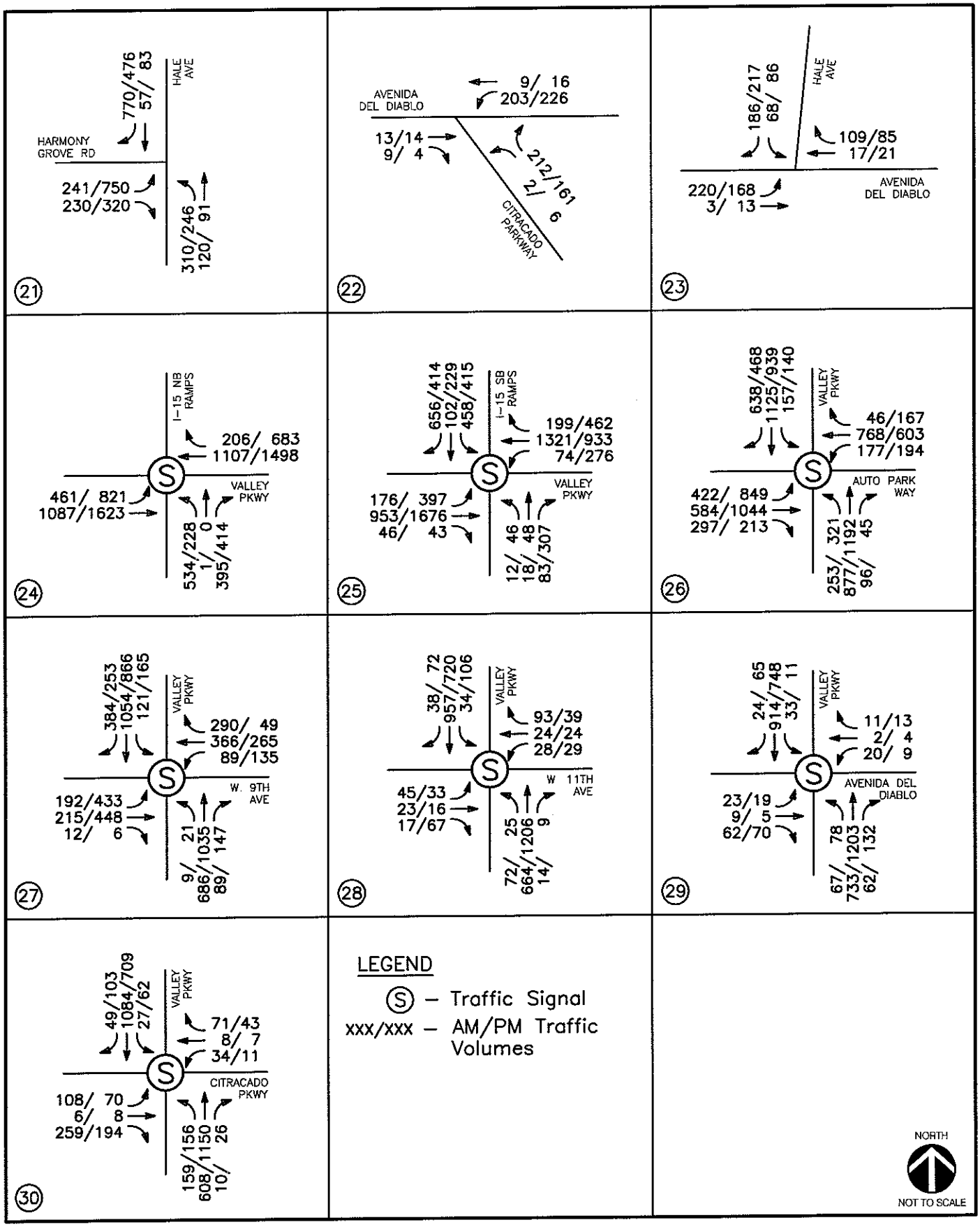

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Figure 9-9

OPTION A: Baseline + Project + Cumulative Peak Hour Traffic Volumes

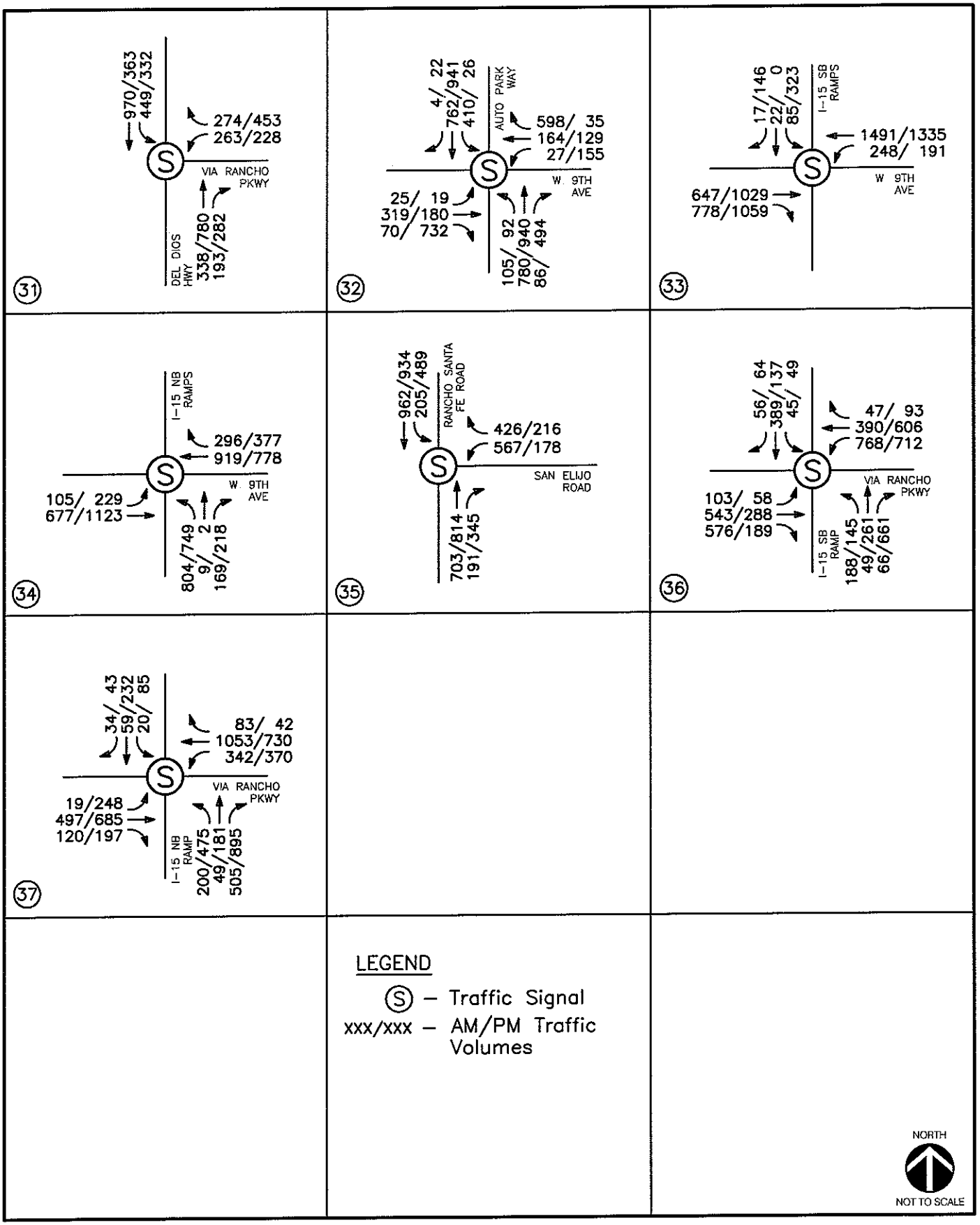

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Figure 9-9

OPTION A: Baseline + Project + Cumulative Peak Hour Traffic Volumes

10.0 ANALYSIS OF OPTION B (VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Option B consists of constructing a new roadway between Harmony Grove Road and an extension of Citracado Parkway.

Table 15-2 includes a mitigation measure to install a cul-de-sac on Avenida Del Diablo just east of Citracado Parkway such that traffic would use Citracado Parkway as opposed to Avenida Del Diablo to travel to / from the east.

Like Option A, this option includes improvements to the Via Rancho Parkway / Valley Parkway intersection. These improvements are assumed to be part of the project and are incorporated into the analysis.

10.1 Option B Baseline (Village Road / Citracado Parkway Connection)

The existing traffic volumes were redistributed to represent the altered traffic patterns due to the extension of Avenida del Diablo. All proposed roadway changes are incorporated into the analysis. The redistributed ADT and AM / PM peak hour traffic volumes are shown on ***Figures 10–1 and 10–2***, respectively.

10.1.1 *Segment Operations*

Table 10–1 summarizes the daily segment levels of service on key segments under Option B Baseline conditions. As shown in *Table 10-1*, all key segments are calculated to operate at LOS D or better, with the exception of the following segments:

-
- Nordahl Road: SR-78 to Mission Road (LOS E)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS F)
- Vineyard Avenue: Enterprise Street to Andreason Drive (LOS F)
- West 9th Avenue: Auto Park Way to I-15 SB Ramps (LOS E)
- Via Rancho Parkway: East of Valley Parkway (LOS E)
- Valley Parkway: W. 11th Street to Avenida del Diablo (LOS F)
- Valley Parkway: Avenida del Diablo to Citracado Parkway (LOS F)
- Valley Parkway: Citracado Parkway to Via Rancho Parkway (LOS F)
- Valley Parkway: South of Via Rancho Parkway (LOS F)

10.1.2 *Intersection Operations*

Signalized Intersections

Table 10–2 shows the signalized intersection operations under Option B Baseline conditions. As shown in *Table 10–2*, all signalized intersections are calculated to operate at LOS D or better, with the exceptions of the following intersections:

- Nordahl Road / SR 78 EB Ramps (LOS E in the PM peak hour)
- Nordahl Road / Mission Road (LOS E in the PM peak hour)
- I-15 NB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 SB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 SB Ramps / Via Rancho Parkway (LOS F in the AM peak hour caused by ramp meter delay)

Unsignalized Intersections

Table 10–3 shows the unsignalized intersection operations under Option B baseline conditions. As seen in *Table 10–3*, the critical movements at all unsignalized intersections are calculated to operate at LOS D or better, with the exception of the following intersections:

- Citracado Parkway / Country Club Drive (Eastbound approach – LOS F in the AM and PM peak hours)
- Avenida del Diablo / Hale Avenue (Southbound approach – LOS F in the PM peak hour)
- Valley Parkway / Avenida del Diablo (Eastbound approach – LOS F during the AM and PM peak hours).

Appendix I contains the peak hour analysis worksheets for signalized and unsignalized intersections under Option B Baseline conditions.

10.1.3 *Freeway Operations*

The Option B circulation change does not affect the freeway traffic volumes. The operations remain the same as outlined in Section 6.3.

10.1.4 *Ramp Meters*

The Option B circulation change does not affect the ramp volumes. The operations remain the same as outlined in Section 6.4.

10.2 Option B Project Traffic (Village Road / Citracado Parkway Connection)

10.2.1 *Project Distribution*

The trip distribution was developed based on a Select Zone assignment obtained from the SANDAG Series 10 Model. However, the project traffic distribution was altered for Option B assuming the Village Road / Citracado Parkway connection.

Figure 10–3 shows the redistributed project traffic distribution for Option B.

10.2.2 *Project Assignment*

The project related ADT and peak hour trips were assigned to the study area segments and intersections based on the distribution percentages shown in *Figure 10–3* and the assumed access

plan. ***Figure 10–4*** depicts the total project traffic ADT and ***Figure 10–5*** depicts the AM / PM peak hour traffic volumes for Option B.

10.3 Option B Baseline + Project (Village Road / Citracado Parkway Connection)

The Option B project traffic was added to Option B baseline traffic volumes and analyzed to determine project impacts to the local circulation system. ***Figure 10–6*** depicts the total project traffic ADT and ***Figure 10–7*** depicts the AM / PM peak hour traffic volumes for Option B Baseline + Project conditions.

10.3.1 *Segment Operations*

Table 10–1 summarizes the daily segment levels of service on key segments under Option B baseline + project conditions. *Table 10–1 shows* that with the addition of project traffic, all key segments are calculated to operate at LOS D or better with the exception of the following segments:

- Nordahl Road: SR-78 to Mission Road (LOS F)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS F)
- Vineyard Avenue: Enterprise Street to Andreason Drive (LOS F)
- West 9th Avenue: Auto Park Way to I-15 SB Ramps (LOS E)
- Via Rancho Parkway: East of Valley Parkway (LOS E)
- Valley Parkway: W. 11th Street to Avenida del Diablo (LOS F)
- Valley Parkway: Avenida del Diablo to Citracado Parkway (LOS F)
- Valley Parkway: Citracado Parkway to Via Rancho Parkway (LOS F)
- Valley Parkway: South of Via Rancho Parkway (LOS F)

10.3.2 *Intersection Operations*

Signalized Intersections

Table 10–2 summarizes the signalized intersection operations under Option B Baseline + Project conditions. *Table 10–2* shows that with the addition of project traffic, all signalized intersections are calculated to operate at LOS D or better, with the exceptions of the following intersections:

- Nordahl Road / SR 78 EB Ramps (LOS E in the AM peak hour and LOS F in the PM peak hour)
- Nordahl Road / Mission Road (LOS F in the PM peak hour)
- I-15 NB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 SB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 SB Ramps / Via Rancho Parkway (LOS F in the AM peak hour caused by ramp meter delay)

Unsignalized Intersections

Table 10–3 summarizes the unsignalized intersection operations under Option B Baseline + Project conditions. *Table 10–3* shows that with the addition of project traffic, the critical movements at all unsignalized intersections are calculated to operate at LOS D or better, with the exception of the following intersections:

- Citracado Parkway / Country Club Drive (Eastbound approach – LOS F during the AM and PM peak hours)
- Harmony Grove Road / Village Road (Westbound approach – LOS E in the AM peak hour)
- Avenida del Diablo / Hale Avenue (Southbound approach - LOS F during the PM peak hour)
-
- Avenida del Diablo / Hale Avenue (Southbound approach – LOS F in the PM peak hour)
- Valley Parkway / Avenida del Diablo (Eastbound approach – LOS F during the AM and PM peak hours).

Appendix I contains the peak hour analysis work sheets for signalized and unsignalized intersections under Option B Baseline + Project conditions.

10.3.3 *Freeway Operations*

The Option B circulation change does not affect the freeway traffic volumes. The operations remain the same as outlined in Section 9.3.3.

10.3.4 *Ramp Meters*

The Option B circulation change does not affect the ramp volumes. The operations remain the same as outlined in Section 9.3.4.

10.4 Option B Baseline + Project + Cumulative Projects (Village Road / Citracado Parkway Connection)

The Option B cumulative project traffic was added to Option B Baseline + Project traffic volumes and analyzed to determine potential cumulative project impacts to the local circulation system. ***Figures 10–8*** show the ADT and *Figure **10–9*** depicts the AM / PM peak hour traffic volumes for Option B Baseline + Project + Cumulative Project conditions.

10.4.1 *Segment Operations*

Table 10–1 summarizes the daily segment levels of service on key segments under Option B baseline + project + cumulative project conditions. *Table 10–1* shows that with the addition of cumulative project traffic, all key segments are calculated to operate at LOS D or better with the exception of the following segments:

- Harmony Grove Road: Country Club Drive to Village Road (LOS E)
- Harmony Grove Road: Enterprise Street to Howard Avenue (LOS F)
- Harmony Grove Road: Howard Avenue to Hale Avenue (LOS F)

- Nordahl Road: SR-78 to Mission Road (LOS F)
- Nordahl Road: Mission Road to Country Club Drive (LOS F)
- Andreason Drive: Vineyard Avenue to Enterprise Street (LOS E)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS F)
- Vineyard Avenue: Enterprise Street to Andreason Drive (LOS F)
- Auto Park Way: Hale Avenue to Valley Parkway (LOS E)
- Hale Avenue: W. 9th Street to Harmony Grove Road (LOS F)
- West 9th Street: Hale Avenue to Valley Parkway (LOS E)
- West 9th Street: Valley Parkway to Auto Park Way (LOS E)
- West 9th Avenue: Auto Park Way to I-15 (LOS F)
- Via Rancho Parkway: East of Valley Parkway (LOS E)
- Valley Parkway: W. 11th Street to Avenida del Diablo (LOS F)
- Valley Parkway: Avenida del Diablo to Citracado Parkway (LOS F)
- Valley Parkway: Citracado Parkway to Via Rancho Parkway (LOS F)
- Valley Parkway: South of Via Rancho Parkway (LOS F)

10.4.2 *Intersection Operations*

Signalized Intersections

Table 10–2 summarizes the signalized intersection operations under Option B Baseline + Project + Cumulative Project conditions. *Table 10–2* shows that with the addition of cumulative project traffic, all signalized intersections are calculated to operate at LOS D or better, with the exceptions of the following intersections:

- Nordahl Road / SR-78 WB Ramps (LOS E in the PM peak hour)
- Nordahl Road / SR 78 EB Ramps (LOS F in the AM and PM peak hours)
- Nordahl Road / Mission Road (LOS F in the AM and PM peak hours)
- I-15 NB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 SB Ramps / Valley Parkway (LOS E in the AM peak hour and LOS F in the PM peak hour)
- Valley Parkway / West 9th Street (LOS E in the PM peak hour)
- I-15 SB Ramps / Via Rancho Parkway (LOS F in the AM peak hour caused by ramp meter delay)

Unsignalized Intersections

Table 10–3 summarizes the unsignalized intersection operations under Option B Baseline + Project + Cumulative Project conditions. *Table 10–3* shows that with the addition of cumulative project

traffic, the critical movements at all unsignalized intersections are calculated to operate at LOS D or better, with the exception of the following intersections:

- Citracado Parkway / Country Club Drive (eastbound approach - LOS F in the AM and PM peak hours)
- Harmony Grove Road / Village Road (eastbound approach– LOS F in the AM peak hour and LOS F in the PM peak hour)
- Andreason Drive / Enterprise Street (LOS F in the AM and PM peak hours)
- Harmony Grove Road / Enterprise Street (northbound approach – LOS F in the AM and PM peak hour)
- Harmony Grove Road / Howard Avenue (southbound approach –LOS F in the AM and PM peak hours)
- Hale Avenue / W. 11th Street (westbound approach –LOS F in the AM and PM peak hours)
- Harmony Grove Road / Hale Avenue (eastbound approach – LOS F in the AM and PM peak hours)
- Avenida del Diablo / Hale Avenue (southbound approach – LOS F in the PM peak hour)
- Valley Parkway / Avenida del Diablo (eastbound approach – LOS F during the AM and PM peak hours).

Appendix I contains the peak hour analysis work sheets for signalized and unsignalized intersections under Option B Baseline + Project + Cumulative Project conditions.

10.4.3 *Freeway Operations*

The Option B circulation change does not affect the freeway traffic volumes. The operations remain the same as outlined in Section 9.4.3.

10.4.4 *Ramp Meters*

The Option B circulation change does not affect the ramp volumes. The operations remain the same as outlined in Section 9.4.4.

TABLE 10-1
OPTION B: NEAR-TERM STREET SEGMENT OPERATIONS
(WITH VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Segment	Existing Classification	Capacity (LOS E)[a]	Baseline Option B[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
Elfin Forest Road													
San Elijo Rd to Questhaven Rd[f]	Rural Collector	16,200	5,800	0.36	C	6,540	0.40	C	0.04	9,650	0.60	D	None
Harmony Grove Road													
Questhaven Rd to Wilgen Rd[f]	Rural Collector	16,200	5,100	0.31	C	5,840	0.36	C	0.05	8,950	0.55	D	None
Wilgen Rd to Country Club Dr.[f]	Town Collector	19,000	5,400	0.28	B	8,370	0.44	C	0.16	11,480	0.60	D	None
Country Club Dr. to Village Rd[f]	Rural Collector	16,200	5,100	0.31	C	7,510	0.46	D	0.15	10,680	0.66	D	None
Village Rd to Kauana Loa Dr.[f]	Rural Collector	16,200	3,100	0.19	B	5,890	0.36	C	0.17	9,770	0.60	D	None
Kauana Loa Dr. to Enterprise St.[f]	Local Collector	15,000	4,800	0.32	B	7,310	0.49	B	0.17	10,970	0.32	D	None
Enterprise St. to Howard Ave	Local Collector	15,000	5,400	0.36	B	6,700	0.45	B	0.09	**15,670**	**1.04**	**F**	Cumulative
Howard Ave to Hale Ave	Rural Collector	10,000	5,700	0.57	B	6,630	0.66	C	0.09	**14,570**	**1.46**	**F**	Cumulative

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).

b. Average Daily Traffic volumes (rounded to the nearest 10).

c. Volume to Capacity ratio.

d. Level of Service.

e. Baseline Option B – redistributed traffic conditions to account for roadway network changes.

f. Segment lies within the County of San Diego. The significance of impacts for County segments is based on the amount of project ADT added to the baseline volumes (see Section 5.0: Significance Criteria, *Table 5–1*), not on the V/C ratio. To review the project ADT volumes see *Figure 10–4*. All other segments are located within the City of Escondido and the significance of impacts is determined based on the V/C in this table.

TABLE 10-1 *(CONTINUED)*
OPTION B: NEAR-TERM STREET SEGMENT OPERATIONS
(WITH VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Segment	Existing Classification	Capacity (LOS E)[a]	Baseline Option B[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
East Mission Road													
West of Nordahl Rd	Major Road	37,000	20,900	0.56	B	21,180	0.57	B	0.01	25,110	0.68	C	None
Kauana Loa Drive													
Harmony Grove Rd to Country Club Dr.[f]	Rural Collector	16,200	800	0.05	A	1,080	0.07	A	0.02	1,610	0.10	A	None
Nordahl Road													
North of SR-78	Major Road	37,000	15,400	0.42	B	15,770	0.43	B	0.01	17,700	0.48	B	None
SR-78 to Mission Rd	Major Road	37,000	35,300	0.95	E	**37,530**	**1.01**	**F**	0.06	46,700	1.26	F	Direct
Mission Rd to Country Club Dr.	Major Road	37,000	24,100	0.65	A	26,610	0.72	C	0.07	**39,280**	**1.06**	**F**	Cumulative

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).

b. Average Daily Traffic volumes (rounded to the nearest 10).

c. Volume to Capacity ratio.

d. Level of Service.

e. Baseline Option B – redistributed traffic conditions to account for roadway network changes.

f. Segment lies within the County of San Diego. The significance of impacts for County segments is based on the amount of project ADT added to the baseline volumes (see Section 5.0: Significance Criteria, *Table 5–1*), not on the V/C ratio. To review the project ADT volumes see *Figure 10–4*. All other segments are located within the City of Escondido and the significance of impacts is determined based on the V/C in this table.

TABLE 10-1 *(CONTINUED)*
OPTION B: NEAR-TERM STREET SEGMENT OPERATIONS
(WITH VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Segment	Existing Classification	Capacity (LOS E)[a]	Baseline Option B[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
Andreason Drive													
Vineyard Ave to Enterprise St.	Local Collector	15,000	9,300	0.62	C	10,040	0.67	D	0.05	**13,040**	**0.87**	**E**	Cumulative
Vineyard Avenue													
Country Club Dr. to Enterprise St.	Local Collector	15,000	15,400	1.03	F	15,590	1.04	F	0.01	27,020	1.80	F	None
Enterprise St. to Andreason St.	Local Collector	15,000	21,600	1.44	F	21,690	1.45	F	0.01	27,290	1.82	F	None
Auto Park Way													
Andreason Dr. to Hale Ave (north)	Collector	20,000	12,100	0.61	C	12,150	0.61	C	0.00	13,430	0.67	D	None
Andreason Dr. to Hale Ave (south)	Collector	20,000	12,800	0.64	B	12,850	0.64	C	0.00	14,130	0.71	D	None
Hale Ave to Valley Pkwy	Collector	34,200	29,500	0.86	D	29,590	0.87	D	0.01	33,450	0.98	E	None
Valley Pkwy to W. 9th St.	Collector	34,200	19,900	0.58	B	19,990	0.58	B	0.00	22,120	0.65	B	None
Hale Avenue													
W. 9th St. to Harmony Grove Rd	Rural Collector	10,000	5,900	0.59	C	7,110	0.71	D	0.12	**12,270**	**1.23**	**F**	Cumulative
Harmony Grove Rd to Avenida del Diablo	Rural Collector	10,000	3,000	0.30	B	3,740	0.37	B	0.07	5,520	0.55	C	None
West 9th Street													
Hale Ave to Valley Pkwy	Local Collector	15,000	8,500	0.57	C	9,520	0.63	C	0.06	**14,620**	**0.97**	**E**	Cumulative
Valley Pkwy to Auto Park Way	Local Collector	15,000	10,200	0.68	D	11,500	0.77	D	0.09	**14,000**	**0.93**	**E**	Cumulative
Auto Park Wy to I-15	Major Road	34,200	32,800	0.96	E	34,190	1.00	E	0.04	**34,390**	**1.01**	**F**	Cumulative

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Volume to Capacity ratio.
d. Level of Service.
e. Baseline Option B – redistributed traffic conditions to account for roadway network changes.

TABLE 10-1 *(CONTINUED)*
OPTION B: NEAR-TERM STREET SEGMENT OPERATIONS
(WITH VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Segment	Existing Classification	Capacity (LOS E)[a]	Baseline Option B[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
Avenida del Diablo													
Citracado Pkwy to Hale Ave	Local Collector	10,000	5,500	0.55	C	7,640	0.76	D	0.21	**8,080**	**0.81**	**D**	Cumulative
Hale Ave to Valley Pkwy	Local Collector	10,000	3,800	0.38	B	5,190	0.52	C	0.04	5,800	0.58	C	None
Citracado Parkway													
Avenida del Diablo to Valley Pkwy	Major Road	34,200	4,000	0.12	A	5,580	0.16	A	0.04	6,020	0.18	A	None
Via Rancho Parkway													
East of Valley Pkwy[f]	Rural Collector	16,200	12,700	0.78	E	**13,910**	**0.86**	**E**	0.08	15,350	0.95	E	Direct
Valley Parkway													
North of I-15	Prime Arterial	60,000	31,200	0.52	C	31,850	0.53	C	0.01	32,940	0.55	C	None
I-15 to Auto Park Way	Prime Arterial	60,000	29,200	0.49	B	30,690	0.51	C	0.02	35,320	0.59	C	None
Auto Park Wy to W. 11th St.	Prime Arterial	60,000	26,200	0.44	B	27,780	0.46	B	0.02	30,690	0.51	C	None
W. 11th St. to Avenida del Diablo	Local Collector	15,000	18,600	1.24	F	19,990	1.33	F	0.09	**20,990**	**1.40**	**F**	Cumulative
Avenida del Diablo to Citracado Pkwy	Local Collector	15,000	20,400	1.36	F	20,400	1.36	F	0.00	21,660	1.44	F	None
Citracado Pkwy to Via Rancho Pkwy[f]	Rural Collector	16,200	18,800	1.16	F	**20,380**	**1.26**	**F**	0.10	22,710	1.40	F	Direct
South of Via Rancho Pkwy[f]	Rural Collector	16,200	18,400	1.14	F	**18,770**	**1.16**	**F**	0.02	20,100	1.24	F	Direct

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).

b. Average Daily Traffic volumes (rounded to the nearest 10).

c. Volume to Capacity ratio.

d. Level of Service.

e. Baseline Option B – redistributed traffic conditions to account for roadway network changes.

f. Segment lies within the County of San Diego. The significance of impacts for County segments is based on the amount of project ADT added to the baseline volumes (see Section 5.0: Significance Criteria, *Table 5–1*), not on the V/C ratio. To review the project ADT volumes see *Figure 10–4*. All other segments are located within the City of Escondido and the significance of impacts is determined based on the V/C in this table.

General Notes

Country Club Drive segment analysis is included in Section 14.0.

TABLE 10-2
OPTION B: NEAR-TERM SIGNALIZED INTERSECTION OPERATIONS
(WITH VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Intersection	Peak Period	Baseline Option B[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
		Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
1. Nordahl Rd / SR-78 WB Ramps	AM	31.7	C	32.2	C	0.5	37.2	D	None
	PM	33.2	C	34.5	C	1.3	61.7	E	
2. Nordahl Rd / SR-78 EB Ramps	AM	53.1	D	**65.6**	**E**	12.5	> 100.0	F	Direct
	PM	74.9	E	**99.4**	**F**	24.5	> 100.0	F	
3. Nordahl Rd / Mission Rd	AM	46.2	D	50.3	D	4.1	> 100.0	F	Direct
	PM	78.4	E	**91.4**	**F**	13.0	> 100.0	F	
15 Andreason Dr / Auto Park Way	AM	35.1	D	35.4	D	0.3	41.7	D	None
	PM	34.5	D	34.9	D	0.4	44.9	D	
19 Hale Ave / Auto Park Way	AM	28.3	C	28.4	C	0.1	46.5	D	None
	PM	33.7	C	33.7	C	0.0	35.1	D	
24 Valley Pkwy / I-15 NB Ramps	AM	30.9	C	30.9	C	0.0	35.9	D	None
	PM	55.8	E	55.9	E	0.1	57.4	E	
25 Valley Pkwy / I-15 SB Ramps	AM	48.4	D	49.6	D	1.2	**59.9**	**E**	Cumulative
	PM	74.1	E	76.2	E	2.1	**87.5**	**F**	
26. Valley Pkwy / Auto Park Way	AM	36.3	D	36.4	D	0.1	38.2	D	None
	PM	40.4	D	40.8	D	0.4	46.1	D	
27. Valley Pkwy / West 9th St	AM	34.0	D	35.2	D	1.2	45.4	D	None
	PM	38.1	D	39.4	D	1.3	58.0	E	
28. Valley Pkwy / W. 11th St	AM	11.4	A	12.2	B	0.8	15.9	B	None
	PM	9.2	A	10.0	A	0.8	14.5	B	

General Notes:

Bold and shading indicate a significant impact

Footnotes:

a Baseline Option B – redistributed traffic conditions to account for roadway network changes
b Delay – measured in seconds
c LOS – Level of Service

SIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 < 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
> 80.1	F

TABLE 10-2 *(CONTINUED)*
OPTION B: NEAR-TERM SIGNALIZED INTERSECTION OPERATIONS
(WITH VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Intersection	Peak Period	Baseline Option B[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
		Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
30 Valley Pkwy / Citracado Pkwy	AM	33.8	C	39.2	D	5.4	45.8	D	None
	PM	28.3	C	39.2	D	10.9	42.9	D	
31. Valley Pkwy / Via Rancho Pkwy[d]	AM	29.8	C	31.9	C	2.1	38.2	D	None
	PM	32.8	C	36.5	D	3.7	42.0	D	
32 West 9th St / Auto Park Wy	AM	44.4	D	44.7	D	0.3	**55.3**	**E**	Cumulative
	PM	26.6	C	28.5	C	1.9	34.0	C	
33 West 9th St / I-15 SB Ramps	AM	18.6	B	19.7	B	1.1	22.3	C	None
	PM	20.8	C	21.7	C	0.9	32.9	C	
34. West 9th St / I-15 NB Ramps	AM	24.7	C	25.3	C	0.6	28.8	C	None
	PM	26.3	C	27.6	C	1.3	29.8	C	
35 San Elijo Rd / Rancho Santa Fe	AM	33.9	C	35.0	C	1.1	41.1	D	None
	PM	30.9	C	32.5	C	1.6	43.9	D	
36 Via Rancho Pkwy / I-15 SB Ramps	AM	>80.0	F[e]	>80.0	F[e]	>2.0	**>80.0**	**F[e]**	Cumulative
	PM	42.2	D	44.9	D	2.7	45.9	D	
37. Via Rancho Pkwy / I-15 NB Ramps	AM	24.9	C	24.9	C	0.0	25.7	C	None
	PM	35.0	C	35.6	D	0.6	37.7	D	

General Notes:

Bold and shading indicate a significant impact

Footnotes:

a Baseline Option B – redistributed traffic conditions to account for roadway network changes

b. Delay – measured in seconds.

c LOS – Level of Service.

d. Intersection is located in the County of San Diego. All other intersections are located in the City of Escondido.

e LOS F conditions caused by ramp meter delay.

SIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 < 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
> 80.1	F

TABLE 10-3
OPTION B: NEAR-TERM UNSIGNALIZED INTERSECTION OPERATIONS
(WITH VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Intersection	Peak Period	Minor Street Approach	Baseline Option B[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
			Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
4 Citracado Pkwy / Country Club	AM	EB	>100 0	F	>100 0	F	> 2 0	**>100.0**	**F**	Cumulative
	PM	EB	>100 0	F	>100 0	F	> 2 0	**>100.0**	**F**	
5. Country Club Dr / Kauana Loa Drive[d]	AM	All-way	7 9	A	8 8	A	0.9	9 7	A	None
	PM	All-way	7 8	A	9 0	A	0 2	10 8	B	
6. Country Club Dr / Entrance #3[d]	AM	WB	e	e	10 4	B	—	11.0	B	None
	PM	WB	e	e	10 2	B	—	10.5	B	
7. Country Club Dr / Village Rd[d]	AM	All-way	6 9	A	9.6	A	2 7	10.0	B	None
	PM	All-way	7 7	A	10 4	B	2 7	11.3	B	
8. Harmony Grove / Village Rd[d]	AM	EB	11.6	B	16.6	C	5.0	19 3	C	Direct
	PM	EB	12.7	B	**21.1**	**C**	7 4	36 6	E	
9. Country Club Dr / Entrance #2[d]	AM	EB	e	e	13.3	B	—	15.6	C	None
	PM	EB	e	e	13.6	B	—	16.5	C	
10 Country Club Dr / Harmony Grove[d]	AM	NB	9 4	A	14 2	B	4 8	19.8	C	None
		SB	11 4	B	13 2	B	1 8	15.8	C	
	PM	NB	13 0	B	21 6	C	8 6	34.9	D	None
		SB	11 2	B	15 5	C	4 3	19 6	C	
11. Harmony Grove / Entrance #1[d]	AM	SB	e	e	17 9	C	—	24 7	C	None
	PM	SB	e	e	20 4	C	—	34 1	D	
12. Harmony Grove / Wilgen Rd[d]	AM	SB	11.5	B	14.3	B	2.8	19 0	C	None
	PM	SB	11.3	B	16.0	C	4.7	24.2	C	
13. Vineyard Ave / Citracado Pkwy[f]	AM	—	e	e	1 7	A	—	51.4	D	None
	PM	—	e	e	1 8	A	—	38.5	D	

General Notes:

Bold and shading indicate a significant impact

Footnotes:

a Baseline Option B – redistributed traffic conditions to account for roadway network changes
Delay –measured in seconds
c LOS – Level of Service
d Intersection is located in the County of San Diego All other intersections are located in the City of Escondido.
e. Intersection does not exist
f. Intersection assumed to be signalized because signalization is a condition of the Escondido Research and Technology study

UNSIGNALIZED DELAY/LOS THRESHOLDS

Delay	LOS
0.0 < 10 0	A
10.1 to 15 0	B
15.1 to 25 0	C
25 1 to 35 0	D
35 1 to 50 0	E
> 50 1	F

TABLE 10-3 *(CONTINUED)*
OPTION B: NEAR-TERM UNSIGNALIZED INTERSECTION OPERATIONS
(WITH VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Intersection	Peak Period	Minor Street Approach	Baseline Option B[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
			Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
14. Harmony Grove / Kauana Loa Drive	AM	NB	9.3	A	11.0	B	1.7	15.7	C	None
	PM	NB	11.8	B	13 7	B	1.9	20.2	C	
16 Andreason Dr / Enterprise St	AM	All-way	10 2	B	11 1	B	0.9	82.6	F	None
	PM	All-way	9.9	A	11 1	B	1 2	55 9	F	
17 Harmony Grove Rd / Enterprise St	AM	NB	10 8	B	12 9	B	2 1	**> 100.0**	**F**	Cumulative
	PM	NB	12 8	B	15.9	C	3 1	**>100.0**	**F**	
18 Harmony Grove Rd / Howard Ave	AM	SB	11 6	B	12.2	B	0 6	50.5	F	None
	PM	SB	16 3	C	16.8	C	0 5	>100.0	F	
20 Hale Ave / West 11th St	AM	WB	11.7	B	23 6	C	11 9	**98.5**	**F**	Cumulative
	PM	WB	12.9	B	15 8	C	2.9	**>100.0**	**F**	
21. Hale Ave / Harmony Grove Ave	AM	EB	11.6	B	13 7	B	2 1	**>100.0**	**F**	Cumulative
	PM	EB	19 0	C	31.5	D	12.5	**>100.0**	**F**	
22. Avenida Del Diablo / Citracado Pkwy	AM	NB	10 8	B	15.1	C	4 3	17.3	C	None
	PM	NB	10 8	B	16 5	C	5.7	24.4	C	
23 Avenida Del Diablo / Hale Ave	AM	SB	10 2	B	11.3	B	1.1	13.0	B	Direct
	PM	SB	58 4	F	**78.0**	**F**	19 6	>100 0	F	
29 Valley Pkwy / Avenida Del Diablo	AM	EB	55.0	F	**>100.0**	**F**	> 2.0	>100 0	F	Direct
	PM	EB	>100 0	F	**>100.0**	**F**	> 2 0	>100.0	F	
38 Country Club Dr/ Entrance # 5	AM	SB	e	e	9 1	A	—	10 5	B	None
	PM	SB	e	e	11 2	B	—	13.9	B	
39. Village Rd / Entrance # 6	AM	NB	e	e	4 2	A	—	4 2	A	None
	PM	NB	e	e	4 4	A	—	4.4	A	

General Notes:

Bold and shading indicate a significant impact

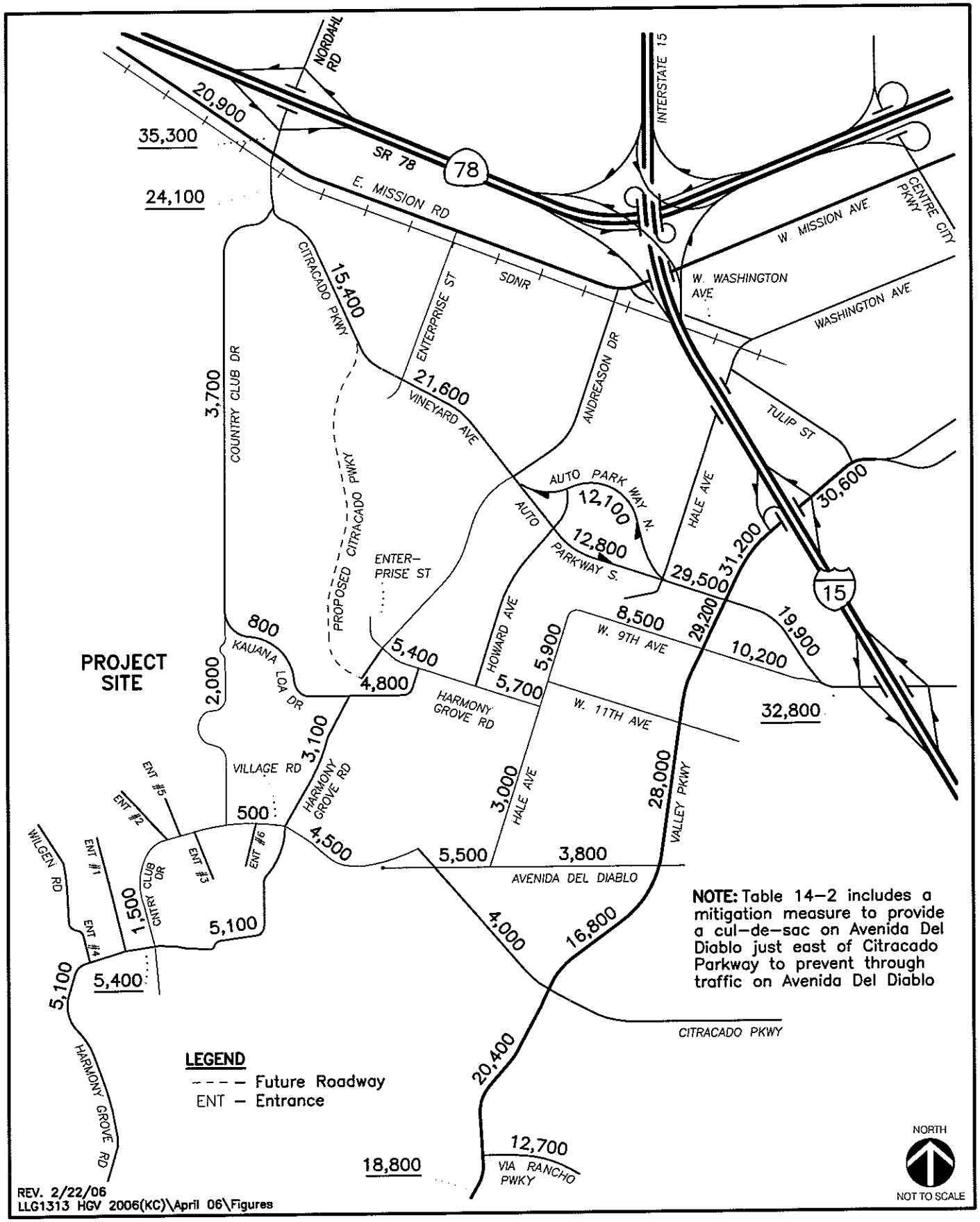
Footnotes:

a Baseline Option B – redistributed traffic conditions to account for roadway network changes.
b. Delay – measured in seconds
c. LOS – Level of Service

UNSIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0 0 < 10.0	A
10 1 to 15 0	B
15 1 to 25.0	C
25 1 to 35 0	D
35 1 to 50 0	E
> 50 1	F



NOTE: Table 14–2 includes a mitigation measure to provide a cul–de–sac on Avenida Del Diablo just east of Citracado Parkway to prevent through traffic on Avenida Del Diablo

LEGEND

- - - - Future Roadway

ENT – Entrance

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Figure 10-1

OPTION B: Baseline Average Daily Traffic Volumes

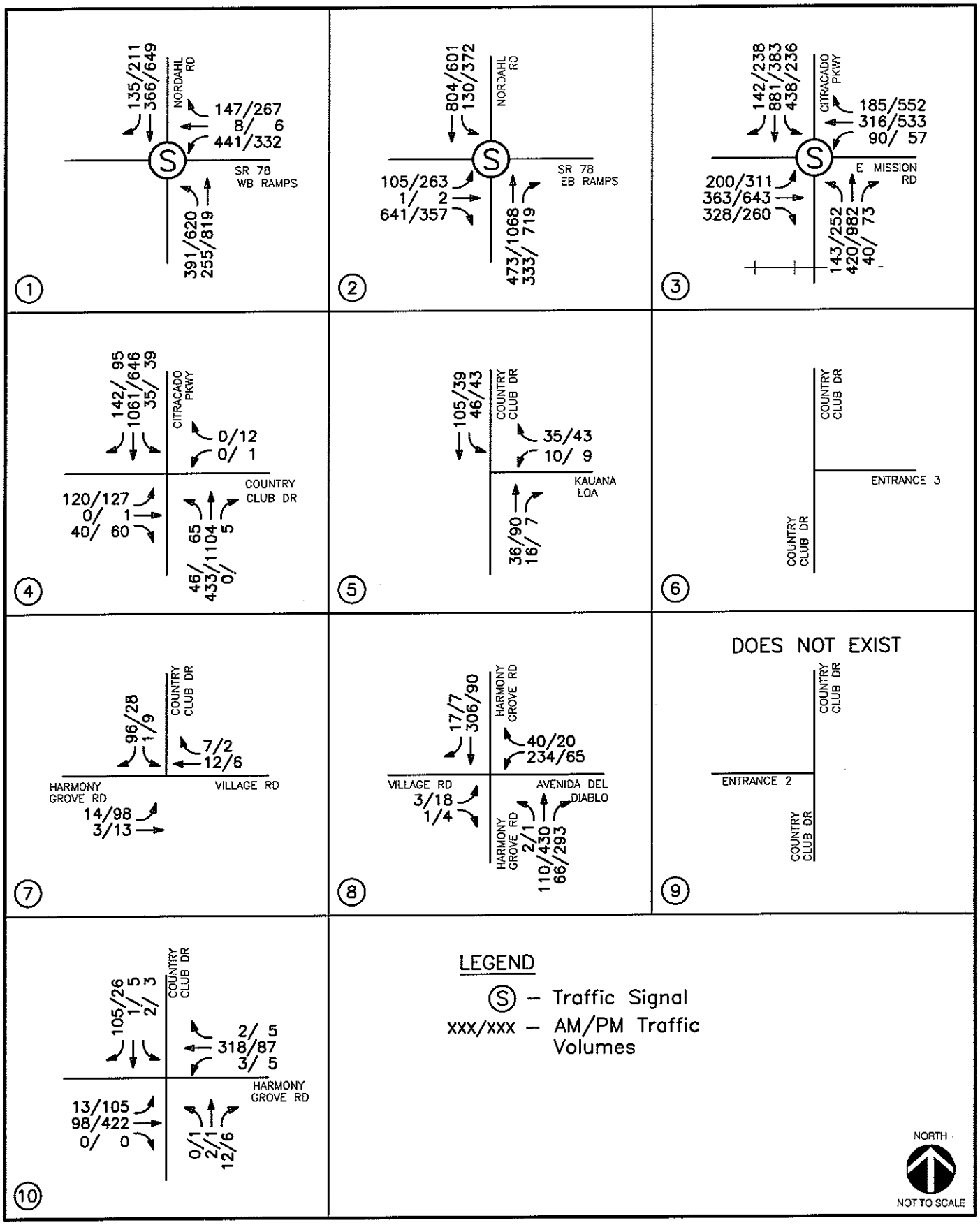

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Figure 10-2

OPTION B: Baseline Peak Hour Traffic Volumes

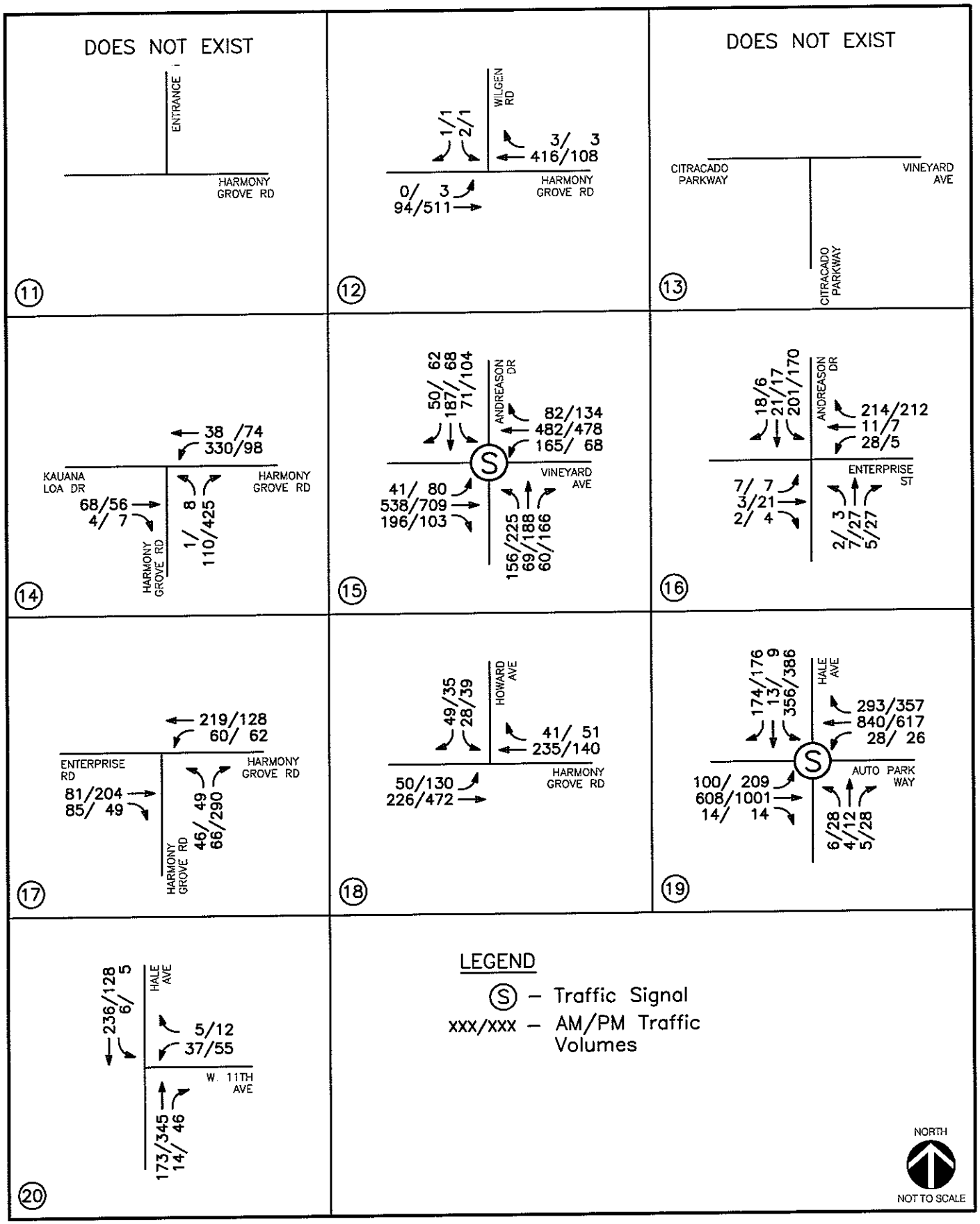

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Figure 10-2

OPTION B: Baseline Peak Hour Traffic Volumes

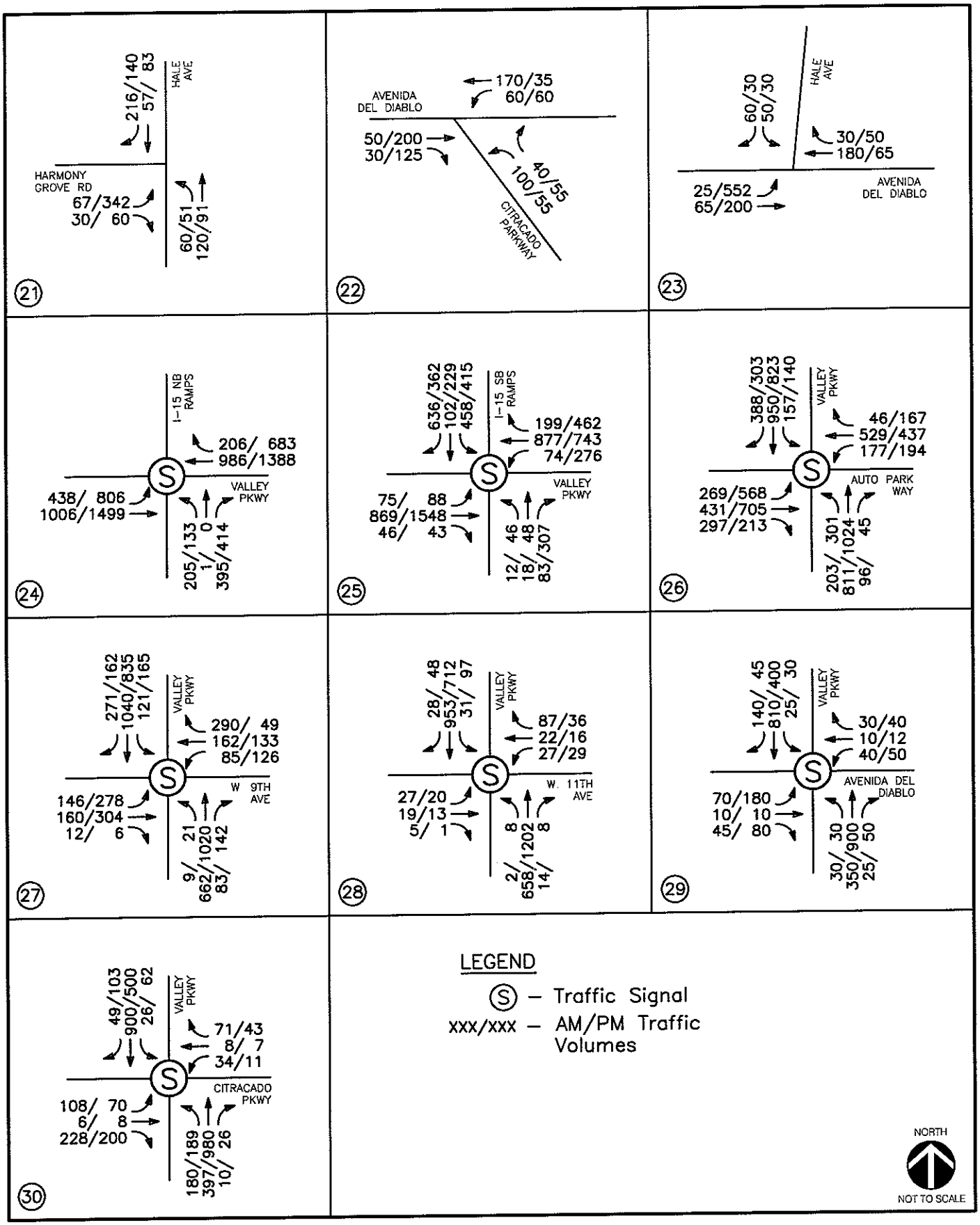

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Figure 10-2

OPTION B: Baseline Peak Hour Traffic Volumes

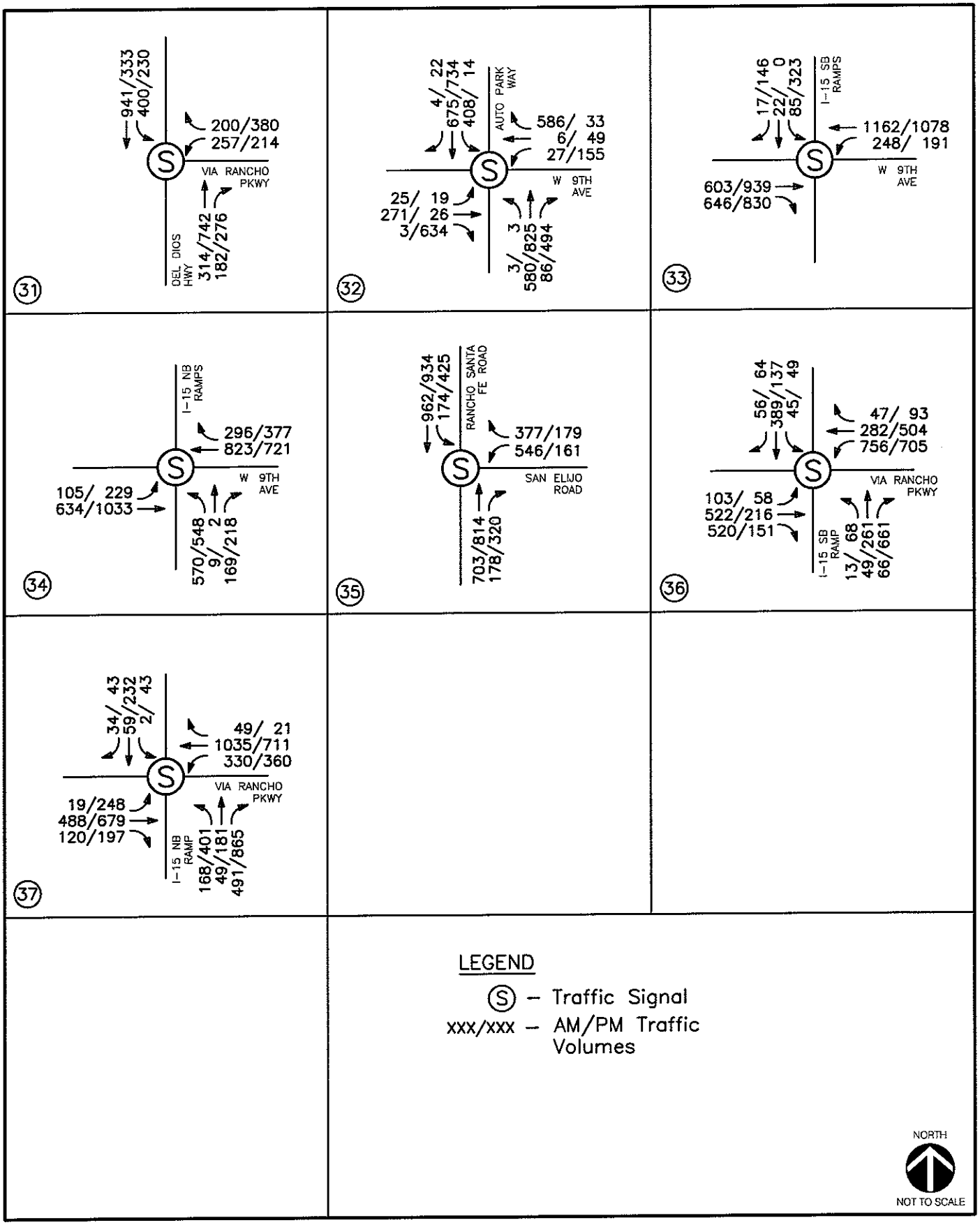

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Figure 10-2

OPTION B: Baseline Peak Hour Traffic Volumes

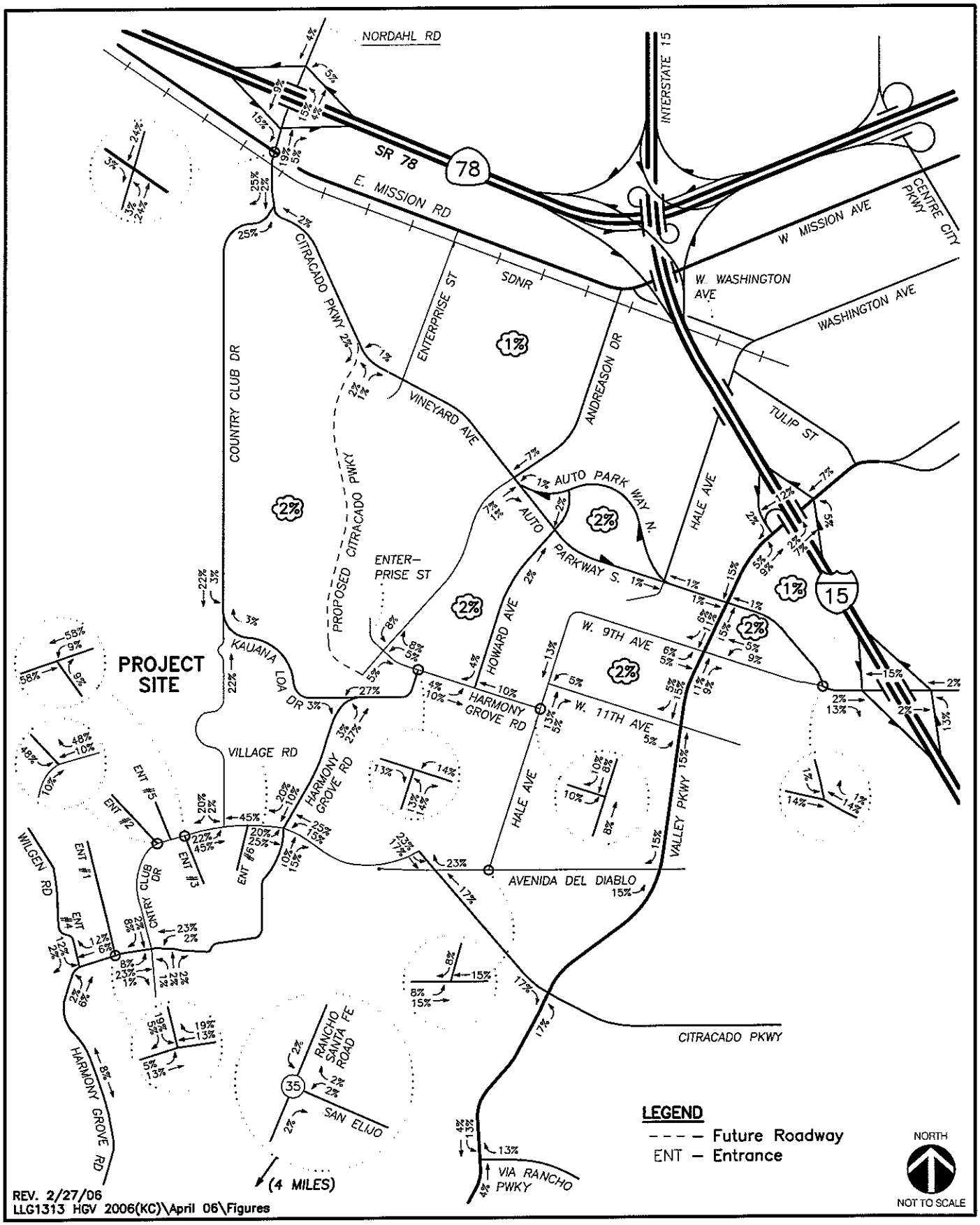

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Figure 10-3

OPTION B: Regional Traffic Distribution

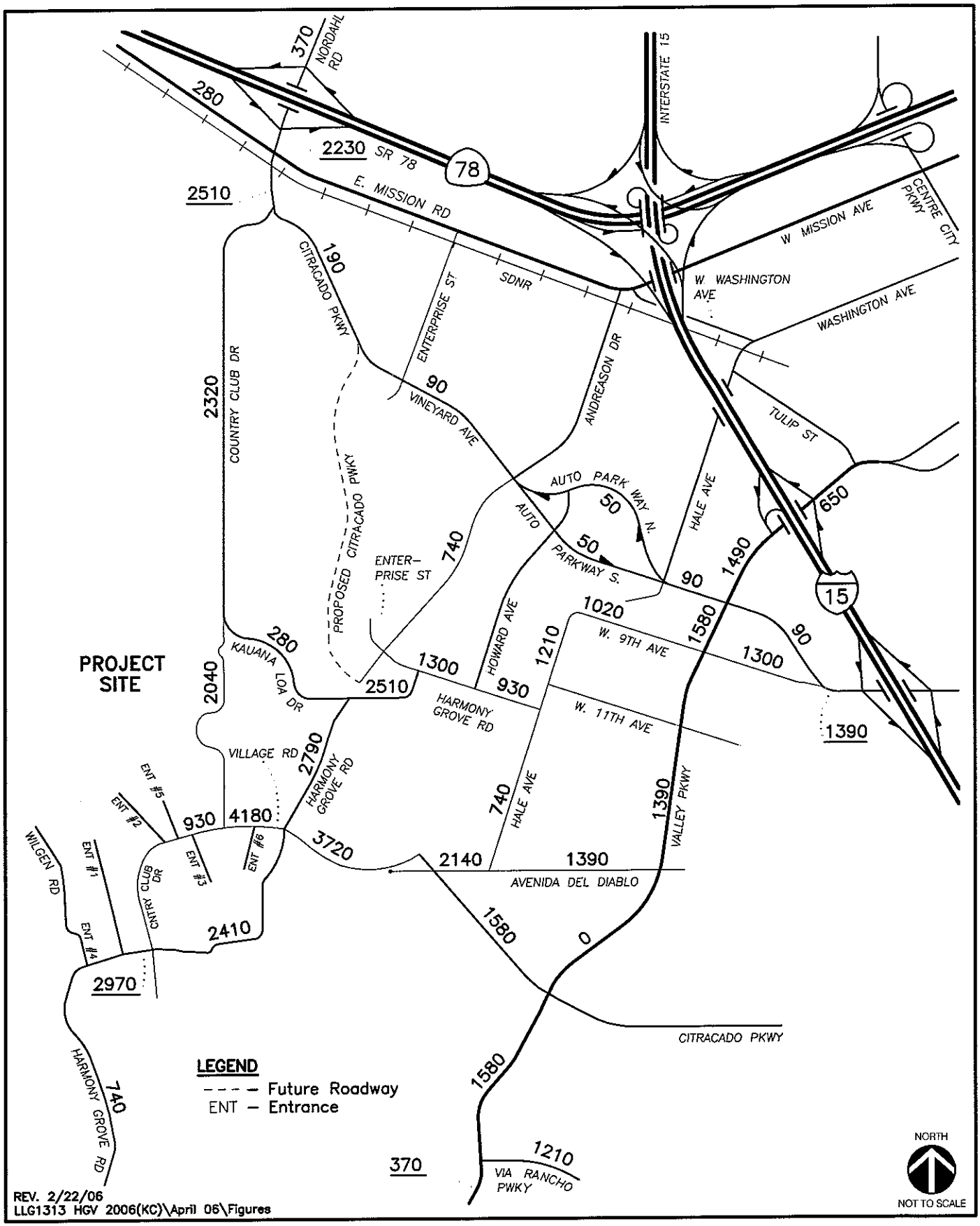

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Figure 10-4

OPTION B: Project Average Daily Traffic Volumes

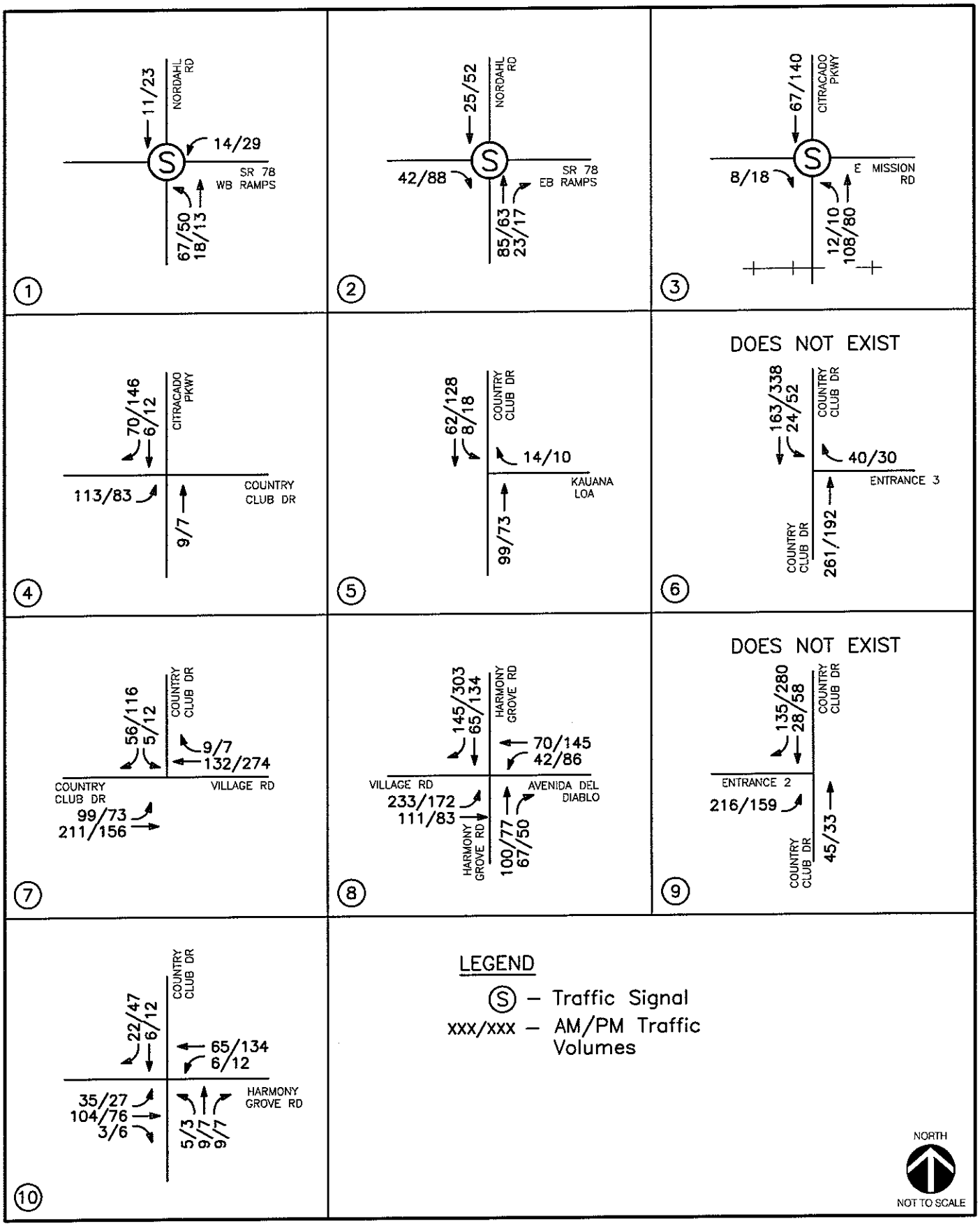

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Figure 10-5

OPTION B: Project Peak Hour Traffic Volumes

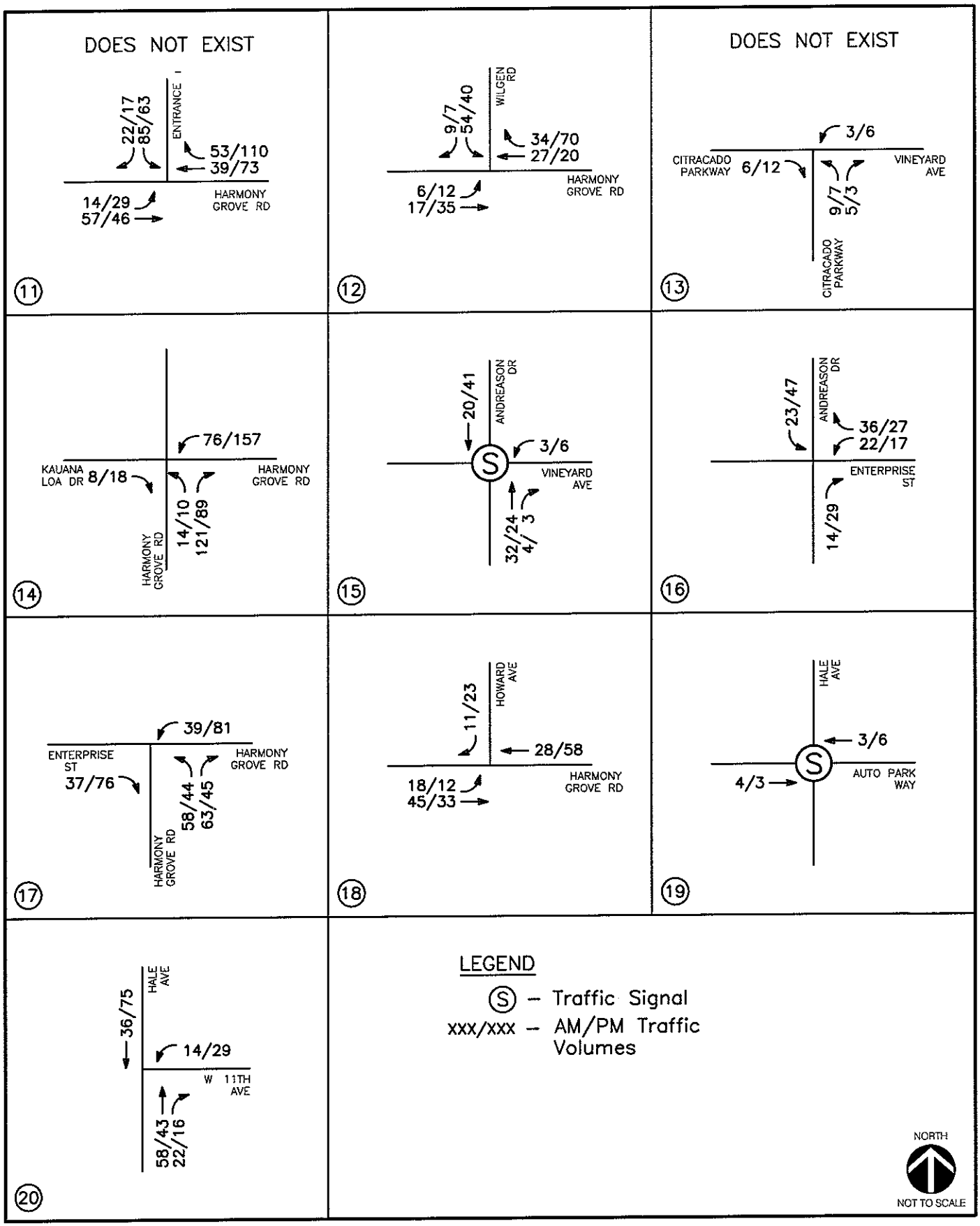

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Figure 10-5

OPTION B: Project Peak Hour Traffic Volumes

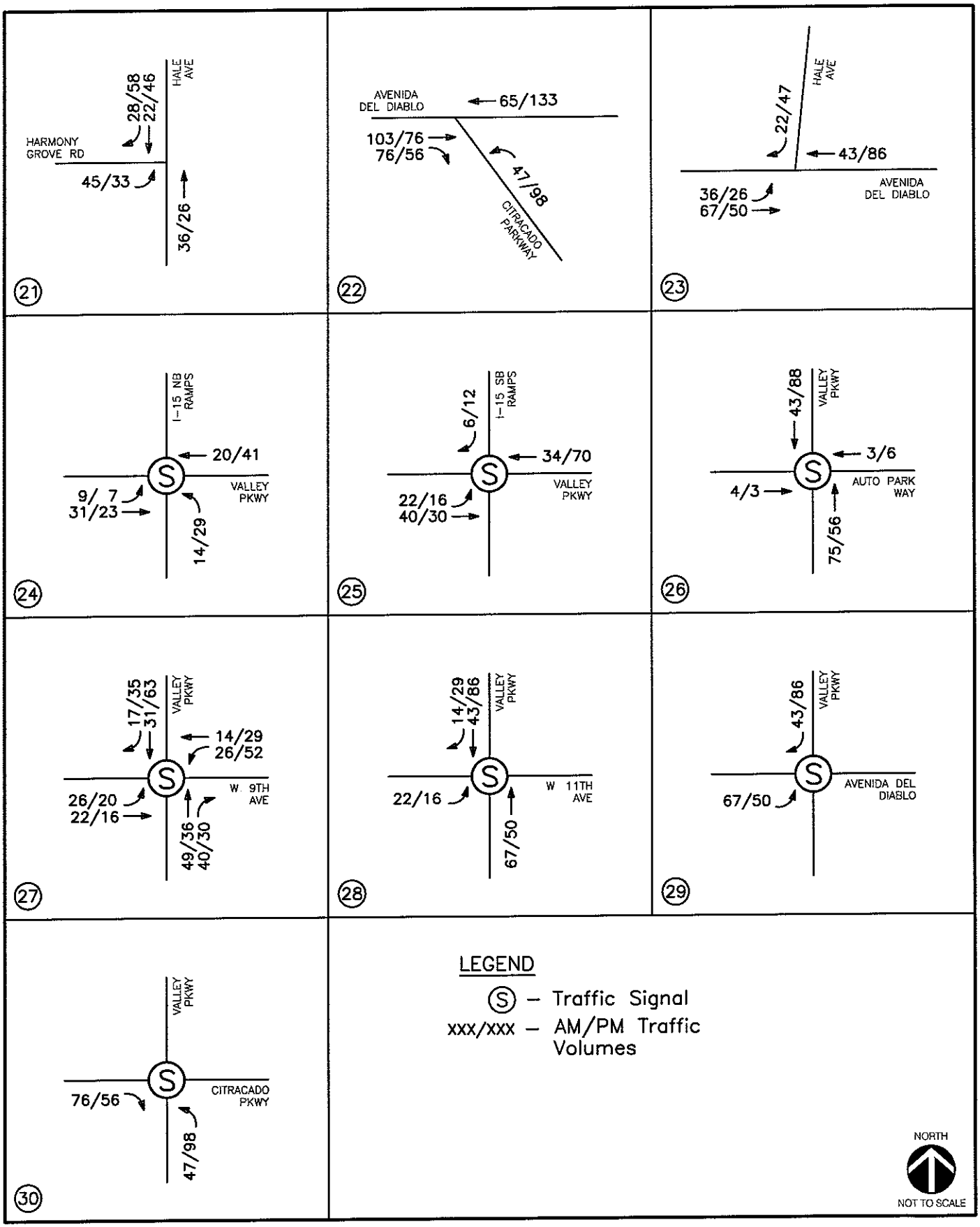

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Figure 10-5

OPTION B: Project Peak Hour Traffic Volumes

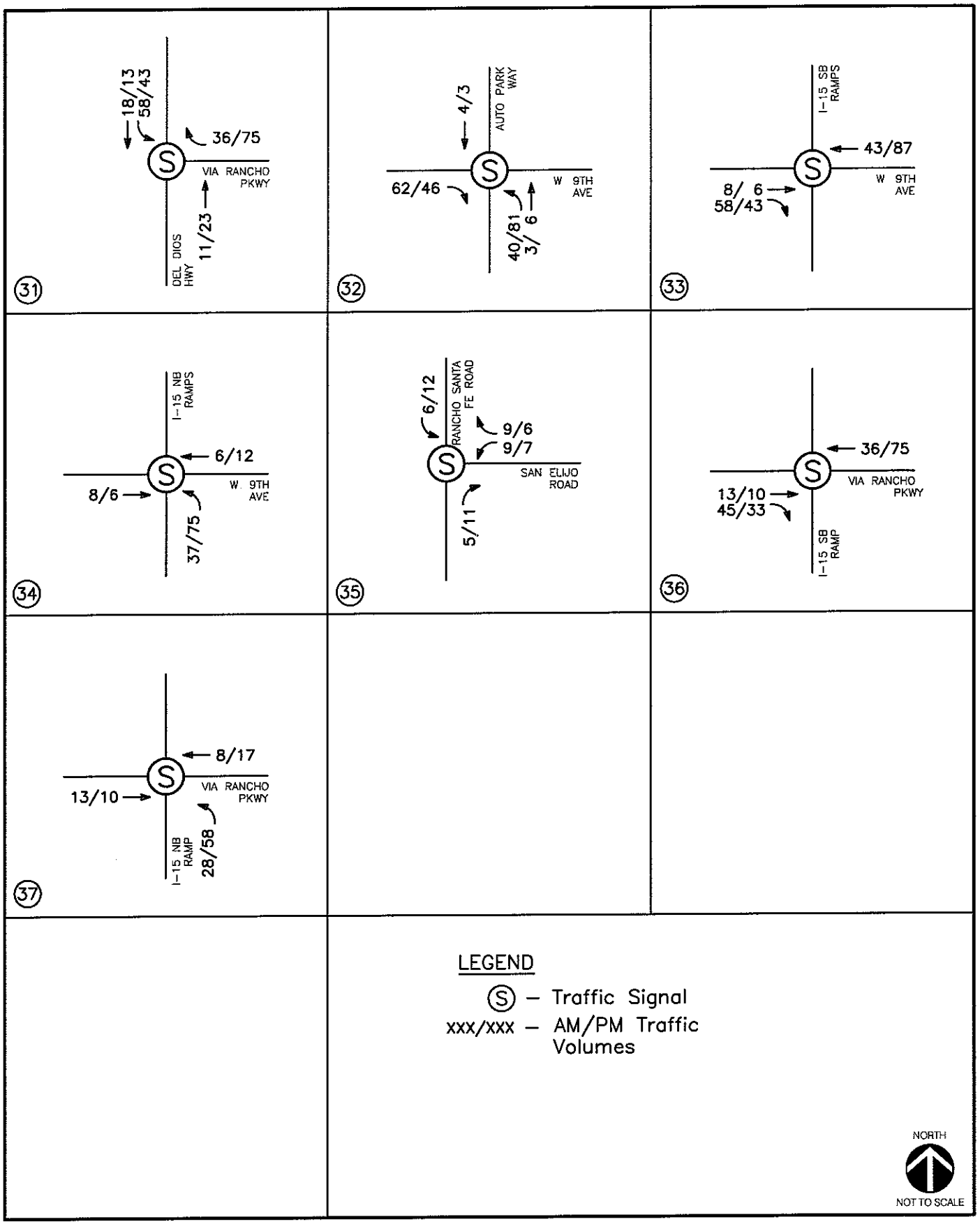

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Figure 10-5

OPTION B: Project Peak Hour Traffic Volumes

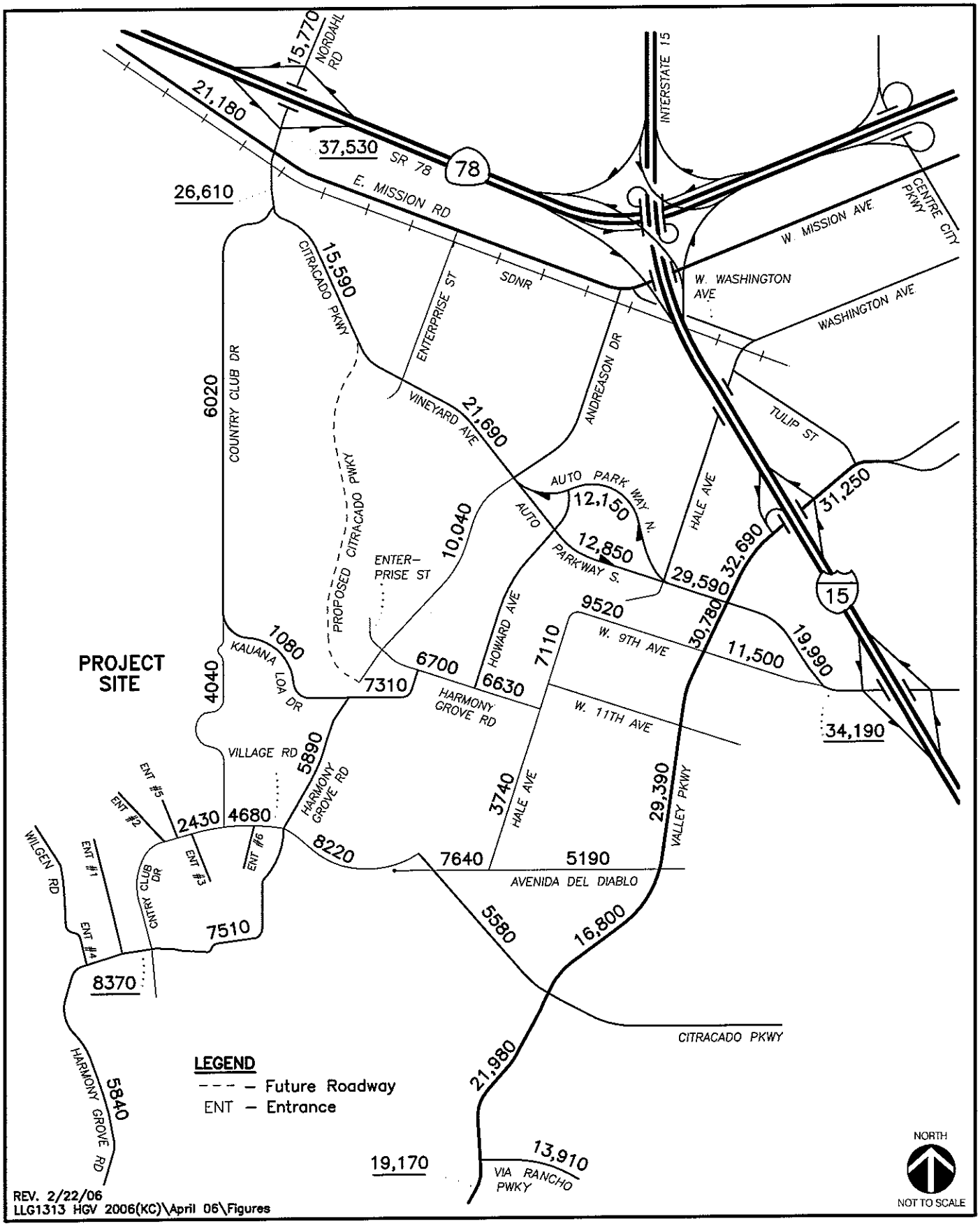

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Figure 10-6

OPTION B: Baseline + Project Average Daily Traffic Volumes

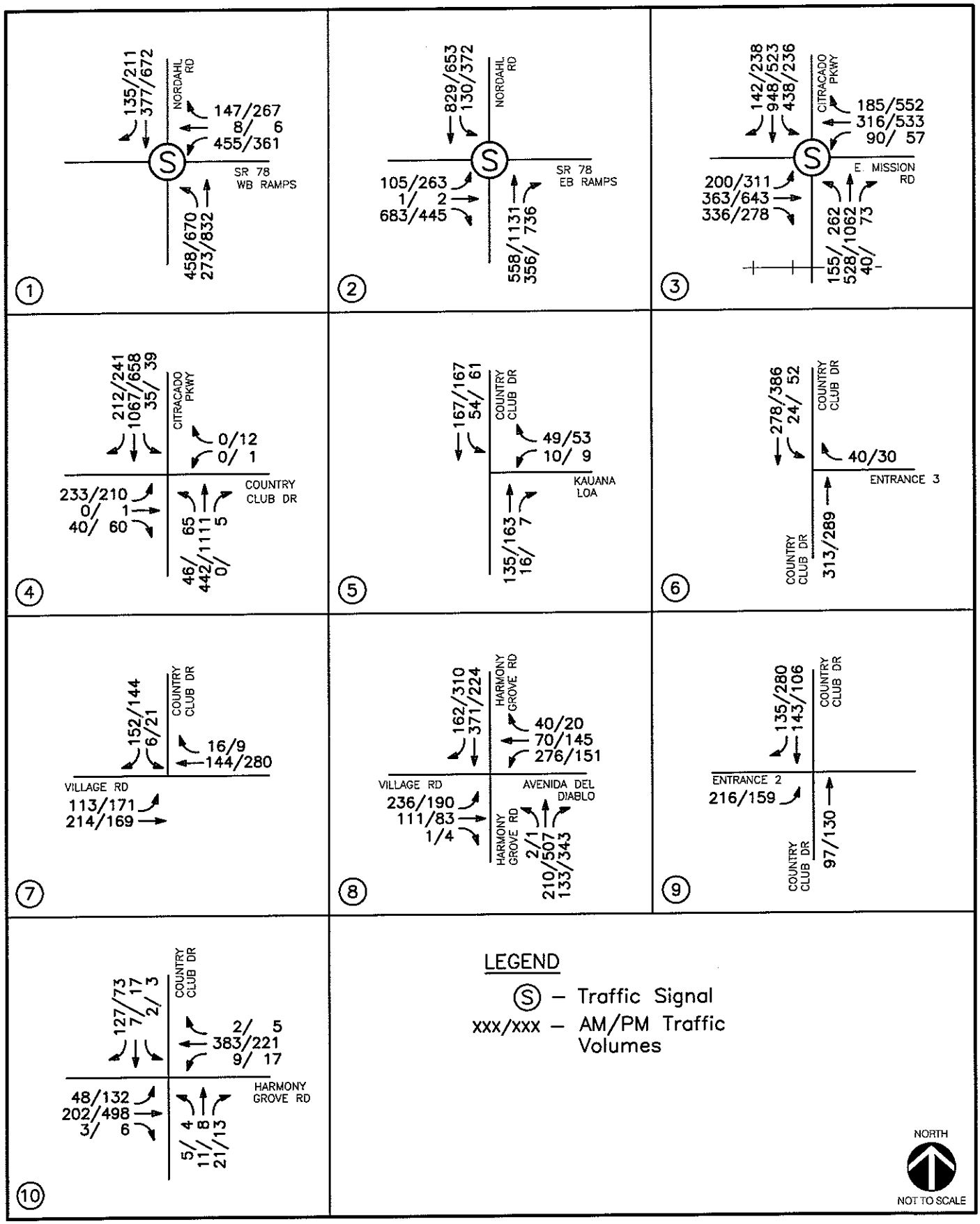

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Figure 10-7

OPTION B: Baseline + Project Peak Hour Traffic Volumes

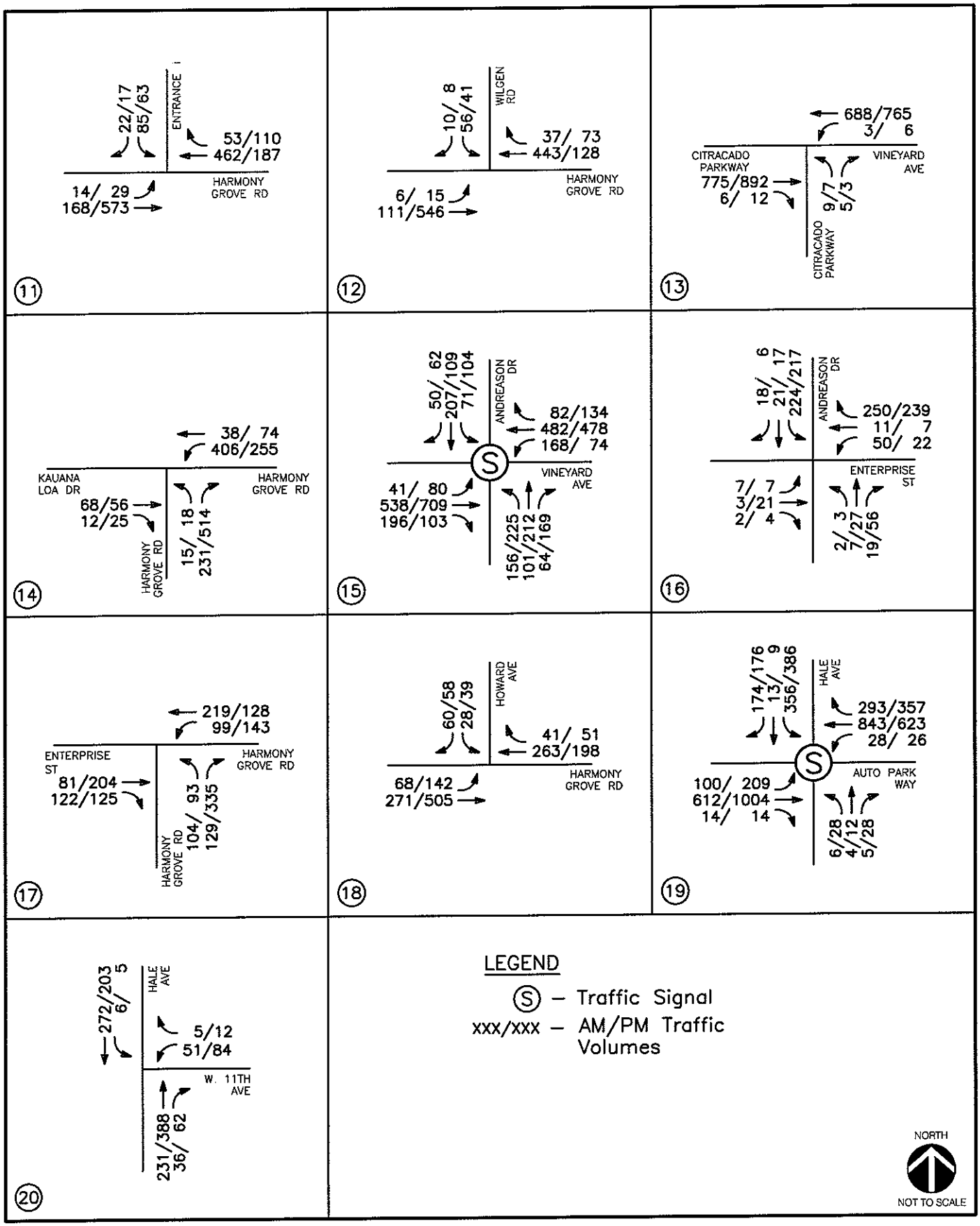

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Figure 10-7

OPTION B: Baseline + Project Peak Hour Traffic Volumes

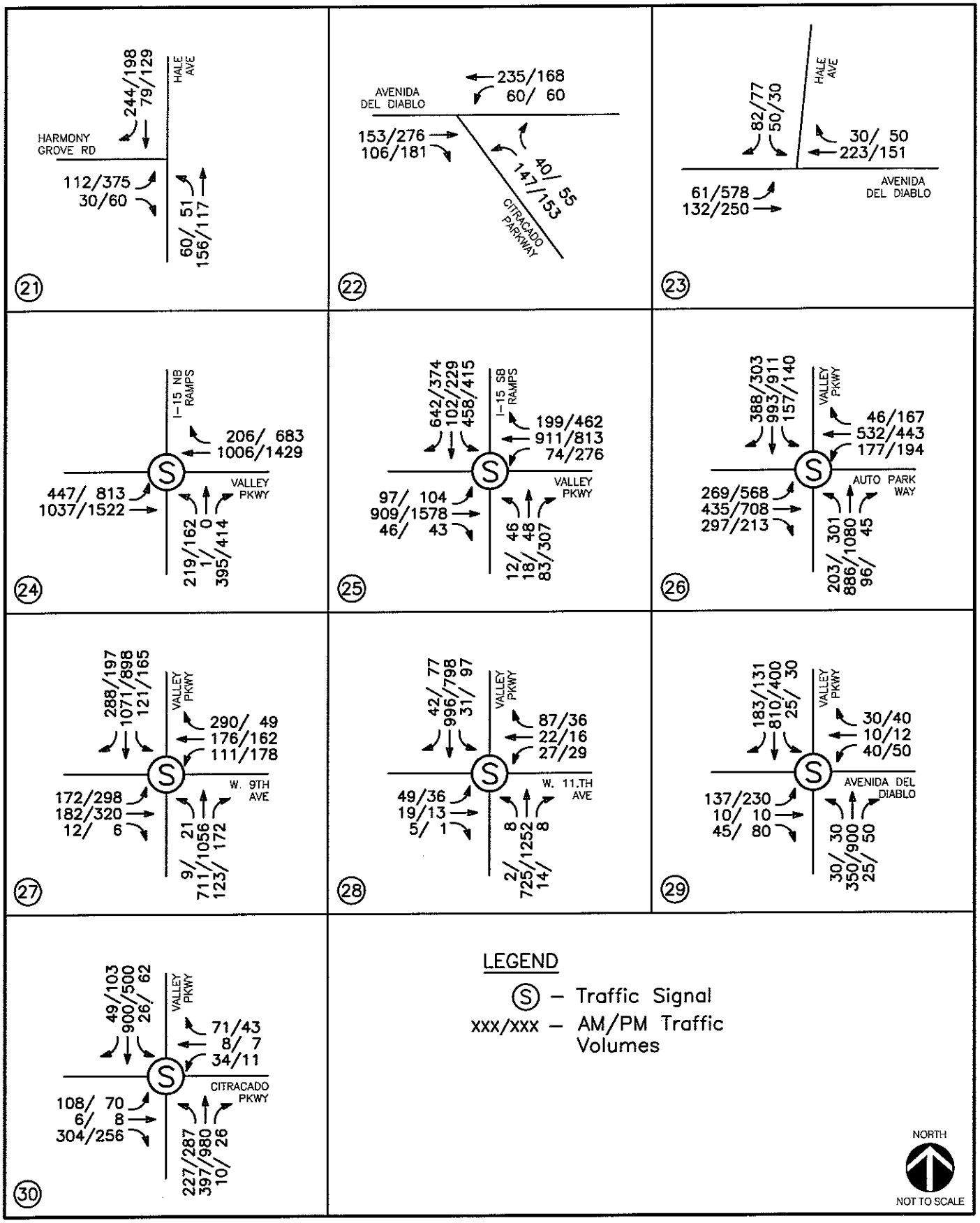

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Figure 10-7

OPTION B: Baseline + Project Peak Hour Traffic Volumes

Harmony Grove Village

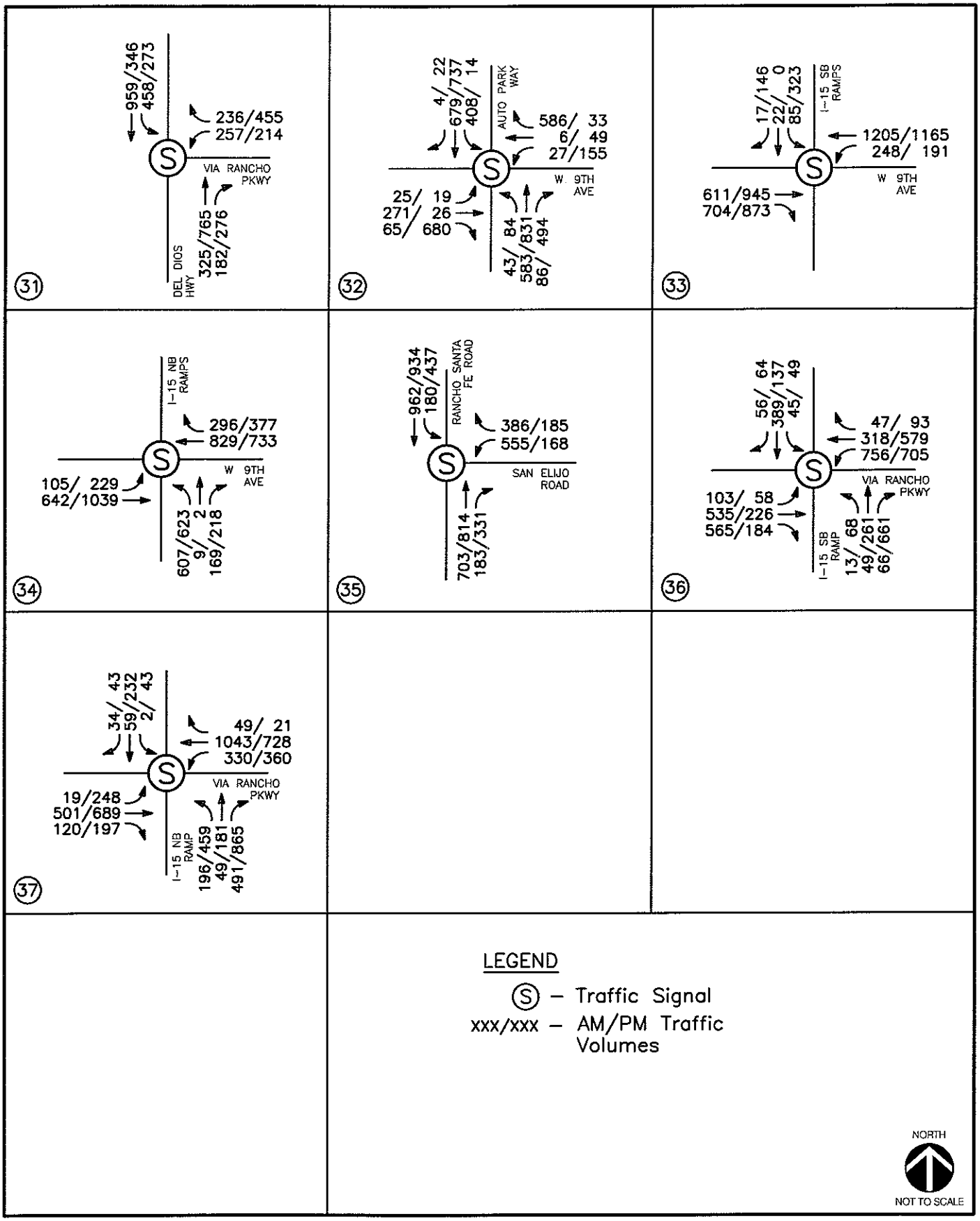

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Figure 10-7

OPTION B: Baseline + Project Peak Hour Traffic Volumes

Harmony Grove Village

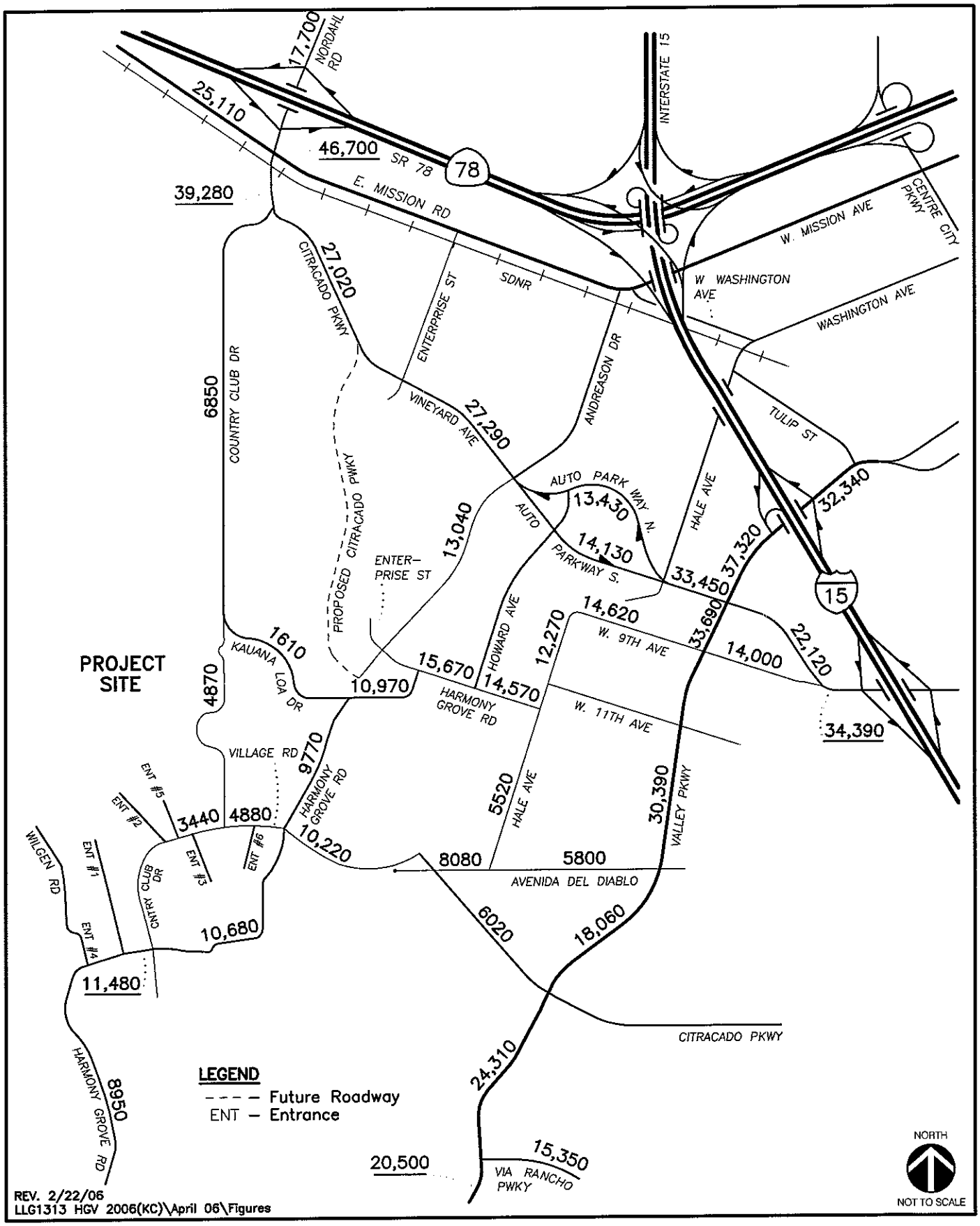

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Figure 10-8

OPTION B: Baseline + Project + Cumulative Average Daily Traffic Volumes

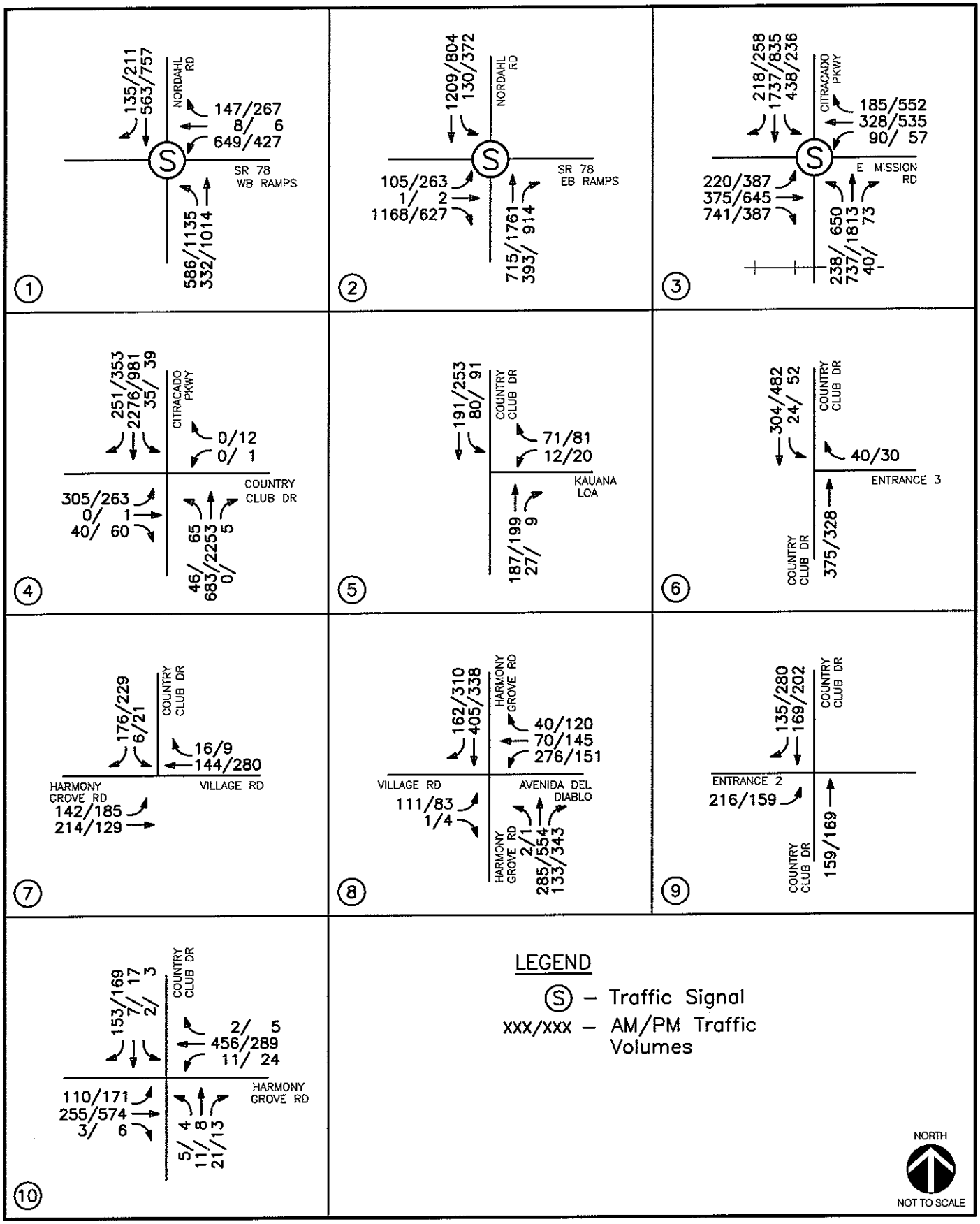

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Figure 10-9

OPTION B: Baseline + Project + Cumulative Peak Hour Traffic Volumes

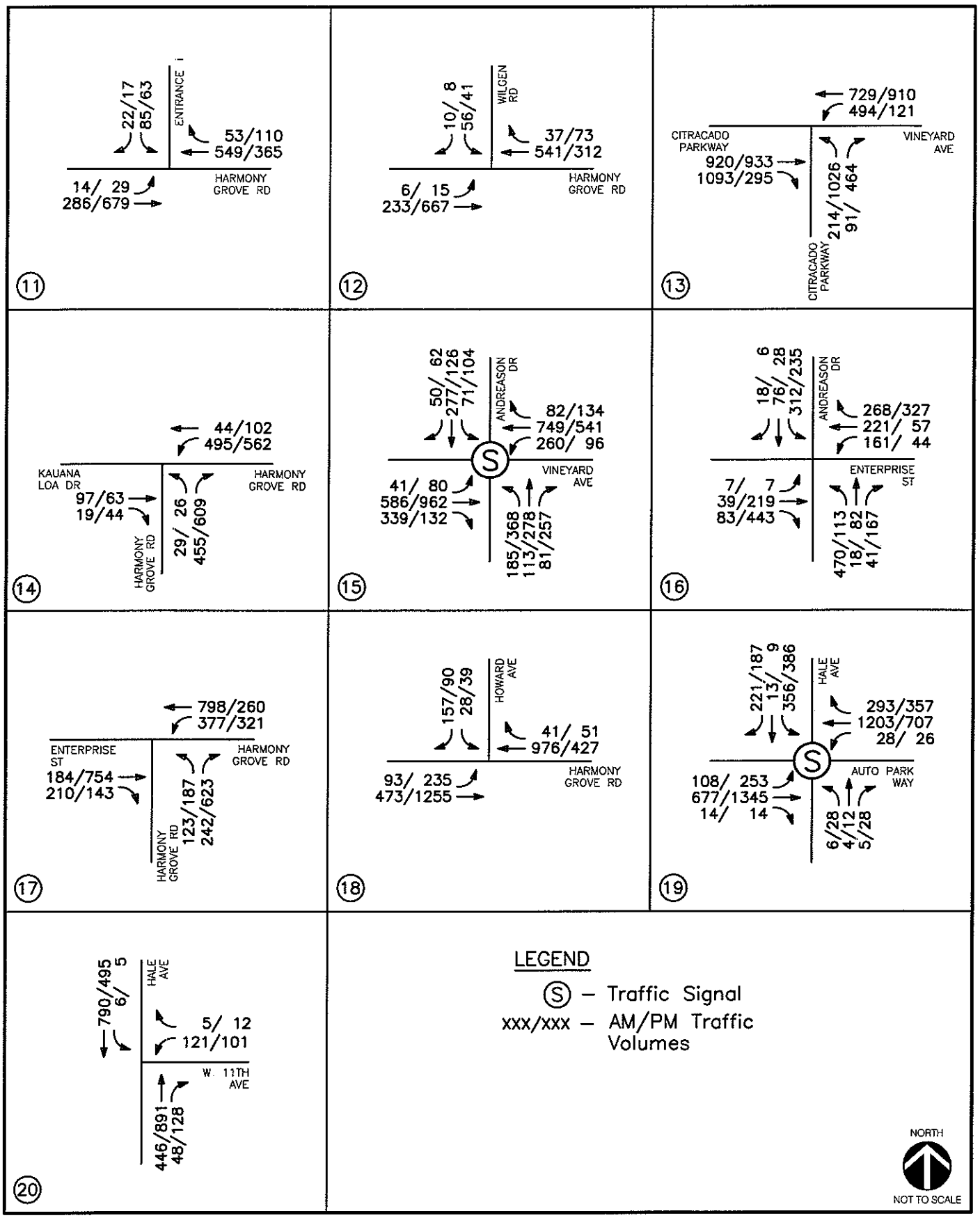

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Figure 10-9

OPTION B: Baseline + Project + Cumulative Peak Hour Traffic Volumes

Harmony Grove Village

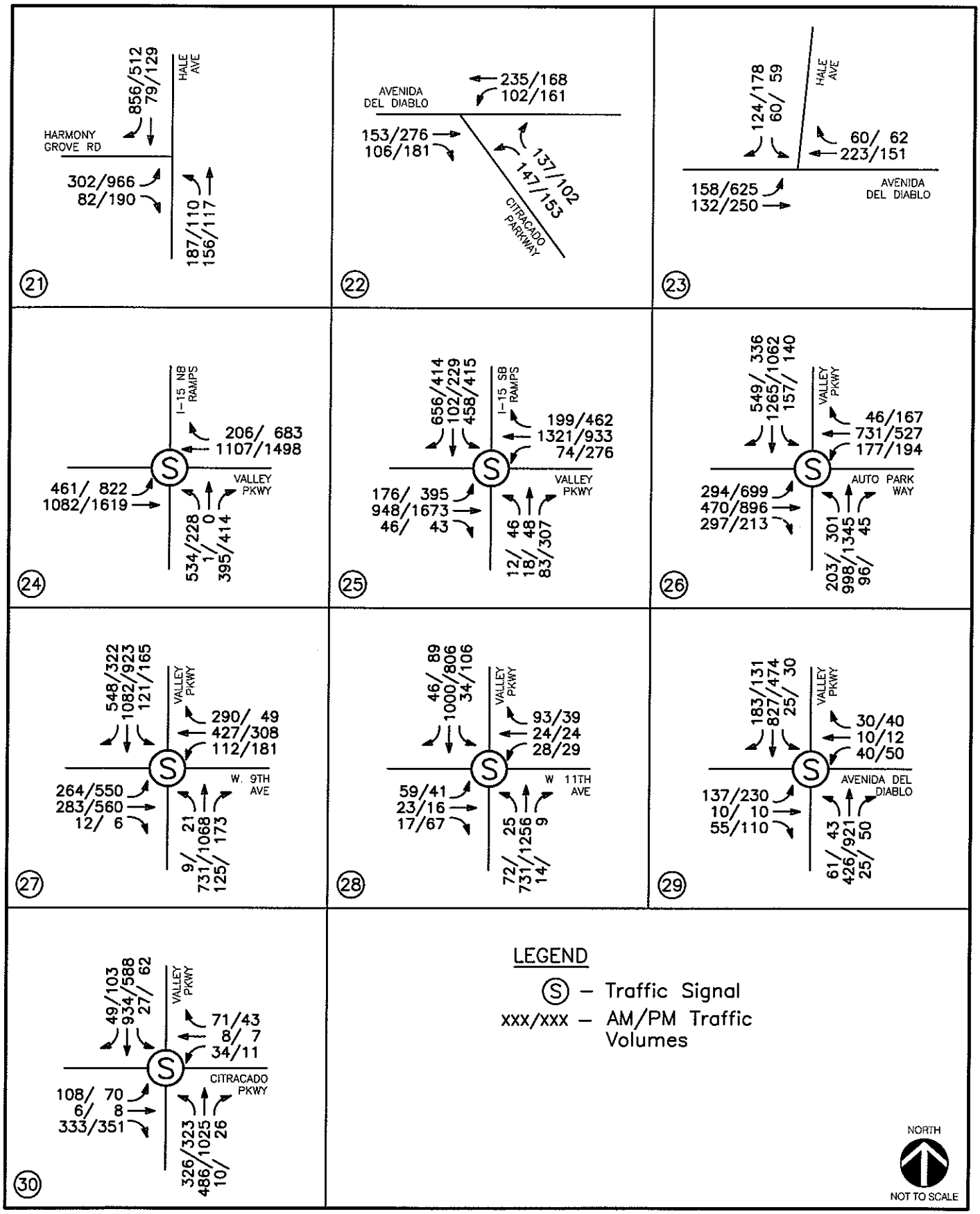

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Figure 10-9

OPTION B: Baseline + Project + Cumulative Peak Hour Traffic Volumes

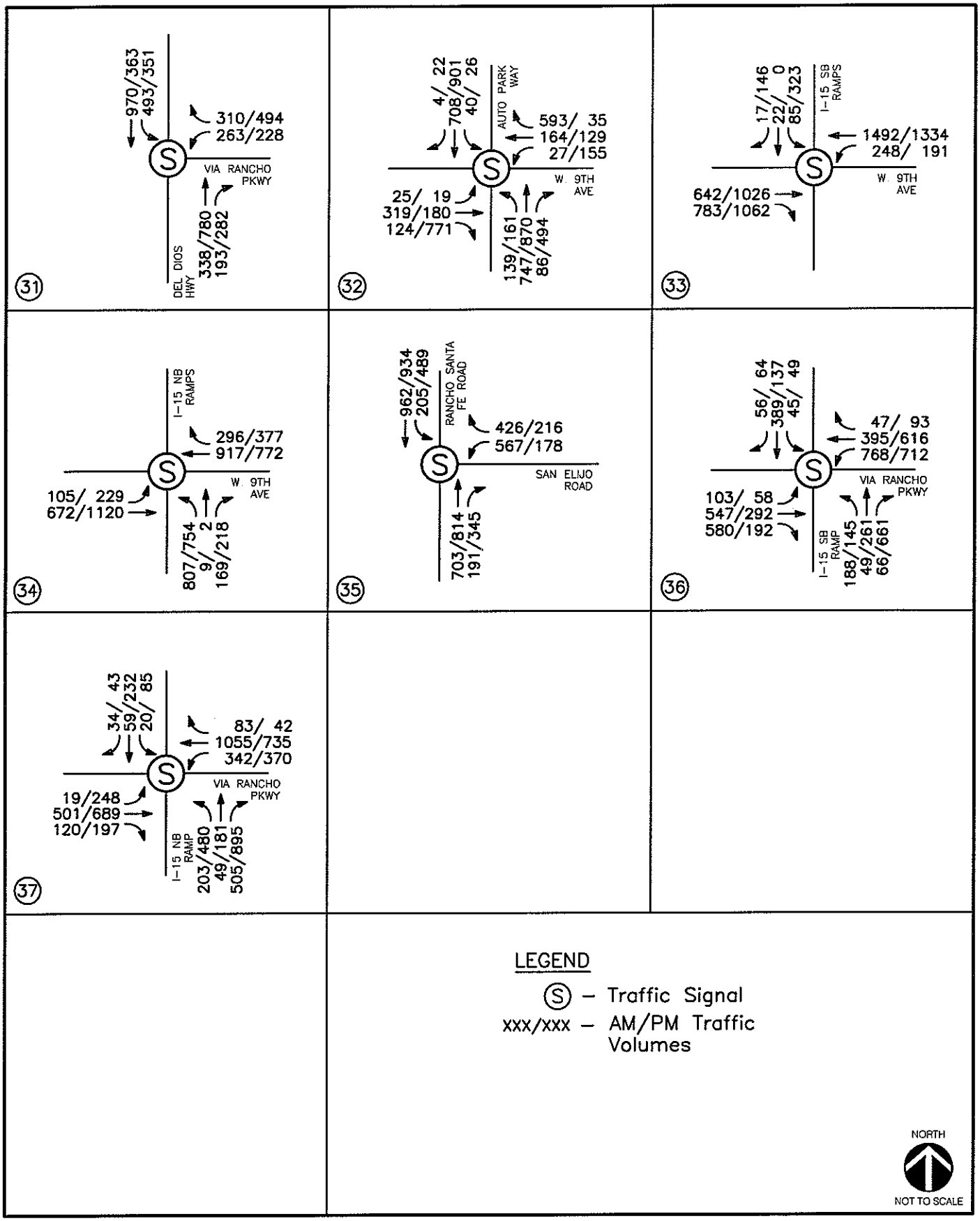

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Figure 10-9

OPTION B: Baseline + Project + Cumulative Peak Hour Traffic Volumes

Harmony Grove Village

11.0 ANALYSIS OF OPTION C (IMPROVEMENTS TO EXISTING ROADWAY NETWORK)

Option C consists of widening Harmony Grove Road to 4-lanes, as proposed for Option A, between Village Road and Kauana Loa Drive. In addition, Option C consists of widening the existing Harmony Grove Road from two lanes to four lanes between Kauana Loa Drive to Hale Avenue.

Like Options A and B, Option C would include improvements at the Via Rancho Parkway / Valley Parkway intersection. These improvements are assumed to be part of the project and are included in the analysis for Option C.

11.1 Option C Baseline (Improvements to Existing Roadway Network)

The existing traffic volumes were not redistributed in this scenario because no roadway network changes are proposed, only improvements to the existing network. However, all proposed improvements are incorporated into the analysis. The existing ADT and AM / PM peak hour traffic volumes are shown on *Figures 3–4 and 3–5*, respectively.

11.1.1 *Segment Operations*

Table 11–1 summarizes the daily segment levels of service on key segments under Option B Baseline conditions. As seen in *Table 11-1*, all key segments are calculated to operate at LOS D or better, with the exception of the following segments:

- Nordahl Road: SR-78 to Mission Road (LOS E)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS F)
- Vineyard Avenue: Enterprise Street to Andreason Drive (LOS F)
- West 9th Avenue: Auto Park Way to I-15 (LOS E)
- Via Rancho Parkway: East of Valley Parkway (LOS E)
- Valley Parkway: W. 11th Street to Avenida del Diablo (LOS F)
- Valley Parkway: Avenida del Diablo to Citracado Parkway (LOS F)
- Valley Parkway: Citracado Parkway to Via Rancho Parkway (LOS F)
- Valley Parkway: South of Via Rancho Parkway (LOS F)

11.1.2 *Intersection Operations*

Signalized Intersections

Table 11–2 shows the signalized intersection operations under Option C Baseline conditions. As seen in *Table 11–2*, all signalized intersections are calculated to operate at LOS D or better, with the exceptions of the following intersections:

- Nordahl Rd / SR 78 EB Ramps (LOS E in the AM and LOS F in the PM peak hours)
- Nordahl Dr. / Mission Road (LOS F in the PM peak hour)
- I-15 NB Ramps / Valley Parkway (LOS E in the PM peak hour)

- I-15 SB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 / Via Rancho Parkway (LOS F caused by ramp meter delay)

Unsignalized Intersections

Table 11–3 shows the unsignalized intersection operations under Option C baseline conditions. As shown in *Table 11–3*, the critical movements at all unsignalized intersections are calculated to operate at LOS D or better, with the exception of the following intersections:

- Nordahl Road / Country Club Drive (Eastbound left-turn movement - LOS F in the AM and PM peak hours)
- Valley Parkway / Avenida del Diablo (Eastbound left-turn movements – LOS F during the AM and PM peak hours).

Appendix J contains the peak hour analysis work sheets for signalized and unsignalized intersections under Option C Baseline conditions.

11.1.3 *Freeway Operations*

The Option C circulation change does not affect the freeway traffic volumes. The operations remain the same as outlined in Section 6.3.

11.1.4 *Ramp Meters*

The Option C circulation change does not affect the ramp volumes. The operations remain the same as outlined in Section 6.4.

11.2 Option C Project Traffic (Improvements to Existing Roadway Network)

11.2.1 *Project Distribution*

The trip distribution was developed based on a Select Zone assignment obtained from the SANDAG Series 10 Model.

Figure 11–1 shows the project traffic distribution for Option C.

11.2.2 *Project Assignment*

The project related ADT and peak hour trips were assigned to the study area segments and intersections based on the distribution percentages shown in *Figure 11–1* and the assumed access plan. ***Figure 11–2*** depicts the total project traffic ADT and ***Figure 11–3*** depicts the AM / PM peak hour traffic volumes for Option C.

11.3 Option C Baseline + Project (Improvements to Existing Roadway Network)

The Option C project traffic was added to Option C baseline traffic volumes and analyzed to determine project impacts to the local circulation system. ***Figure 11–4*** depicts the total project traffic ADT and ***Figure 11–5*** depicts the AM / PM peak hour traffic volumes for Option C Baseline + Project conditions.

11.3.1 *Segment Operations*

Table 11–1 summarizes the daily segment levels of service on key segments under Option C Baseline + Project conditions. *Table 11–1* shows that will the addition of project traffic, all key segments are calculated to operate at LOS D or better with the exception of the following segments:

-
- Nordahl Road: SR-78 to Mission Road (LOS F)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS F)
- Vineyard Avenue: Enterprise Street to Andreason Drive (LOS F)
- Hale Avenue: W. 9th Street to Harmony Grove Road (LOS E)
- West 9th Avenue: Auto Park Way to I-15 (LOS F)
- Via Rancho Parkway: East of Valley Parkway (LOS E)
- Valley Parkway: W. 11th Street to Avenida del Diablo (LOS F)
- Valley Parkway: Avenida del Diablo to Citracado Parkway (LOS F)
- Valley Parkway: Citracado Parkway to Via Rancho Parkway (LOS F)
- Valley Parkway: South of Via Rancho Parkway (LOS F)

11.3.2 *Intersection Operations*

Signalized Intersections

Table 11–2 summarizes the signalized intersection operations under Option C Baseline + Project conditions. *Table 11–2* shows that with the addition of project traffic, all signalized intersections are calculated to operate at LOS D or better, with the exceptions of the following intersections:

- Nordahl Rd / SR 78 EB Ramps (LOS E in the AM peak hour and LOS F in the PM peak hour)
- Nordahl Dr. / Mission Road (LOS F in the PM peak hour)
- I-15 NB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 SB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 / Via Rancho Parkway (LOS F caused by ramp meter delay)

Unsignalized Intersections

Table 11–3 summarizes the unsignalized intersection operations under Option C Baseline + Project conditions. Table *11–3* shows that with the addition of project traffic, the critical movements at all unsignalized intersections are calculated to operate at LOS D or better, with the exception of the following intersections:

- Nordahl Road / Country Club Drive (Eastbound left-turn movement - LOS F in the AM and PM peak hours)
- Harmony Grove / Enterprise Street (Northbound left-turn movement – LOS F in the AM and PM peak hours)
- Harmony Grove / Hale Avenue (Eastbound left-turn movement – LOS E in the AM peak hour and LOS F in the PM peak hour)
- Valley Parkway / Avenida del Diablo (Eastbound left-turn movements – LOS F during the AM and PM peak hours).

Appendix J contains the peak hour analysis work sheets for signalized and unsignalized intersections under Option C baseline + project conditions.

11.3.3 *Freeway Operations*

The Option C circulation change does not affect the freeway traffic volumes. The operations remain the same as outlined in Section 9.3.3.

11.3.4 *Ramp Meters*

The Option C circulation change does not affect the ramp volumes. The operations remain the same as outlined in Section 9.3.4.

11.4 Option C Baseline + Project + Cumulative Projects (Existing Roadway Network)

The Option C cumulative project traffic was added to Option C Baseline + Project traffic volumes and analyzed to determine cumulative project impacts to the local circulation system. ***Figure 11–6*** depicts the total project traffic ADT and ***Figure 11–7*** depicts the AM / PM peak hour traffic volumes for Option C Baseline + Project + Cumulative Project conditions.

11.4.1 *Segment Operations*

Table 11–1 summarizes the daily segment levels of service on key segments under Option C Baseline + Project + Cumulative Project conditions. *Table 11–1* shows that will the addition of cumulative project traffic, all key segments are calculated to operate at LOS D or better with the exception of the following segments:

- Nordahl Road: SR-78 to Mission Road (LOS F)
- Nordahl Road: Mission Road to Country Club Drive (LOS F)
- Andreason Drive: Vineyard Avenue to Enterprise Street (LOS E)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS F)
- Vineyard Avenue: Enterprise Street to Andreason Drive (LOS F)
- Auto Park Way: Hale Avenue to Valley Parkway (LOS E)
- Hale Avenue: W. 9th Street to Harmony Grove Road (LOS F)
- West 9th Avenue: Hale Avenue to Valley Parkway (LOF F)
- West 9th Avenue: Valley Parkway to Auto Park Way (LOS E)
- West 9th Avenue: Auto Park Way to I-15 (LOS F)
- Via Rancho Parkway: East of Valley Parkway (LOS E)
- Valley Parkway: W. 11th Street to Avenida del Diablo (LOS F)
- Valley Parkway: Avenida del Diablo to Citracado Parkway (LOS F)
- Valley Parkway: Citracado Parkway to Via Rancho Parkway (LOS F)
- Valley Parkway: South of Via Rancho Parkway (LOS F)

Table 11-4 lists the segments, which operate below City or County standards (at LOS E or F) for a particular segment in either Option A or Option B or Option C, but not in all three (3) options.

11.4.2 *Intersection Operations*

Signalized Intersections

Table 11–2 summarizes the signalized intersection operations under Option C Baseline + Project + Cumulative Project conditions. *Table 11–2* shows that with the addition of cumulative project traffic, all signalized intersections are calculated to operate at LOS D or better, with the exceptions of the following intersections:

- Nordahl Rd / SR-78 WB Ramps (LOS E in the PM peak hour)
- Nordahl Rd / SR-78 EB Ramps (LOS F in the AM and PM peak hours)
- Nordahl Dr. / Mission Road (LOS F in the AM and PM peak hours)
- I-15 NB Ramps / Valley Parkway (LOS E in the PM peak hour)
- I-15 SB Ramps / Valley Parkway (LOS E in the AM peak hour and LOS F in the PM peak hour)
- West 9th Street / Valley Parkway (LOS E in the PM peak hour)
- West 9th Street / Auto Park Way (LOS E in the AM peak hour)
- I-15 SB Ramps / Via Rancho Parkway (LOS F caused by ramp meter delay)

Unsignalized Intersections

Table 11–3 summarizes the unsignalized intersection operations under Option C Baseline + Project + Cumulative Project conditions. *Table 11–3* shows that with the addition of cumulative project traffic, the critical movements at all unsignalized intersections are calculated to operate at LOS D or better, with the exception of the following intersections:

- Nordahl Road / Country Club Drive (eastbound approach - LOS F in the AM and PM peak hours)
- Harmony Grove Road / Village Road (eastbound approach –LOS E in the PM peak hour)
- Harmony Grove Road / Kauana Loa Drive (northbound approach – LOS F in the PM peak hour)
- Andreason Drive / Enterprise Street (LOS F in the AM and PM peak hours)
- Harmony Grove Road / Enterprise Street (northbound approach – LOS F in the AM and PM peak hours)
- Harmony Grove Road / Howard Avenue (southbound approach – LOS F in the AM and PM peak hours)
- Harmony Grove Road / Hale Avenue (eastbound approach – LOS F in the AM and PM peak hours)
- Hale Avenue / W. 11th Street (westbound approach – LOS F in the AM and PM peak hours)
- Valley Parkway / Avenida del Diablo (eastbound approach – LOS F during the AM and PM peak hours).

Table 11-5 lists the intersections, which operate at LOS E or F for a particular intersection in either Option A or Option B or Option C, but not in all three (3) options. *Appendix J* contains the peak hour analysis work sheets for signalized and unsignalized intersections under Option C Baseline + Project + Cumulative Project conditions.

11.4.3 *Freeway Operations*

The Option C circulation change does not affect the freeway traffic volumes. The operations remain the same as outlined in Section 9.4.3.

11.4.4 *Ramp Meters*

The Option C circulation change does not affect the ramp volumes. The operations remain the same as outlined in Section 9.4.4.

TABLE 11-1
OPTION C: NEAR-TERM STREET SEGMENT OPERATIONS
(IMPROVEMENTS TO EXISTING ROADWAY NETWORK)

Segment	Existing Classification	Capacity (LOS E) [a]	Baseline Option C[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
Elfin Forest Road													
San Elijo Rd to Questhaven Rd[f]	Rural Collector	16,200	5,800	0.36	C	6,540	0.40	C	0.04	9,650	0.60	D	None
Harmony Grove Road													
Questhaven Rd to Wilgen Rd[f]	Rural Collector	16,200	5,100	0.31	C	5,840	0.36	C	0.05	8,950	0.55	D	None
Wilgen Rd to Country Club Dr.[f]	Town Collector	19,000	5,400	0.28	B	8,190	0.43	C	0.15	11,300	0.59	D	None
Country Club Dr. to Village Rd[f]	Rural Collector	16,200	5,100	0.31	C	7,240	0.45	D	0.14	10,410	0.64	D	None
Village Rd to Kauana Loa Dr.[f]	Rural Collector	34,200	5,100	0.15	A	11,600	0.34	A	0.19	15,480	0.45	B	None
Kauana Loa Dr. to Enterprise St.	Collector	34,200	7,000	0.20	A	13,220	0.39	A	0.19	16,880	0.49	B	None
Enterprise St. to Howard Ave	Collector	34,200	8,700	0.25	A	13,070	0.38	A	0.13	22,040	0.64	B	None
Howard Ave to Hale Ave	Local Collector	34,200	9,000	0.26	A	12,900	0.38	A	0.12	20,840	0.61	B	None

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).

b. Average Daily Traffic volumes (rounded to the nearest 10).

c. Volume to Capacity ratio.

d. Level of Service.

e. Baseline Option C – the existing street network with Village Road constructed between Country Club Drive and Harmony Grove Road.

f. Segment lies within the County of San Diego. The significance of impacts for County segments is based on the amount of project ADT added to the baseline volumes (see Section 5.0: Significance Criteria, *Table 5–1*), not on the V/C ratio. To review the project ADT volumes see *Figure 11–2*. All other segments are located within the City of Escondido and the significance of impacts is determined based on the V/C in this table.

TABLE 11-1 *(CONTINUED)*
OPTION C: NEAR-TERM STREET SEGMENT OPERATIONS
(IMPROVEMENTS TO EXISTING ROADWAY NETWORK)

Segment	Existing Classification	Capacity (LOS E)[a]	Baseline Option C[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
East Mission Road													
West of Nordahl Rd	Major Road	37,000	20,900	0.56	B	21,180	0.57	B	0.01	25,110	0.68	C	None
Village Road													
Country Club Dr. to Harmony Grove Rd[f]	Residential Collector	4,500	400	-	-	**4,770**	-	-	-	5,770	-	-	Direct
Kauana Loa Drive													
Harmony Grove Rd to Country Club Dr.[f]	Rural Collector	16,200	1,300	0.08	A	1,580	0.10	A	0.02	2,110	0.13	B	None
Nordahl Road													
North of SR-78	Major Road	37,000	15,400	0.42	B	15,770	0.43	B	0.01	17,700	0.48	B	None
SR-78 to Mission Rd	Major Road	37,000	35,300	0.95	E	**37,530**	**1.01**	**F**	0.06	46,700	1.26	F	Direct
Mission Rd to Country Club Dr.	Major Road	37,000	24,100	0.65	B	26,610	0.72	C	0.07	**39,280**	**1.06**	**F**	Cumulative

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Volume to Capacity ratio.
d. Level of Service.
e. Baseline Option C – the existing street network with Village Road constructed between Country Club Drive and Harmony Grove Road.
f. Segment lies within the County of San Diego. The significance of impacts for County segments is based on the amount of project ADT added to the baseline volumes (see Section 5.0: Significance Criteria, *Table 5–1*), not on the V/C ratio. To review the project ADT volumes see *Figure 11–2*. All other segments are located within the City of Escondido and the significance of impacts is determined based on the V/C in this table.

General Notes

Country Club Drive segment analysis is included in Section 14.0.

TABLE 11-1 *(CONTINUED)*
OPTION C: NEAR-TERM STREET SEGMENT OPERATIONS
(IMPROVEMENTS TO EXISTING ROADWAY NETWORK)

Segment	Existing Classification	Capacity (LOS E)[a]	Baseline Option C[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
Andreason Drive													
Vineyard Ave to Enterprise St.	Local Collector	15,000	9,300	0.62	C	10,690	0.71	D	0.09	**13,690**	**0.91**	**E**	Cumulative
Vineyard Avenue													
Country Club Dr. to Enterprise St.	Local Collector	15,000	15,400	1.03	F	15,590	1.04	F	0.01	27,020	1.80	F	None
Enterprise St. to Andreason St.	Local Collector	15,000	21,600	1.44	F	21,690	1.45	F	0.01	27,290	1.82	F	None
Auto Park Way													
Andreason Dr. to Hale Ave (north)	Collector	20,000	12,100	0.61	C	12,520	0.63	C	0.02	13,800	0.69	D	None
Andreason Dr. to Hale Ave (south)	Collector	20,000	12,800	0.64	C	13,220	0.66	C	0.02	14,500	0.73	D	None
Hale Ave to Valley Pkwy	Collector	34,200	29,500	0.86	D	30,340	0.89	D	0.03	**34,170**	**1.00**	**E**	Cumulative
Valley Pkwy to W. 9th St.	Collector	34,200	19,900	0.58	B	20,090	0.59	B	0.01	22,630	0.66	B	None
Hale Avenue													
W. 9th St. to Harmony Grove Rd	Rural Collector	10,000	7,100	0.71	D	**8,680**	**0.87**	**E**	0.16	13,750	1.38	F	Direct
Harmony Grove Rd to Avenida del Diablo	Rural Collector	10,000	4,800	0.48	B	6,190	0.62	C	0.14	7,620	0.76	D	None
West 9th Street													
Hale Ave to Valley Pkwy	Local Collector	15,000	9,500	0.63	C	10,890	0.73	D	0.10	**15,960**	**1.06**	**F**	Cumulative
Valley Pkwy to Auto Park Way	Local Collector	15,000	10,400	0.69	D	**11,790**	**0.79**	**D**	0.10	14,270	0.95	E	Direct
Auto Park Wy to I-15	Major Road	34,200	32,800	0.96	E	**34,380**	**1.01**	**F**	0.05	38,320	1.12	F	Direct

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Volume to Capacity ratio.
d. Level of Service.
e. Baseline Option C – the existing street network with Village Road constructed between Country Club Drive and Harmony Grove Road.

TABLE 11-1 *(CONTINUED)*
OPTION C: NEAR-TERM STREET SEGMENT OPERATIONS
(IMPROVEMENTS TO EXISTING ROADWAY NETWORK)

Segment	Existing Classification	Capacity (LOS E)[a]	Baseline Option C[e]			Baseline + Project			Δ in V/C	Baseline + Project + Cumulative Projects			Type of Impact
			ADT[b]	V/C[c]	LOS[d]	ADT	V/C	LOS		ADT	V/C	LOS	
Avenida del Diablo													
Citracado Pkwy to Hale Ave	Local Collector	10,000	2,700	0.27	B	3,350	0.34	B	0.07	3,790	0.38	B	None
Hale Ave to Valley Pkwy	Local Collector	10,000	1,100	0.11	A	1,840	0.18	A	0.07	2,450	0.25	A	None
Citracado Parkway													
Avenida del Diablo to Valley Pkwy	Major Road	34,200	2,400	0.07	A	3,050	0.09	A	0.02	3,280	0.10	A	None
Via Rancho Parkway													
East of Valley Pkwy[f]	Rural Collector	16,200	12,700	0.78	E	**13,720**	**0.85**	**E**	0.07	15,070	0.93	E	Direct
Valley Parkway													
Tulip St. to I-15	Prime Arterial	60,000	31,200	0.52	C	31,850	0.53	C	0.01	32,940	0.55	C	None
I-15 to Auto Park Way	Prime Arterial	60,000	29,200	0.49	B	30,500	0.51	C	0.02	35,130	0.59	C	None
Auto Park Wy to W. 11th St.	Prime Arterial	60,000	26,200	0.44	B	27,130	0.45	B	0.02	30,040	0.50	C	None
W. 11th St. to Avenida del Diablo	Major Road	15,000	18,600	1.24	F	18,600	1.24	F	0.00	19,600	1.31	F	None
Avenida del Diablo to Citracado Pkwy	Local Collector	15,000	20,400	1.36	F	21,140	1.41	F	0.05	**22,160**	**1.48**	**F**	Cumulative
Citracado Pkwy to Via Rancho Pkwy[f]	Rural Collector	16,200	18,800	1.16	F	**20,190**	**1.25**	**F**	0.09	22,080	1.36	F	Direct
South of Via Rancho Pkwy[f]	Rural Collector	16,200	18,400	1.14	F	**18,770**	**1.16**	**F**	0.02	20,190	1.25	F	Direct

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Volume to Capacity ratio.
d. Level of Service.
e. Baseline Option C – redistributed traffic conditions to account for roadway network changes.
f. Segment lies within the County of San Diego. The significance of impacts for County segments is based on the amount of project ADT added to the baseline volumes (see Section 5.0: Significance Criteria, *Table 5–1*), not on the V/C ratio. To review the project ADT volumes see *Figure 11–2*. All other segments are located within the City of Escondido and the significance of impacts is determined based on the V/C in this table.

TABLE 11-2
OPTION C: NEAR-TERM SIGNALIZED INTERSECTION OPERATIONS
(IMPROVEMENTS TO EXISTING ROADWAY NETWORK)

Intersection	Peak Period	Baseline Option C[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
		Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
1 Nordahl Rd / SR-78 WB Ramps	AM	31 7	C	32 2	C	0 5	37.2	D	None
	PM	33.2	C	34 5	C	1.3	61.7	E	
2 Nordahl Rd / SR-78 EB Ramps	AM	53 1	D	**65.6**	**E**	12.5	> 100 0	F	Direct
	PM	74 9	E	**99.4**	**F**	24.5	> 100.0	F	
3. Nordahl Rd / Mission Rd	AM	46.2	D	50 4	D	4 2	> 100.0	F	Direct
	PM	78 4	E	**91.3**	**F**	12 9	> 100 0	F	
15. Andreason Dr / Auto Park Way	AM	35 1	D	36 0	D	0 9	41 6	D	None
	PM	34.5	C	36 2	D	1 7	47 2	D	
19 Hale Ave / Auto Park Way	AM	27 9	D	28 0	C	0 1	28.5	C	None
	PM	33 5	C	33.7	C	0.2	35.4	D	
24 Valley Pkwy / I-15 NB Ramps	AM	30.9	C	31.1	C	0 2	36 5	D	None
	PM	55 8	E	55 9	E	0 1	57 3	E	
25. Valley Pkwy / I-15 SB Ramps	AM	48 4	D	49 6	D	1.2	**60.0**	**E**	Cumulative
	PM	74 1	E	76.4	E	2.3	**87.7**	**F**	
26 Valley Pkwy / Auto Park Way	AM	36 3	D	36 6	D	0 3	39 0	D	None
	PM	40 4	D	40 9	D	0 5	46.2	D	
27 Valley Pkwy / West 9th St	AM	34.0	D	35.4	D	1.4	45.9	D	None
	PM	38.1	D	39 3	D	1 2	57 3	E	
28. Valley Pkwy / W. 11th St	AM	8 9	A	11 2	B	2 3	14.7	B	None
	PM	7.2	A	8.4	A	1.2	11.0	B	

General Notes:

Bold and shading indicate a significant impact

Footnotes:

a Baseline Option C – the existing street network with Village Road constructed between Country Club Drive and Harmony Grove Road.

b Delay – measured in seconds.

c LOS – Level of Service

SIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0 0 < 10 0	A
10 1 to 20 0	B
20 1 to 35 0	C
35 1 to 55 0	D
55.1 to 80 0	E
> 80 1	F

TABLE 11-2 *(CONTINUED)*
OPTION C: NEAR-TERM SIGNALIZED INTERSECTION OPERATIONS
(IMPROVEMENTS TO EXISTING ROADWAY NETWORK)

Intersection	Peak Period	Baseline Option C[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
		Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
30 Valley Pkwy / Citracado Pkwy	AM	26.8	C	28.0	C	1.2	33.6	C	None
	PM	23.8	C	25.0	C	1.2	27.1	C	
31. Valley Pkwy / Via Rancho Pkwy[d]	AM	28.2	C	30.2	C	2.0	34.7	C	None
	PM	31.6	C	34.5	C	2.9	38.9	D	
32. West 9th St / Auto Park Wy	AM	44.4	D	44.4	D	0.0	72.9	E	None
	PM	26.6	C	28.7	C	2.1	33.9	C	
33 West 9th St / I-15 SB Ramps	AM	18.6	B	20.0	B	1.4	22.8	C	None
	PM	20.8	C	21.9	C	1.1	33.3	C	
34 West 9th St / I-15 NB Ramps	AM	24.7	C	28.1	C	3.4	28.0	C	None
	PM	26.3	C	27.8	C	1.5	30.0	C	
35. San Elijo Rd / Rancho Santa Fe	AM	27.6	C	28.3	C	0.7	32.0	C	None
	PM	32.2	C	33.8	C	1.6	43.1	D	
36 Via Rancho Pkwy / I-15 SB Ramps	AM	>80.0	F[e]	>80.0	F[e]	>2.0	**>80.0**	**F[e]**	Cumulative
	PM	42.2	D	44.6	D	2.4	45.6	D	
37. Via Rancho Pkwy / I-15 NB Ramps	AM	24.9	C	24.9	C	0.0	25.8	C	None
	PM	35.0	C	35.5	D	0.5	37.6	D	

General Notes:

Bold and shading indicate a significant impact

Footnotes:

a. Baseline Option C – the existing street network with Village Road constructed between Country Club Drive and Harmony Grove Road
b. Delay – measured in seconds
c. LOS – Level of Service
d. Intersection is located in the County of San Diego. All other intersections are located in the City of Escondido.
e. LOS F conditions caused by ramp meter delay

SIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 < 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
> 80.1	F

TABLE 11-3
OPTION C: NEAR-TERM UNSIGNALIZED INTERSECTION OPERATIONS
(IMPROVEMENTS TO EXISTING ROADWAY NETWORK)

Intersection	Peak Period	Minor Street Approach	Baseline Option C[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
			Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
4 Citracado Pkwy / Country Club	AM	EB	>100 0	F	>100.0	F	> 2.0	**>100.0**	**F**	Cumulative
	PM	EB	>100 0	F	>100.0	F	> 2.0	**>100.0**	**F**	
5. Country Club Dr / Kauana Loa Drive[d]	AM	All-way	7 9	A	8 5	A	0.6	9 2	A	None
	PM	All-way	7 8	A	8 7	A	0 9	10.4	B	
6 Country Club Dr / Entrance #3[d]	AM	WB	e	e	10.6	B	—	11.1	B	None
	PM	WB	e	e	10.3	B	—	10 7	B	
7. Country Club Dr / Village Rd[d]	AM	WB	6 9	A	9 6	A	2 7	10 0	B	None
	PM	WB	7 7	A	10 4	B	2.7	11 3	B	
8. Harmony Grove / Village Rd[d]	AM	EB	11 6	B	16 6	C	5.0	19.3	C	Direct[f]
	PM	EB	12 7	B	21.1	C	7.4	36.6	E	
9 Country Club Dr / Entrance #2[d]	AM	EB	e	e	12.8	B	—	15.9	C	None
	PM	EB	e	e	13.8	B	—	17 0	C	
10 Country Club Dr / Harmony Grove[d]	AM	NB	9 4	A	14 0	B	4 6	19 4	C	None
		SB	11.4	B	13 1	B	1 7	15 6	C	
	PM	NB	13 0	B	21.1	C	8.1	33 7	D	None
		SB	11 2	B	15.2	C	4.0	19.0	C	
11. Harmony Grove / Entrance #1[d]	AM	SB	e	e	17.2	C	—	23.4	C	None
	PM	SB	e	e	19.5	C	—	31.4	D	
12 Harmony Grove / Wilgen Rd[d]	AM	SB	11.5	B	14 5	C	3 5	18 9	C	None
	PM	SB	11 3	B	16 2	C	5 4	24 4	C	
13. Vineyard Ave / Citracado Pkwy[g]	AM	—	e	e	1 6	A	—	17.7	B	None
	PM	—	e	e	1.7	A	—	46.2	D	

General Notes:

Bold and shading indicate a significant impact.

Footnotes:

a. Baseline Option C – the existing street network with Village Road constructed between Country Club Drive and Harmony Grove Road.
b Delay –measured in seconds
c. LOS – Level of Service
d. Intersection is located in the County of San Diego All other intersections are located in the City of Escondido
e Intersection does not exist
f. Direct impact assumed because the construction of this intersection is a result of the project
g Intersection assumed to be signalized because signalization is a condition of the Escondido Research and Technology study

TABLE 11-3 *(CONTINUED)*
OPTION C: NEAR-TERM UNSIGNALIZED INTERSECTION OPERATIONS
(IMPROVEMENTS TO EXISTING ROADWAY NETWORK)

Intersection	Peak Period	Minor Street Approach	Baseline Option C[a]		Baseline + Project		Δ in Delay	Baseline + Project + Cumulative Projects		Type of Impact
			Delay[b]	LOS[c]	Delay	LOS		Delay	LOS	
14. Harmony Grove / Kauana Loa Drive	AM	NB	9.3	A	13.0	B	3.7	25.2	D	Cumulative
	PM	NB	11.8	B	18.5	C	6.7	**> 100.0**	**F**	
16. Andreason Dr / Enterprise St	AM	All-way	10.2	B	11.9	B	1.7	89.3	F	Cumulative
	PM	All-way	9.9	A	12.4	B	2.5	**70.6**	**F**	
17. Harmony Grove Rd / Enterprise St	AM	NB	14.6	B	**>100.0**	**F**	>2.0	>100.0	F	Direct
	PM	NB	14.2	B	**75.7**	**F**	61.5	>100.0	F	
18. Harmony Grove Rd / Howard Ave	AM	SB	14.9	B	23.5	C	8.6	>100.0	F	Direct
	PM	SB	16.6	C	**34.8**	**D**	18.2	>100.0	F	
20. Hale Ave / West 11th St	AM	WB	13.0	B	16.4	C	3.4	**>100.0**	**F**	Cumulative
	PM	WB	14.8	B	23.3	C	8.5	**>100.0**	**F**	
21. Hale Ave / Harmony Grove Ave	AM	EB	16.0	C	**53.2**	**F**	37.2	>100.0	F	Direct
	PM	EB	27.6	D	**>100.0**	**F**	> 2.0	>100.0	F	
22. Avenida Del Diablo / Citracado Pkwy	AM	NB	8.8	A	8.9	A	0.1	9.4	A	None
	PM	NB	8.8	A	8.9	A	0.1	9.2	A	
23. Avenida Del Diablo / Hale Ave	AM	SB	9.1	A	9.6	A	0.5	10.7	B	None
	PM	SB	9.1	A	9.7	A	0.6	10.5	B	
29. Valley Pkwy / Avenida Del Diablo	AM	EB	>100.0	F	>100.0	F	>2.0	**>100.0**	**F**	Cumulative
	PM	EB	>100.0	F	>100.0	F	>2.0	**>100.0**	**F**	
38. Country Club Dr/ Entrance # 4	AM	SB	e	e	9.1	A	—	10.5	B	None
	PM	SB	e	e	11.2	B	—	13.9	B	
39. Village Rd / Entrance # 6	AM	NB	e	e	4.2	A	—	4.2	A	None
	PM	NB	e	e	4.4	A	—	4.4	A	

General Notes:

Bold and shading indicate a significant impact

Footnotes:

a. Baseline Option C – the existing street network with Village Road constructed between Country Club Drive and Harmony Grove Road
b. Delay –measured in seconds
c. LOS – Level of Service

TABLE 11-4
COMPARISON OF NEAR-TERM STREET SEGMENT OPERATIONS

Segment	Option A Baseline + Project + Cumulative Projects			Option B Baseline + Project + Cumulative Projects			Option C Baseline + Project + Cumulative Projects		
	ADT	V/C	LOS	ADT	V/C	LOS	ADT	V/C	LOS
Harmony Grove Road									
Enterprise St to Howard Ave	19,290	1.29	E	15,670	1.04	F	22,040	0.64	B[a]
Howard Ave to Hale Ave	16,400	1.64	F	14,570	1.46	F	20,840	0.61	B[a]
Auto Park Way									
Andreason Dr to Hale Ave (north)	15,980	0.8	E	13,430	0.67	D	13,800	0.69	D
Andreason Dr. to Hale Ave (south)	16,280	0.81	E	14,130	0.71	D	14,500	0.73	D

General Notes:

This table shows segments with LOS E/F operations in one option but not for all options.

Footnotes:

a Project description includes widening to four lanes.

TABLE 11-5
COMPARISON OF NEAR-TERM INTERSECTION OPERATIONS

Intersection	Peak Period	Option A Baseline + Project + Cumulative Projects		Option B Baseline + Project + Cumulative Projects		Option C Baseline + Project + Cumulative Projects	
		Delay	LOS	Delay	LOS	Delay	LOS
27 Valley Pkwy / West 9th Ave	AM	37.5	D	45.4	D	45.9	D
	PM	44.8	D	58	E	57.3	E
14. Harmony Grove / Kauana Loa Drive	AM	92.4	F	15.7	C	25.2	D
	PM	> 100.0	F	20.2	C	> 100.0	F
23. Avenida Del Diablo / Hale Ave	AM	10.7	B	13	B	10.7	B
	PM	10.5	B	>100.0	F	10.5	B

General Notes:

This table shows intersections with LOS E/F operations in one option but not for all options.

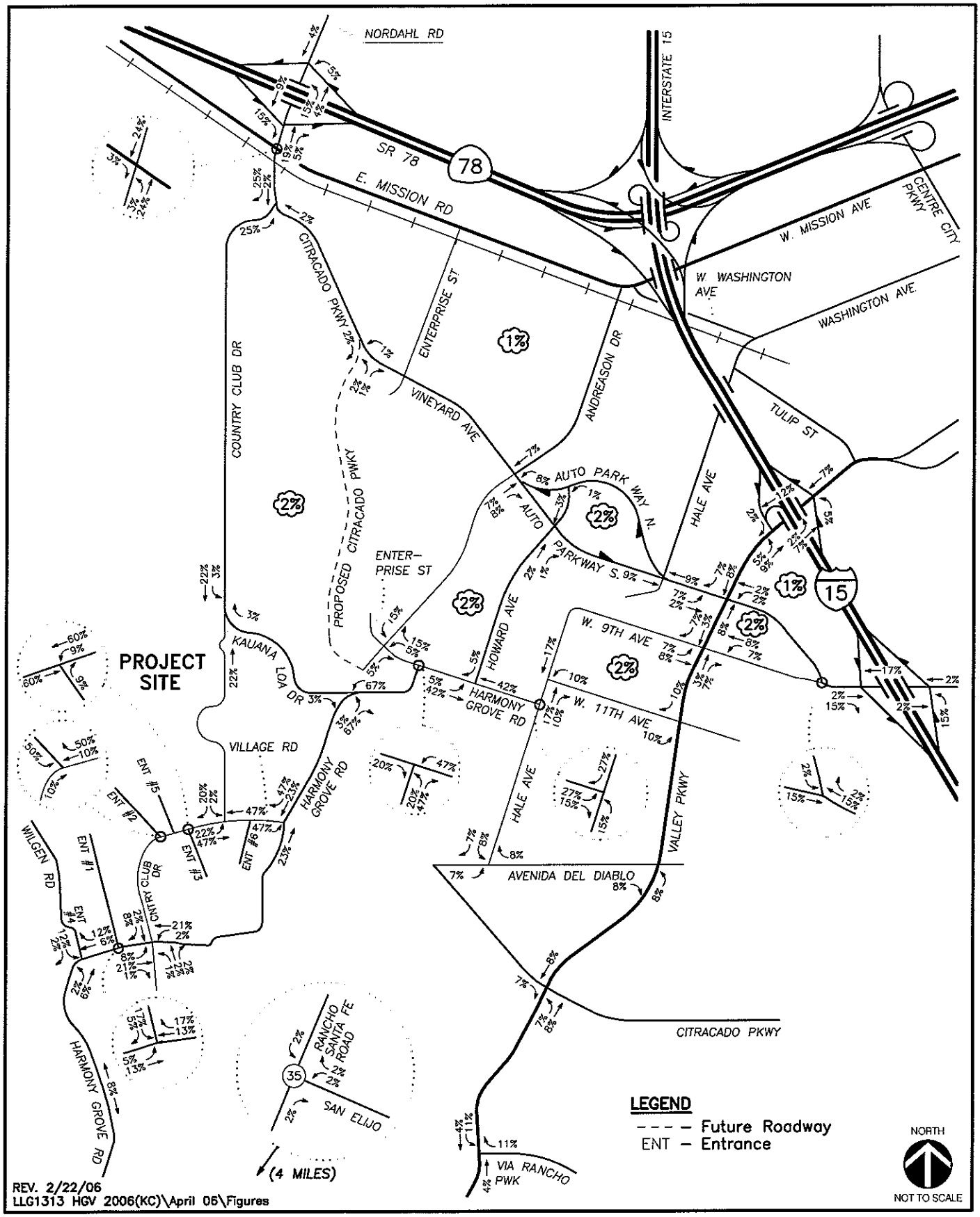

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Figure 11-1

OPTION C: Regional Traffic Distribution

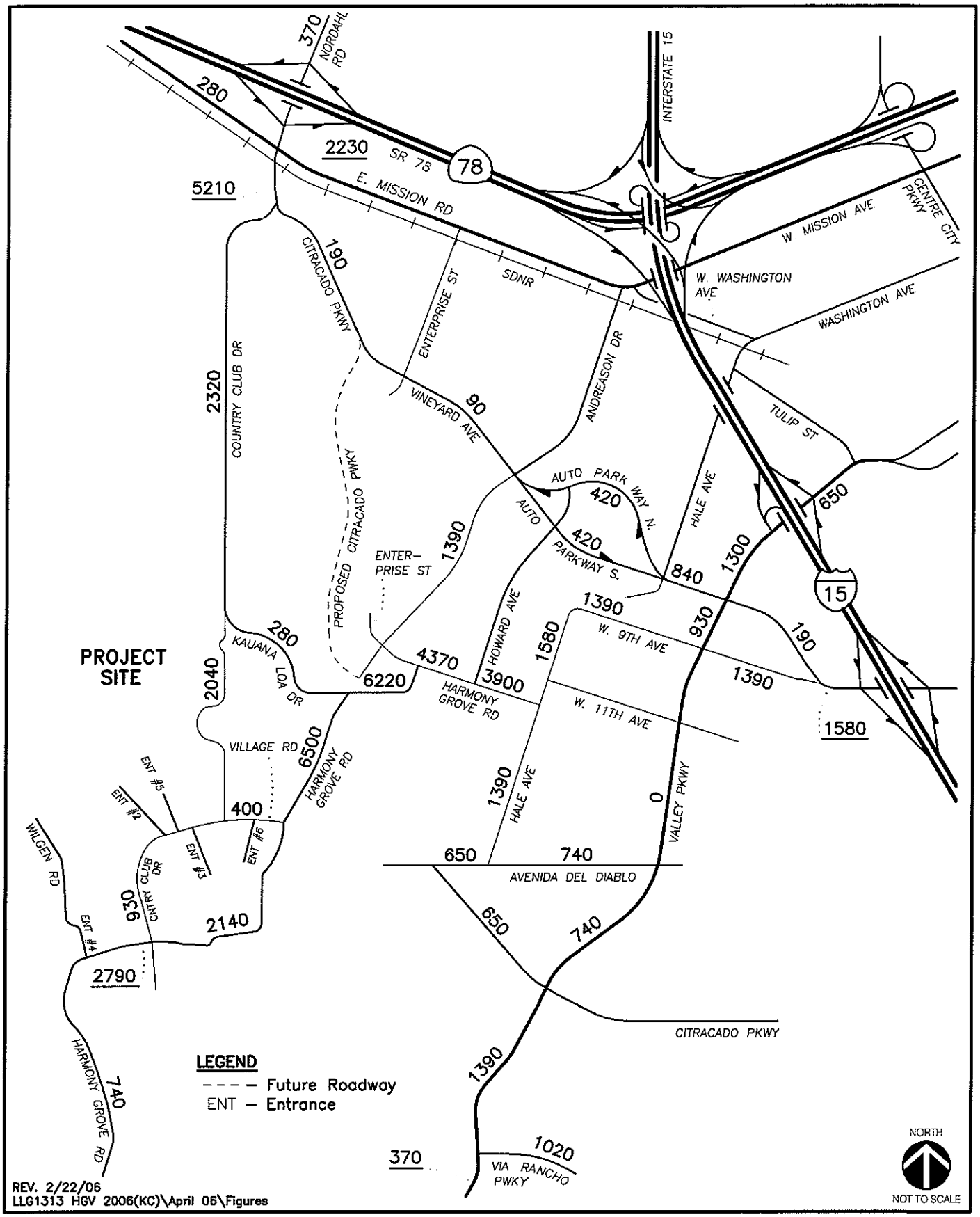

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Figure 11-2

OPTION C: Project Average Daily Traffic Volumes

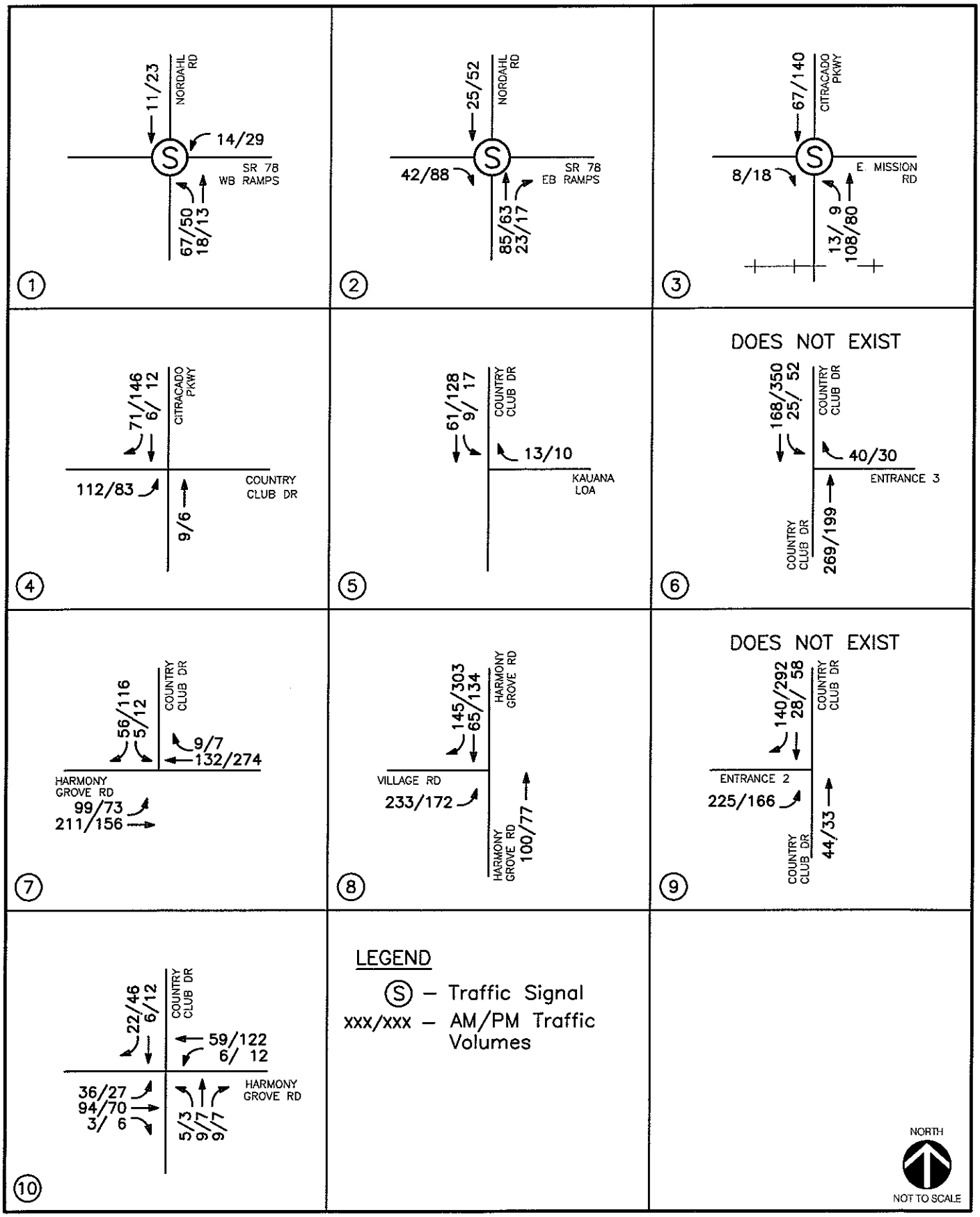

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Figure 11-3

OPTION C: Project Peak Hour Traffic Volumes

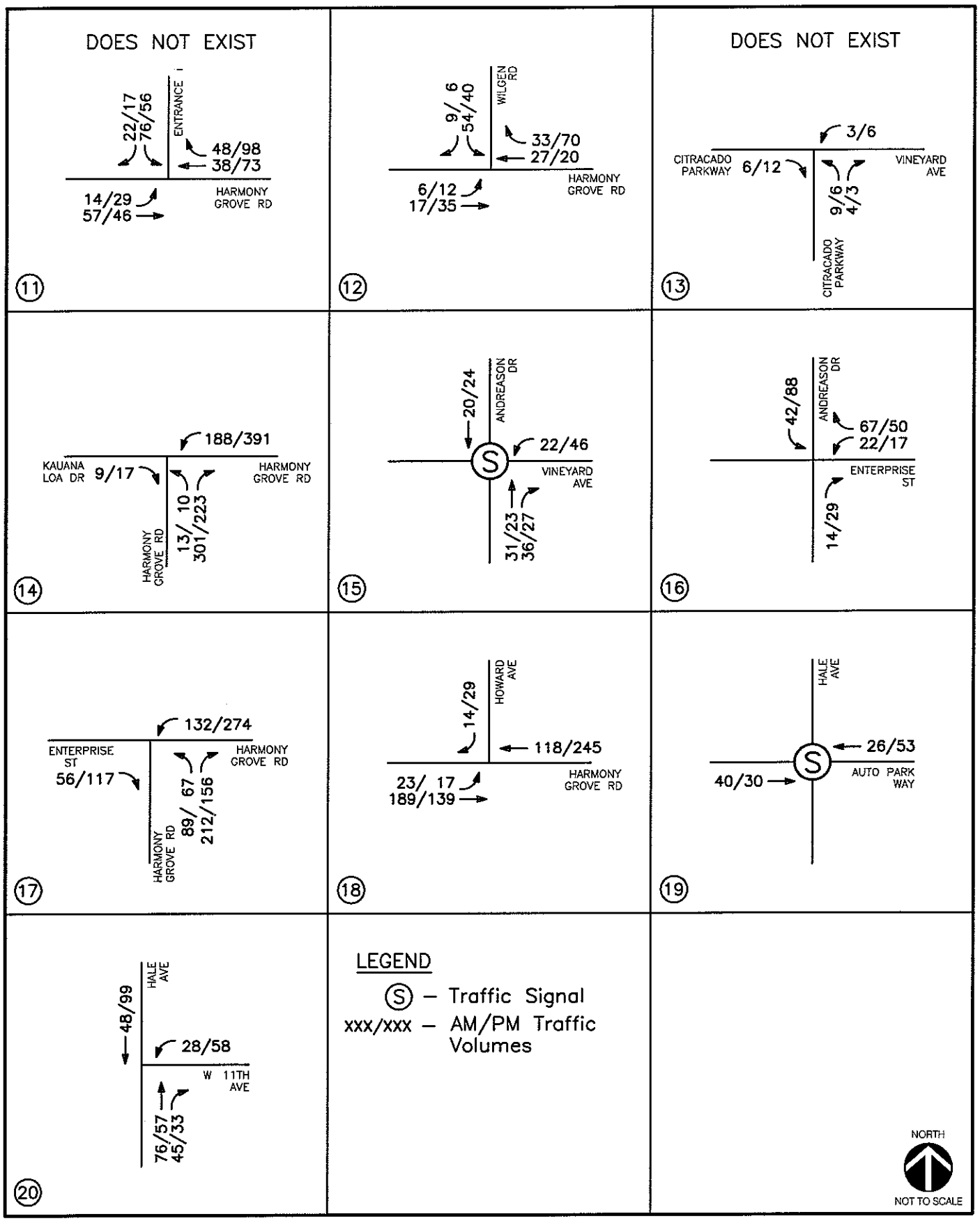

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Figure 11-3

OPTION C: Project Peak Hour Traffic Volumes

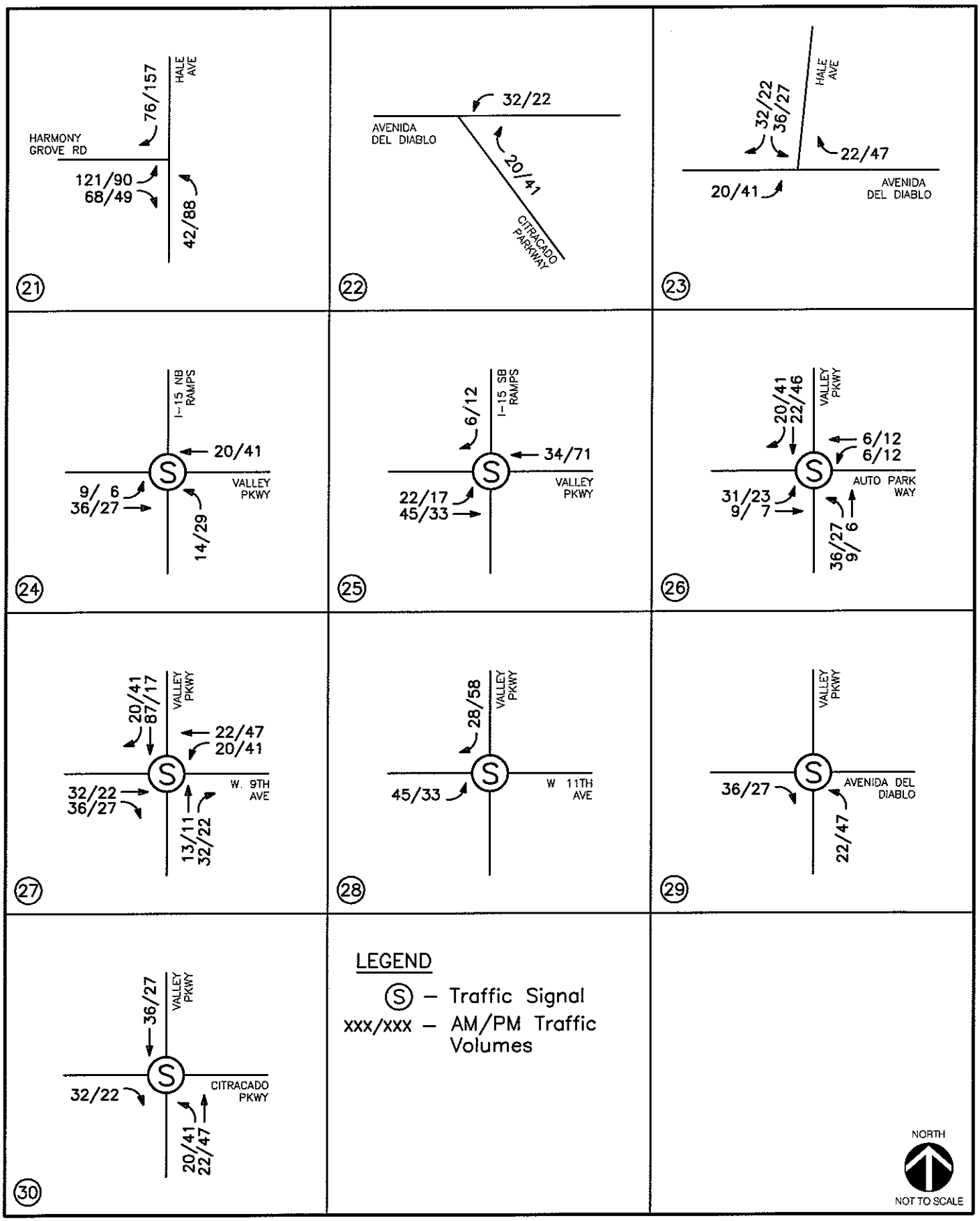

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Figure 11-3

OPTION C: Project Peak Hour Traffic Volumes

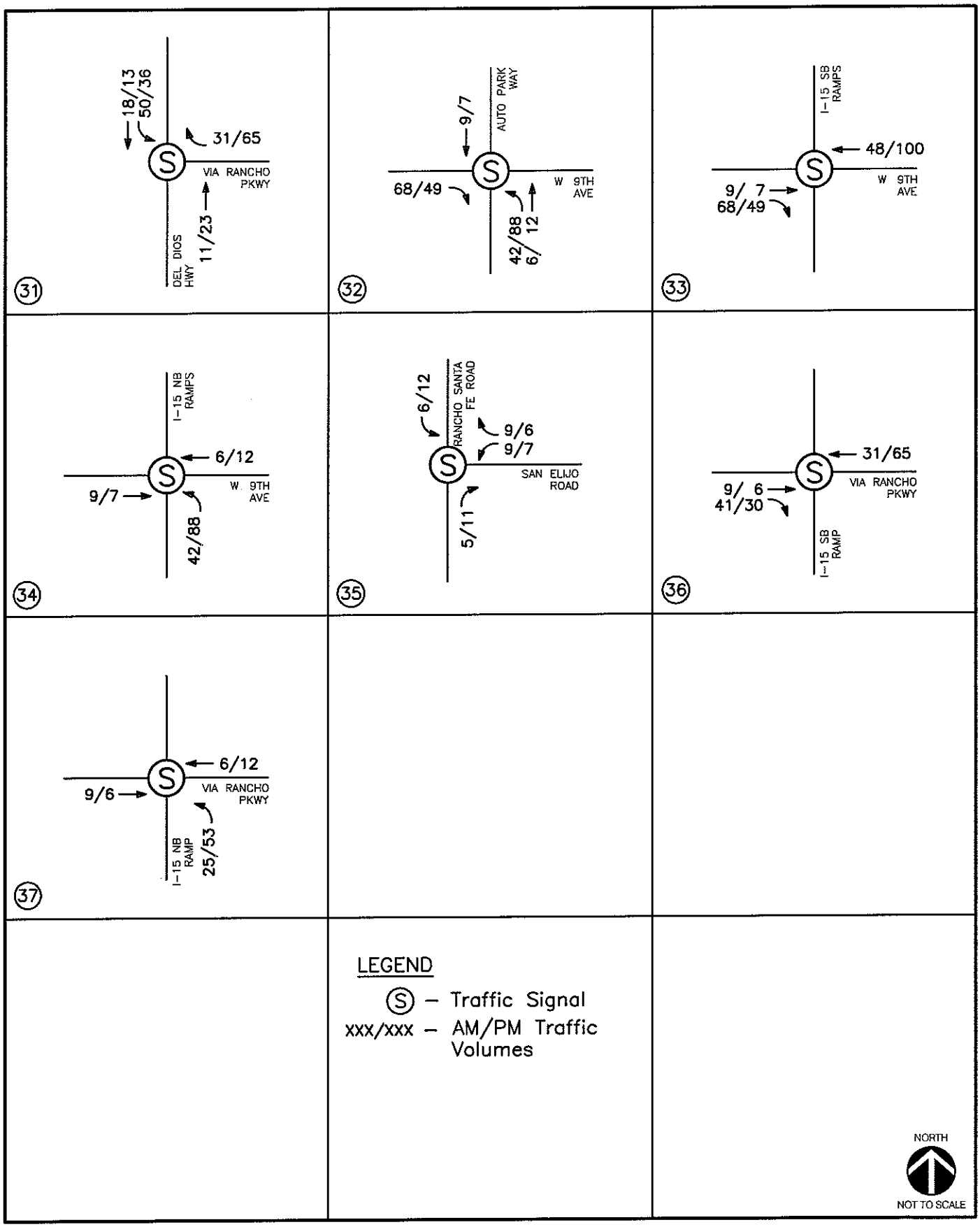

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Figure 11-3

OPTION C: Project Peak Hour Traffic Volumes

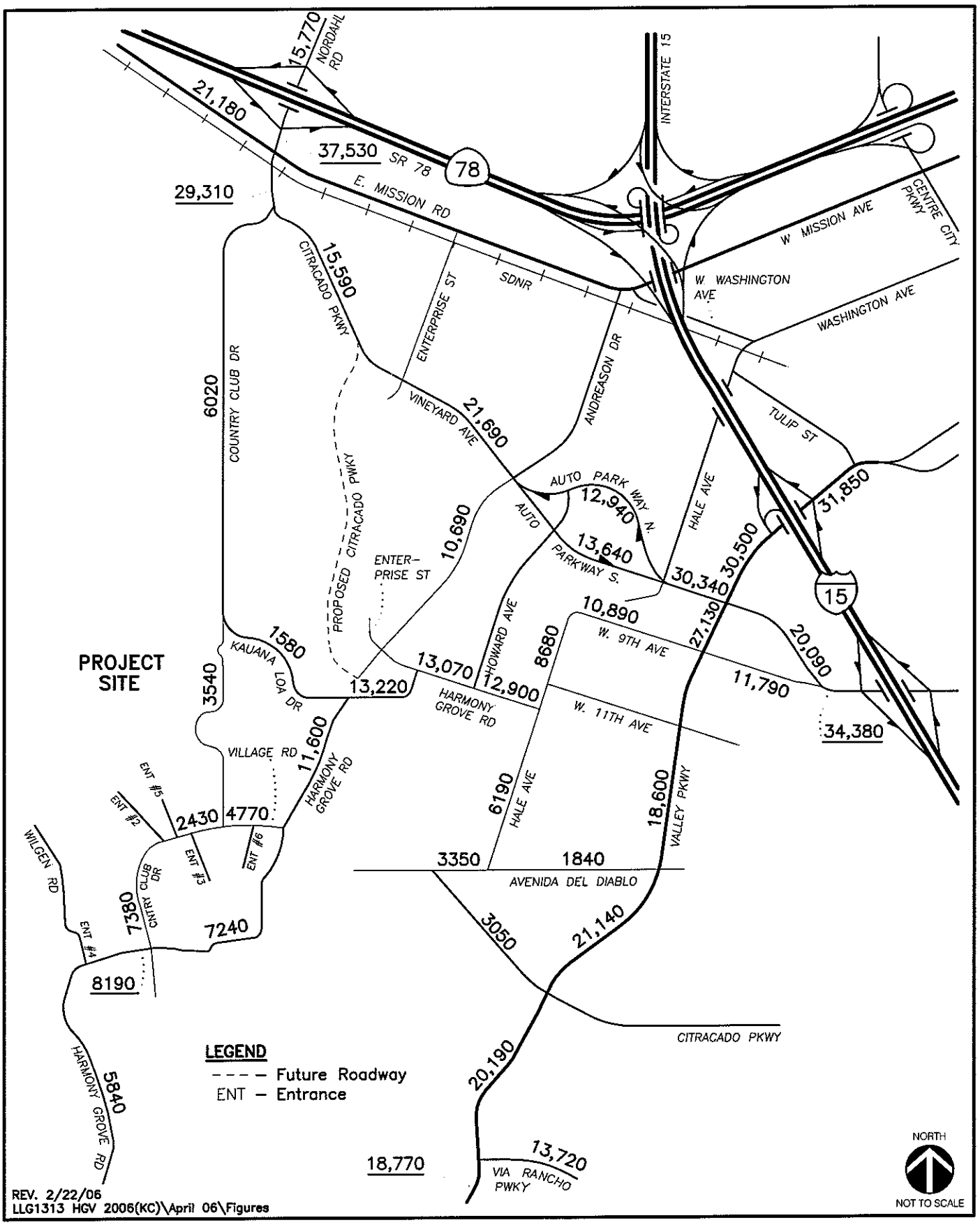

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Figure 11-4

OPTION C: Existing + project Average Daily Traffic Volumes

Harmony Grove Village

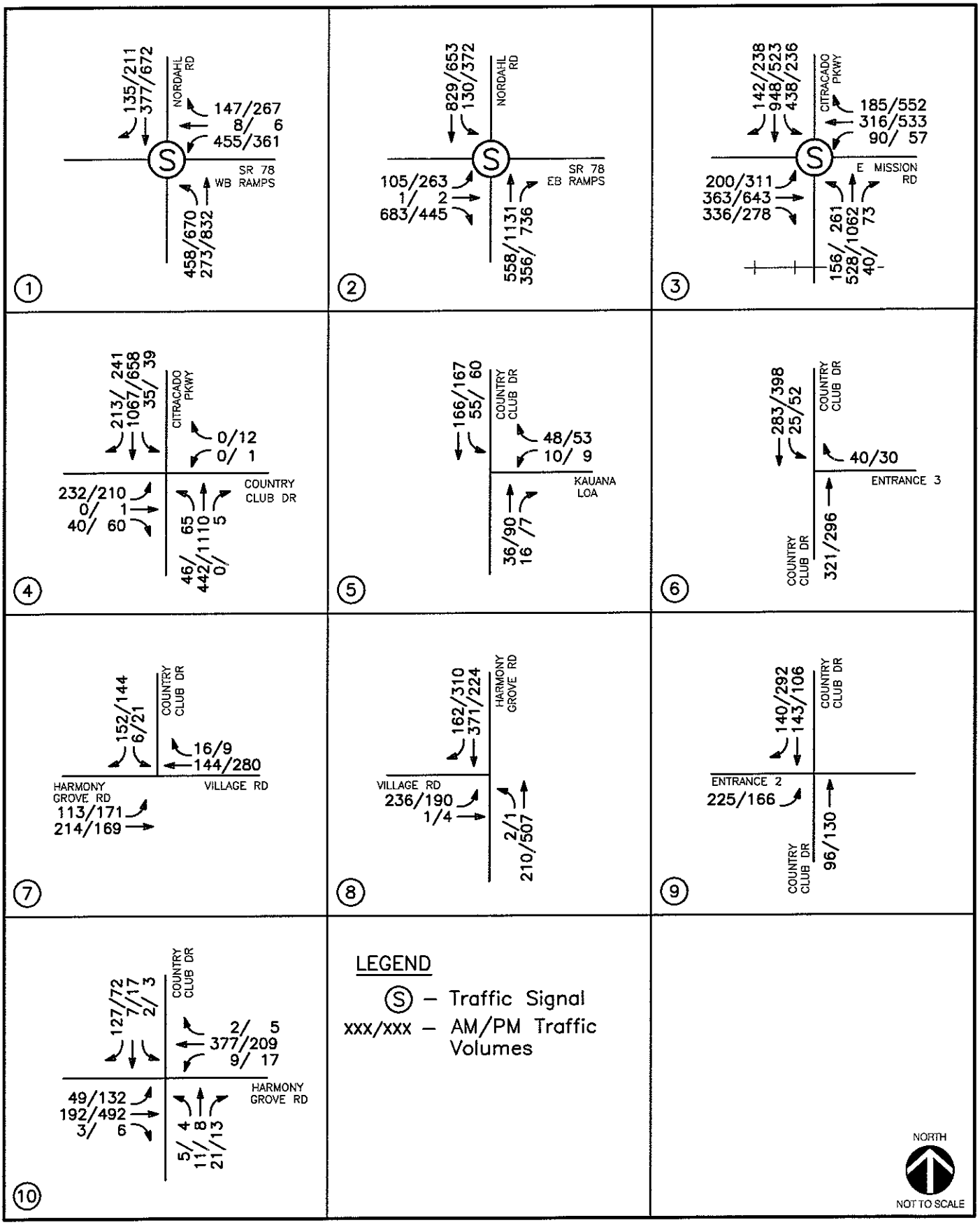

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Figure 11-5

OPTION C: Baseline + Project Peak Hour Traffic Volumes

Harmony Grove Village

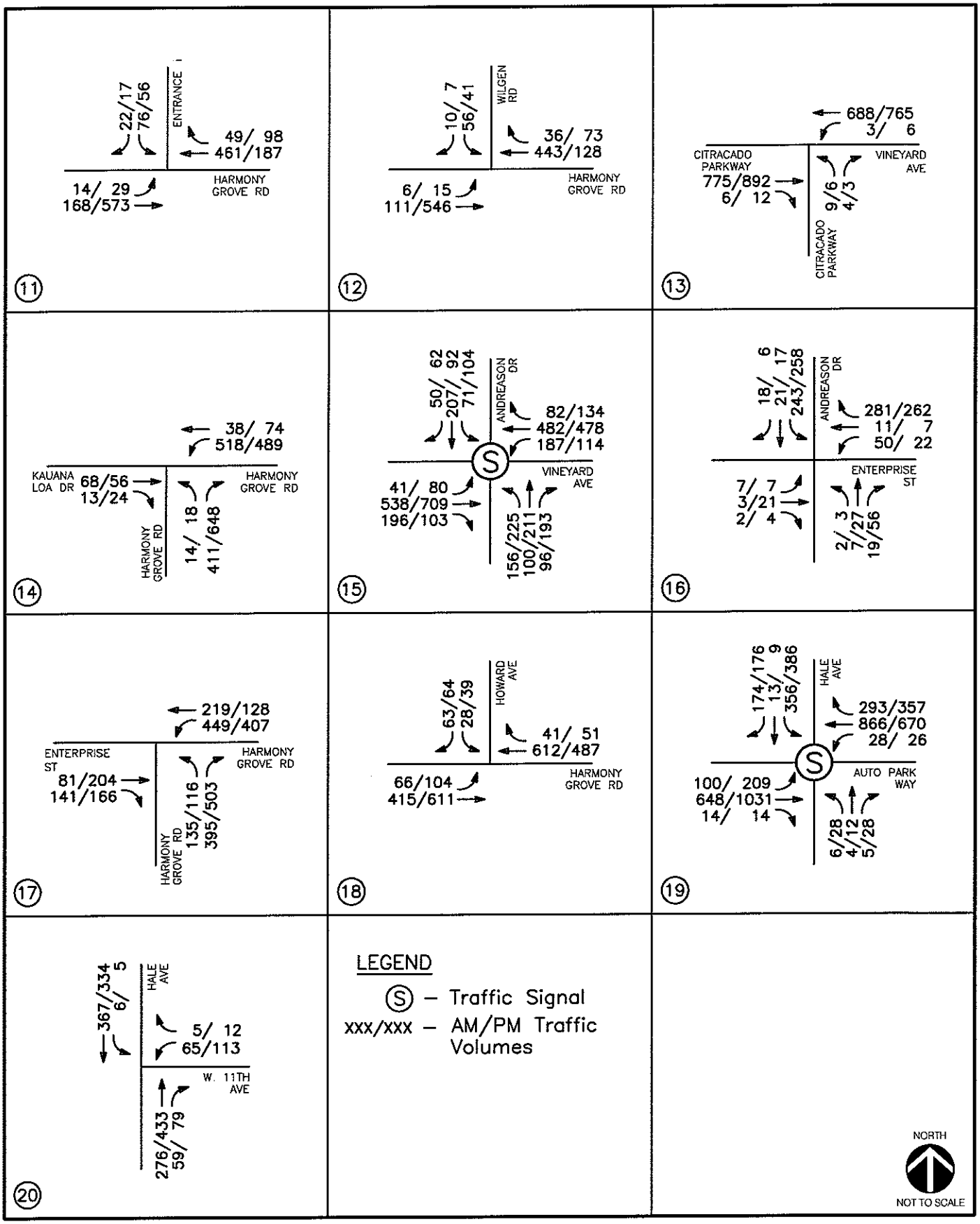

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Figure 11-5

OPTION C: Baseline + Project Peak Hour Traffic Volumes

Harmony Grove Village

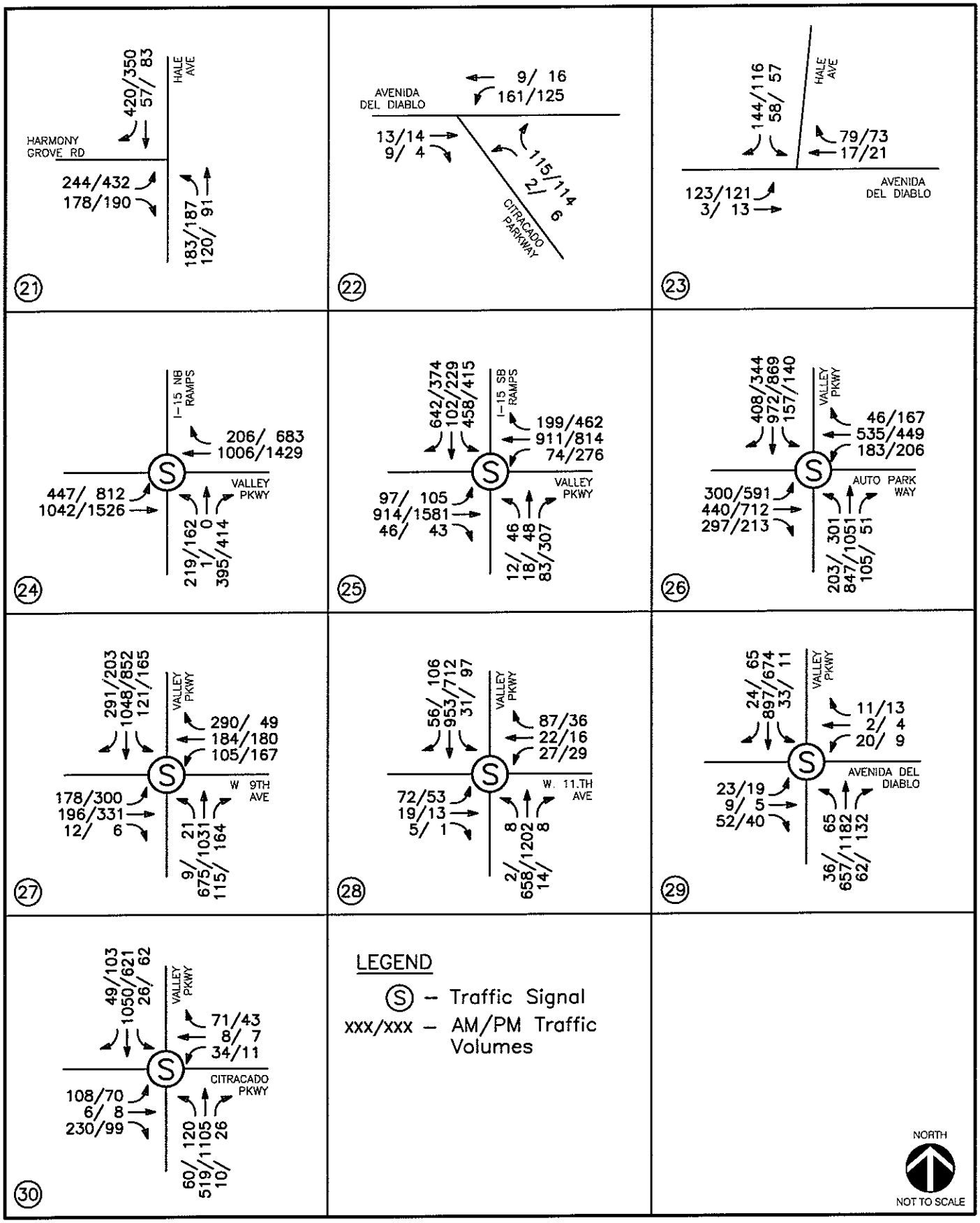

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Figure 11-5

OPTION C: Baseline + Project Peak Hour Traffic Volumes

Harmony Grove Village

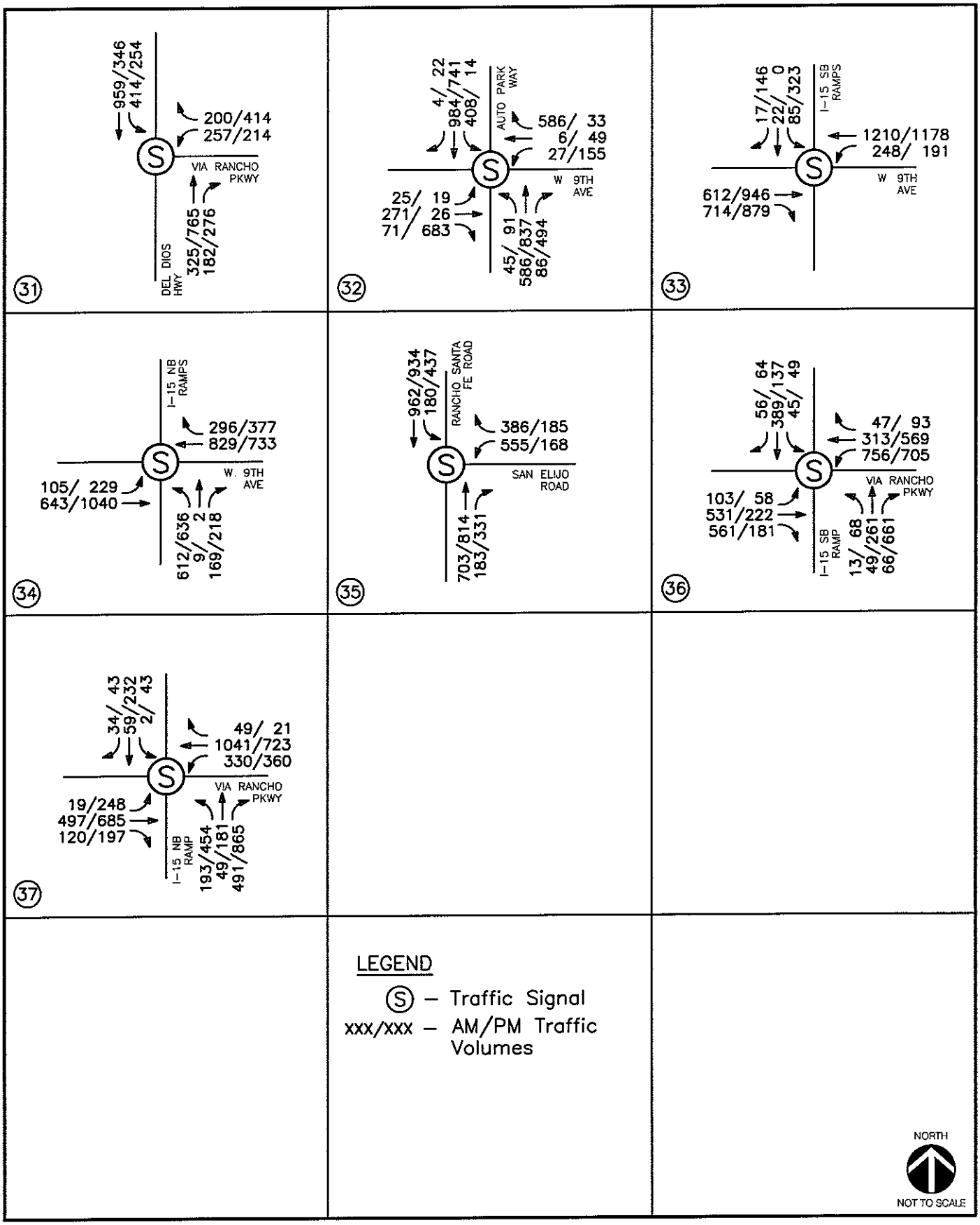

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Figure 11-5

OPTION C: Baseline + Project Peak Hour Traffic Volumes

Harmony Grove Village

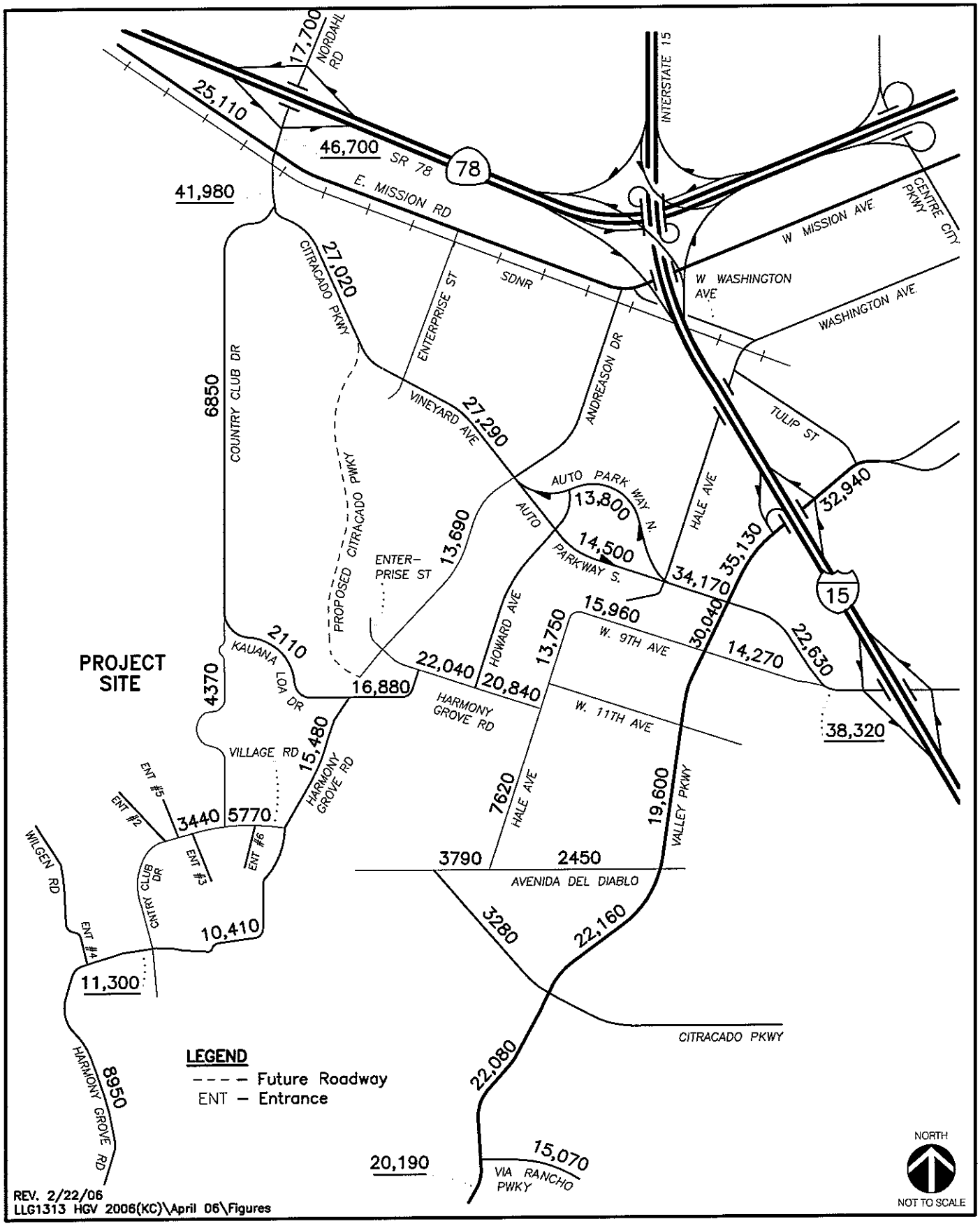

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Figure 11-6

OPTION C: Baseline + Project + Cumulative Average Daily Traffic Volumes

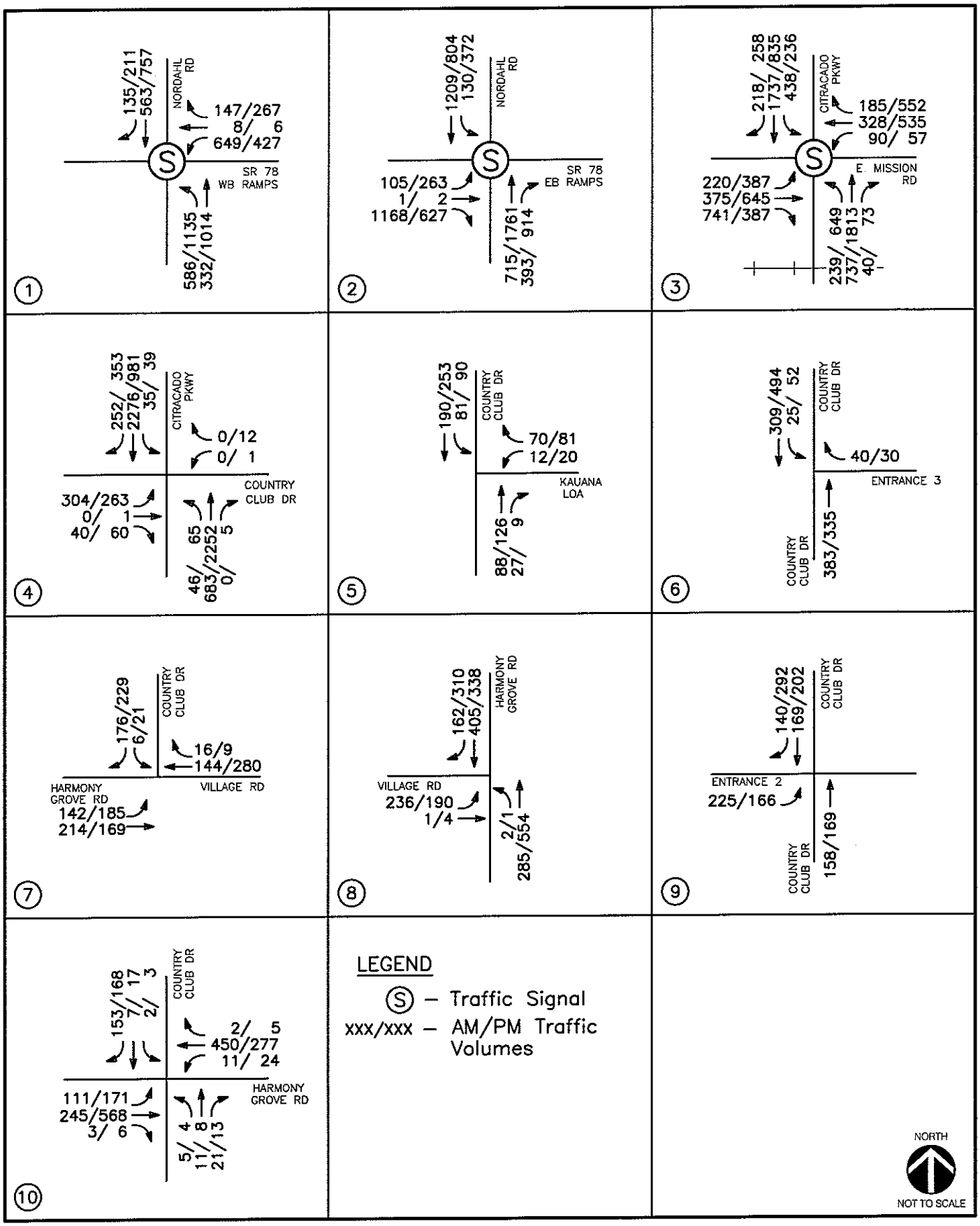

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Figure 11-7

OPTION C: Baseline + Project + Cumulative Peak Hour Traffic Volumes

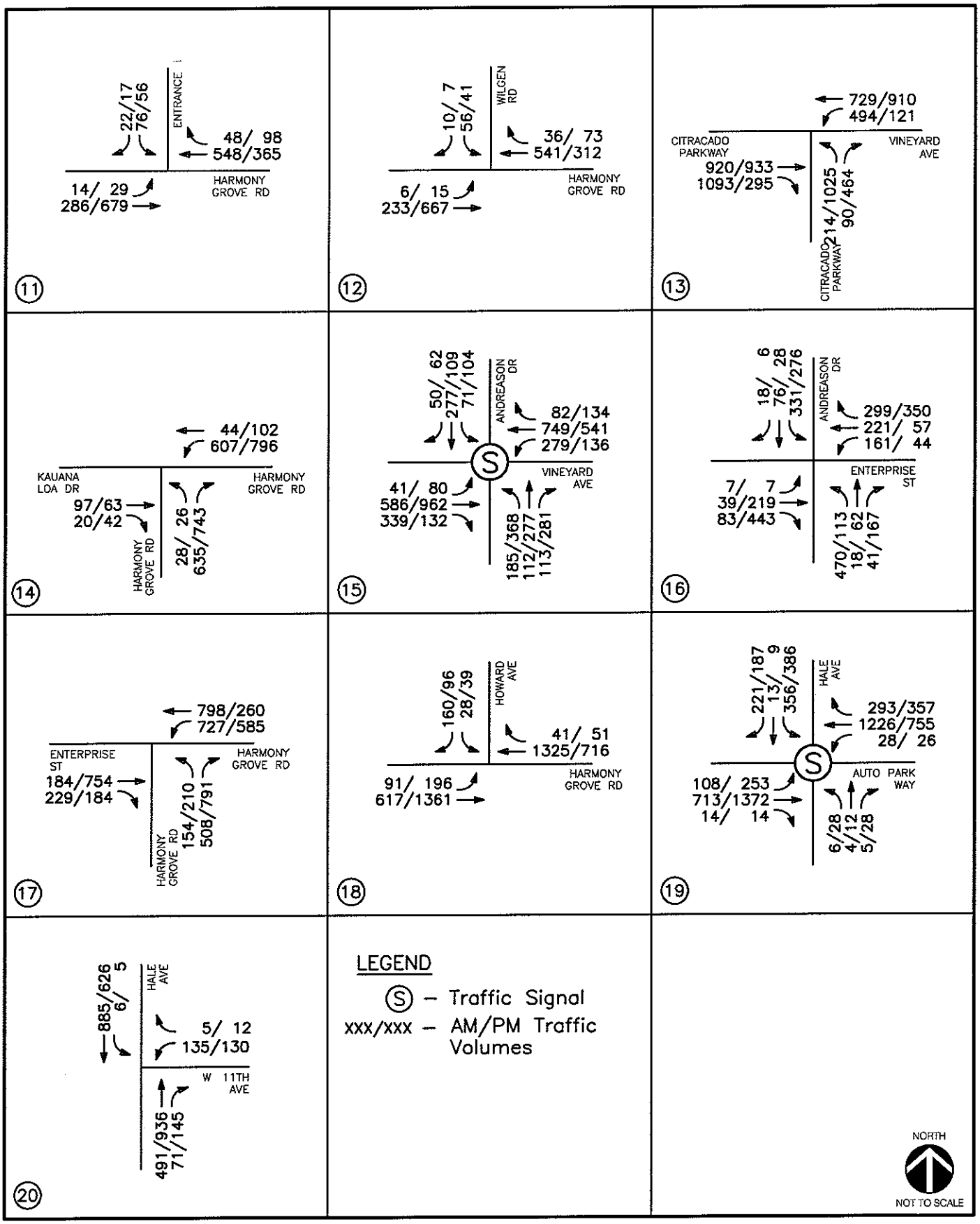

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Figure 11-7

OPTION C: Baseline + Project + Cumulative Peak Hour Traffic Volumes

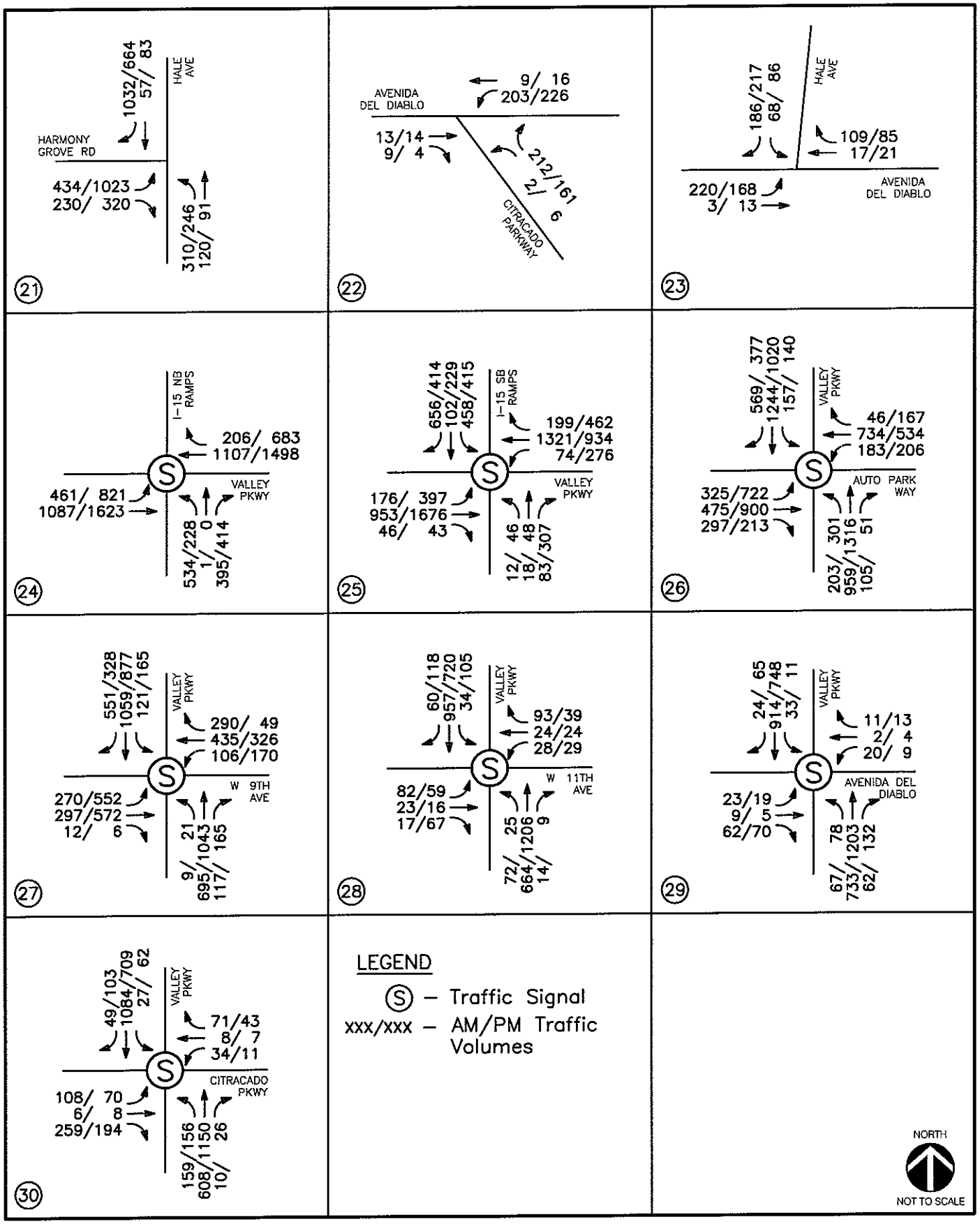

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Figure 11-7

OPTION C: Baseline + Project + Cumulative Peak Hour Traffic Volumes

Harmony Grove Village

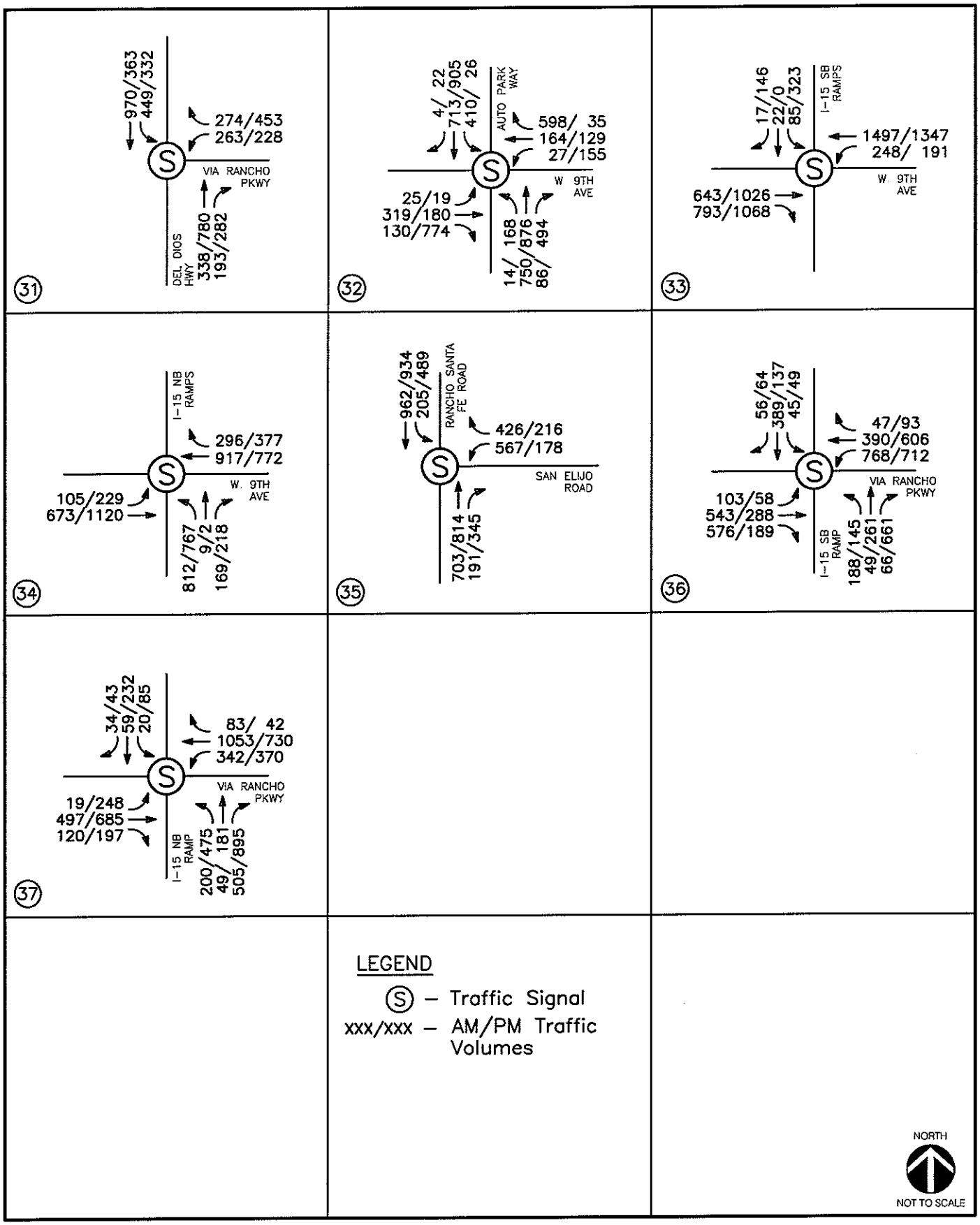

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Figure 11-7

OPTION C: Baseline + Project + Cumulative Peak Hour Traffic Volumes

12.0 YEAR 2030 ANALYSIS

12.1 Proposed General Plan / Circulation Element Network and Land Use

The year 2030 traffic volumes were determined using the SANDAG Series 10 traffic forecast, which includes proposed County General Plan 2020 land uses outside the project site. The land-uses proposed by the project were coded into the model as proposed. The model run assumed the proposed project's Circulation Element changes including the construction of Village Road between Harmony Grove Road and Country Club Drive. The Year 2030 traffic forecasts are shown in ***Appendix K.***

Given that the potential traffic impacts to Country Club Drive were of particular importance, a detailed review of the SANDAG Model was conducted in the area surrounding Country Club Drive. Specifically, Traffic Analysis Zone (TAZ) 1003 was reviewed and found to contain 731 dwelling units (DU) in the model. However, based on discussions with the County of San Diego, Department of Planning and Land Use (DPLU), General Plan 2020 (GP 2020) is forecast to accommodate only about 300 DU (see ***Appendix L***). Therefore, the traffic volume loading to Country Club Drive is overstated by approximately 4,000 ADT.

Based on this amount, the SANDAG 2030 Model volume on Country Club Drive near Citracado Parkway was reduced by 2,600 ADT and the volume near Harmony Grove Road was reduced by approximately 1,000 ADT. The SANDAG Year 2030 volumes on Harmony Grove Road and Elfin Forest Road were lower than Existing + Project + Cumulative volumes. Part of the reason for this is the future construction of new roads such as Twin Oaks Valley Road and Citracado Parkway. However, it is believed that the SANDAG volumes are low and therefore the forecast volumes were increased by 4,000 ADT on Harmony Grove Road and Elfin Forest Road. Aside from the above modifications, all of the SANDAG volumes were used as output by the Model.

It was assumed that Citracado Parkway between Andreason Drive and Avenida del Diablo would be built by 2030 since this roadway is on the City's Circulation Element and the majority of the funding has been identified. If the roadway was not built by 2030, volumes in the area would be higher especially on parallel roadways such as Country Club Drive.

A complete analysis of Country Club Drive is contained in Section 14.0, since several classification options are contemplated.

12.1.1 *Option A (Harmony Grove Road Cul-De-Sac)*

Figure 12–1 depicts the Year 2030 traffic volumes under Option A conditions. *Table 12–1* summarizes the daily segment levels of service on key segments for the Year 2030.

The street segment capacities are based on the City of Escondido General Plan Circulation Element roadway classification and the County of San Diego Circulation Element. As shown in *Table 12–1*, all key segments are calculated to operate at LOS D or better in the Year 2030, except the following:

- East Mission Road: West of Nordahl Road (LOS F)
- Nordahl Road: SR 78 to East Mission Road (LOS E)
- Nordahl Road: East Mission Road to Country Club Drive (LOS E)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOSE)
- Auto Park Way: Andreason Drive to Hale Avenue (South) (LOS E)
- Auto Park Way: Hale Avenue to Valley Parkway (LOS E)
- Hale Avenue: W. 9th Street to Harmony Grove (LOS F)
- Valley Parkway: South of Via Rancho Parkway (LOS E)

12.1.2 *Option B (Village Road / Citracado Parkway Connection)*

The SANDAG Model was updated to include the Village Road / Citracado Parkway Connection. ***Figure 12–2*** depicts the Year 2030 traffic volumes under Option B conditions.

Table 12–1 summarizes the daily segment levels of service on key segments for the Year 2030 with the extension of Village Road to Citracado Parkway. The street segment capacities are based on the City of Escondido General Plan Circulation Element roadway classification and the County of San Diego Circulation Element. As shown in *Table 12–1*, all key segments are calculated to operate at LOS D or better in the Year 2030, except the following:

- East Mission Road: West of Nordahl Road (LOS F)
- Nordahl Road: SR 78 to East Mission Road (LOS E)
- Nordahl Road: East Mission Road to Country Club Drive (LOS E)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS E)
- Valley Parkway: Citracado Parkway to Via Rancho Parkway (LOS E)
- Valley Parkway: South of Via Rancho Parkway (LOS E)

12.1.3 *Option C (Improvements to the Existing Street System)*

Figure 12–3 depicts the Year 2030 traffic volumes under Option C conditions.

Table 12–1 summarizes the daily segment levels of service on key segments for the Year 2030. The street segment capacities are based on the City of Escondido General Plan Circulation Element roadway classification and the County of San Diego Circulation Element. As shown in *Table 12–1*, all key segments are calculated to operate at LOS D or better in the Year 2030, except the following:

-
- East Mission Road: West of Nordahl Road (LOS F)
- Nordahl Road: SR 78 to East Mission Road (LOS E)
- Nordahl Road: East Mission Road to Country Club Drive (LOS E)
- Vineyard Avenue: Country Club Drive to Enterprise Street (LOS E)
- Hale Avenue: W. 9th Street to Harmony Grove (LOS F)
- Valley Parkway: South of Via Rancho Parkway (LOS E)

12.1.4 *Proposed Road Reclassifications*

The following roadway reclassifications / additions are proposed.:

- Reclassify Harmony Grove Road / Elfin Forest Road from the City of San Marcos to the City of Escondido from a Collector to a Rural Light Collector– except for the portion between Wilgen Road and Country Club Drive, which will be classified as a Town Collector.
- Add Village Road as a non-Circulation Element Residential Collector (C) or as a Rural Light Collector between Country Club Drive and the extension of Citracado Parkway.
- Reclassify Country Club Drive from Citracado Parkway to Harmony Grove Road as a Residential Collector, a Rural Light Collector, Light Collector, or a Minor Collector.

Table 12–1 shows the Year 2030 operations on these roadways with the proposed reclassifications. This table shows that LOS D or better operations are calculated in the Year 2030 along Harmony Grove Road / Elfin Forest Road and Country Club Road and therefore the proposed reclassifications can be supported.

12.1.5 *Plan-to-Plan Comparison*

A comparison of *Table 12–1* (Section 12.1: Proposed General Plan / Circulation Element Network and Land Use) and *Table 12–2* (Section 12.2: Currently Adopted General Plan Network and Land Use) shows that the proposed project does not result in any poorly operating (i.e. LOS E or F) segments for Option B that were not also forecast to poorly operate with the Adopted General Plan.

Options A and C would have a significant "plan-to-plan" impact on Hale Avenue (between West 9th Street and Harmony Grove Road) because LOS F is calculated with the proposed project. To mitigate this impact, upgrading the roadway to City of Escondido Local Collector standards is recommended.

12.1.6 *GP2020 Traffic Models*

The County planning staff is currently in the process of updating the Circulation Element as part of the General Plan (GP2020) update. During this road network planning process, a series of regional alternative road networks were tested, which included the Harmony Grove Village plan and three scenarios for Country Club Drive. These include one scenario with Country Club classified as a non-Circulation Element (CE) road, and two scenarios with the road classified as a 2-lane CE classification. The threshold capacity for applying a CE classification to a road is 4,500 ADT.

The test results for Country Club drive all show acceptable levels of service, ranging from approximately 2,700 ADT's when tested as a non-CE road, to 4,400 ADT's when tested as a CE road. (Appendix L1 shows the level of service maps and road network planning matrix which shows the test results as presented to the San Dieguito Planning Group, May 2006).

TABLE 12–1
YEAR 2030 STREET SEGMENT OPERATIONS (WITH PROPOSED PROJECT LAND USES AND PROPOSED CIRCULATION ELEMENT)

Segment	Classification	Capacity at LOS E[a]	Option A			Option B			Option C		
			VOL[b]	V/C[c]	LOS[d]	VOL	V/C	LOS	VOL	V/C	LOS
Elfin Forest Road											
San Elijo Rd to Questhaven Rd [e]	Rural Light Collector[f]	16,200	8,400	0.52	D	8,400	0.52	D	8,400	0.52	D
Harmony Grove Road											
Questhaven Rd to Wilgen Rd[e]	Rural Light Collector[f]	16,200	8,400	0.52	D	8,400	0.52	D	8,400	0.52	D
Wilgen Rd to Country Club Dr[e]	Town Collector[f]	19,000	8,000	0.42	C	8,000	0.42	C	8,000	0.42	C
Country Club Dr. to Village Road[e]	Rural Light Collector[f]	16,200	9900	0.61	D	9900	0.61	D	9900	0.61	D
Village Road to Kauana Loa Dr[e]	Collector	34,200	15200	0.44	B	9,100	0.27	A	15200	0.44	B
Kauana Loa Dr to Enterprise St	Collector	34,200	1,900	0.56	A	5,500	0.16	C	15,400	0.45	B
Enterprise St to Howard Ave	Collector	34,200	17,400	0.51	B	6,400	0.19	A	18,700	0.55	B
Howard Ave to Hale Ave	Collector	34,200	13,600	0.40	A	5,500	0.16	A	17,800	0.52	B

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Volume to Capacity ratio.
d. Level of Service.
e. Segment lies within County of San Diego. All other segments are located within of City of Escondido.
f. Proposed roadway reclassification.
g. Proposed Rural Light Collector for Option B (Capacity = 16,200 ADT)

General Note:

Since numerous classification options are contemplates for Country Club Drive, a separate stand alone analysis for this roadway was conducted in section 14-2.

TABLE 12–1 *(CONTINUED)*
YEAR 2030 STREET SEGMENT OPERATIONS (WITH PROPOSED PROJECT LAND USES AND PROPOSED CIRCULATION ELEMENT)

Segment	Classification	Capacity at LOS E[a]	Option A			Option B			Option C		
			VOL[b]	V/C[c]	LOS[d]	VOL	V/C	LOS	VOL	V/C	LOS
East Mission Road											
West of Nordahl Rd	Major Road	37,000	38,500	1.04	F	38,500	1.04	F	38,500	1.04	F
Kauana Loa Drive											
Harmony Grove Rd to Country Club Dr[e]	Rural Collector	16,200	3,000	0.19	B	3,000	0.19	B	3,000	0.19	B
Nordahl Road											
SR-78 to Mission Rd	Major Road	50,000	48,800	0.98	E	48,800	0.98	E	48,800	0.98	E
Mission Rd to Country Club Dr	Major Road	50,000	43,400	0.87	E	43,400	0.87	E	43,400	0.87	E

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Volume to Capacity ratio.
d. Level of Service.
e. Segment lies within County of San Diego. All other segments are located within of City of Escondido.

TABLE 12-1 *(CONTINUED)*
YEAR 2030 STREET SEGMENT OPERATIONS (WITH PROPOSED PROJECT LAND USES AND PROPOSED CIRCULATION ELEMENT)

Segment	Classification	Capacity at LOS E[a]	Option A			Option B			Option C		
			VOL[b]	V/C[c]	LOS[d]	VOL	V/C	LOS	VOL	V/C	LOS
Vineyard Avenue											
Country Club Dr to Enterprise St	Collector	34,200	32,900	0.96	E	32,900	0.96	E	32,900	0.96	E
Enterprise St to Andreason St	Collector	34,200	19,400	0.57	B	19,400	0.57	B	19,400	0.57	B
Auto Park Way											
Andreason Dr to Hale Ave (north)	Collector	20,000	17,200	0.86	D	12,200	0.61	C	12,200	0.61	C
Andreason Dr to Hale Ave (south)	Collector	20,000	18,400	0.92	E	12,400	0.62	C	12,400	0.62	C
Hale Ave to Valley Pkwy	Collector	34,200	31,300	0.92	E	27,400	0.80	D	27,400	0.80	D
Valley Pkwy to W. 9th St	Collector	34,200	22,300	0.65	B	7,200	0.21	A	7,200	0.21	A
Hale Avenue											
W. 9th St to Harmony Grove Rd	Rural Collector	10,000	12,300	1.23	F	6,800	0.68	C	14,800	1.48	F
Harmony Grove Rd to Avenida del Diablo	Rural Collector	10,000	6,200	0.62	C	2,200	0.22	A	6,200	0.62	C
West 9th Street											
Hale Ave to Valley Pkwy	Collector	34,200	15,100	0.44	B	16,300	0.48	B	18,400	0.54	B
Auto Park Wy to I-15	Major Road	37,000	21,000	0.57	B	16,900	0.46	B	16,900	0.46	B

Footnotes:

a. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Volume to Capacity ratio.
d. Level of Service.
e. Segment lies within County of San Diego. All other segments are located within of City of Escondido.

TABLE 12–1 *(CONTINUED)*
YEAR 2030 STREET SEGMENT OPERATIONS (WITH PROPOSED PROJECT LAND USES AND PROPOSED CIRCULATION ELEMENT)

Segment	Classification	Capacity at LOS E[a]	Option A			Option B			Option C		
			VOL[b]	V/C[c]	LOS[d]	VOL	V/C	LOS	VOL	V/C	LOS
Avenida del Diablo											
Citracado Pkwy to Hale Ave	Local Collector	15,000	3,700	0.25	A	3,700	0.25	A	3,700	0.25	A
Hale Ave to Valley Pkwy	Local Collector	15,000	2,300	0.15	A	4,300	0.29	B	2,300	0.15	A
Citracado Parkway											
Avenida del Diablo to Valley Pkwy	Major Road	34,200	21,000	0.61	B	23,000	0.67	C	21,000	0.61	B
Via Rancho Parkway											
East of Valley Parkway[e]	Collector	34,200	11,100	0.32	A	12,600	0.37	A	11,100	0.32	A
Valley Parkway											
I-15 to Auto Park Way	Prime Arterial	60,000	50,800	0.85	D	49,200	0.82	D	49,200	0.82	D
Auto Park Wy to W. 11th St	Prime Arterial	60,000	39,700	0.66	C	38,300	0.64	C	38,300	0.64	C
W. 11th St to Avenida del Diablo	Major Road	37,000	23,800	0.64	B	24,800	0.67	C	23,800	0.64	B
Avenida del Diablo to Citracado Pkwy	Major Road	37,000	26,500	0.72	C	26,500	0.72	C	26,500	0.72	C
Citracado Pkwy to Via Rancho Pkwy[e]	Major Road	37,000	32,600	0.88	D	34,600	0.94	E	32,600	0.88	D
South of Via Rancho Pkwy[e]	Major Road	37,000	34,200	0.92	E	34,700	0.94	E	34,200	0.92	E

Footnotes:

f. LOS E capacity obtained form City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*).
g. Average Daily Traffic volumes (rounded to the nearest 10).
h. Volume to Capacity ratio.
i. Level of Service.
j. Segment lies within County of San Diego. All other segments are located within of City of Escondido.

12.2 Currently Adopted General Plan Land Use and Network

A SANDAG Series 10 model was also run assuming the adopted land use for the project site itself and also the currently adopted County Circulation Element. ***Table 12–2*** shows the forecast ADT volumes and levels of service. *Appendix K* contains the model plot. After the model was run, the assumption for the adopted General Plan was reduced. A manual reduction in the 2030 adopted traffic volume forecast was conducted. The difference between the adopted land use trip generation and the proposed land use trip generation is 8,486 ADT (refer to *Table 7–2*).

The street segment capacities are based on the City of Escondido General Plan Circulation Element roadway classification and the County of San Diego Circulation Element. As shown in *Table 12–2*, all key segments are calculated to operate at LOS D or better in the Year 2030, except the following:

- East Mission Road: West of Nordahl Road (LOS E)
- Nordahl Road: SR-78 to East Mission Road (LOS F)
- Nordahl Road: Eat Mission Road to Country Club Drive (LOS F)
- Vineyard Road: Country Club Drive to Enterprise Street (LOS F)
- Valley Parkway: Citracado Parkway to Via Rancho Parkway (LOS E)
- Valley Parkway: South of Via Rancho Parkway (LOS E)

It should be noted that SC 1375 is currently on the County Circulation Element. The project is not proposing to delete SC 1375 from the Circulation Element. However, the General Plan 2020 update will be considering the deletion of SC 1375 between Harmony Grove Road and Del Dios Highway from the County's Circulation Element. It is anticipated that the volumes on Country Club Drive would decrease slightly without SC 1375, since there would no longer be a direct connection from Del Dios Highway to Harmony Grove Road. An increase in volumes on Harmony Grove Road and Citracado Parkway (the nearest parallel roadway) would be expected without SC 1375.

TABLE 12–2
YEAR 2030 STREET SEGMENT OPERATIONS
(WITH ADOPTED GENERAL PLAN LAND USES AND ADOPTED COUNTY CIRCULATION ELEMENT)

Segment	Classification	Capacity at LOS E[a]	Year 2030 With Adopted General Plan Land Uses and Adopted County Circulation Element		
			ADT[b]	V/C[c]	LOS[d]
Elfin Forest Road					
San Elijo Rd to Questhaven Rd	Collector	34,200	8,100	0.24	A
Harmony Grove Road					
Questhaven Rd to Wilgen Rd[e]	Collector	34,200	8,100	0.24	A
Wilgen Rd to Country Club Dr[e]	Collector	34,200	3,800	0.11	A
Country Club Dr to Village Rd[e]	Collector	34,200	6,200	0.18	A
Village Rd to Kauana Loa Dr[e]	Collector	34,200	8,300	0.24	A
Kauana Loa Dr to Enterprise St	Collector	34,200	3,500	0.1	A
Enterprise St to Howard Ave	Collector	34,200	5,400	0.16	A
Howard Ave to Hale Ave	Collector	34,200	5,900	0.17	A
East Mission Road					
West of Nordahl Rd	Major Road	37,000	35,900	0.97	E
Kauana Loa Drive					
Harmony Grove Rd to Country Club Dr[e]	Rural Collector	16,200	3,400	0.21	B
Nordahl Road					
SR-78 to Mission Rd	Major Road	37,000	49,900	1.35	F
Mission Rd to Country Club Dr	Major Road	37,000	43,000	1.16	F
Andreason Drive					
Vineyard Ave to Enterprise St	Local Collector	15,000	7,100	0.47	B
Vineyard Avenue					
Country Club Dr to Enterprise St	Collector	34,200	34,800	1.02	F
Enterprise St to Andreason St	Collector	34,200	19,400	0.57	B
Auto Park Way					
Andreason Dr to Hale Ave (north)	Collector	20,000	12,700	0.64	C
Andreason Dr to Hale Ave (south)	Collector	20,000	11,900	0.60	C
Hale Ave to Valley Pkwy	Collector	34,200	25,300	0.74	C
Valley Pkwy to W 9th St	Collector	34,200	15,100	0.44	B

Footnotes:

a LOS E capacity obtained from City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*)

b Average Daily Traffic volumes (rounded to the nearest 10)

c Volume to Capacity ratio

d Level of Service

e Segment is located in the County of San Diego All other segments are located within the City of Escondido

TABLE 12–2 *(CONTINUED)*
YEAR 2030 STREET SEGMENT OPERATIONS (WITH ADOPTED GENERAL PLAN LAND USES)

Segment	Classification	Capacity at LOS E[a]	Year 2030 With Adopted General Plan Land Uses and Adopted County Circulation Element		
			ADT[b]	V/C[c]	LOS[d]
Hale Avenue					
W. 9th St to Harmony Grove Rd	Local Collector	10,000	5,800	0 58	C
Harmony Grove Rd to Avenida del Diablo	Local Collector	10,000	1,500	0 15	A
West 9th Street					
Hale Ave to Valley Pkwy	Collector	34,200	14,500	0 42	B
Auto Park Wy to I-15	Major Road	37,000	16,200	0 44	B
Avenida del Diablo					
Citracado Pkwy to Hale Ave	Local Collector	15,000	1,600	0 1	A
Hale Ave to Valley Pkwy	Local Collector	15,000	3,600	0.24	A
Citracado Parkway					
Avenida del Diablo to Valley Pkwy	Major Road	34,200	25,700	0.75	C
Via Rancho Parkway					
East of Valley Parkway[e]	Collector	34,200	12,400	0 37	A
Valley Parkway					
I-15 to Auto Park Way	Prime Arterial	60,000	47,800	0 80	D
Auto Park Wy to W. 11th St	Prime Arterial	60,000	41,200	0 69	C
W 11th St to Avenida del Diablo	Major Road	37,000	22,000	0 60	B
Avenida del Diablo to Citracado Pkwy	Major Road	37,000	24,100	0.65	B
Citracado Pkwy to Via Rancho Pkwy[e]	Major Road	37,000	34,000	0.92	E
South of Via Rancho Pkwy[e]	Major Road	37,000	34,500	0.93	E
SC 1375					
Harmony Grove Rd to Del Dios Hwy	Collector	34,200	4,000[f]	12	A

Footnotes:
a LOS E capacity obtained from City of Escondido / San Diego County Segment Capacity Tables (See *Appendix B*)
b Average Daily Traffic volumes (rounded to the nearest 10)
c. Volume to Capacity ratio
d Level of Service
e Segment is located in the County of San Diego All other segments are located within the City of Escondido
f. See Appendix O
General Notes
Country Club Drive segment analysis is included in Section 14.0

TABLE 12–3
COMPARISON OF YEAR 2030 STREET SEGMENT OPERATIONS (ADOPTED LAND USES VS PROPOSED PROJECT LAND USES – OPTION A)

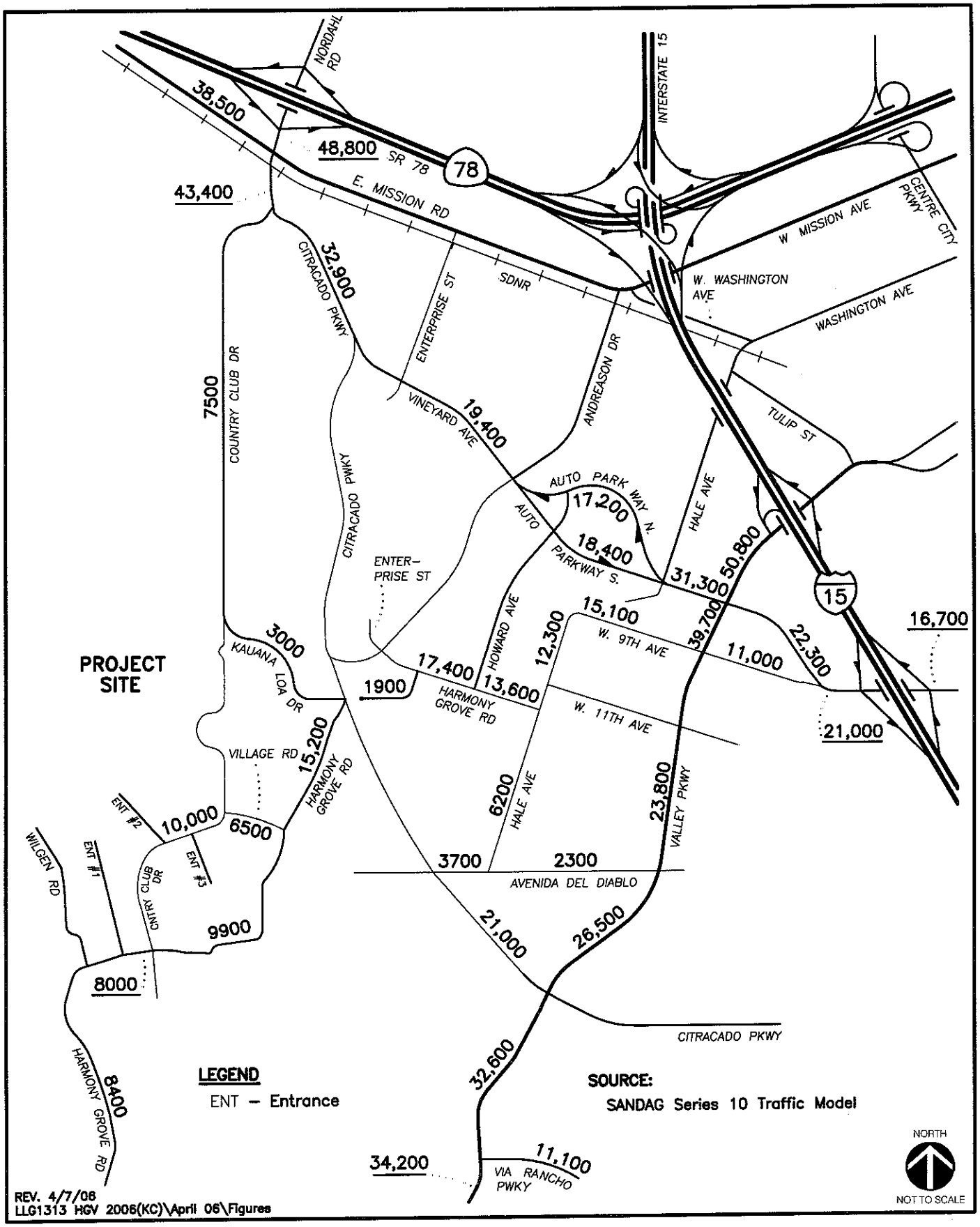
Segment	Classification	Capacity at LOS E	Proposed Project – Option A			Adopted Land Use		
			VOL	V/C	LOS	VOL	V/C	LOS
Auto Park Way								
Andreason Dr to Hale Ave (south)	Collector	20,000	18,400	0.92	E	11,900	0.60	C
Hale Ave to Valley Pkwy	Collector	34,200	31,300	0.92	E	25,300	0.74	C
Hale Avenue								
W. 9th St to Harmony Grove Rd	Local Collector	10,000	12,300	1.23	F	5800	0.58	C

TABLE 12–4
COMPARISON OF YEAR 2030 STREET SEGMENT OPERATIONS (ADOPTED LAND USES VS PROPOSED PROJECT LAND USES - OPTION C)

Segment	Classification	Capacity at LOS E	Proposed Project – Option C			Adopted Land Use		
			VOL	V/C	LOS	VOL	V/C	LOS
Hale Avenue								
W. 9th St to Harmony Grove Rd	Local Collector	10,000	14,800	1.48	F	5800	0.58	C

General Notes

There are no segments for Option B, which operate at LOS E/F with the proposed project but LOS D or better with the adopted land use.



LINSCOTT LAW & GREENSPAN engineers

Figure 12-1

OPTION A: Year 2030 Street Segment Volumes

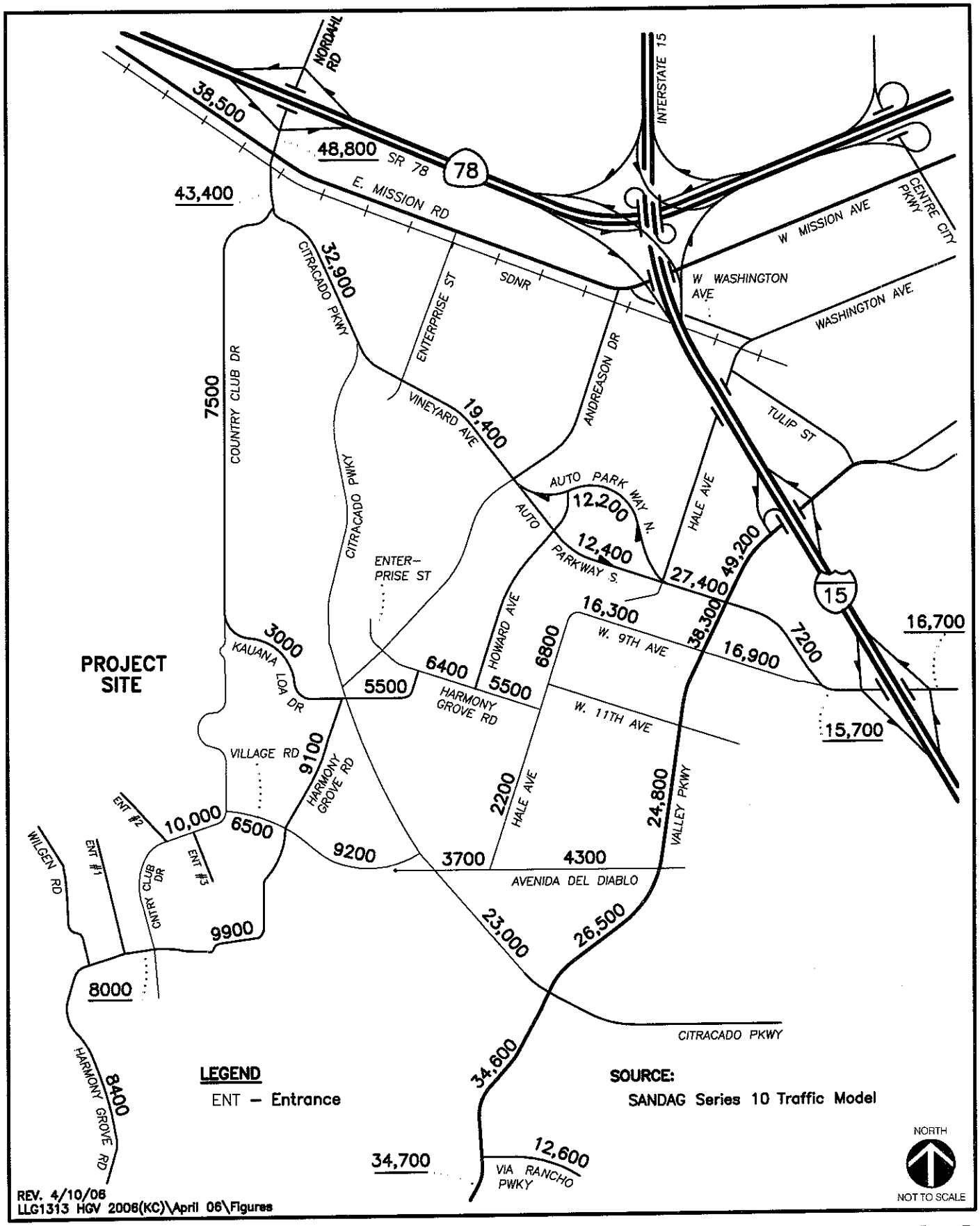


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Figure 12-2

OPTION B: Year 2030 Street Segment Volumes

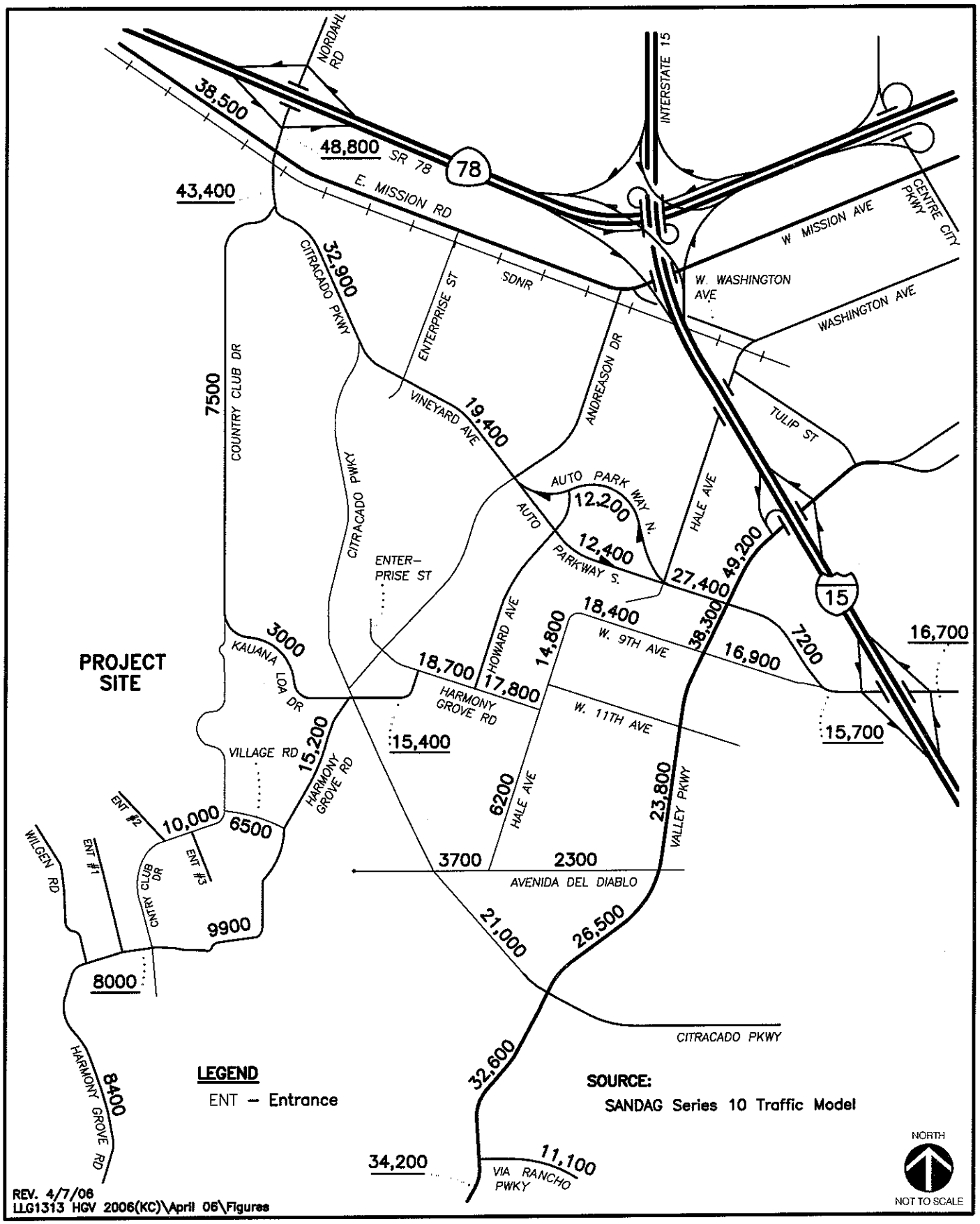

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Figure 12-3

OPTION C: Year 2030 Street Segment Volumes

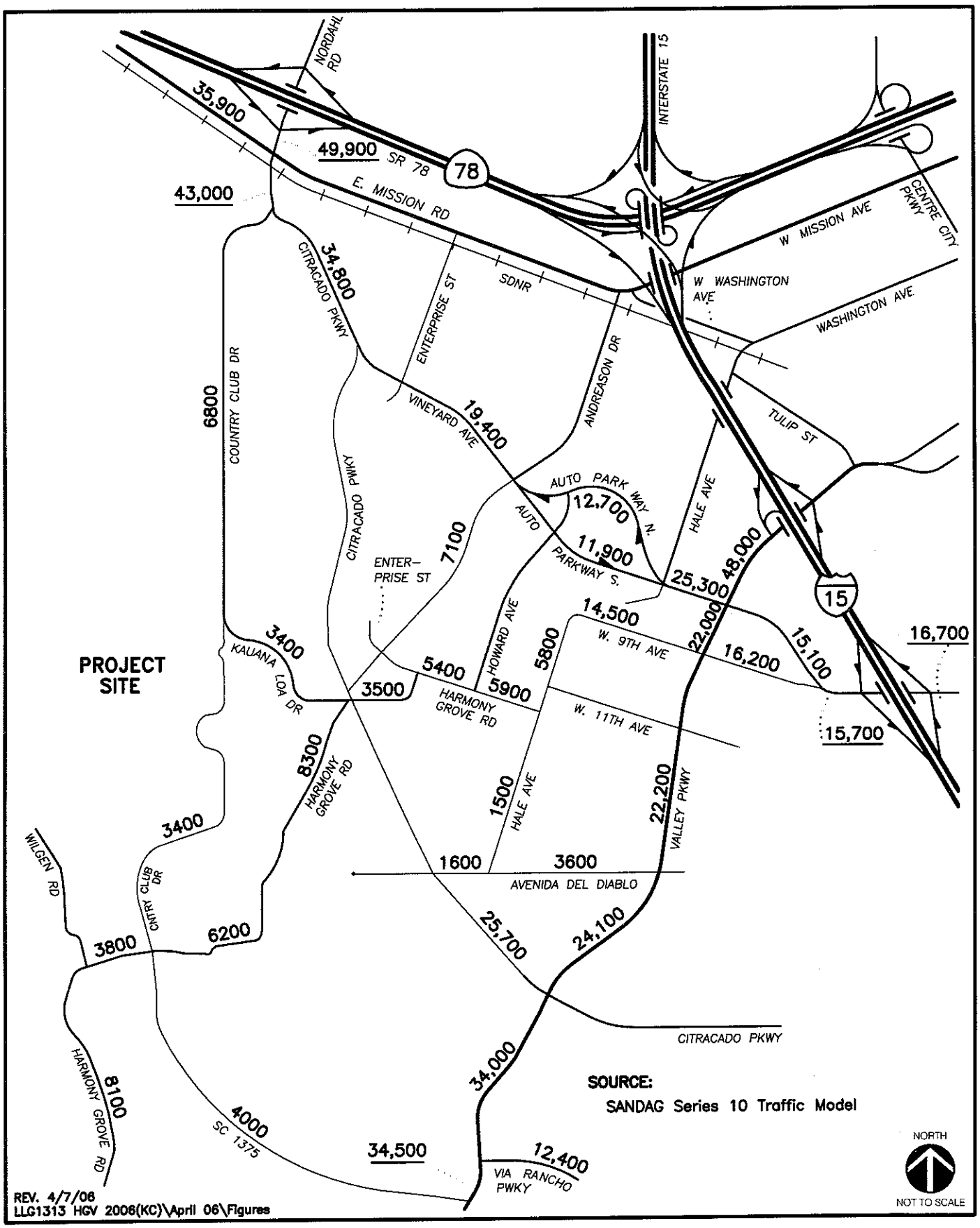

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Figure 12-4

Year 2030 Adopted General Plan Land use & Adopted County Circulation Element Segment Volumes

13.0 CONGESTION MANAGEMENT PROGRAM COMPLIANCE

The Congestion Management Program Update (CMP) was adopted in January 2003 by the SANDAG Board, and is intended to directly link land use, transportation and air quality through Level of Service performance. Local agencies are required by statute to conform to the CMP.

The CMP requires an Enhanced CEQA Review for all large projects that are expected to generate more than 2,400 ADT or more than 200 peak hour trips. Since the project is calculated to generate more than 2,400 ADT and over 200 peak hour trips, this level of review is required of the proposed project.

In 1993, the Institute of Transportation Engineers California Border Section and the San Diego Region Traffic Engineer's Council established a set of guidelines to be used in the preparation of traffic impact studies that are subject to the Enhanced CEQA review process. This published document, which is titled 1993 Guidelines for Congestion Management Program Transportation Impact Reports for the San Diego Region, requires that a project study area be established as follows:

1) All streets and intersections on CMP principal arterials where the project will add 50 or more peak hour trips in either direction.

2) Mainline freeway locations where the project will add 50 or more peak hour trips in either direction.

This project will add more than 50 new peak hour trips to SR-78 and I-15, CMP Freeways, as listed in the 2003 Guidelines for Congestion Management Program Transportation Impact Reports for the San Diego Region; therefore, a freeway analysis is included.

Existing freeway analysis is included in Section 6.0, while near-term (Existing + Project and Existing + Project + Cumulative Projects) freeway analysis is included in Section 9.0. ***Table 13–1*** summarizes the Year 2030 freeway operations on SR 78 west of Nordahl Road and on I-15 south of 9th Avenue and south of Via Rancho Parkway. Following is a summary of the near and long-term operations on SR 78 and I-15.

TABLE 13–1
YEAR 2030 FREEWAY SEGMENT OPERATIONS

Scenario	Direction	Number of Lanes	Hourly Capacity [a]	ADT [b]	Peak Hour Volume [c]		V/C [d]		LOS	
					AM	PM	AM	PM	AM	PM
SR-78										
West of Nordahl Road	EB	3M + 1A	8,100	199,000	7,285	10,746	0.899	1.327	D	F(1)
	WB	3M + 1A	8,100	199,000	8,216	8,107	1.014	1.001	F(0)	F(0)
I-15										
South of 9th Avenue	NB	5M + 1A	12,700	300,000	9,548	14,845	0.752	1.169	C	F(0)
	SB	5M + 3A	15,100	300,000	14,323	10,316	0.949	0.683	E	C
South of Via Rancho Parkway	NB	5M + 2A	16,100	364,000	11,585	18,012	0.833	1.296	D	F(1)
	SB	6M + 3A	17,400	364,000	17,378	12,517	0.999	0.719	E	C

Footnotes:

a. Capacity calculated at 2,300 vehicles per hour per mainline lane and 1,200 vehicles per hour per auxiliary lane (M: Mainline, A: Auxiliary Example: 4M+2A=4 Mainline + 2 Auxiliary)

b. Year 2030 ADT volumes obtained from SANDAG Series 10 Model (*Appendix K*)

c. Peak Hour Volume = ((ADT)(K)(D)/Truck Factor) (*Appendix D*)

d. V/C = ((ADT)(K)(D)/Truck Factor/Capacity) (*Appendix D*)

FREEWAY THRESHOLDS

LOS	v/c
A	<0.41
B	0.42-0.62
C	0.63-0.8
D	0.81-0.92
E	0.93-1.00
F(0)	1.01-1.25
F(1)	1.26-1.35
F(2)	1.36-1.45
F(3)	>1.46

13.1 State Route 78

As seen in *Table 9–4*, the segment of SR-78 west of Nordahl Road is calculated to operate at LOS D in the eastbound direction during the AM peak hour and LOS F(0) during the PM peak hour. The westbound segment is calculated to operate at LOS D in the AM and PM peak hours for the Existing scenario. A cumulative impact is calculated on the eastbound segment during the PM peak hour for the Existing + Project scenario as the freeway operates at LOS F(0) under Existing conditions and the project adds more than 0.01 to the volume over capacity (v/c) ratio. In the westbound direction, the segment is calculated to operate at LOS D during the AM and PM peak hours. In the Existing + Project + Cumulative Projects scenario, the eastbound segment is calculated to operate at LOS D in the eastbound direction during the AM peak hour and LOS F(0) during the PM peak hour. The westbound segment is calculated to operate at LOS E in the AM and PM peak hours. A significant impact is calculated for the eastbound PM and the westbound AM and PM peak hours.

13.2 Interstate 15

I-15 South of West 9th Street

As seen in *Table 9–4*, the segment of I-15 south of W. 9th Street in the northbound is calculated to operate at LOS D or better during the AM peak hour and PM peak hour for all of the scenarios. In the southbound direction, the segment is calculated to operate at LOS E during the AM peak hour and LOS C during the PM peak hour for all scenarios. The project is not calculated to have a significant impact on this segment of I-15 because the project increases the v/c ratio by less than 0.01.

I-15 South Of Via Rancho Parkway

As seen in *Table 9–4*, the northbound segment of I-15 south of Via Rancho Parkway is calculated to operate at LOS C during the AM peak hour and LOS F(0) during the PM peak hour for all scenarios. In the southbound direction, this segment is calculated to operate at LOS F(0) during the AM peak hour and LOS D during the PM peak hour for all scenarios. The project is calculated to have a significant impact on this segment of I-15 during the PM peak hour in the northbound direction and during the AM peak hour in the southbound direction, because the project increases the v/c ratio by more than 0.01. The significance of the project impacts is discussed later in this report.

13.3 CMP Level of Service Standard

The CMP Level of Service standard for freeways and arterials is LOS E. Given that LOS F is calculated on both SR 78 and I-15 with and without the project, the CMP LOS standard is not met.

13.4 Potential Construction Impacts

Construction traffic is anticipated to use Harmony Grove Road, heading northeast toward I-15 and SR 78. The construction traffic haul routes would follow Harmony Grove Road, Enterprise Street, Andreas0n, and Auto Park Way to I-15, or alternatively Harmony Grove Road, Enterprise Street, Andreas0n, Vineyard Avenue, and Citracado to SR78. Although construction traffic could slow or interrupt flow along area roadways, there are no plans to close area roads during construction or identify alternative routes for through traffic. Construction staging areas are proposed to be located on site. With the exception of the bridge associated with the extension of Village Road staging areas for off-site improvements (e.g., sewer pipelines and roadway improvements) would occur within disturbed road rights-of-way.

The Proposed Project Village grading would result in approximately 2,922,000 cubic yards of cut and approximately 2,922,000 cubic yards of fill. Proposed earthwork is projected to be balanced on site, and import or export of earthwork is not expected, reducing the number of truck trips to and/or from the site during the construction phase. Off-site road improvement or sewer upgrades would be expected to result in approximately 50,000 c.y. of fill beyond what would be generated by cut. Project construction would require a variety of trucks and vehicles and the associated trips to the site by the various vehicles would be based upon the actual phase of construction.

The project construction is anticipated to be ongoing over a period of six years. Construction traffic is expected to result in general congestion and/or traffic delays in the project vicinity. Due to the length of the construction phase and the fact that various components of construction would overlap, projecting the delays on specific road segments for the full six years would be speculative and would not result in a modification to the planned implementation of standard traffic control measures. The Proposed Project includes the preparation and approval of a Traffic Control Plan (TCP), which would include measures to reduce traffic delays and minimize public safety impacts. The TCP would include measures such as the use of flagmen, traffic cones, k-rails, lane-shifting, detours and advanced notification signage, pedestrian/equestrian detours, movement restrictions and temporary lane closures. In addition, the construction contractor would provide a means for public liaison/contact information for public inquiries and concerns. The TCP would be part of the project and is included in the list of discretionary project approvals. The Plan would have to be approved by County DPW and the County Board of Supervisors. While construction traffic would be a nuisance to motorists in the project vicinity and would result in an adverse short-term traffic impact, this short-term effect generally would be lowered to a less than significant level via project-mandated implementation of the TCP.

14.0 INTERNAL CIRCULATION / COUNTRY CLUB DRIVE / VILLAGE ROAD

14.1 Internal Circulation

The internal roadways for the proposed project have been reviewed. A map of the proposed circulation system is shown in ***Appendix M.*** As shown on the proposed map, most internal roadways will be designed to current County of San Diego design standards. However, there are a few internal roadways, which are not planned to meet the current standards. A design exception will be requested for these roadways.

County standards include that non-circulation roads intersecting a circulation road must have their centerline separated by at least 300 feet. If it was determined that Country Club Drive and Village Road would not be Circulation Element Roads, the separation would be 200 feet. A review of the conceptual site plan shows that the driveway spacing meets County standards (assuming 300 feet) although the spacing between driveways # 2 and # 5 and between driveways # 6 and Harmony Grove Road is close to the 300 feet. A mitigation measure has been added to ensure County intersection spacing standards are met.

14.2 Country Club Drive

There are several options that have been analyzed in terms of the future classification of Country Club Drive between Harmony Grove Road and Vineyard Avenue. It should be noted that Country Club Drive north of Harmony Grove Road was built many years ago under previous County standards and is posted with several 20 MPH advisory speed plates. The following is a discussion of the existing classification and an analysis of four reclassification options. These four options are listed below and are each assessed in terms of roadway capacity and roadway operations.

1) Two lane Light Collector (45 mph)
2) Two lane Rural Light Collector (40 mph)
3) Two lane Minor (Neighborhood) Collector (35 mph)
4) Two lane Residential Collector (30 mph)

14.2.1 *Existing Classification*

The current County Circulation Element Classification of Country Club Drive is a four-lane Collector with a design speed of 55 mph. The traffic volume projections for Country Club Drive are within the capacity of a two-lane roadway and therefore a reclassification from the current four-lane roadway can be supported.

There are two existing curves on Country Club Drive between Village Road and Kauana Loa Drive, which have radii less than 300 feet.

14.2.2 *Reclassification Options*

The following is an assessment of the five contemplated reclassification options for Country Club Drive between Harmony Grove and Vineyard Avenue.

1. Two Lane Light Collector

This roadway has a design speed of 45 mph and a LOS D capacity of 10,900.

Table A shows the near term levels of service for Country Club Drive with this classification. Table B shows the 2030 levels of service. These tables show that the future traffic volumes can be accommodated with a two lane Light Collector designation.

Designing the road to meet County Light Collector standards would require minimum 700-foot horizontal curve radii. If the County Light Collector Roadway standards were met, roadway operations would be adequate.

A concept plan satisfying the 45 mph design speed is contained in the EIR. A design exception may be required if the 700 feet horizontal curve radii cannot be met due to environmental constraints. The advantage of implementing this classification is that a Light Collector can accommodate the forecasted volumes.

The EIR contains a more detailed analysis and comparative assessment of other environmental constraints (e.g., biological and visual resources).

A 45 MPH design would meet both Circulation Element standards and non-Circulation Element standards in terms of roadway width and curve radii design.

2. Two Lane Rural Light Collector

This roadway has a design speed of 40 mph and a LOS D capacity of 10,900 ADT

Table A shows the near term levels of service for Country Club Drive with this classification. ***Table B*** shows the 2030 levels of service. These tables show that the future traffic volumes can be accommodated with a two-lane Rural Light Collector designation.

Designing the road to meet County Rural Light Collector standards would require minimum 500-foot curve radii. A concept satisfying the 40 mph design speed is contained in the EIR. There are two existing horizontal curves on Country Club Drive between Village Road and Kauana Loa Drive with curve radii of less than 300 feet. It appears that it would be difficult to attain curve radii meeting a 40 mph design speed at these two locations. If it is not possible, a design exception would be required.

This roadway classification would consist of two 12-foot travel lanes with two 8-foot shoulders. A 40 MPH design would meet both Circulation Element standards and non-Circulation Element standards in terms of roadway width and curve radii design.

The advantage of this classification is that future traffic volumes would be accommodated and if Rural Light Collector standards were met, good operations would be achieved.

3. Two Lane Minor (Neighborhood) Collector

This classification is not part of the current Circulation Element but is proposed as part of the proposed GP 2020 roadway standards. Therefore, it should be noted that the project would need to reclassify Country Club Drive to a current County Circulation Element classification and replicate the 35 MPH design speed of a Minor Collector through the design exception process until the GP2020 update is officially incorporated onto the Circulation Element and public road standards. It should also be noted that these is no guarantee the minor collector classification will become a Circulation Element roadway classification. The Minor Collector is a two-lane roadway with a lower design speed that is considered appropriate for rural areas that are highly constrained and for areas within a village with heavy pedestrian bicycle and transit activities. The design speed is 35 mph and the LOS D capacity is 7,000-8,000 ADT.

Table C shows the near term levels of service for Country Club Drive with this classification. Table D shows the 2030 levels of service. Table shows that the capacity is exceeded between Harmony Grove Road and Village Road. Dedicated left-turn lanes are recommended at all driveways on Country Club between Harmony Grove Road and Kauana Loa Drive to accommodate the forecasted 10,000 ADT.

The construction of Country Club Drive to Minor Collector standards would require minimum 400-foot horizontal curve radii with the same travel lane and shoulder width, described above. There are two existing horizontal curves on Country Club Drive between Village Road and Kauana Loa Drive with curve radii of less than 200 feet. A concept satisfying the 35 mph design speed is contained in the EIR.

A 35 MPH design would meet non-Circulation Element roadway standards but would not meet current standards in the County Circulation Element in terms of horizontal curve radii.

4. Two Lane Residential Collector

A roadway built to Residential Collector standards would not be on the County Circulation Element and would have a LOS C capacity of 4,500 ADT.

Tables E & F show that forecasted volumes exceed the LOS C capacity of a Residential Collector. The volumes exceed the amount a driver would expect on a non-Circulation Element road. Additional lanes at driveways would be recommended on Country Club Drive to accommodate the

forecasted volumes. If this classification is chosen, a design exception to allow volumes exceeding the 4,500 ADT may be needed.

The two aforementioned curves could be redesigned to meet 30 mph, 300-foot curve radii. If this were done, Country Club Drive would meet County operational standards for a Residential Collector. The advantage of implementing the Residential Collector is that the environmental constraints to provide a 30 MPH design speed are less. However, the disadvantage is that the forecasted volumes greatly exceed the LOS C capacity.

A 30 MPH design would meet non-Circulation Element roadway standards but would not meet current standards in the County Circulation Element in terms of horizontal curve radii.

5. Town Collector

This roadway has a design speed of 40 mph, a LOS C capacity of 9,500 ADT and a LOS D capacity of 13,500 ADT. Table F1 shows the near term LOS for Country Club Drive with this classification and Table F2 shows the 2030 LOS. These tables show that the future traffic volumes can be accommodated with a Town Collector designation. However, since LOS D is calculated on the on-site portion of Country Club Drive between Harmony Grove Drive and Village Road and LOS C is required per the Public Facility Element, a General Plan Amendment would be needed.

This roadway segment would include two 12-foot travel lanes, a 14-foot turning lane, two 8-foot shoulders, and 10 feet of parkway on either side of the roadway when improved as part of Harmony Grove Village implementation. A 40 MPH design would meet both Circulation Element and non-Circulation Element standards in terms of roadway width and curve radii design.

14.2.3 *Comparisons Among Options*

Table G is a table comparing the five options from a traffic capacity standpoint. Based on the forecasted traffic volumes, a Rural Light Collector or Town Collector classification would be required.

TABLE A
NEAR TERM ANALYSIS OF COUNTRY CLUB DRIVE
(LIGHT COLLECTOR AND RURAL LIGHT COLLECTOR)

Segment	Assumed Classification	Capacity (LOS E) [a]	Baseline [D]		Baseline + Project		Baseline + Project + Cumulative Projects	
			ADT[b]	LOS[c]	ADT	LOS	ADT	LOS
Country Club Drive								
Nordahl Rd to Kauana Loa Dr.	Light[H] Collector	16,200	3,700	B	**6,020**	C	6,850	C
Kauana Loa Dr. to Village Rd [1]	Light[H] Collector	16,200	2,000	B	4,040	B	**4,870**	C
Village Rd to Harmony Grove Rd	Light[H] Collector	16,200	1,500	A	2,430	B	3,440	B

Footnotes:

a. LOS E capacity obtained from San Diego County Segment Capacity Table.
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Level of Service.
d. Baseline is existing with redistributed traffic volumes to account for Village Rd construction.
h. Rural Light Collector has the same capacity.
Volumes shown are for Option B, volumes on Country Club Drive are virtually identical for Options A and C.
i. Two Curves on this segment have curve radii less than 300 feet.

TABLE B
YEAR 2030 STREET SEGMENT OPERATIONS OF COUNTRY CLUB DRIVE
(LIGHT COLLECTOR AND RURAL LIGHT COLLECTOR)

Segment	Assumed Classification	Capacity (LOS E)[a]	With Proposed Project		With Adopted Land Use	
			ADT[b]	LOS[d]	ADT	LOS
Country Club Drive						
Nordahl Rd to Kauana Loa Dr.	Light[d] Collector	16,200	7,500	D	**6800**	C
Kauana Loa Dr. to Village Rd	Light[d] Collector	16,200	7,500	D	N/A	-
Village Rd to Harmony Grove Rd	Light[d] Collector	16,200	10,000	D	3400	B

Footnotes:

a. LOS E capacity obtained from San Diego County Segment Capacity Table.
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Level of Service.
Volumes shown are for Option B, volumes on Country Club Drive are virtually identical for Options A and C.
N/A = Village Road does not exist under Adopted Circulation Element.

TABLE C
NEAR TERM ANALYSIS OF COUNTRY CLUB DRIVE
(MINOR COLLECTOR)

Segment	Assumed Classification	Capacity (LOS D) [a]	Baseline [D]		Baseline + Project		Baseline + Project + Cumulative Projects	
			ADT[b]	LOS[c]	ADT	LOS	ADT	LOS
Country Club Drive								
Nordahl Rd to Kauana Loa Dr.	Minor Collector	7,000	3,700	B	**6,020**	**D**	6,850	**D**
Kauana Loa Dr. to Village Rd	Minor Collector	7,000	2,000	B	4,040	C	**4,870**	**C**
Village Rd to Harmony Grove Rd	Minor Collector	7,000	1,500	B	2,430	B	3,440	C

Footnotes:

a. Proposed Minor Collector capacity.
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Level of Service.
d. Baseline is existing with redistributed traffic volumes to account for Village Rd construction.
Volumes shown are for Option B, volumes on Country Club Drive are virtually identical for Options A and C.

TABLE D
YEAR 2030 STREET SEGMENT OPERATIONS OF COUNTRY CLUB DRIVE
(MINOR COLLECTOR)

Segment	Assumed Classification	Capacity (LOS D)[a]	With Proposed Project		With Adopted Land Use	
			ADT[b]	LOS[c]	ADT	LOS
Country Club Drive						
Nordahl Rd to Kauana Loa Dr.	Minor Collector	7,000	7,500	E	**6800**	D
Kauana Loa Dr. to Village Rd	Minor Collector	7,000	7,500	E	N/A	-
Village Rd to Harmony Grove Rd	Minor Collector	7,000	10,000	E/F	3400	C

Footnotes:

a. Proposed Minor Collector capacity.

b. Average Daily Traffic volumes (rounded to the nearest 10).

c. Level of Service.

Volumes shown are for Option B, volumes on Country Club Drive are virtually identical for Options A and C.

N/A = Village Road does not exist under Adopted Circulation Element.

TABLE E
NEAR TERM ANALYSIS OF COUNTRY CLUB DRIVE
(RESIDENTIAL COLLECTOR)

Segment	Assumed Classification	Capacity (LOS C)[a]	Baseline[D]		Baseline + Project		Baseline + Project + Cumulative Projects	
			ADT[b]	LOS[c]	ADT	LOS	ADT	LOS
Country Club Drive								
Nordahl Rd to Kauana Loa Dr.	Residential Collector	4,500	3,700	U	**6,020**	**O**	6,850	**O**
Kauana Loa Dr. to Village Rd	Residential Collector	4,500	2,000	U	4,040	U	**4,870**	**O⁻**
Village Rd to Harmony Grove Rd	Residential Collector	4,500	1,500	U	2,430	U	3,440	U

Footnotes:

a. Capacity obtained from San Diego County Segment Capacity Table.
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Level of Service.
d. Baseline is existing with redistributed traffic volumes to account for Village Rd construction.
Volumes shown are for Option B, volumes on Country Club Drive are virtually identical for Options A and C.
U= Under 4,500 ADT capacity.
O= Over 4,500 ADT capacity.
N/A = Village Road does not exist under Adopted Circulation Element.

TABLE F
YEAR 2030 STREET SEGMENT OPERATIONS OF COUNTRY CLUB DRIVE
(RESIDENTIAL COLLECTOR)

Segment	Assumed Classification	Capacity (LOS C)[a]	With Proposed Project		With Adopted Land Use	
			ADT[b]	LOS[c]	ADT	LOS
Country Club Drive						
Nordahl Rd to Village Road	Residential Collector	4,500	7,500	O	**6800**	O
Kauana Loa Dr. to Village Rd	Residential Collector	4,500	7,500	O	N/A	-
Village Rd to Harmony Grove Rd	Residential Collector	4,500	10,000	O	3400	U

Footnotes:

a. Capacity obtained from San Diego County Segment Capacity Table.
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Level of Service.
Note: Volumes shown are for Option B, volumes on Country Club Drive are virtually identical for Options A and C.
U= Under 4,500 ADT capacity.
O= Over 4,500 ADT capacity.
N/A = Village Road does not exist under Adopted Circulation Element.

TABLE F1
NEAR TERM ANALYSIS OF COUNTRY CLUB DRIVE
(TOWN COLLECTOR)

Segment	Assumed Classification	Capacity (LOS E) [a]	Baseline [D]		Baseline + Project		Baseline + Project + Cumulative Projects	
			ADT[b]	LOS[c]	ADT	LOS	ADT	LOS
Country Club Drive								
Nordahl Rd to Kauana Loa Dr.	Town Collector	19,000	3,700	B	6,020	C	6,850	C
Kauana Loa Dr. to Village Rd [F]	Town Collector	19,000	2,000	A	4,040	B	4,870	B
Village Rd to Harmony Grove Rd	Town Collector	19,000	1,500	A	2,430	A	3,440	B

Footnotes:

a. LOS E capacity obtained from San Diego County Segment Capacity Table.
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Level of Service.
d. Baseline is existing with redistributed traffic volumes to account for Village Rd construction.
Volumes shown are for Option B, volumes on Country Club Drive are virtually identical for Options A and C.
e. Two Curves on this segment have curve radii less than 300 feet.

TABLE F2

YEAR 2030 STREET SEGMENT OPERATIONS OF COUNTRY CLUB DRIVE (TOWN COLLECTOR)

Segment	Assumed Classification	Capacity (LOS E) [a]	With Proposed Project		With Adopted Land Use	
			ADT[b]	LOS[d]	ADT	LOS
Country Club Drive						
Nordahl Rd to Kauana Loa Dr.	Town Collector	19,000	7,500	C	6800	C
Kauana Loa Dr. to Village Rd	Town Collector	19,000	7,500	C	N/A	-
Village Rd to Harmony Grove Rd	Town Collector	19,000	10,000	D	3400	B

Footnotes:

a. LOS E capacity obtained from San Diego County Segment Capacity Table.

b. Average Daily Traffic volumes (rounded to the nearest 10).

d. Level of Service.

Volumes shown are for Option B, volumes on Country Club Drive are virtually identical for Options A and C.

N/A = Village Road does not exist under Adopted Circulation Element.

Table G
Option Comparison

Option	Roadway Capacity
Town Collector	Forecasted volumes within capacity. Since LOS D is calculated on the on-site portion between Harmony Grove Road and Village Road and LOS C is required per the Public Facility Element, a General Plan Amendment would be needed.
Light Collector	Forecasted volume within capacity
Rural Light Collector	Forecasted volume within capacity
Minor Collector	Section of Country Club Drive between Harmony Grove Road and Village Road exceeds capacity of Minor Collector[1]
Residential Collector	Forecasted volume greatly exceeds capacity. Road would likely function as a Circulation Element Roadway even though road is not on the Circulation Element

TABLE H
NEAR TERM ANALYSIS OF VILLAGE ROAD
(RESIDENTIAL COLLECTOR)

Segment	Assumed Classification	Capacity (LOS C) [a]	Baseline [d]		Baseline + Project		Baseline + Project + Cumulative Projects	
			ADT[b]	LOS[c]	ADT	LOS	ADT	LOS
Village Road								
Country Club Dr to Harmony Grove Rd	Residential Collector	4,500	500	U	4,680	O	4,880	O
Harmony Grove Rd to Citracado Pkwy	Residential Collector	4,500	4,500	U	8,220	O	10,220	O

Footnotes:

a. LOS C capacity obtained from San Diego County Segment Capacity Table.
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Level of Service.
d. Baseline is existing with redistributed traffic volumes to account for Village Rd construction.

General Notes:

Volumes shown are for Option B
U = Under 4,500 ADT Capacity
O = Over 4,500 ADT Capacity

TABLE I
YEAR 2030 STREET SEGMENT OPERATIONS OF VILLAGE ROAD
(RESIDENTIAL COLLECTOR)

Segment	Assumed Classification	Capacity (LOS C) [a]	With Proposed Project	
			ADT[b]	LOS[c]
Village Road				
Country Club Dr to Harmony Grove Rd	Residential Collector	4,500	6,500	O
Harmony Grove Rd to Citracado Pkwy	Residential Collector	4,500	9,200	O

Footnotes:

a. Capacity obtained from San Diego County Segment Capacity Table.
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Level of Service.

General Notes:

Volumes shown are for Option B
U = Under 4,500 ADT Capacity
O = Over 4,500 ADT Capacity

TABLE J
NEAR TERM ANALYSIS OF VILLAGE ROAD
(RURAL LIGHT COLLECTOR)

Segment	Assumed Classification	Capacity (LOS E)[a]	Baseline[d]		Baseline + Project		Baseline + Project + Cumulative Projects	
			ADT[b]	LOS[c]	ADT	LOS	ADT	LOS
Village Road								
Country Club Dr to Harmony Grove Rd	Rural Light Collector	16,200	500	A	4,680	C	4,880	C
Harmony Grove Rd to Citracado Pkwy	Rural Light Collector	16,200	4,500	C	8,220	D	10,220	D

Footnotes:

a. Capacity obtained from San Diego County Segment Capacity Table.
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Level of Service.
d. Baseline is existing with redistributed traffic volumes to account for Village Rd construction.

General Notes:
Volumes shown are for Option B

TABLE K
YEAR 2030 STREET SEGMENT OPERATIONS OF VILLAGE ROAD
(RURAL LIGHT COLLECTOR)

Segment	Assumed Classification	Capacity (LOS E) [a]	With Proposed Project	
			ADT[b]	LOS[c]
Village Road				
Country Club Dr to Harmony Grove Rd	Rural Light Collector	16,200	6,500	C
Harmony Grove Rd to Citracado Pkwy	Rural Light Collector	16,200	9,200	D

Footnotes:

a. Capacity obtained from San Diego County Segment Capacity Table.
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Level of Service.

General Notes:

Volumes shown are for Option B

14.3 Village Road

Tables H-M show the forecasted near-term and Year 2030 traffic volumes on Village Road between Country Club Drive and Citracado Parkway. Tables H and I show the analysis results assuming a Residential Collector (30 MPH) designation, Tables J and K show the results assuming a Rural Light Collector (40 MPH) designation and Tables L & M show the results assuming a Minor Collector (35 MPH) designation. These tables show that the volumes exceed the capacity of a Residential Collector and Minor Collector but a Rural Light Collector can accommodate the forecasted traffic volumes. Therefore a Rural Light Collector classification is recommended for Village Road.

TABLE L
NEAR TERM ANALYSIS OF VILLAGE ROAD
(MINOR COLLECTOR)

Segment	Assumed Classification	Capacity (LOS D)	Baseline [d]		Baseline + Project		Baseline + Project + Cumulative Projects	
			ADT[b]	LOS[c]	ADT	LOS	ADT	LOS
Village Road								
Country Club Dr to Harmony Grove Rd	Minor Collector	7,000	500	A	4,680	C	4,880	C
Harmony Grove Rd to Citracado Pkwy	Minor Collector	7,000	4,500	C	8,220	E	10,220	F

Footnotes:

b. Average Daily Traffic volumes (rounded to the nearest 10).

c. Level of Service.

d. Baseline is existing with redistributed traffic volumes to account for Village Rd construction.

General Notes:

Volumes shown are for Option B

TABLE M
YEAR 2030 STREET SEGMENT OPERATIONS OF VILLAGE ROAD
(MINOR COLLECTOR)

Segment	Assumed Classification	Capacity (LOS D)	With Proposed Project	
			ADT[b]	LOS[c]
Village Road				
Country Club Dr to Harmony Grove Rd	Minor Collector	7,000	6,500	D
Harmony Grove Rd to Citracado Pkwy	Minor Collector	7,000	9,200	E

Footnotes:
b. Average Daily Traffic volumes (rounded to the nearest 10).
c. Level of Service.

General Notes:
Volumes shown are for Option B

15.0 SIGNIFICANCE OF IMPACTS AND MITIGATION MEASURES

The City of Escondido or County of San Diego significance criteria were utilized to determine significance of impacts within the corresponding jurisdictions. Significant impacts were calculated for each roadway network option independently.

The access related impacts are not necessarily capacity related. Mitigation is recommended at access points to provide safe and efficient access to the project site.

As previously stated, the portion of Citracado Parkway between Vineyard Avenue and Andreason Drive is a condition of the ERTC project and is currently under construction. This segment of Citracado Parkway was assumed to be completed prior to the proposed project in the near-term analysis. The project is not relying, in any way, on the construction of Citracado Parkway between Andreason Drive and Avenida del Diablo for mitigation.

15.1 Significant Impacts and Mitigation Measures

15.1.1 *Option A (Harmony Grove Road Cul-de-sac)*

Table 15–1 shows the intersection, street segment, freeway, ramp meter, and access related significant impacts and the proposed mitigation measures under Option A conditions.

15.1.2 *Option B (Village Road / Citracado Parkway Connection)*

Table 15–2 shows the intersection, street segment, freeway, ramp meter, and access related significant impacts and the proposed mitigation measures under Option B conditions.

15.1.3 *Option C (Improvements to the Existing Roadway Network)*

Table 15–3 shows the intersection, street segment, freeway, ramp meter, and access related significant impacts and the proposed mitigation measures under Option C conditions.

TABLE 15–1
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures[a]	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Harmony Grove Road					
Enterprise Street to Howard Avenue	City of Escondido	Cumulative	Contribute a fair share toward the upgrade of Harmony Grove Road between Enterprise Street and Howard Avenue to Local Collector Standards including dedicated left-turn lanes on Harmony Grove Road and Enterprise Street, Howard Avenue and Hale Avenue.	No[a]	1 Units (300 ADT)
Howard Avenue to Hale Avenue	City of Escondido	Cumulative	Contribute a fair share toward the upgrade of Harmony Grove Road between Howard Avenue and Hale Avenue to Local Collector Standards including dedicated left-turn lanes on Harmony Grove Road and Enterprise Street, Howard Avenue and Hale Avenue.	No[a]	1 Units (200 ADT)
Nordahl Road					
SR-78 to Mission Road	City of Escondido	Direct	Contribute a fair share towards the City planned widening of Nordahl Road between SR-78 westbound ramps and East Mission Road (including the bridge) to six lanes. A joint City / Caltrans project study report (PSR) is on-going at the interchange that will lead to the eventual improvement of the interchange.	No[a]	200 Units (740 ADT)

Note: The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–1 *(CONTINUED)*
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures[a]	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments *(continued)*					
Nordahl Road					
Mission Road to Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the City planned improvements of the Nordahl Road / East Mission Road intersection. The improvements are part of a City capital improvement program (CIP).	No[a]	200 Units (740 ADT)
Andreason Drive					
Vineyard Avenue to Enterprise Street	City Of Escondido	Direct	Upgrade existing Andreason Drive to City of Escondido four-Lane Collector standards per City Circulation Element.	No[a]	400 Units (1950 ADT)
Auto Park Way					
Andreason Drive to Hale Avenue	City of Escondido	Cumulative	Contribute a fair share towards improving the Hale Avenue / Auto Park Way intersection to include (1) right-turn lane, (1) shared through / left lane, and (1) left-turn lane on the southbound approach with split phasing on the north / south approaches. In addition, part of the project includes the provision of a second left-turn lane on Andreason Drive at Auto Park Way. These additional intersection capacities mitigate the significant segment impact.	No[a]	200 Units (770 ADT)
Hale Avenue to Valley Parkway	City of Escondido	Direct	Improve the Hale Avenue / Auto Park Way intersection to include (1) right-turn lane, (1) shared through / left lane, and (1) left-turn lane on the southbound approach with split phasing on the north / south approaches. The additional intersection capacity mitigates the direct segment impact.	No[a]	100 Units (680 ADT)

Note: The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–1 *(CONTINUED)*
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures[a]	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments *(continued)*					
Hale Avenue					
W. 9th Street to Harmony Grove Road	City of Escondido	Cumulative	Contribute a fair share towards the future upgrade of Hale Avenue to City Local Collector Standards between W. 9th Street and Harmony Grove Road. Also, to mitigate the "plan-to-plan" impact, this roadway needs to be upgraded to City Local Collector standards.	No[a]	600 Units (200 ADT)
Harmony Grove Road to Avenida del Diablo	City of Escondido	Cumulative	Contribute a fair share towards the future upgrade of Hale Avenue to City Local Collector Standards between Harmony Grove Road and Avenida del Diablo.	No[a]	600 Units (1170 ADT)
West 9th Street					
Auto Park Way to I-15	City of Escondido	Direct	Restripe the eastbound approach on West 9th Street at Auto Park Way to a right-turn lane, a shared through / right lane, and a left-turn lane and the provision of right-turn overlap phasing on the eastbound approach.	No[a]	300 Units (680 ADT)
Via Rancho Parkway					
East of Valley Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	100 Units (200 ADT)
Valley Parkway					
Avenida del Diablo to Citracado Parkway	City of Escondido	Cumulative	Contribute a fair share towards the City planned widening of Valley Parkway between Avenida del Diablo and Citracado Parkway to four lanes.	No[a]	300 Units (300 ADT)

Note: The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–1 *(CONTINUED)*
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures[a]	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments *(continued)*					
Citracado Parkway to Via Rancho Parkway	County of San Diego and City of Escondido	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact. In addition, install left-turn phasing on all four approaches at the Citracado Parkway / Via Rancho Parkway intersection and contribute a fair share toward the widening of Valley Parkway between Citracado Parkway and Via Rancho Parkway to 4-lanes to the satisfaction of both the City of Escondido and the County of San Diego.	Yes	1 Units (100 ADT)
South of Via Rancho Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	100Units (100 ADT)
B. Intersections					
Nordahl Road / SR-78 EB Ramps	City of Escondido / Caltrans	Direct	Contribute a fair share toward the City / Caltrans planned improvement of the SR-78 / Nordahl Road interchange to provide a six-lane bridge with dual left-turn lanes onto the ramps. A joint City / Caltrans project study report (PSR) is on-going at the interchange that will lead to the eventual improvement of the interchange.	No[a]	1 Unit (20 PM Peak Hour Trips)
Nordahl Road / Mission Road	City of Escondido	Direct	Contribute a fair share toward the City planned widening of Nordahl Road between SR-78 and E. Mission Road to six-lanes. The improvements are part of a City capital improvement program (CIP).	No[a]	1 Unit (30 PM Peak Hour Trips)

Note: The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–1 *(CONTINUED)*
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures[a]	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections *(continued)*					
Valley Parkway / I-15 SB Ramps	City of Escondido / Caltrans	Cumulative	Contribute a fair share toward the future improvements of the Valley Parkway / I-15 interchange.	No[a]	400 Units (80 PM Peak Hour Trips)
Via Rancho Parkway / I-15 SB Ramps (signalized intersection and the SB on-ramp meter)	City of Escondido / Caltrans	Cumulative	Contribute a fair share towards the future improvements of the I-15 / Via Rancho Parkway interchange.	No[a]	1 Unit (10 AM/PM Peak Hour Trips)
Citracado Parkway / Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the future signalization of the Citracado Parkway / Country Club Drive intersection. The improvements are part of a City capital improvement program (CIP).	No[a]	1 Unit (10 AM/PM Peak Hour Trips)
Harmony Grove Road / Village Road	County of San Diego	Direct	Signalize the Harmony Grove Road / Village Road intersection, when warrants are met and, provide an eastbound left-turn lane on Harmony Grove Road. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it. A conceptual striping plan is shown in Appendix Q.	Yes	1 Unit[d] (10 AM/PM Peak Hour Trips)
Harmony Grove Road / Howard Avenue	City of Escondido	Cumulative	Contribute a fair share towards the future signalization of this intersection and the provision of dedicated left-turn lanes.	No[a]	400 Units (130 PM Peak Hour Trips)
Hale Avenue / Harmony Grove Road	City of Escondido	Cumulative	Signalize this intersection and contribute a fair share towards the provision of dual eastbound left-turn lanes.	No[a]	300 Units (80 PM Peak Hour Trips)
Harmony Grove Road / Kauana Loa Drive	City of Escondido	Direct	When warrants are met, signalize the Harmony Grove Road / Kauana Loa Drive intersection.	Yes	600 Units (60 PM Peak Hour Trips)

Note: The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–1 *(CONTINUED)*
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures[a]	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections (Continued)					
Andreason Drive / Enterprise Street	City of Escondido	Cumulative	Contribute a fair share toward the installation of a traffic signal to the satisfaction of the city engineer.	No[a]	1 Unit (10 AM/PM Peak Hour Trips)
Valley Parkway / Avenida Del Diablo	City of Escondido	Cumulative	Contribute a fair share toward the installation of a traffic signal at this location. The improvements are part of a City capital improvement program (CIP).	No[a]	1 Unit (10 AM/PM Peak Hour Trips)
C. Freeways					
SR-78	Caltrans	Direct / Cumulative	Contribute a fair share towards the future improvements of SR-78 between Twin Oaks Valley Road and I-15.	No[a]	300 Units (70 AM/PM Peak Hour Trips)
I-15	Caltrans	Direct / Cumulative	Contribute a fair share towards the future improvements of I-15 between SR-78 and SR-56.	No[a]	600 Units (90 AM/PM Peak Hour Trips)
D. Project Access					
Harmony Grove Road / Entrance #1	County of San Diego	Direct	Install a traffic signal at the main project entrance on Harmony Grove Road when signal warrants are met. Provide dedicated left-turn lanes and right-turn lanes on Harmony Grove Road. Also provide a dedicated left-turn lane and a right-turn lane in the southbound direction at the project driveway. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it.	Yes	1 Unit[d] (10 AM/PM Peak Hour Trips)
Country Club Drive, Harmony Grove Road, and Village Rd Segments	County of San Diego	-	See *Table 15–2* for mitigation.	-	-

Note: The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–1 *(CONTINUED)*
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures[a]	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
D. Project Access (Continued)					
Harmony Grove Road / Wilgen Road	County of San Diego	Direct	Provide an eastbound left-turn pocket on Harmony Grove Road at the Harmony Grove Road / Wilgen Road intersection.	Yes	1 Unit
E. Project Construction					
	City of Escondido / County of San Diego	Direct	Prepare traffic control plans to manage construction traffic. Also ensure only City of Escondido and County of San Diego designated truck routes are used by heavy vehicles and trucks.	Yes	1 Unit
	County of San Diego	Direct	Obtain construction and encroachment permits for any work performed with the County right-of-way.	Yes	1 Unit

Note: The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–1 *(CONTINUED)*
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures[a]	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
F. Plan-to-Plan Analysis					
Hale Avenue					
West 9th Avenue to Harmony Grove Rd.	City of Escondido	Direct	Upgrade this roadway to City Local Collector standards.	Yes	1 Unit
Auto Parkway					
Andreason Dr to Valley Pkwy.	City of Escondido	Direct	Improve the Hale Avenue / Auto Park Way intersection to include (1) right-turn lane, (1) shared through / left lane, and (1) left-turn lane on the southbound approach with split phasing on the north / south approaches. The additional intersection capacity mitigates the direct segment impact.	Yes	1 Unit

General Notes:
There are several roadway improvements that are part of the project description and will become conditions of approval for the project. They are not, however, technically considered to be mitigation measures because by definition they are already part of the project. These improvements are discussed in Section 2.3 of the report and again, shall be conditions of approval for the project.

Footnotes:
a. The majority of the mitigation measures recommend reducing direct project impacts to a less than significant level, require construction in the City of Escondido while others require a "fair share" contribution to the City of Escondido.

Approval of the construction of physical improvements by the City of Escondido are reasonably anticipated but cannot be guaranteed. The City of Escondido does not have a defined traffic mitigation fee program or other program or payment plan that would assure that fair share payments were used for the relevant mitigation measures. Therefore, the project impacts in the City of Escondido are considered to be significant and cannot be mitigated to less than a significant level because the County of San Diego cannot reasonably assure or guarantee the City of Escondido will implement the recommended mitigation. Fair share contributions are also recommended to be paid to Caltrans in mitigation of project impacts. Caltrans has no fee mitigation program that would assure such payments would be used for the relevant mitigation measures that would lessen the project's significant impacts on the freeway, although such mitigation would reduce the project impact to a level less than significant.

An iterative process was conducted to determine the number of units to be built before each mitigation measure is required. For further information on the phasing analysis calculations see Section 15.3: Mitigation Measure Phasing of this report.

. Assumes one-half of non-residential uses are built.

d. Turn lanes needed at Unit 1, signal installed when warrants are met.

TABLE 15–2
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Harmony Grove Road					
Enterprise Street to Howard Avenue	City of Escondido	Cumulative	Contribute a fair share toward the upgrade of Harmony Grove Road between Enterprise Street and Howard Avenue to Local Collector Standards including dedicated left-turn lanes on Harmony Grove Road and Enterprise Street, Howard Avenue and Hale Avenue.	No[a]	100 Units (300 ADT)
Howard Avenue to Hale Avenue	City of Escondido	Cumulative	Contribute a fair share toward the upgrade of Harmony Grove Road between Howard Avenue and Hale Avenue to Local Collector Standards including dedicated left-turn lanes on Harmony Grove Road and Enterprise Street, Howard Avenue and Hale Avenue.	No[a]	100 Units (200 ADT)

Footnotes:

The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–2 *(CONTINUED)*
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments *(continued)*					
Nordahl Road					
SR-78 to Mission Road	City of Escondido	Direct	Contribute a fair share towards the City planned widening of Nordahl Road between SR-78 westbound ramps and East Mission Road (including the bridge) to six lanes. A joint City / Caltrans project study report (PSR) is on-going at the interchange that will lead to the eventual improvement of the interchange.	No[a]	200 Units (740 ADT)
Mission Road to Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the City planned improvements of the Nordahl Road / East Mission Road intersection. The improvements are part of a City capital improvement program (CIP).	No[a]	200 Units (740 ADT)
Andreason Drive					
Vineyard Avenue to Enterprise Street	City of Escondido	Cumulative	Contribute a fair share towards the restriping of Andreason Drive to City of Escondido 4-lane Collector standards	No[a]	300 Units (300 ADT)
Hale Avenue					
W. 9th Street to Harmony Grove Road	City of Escondido	Cumulative	Contribute a fair share towards the future upgrade of Hale Avenue to City Local Collector standards between W. 9th Street and Harmony Grove Road.	No[a]	1 Units (200 ADT)

Footnotes:

The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–2 *(CONTINUED)*
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES (VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments *(continued)*					
West 9th Street					
Hale Avenue to Valley Parkway	City of Escondido	Cumulative	Contribute a fair share towards the widening of W. 9th Street to City of Escondido Collector standards between Hale Avenue and Valley Parkway	No[a]	200 Units (300 ADT)
Valley Parkway to Auto Park Way	City of Escondido	Cumulative	Contribute a fair share towards restriping eastbound West 9th Street at Auto Park Way to provide a right-turn lane, a shared through / right lane, and a left-turn lane and provide right-turn overlap phasing at the eastbound approach. This intersection improvement would mitigate the segment impact.	No	100 Unit (300 ADT)
Auto Park Way to I-15	City of Escondido	Direct	Contribute fair share towards restriping the eastbound approach on West 9th Street at Auto Park Way to a right-turn lane, a shared through / right lane, and a left-turn lane and the provision of right-turn overlap phasing on the eastbound approach.	No[a]	300 Units (680 ADT)
Avenida del Diablo					
Citracado Parkway to Hale Avenue	City of Escondido	Cumulative	Install a cul-de-sac or implement turn restrictions with a raised median on Avenida del Diablo, east of Citracado Parkway.	Yes	300 Unit[e] (1810 ADT)
Via Rancho Parkway					
East of Valley Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. The right turn lane should be 150-feet long with a 90-foot transition. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	100 Units (200 ADT)

Footnotes:
The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–2 *(CONTINUED)*
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments *(continued)*					
Valley Parkway					
W. 11th Street to Avenida del Diablo	City of Escondido	Cumulative	Contribute a fair share towards the widening of Valley Parkway between W. 11th Street and Avenida del Diablo to 4 lanes.	No[a]	100 Units (300 ADT)
Citracado Parkway to Via Rancho Parkway	County of San Diego and City of Escondido	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact. The right turn lane should be 150-feet long with a 90-foot transition. This improvement will reduce delay significantly at this intersection, mitigating the segment impact. In addition, install left-turn phasing (this constitutes replacing the permissive signal phasing with protected (left-turn arrow) phasing) on all four approaches at the Citracado Parkway / Valley Parkway intersection and contribute a fair share toward the widening of Valley Parkway between Citracado Parkway and Via Rancho Parkway to 4-lanes to the satisfaction of both the City of Escondido and the County of San Diego.	Yes	100 Units (100 ADT)
South of Via Rancho Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. The right turn lane should be 150-feet long with a 90-foot transition. This improvement will reduce delay significantly at this intersection, mitigating the segment impact. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	200 Units (100 ADT)

Footnotes:

The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–2 *(CONTINUED)*
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections					
Nordahl Road / SR-78 EB Ramps	City of Escondido / Caltrans	Direct	Contribute a fair share toward the City / Caltrans planned improvement of the SR-78 / Nordahl Road interchange to provide a six-lane bridge with dual left-turn lanes onto the ramps. A joint City / Caltrans project study report (PSR) is on-going at the interchange that will lead to the eventual improvement of the interchange.	No[a]	1 Unit 20 PM Peak Hour Trips
Nordahl Road / Mission Road	City of Escondido	Direct	Contribute a fair share toward the City planned widening of Nordahl Road between SR-78 and E. Mission Road to six-lanes. The improvements are part of a City capital improvement program (CIP).	No[a]	1 Unit 40 PM Peak Hour Trips
Valley Parkway / I-15 SB Ramps	City of Escondido / Caltrans	Cumulative	Contribute a fair share toward the future improvements of the Valley Parkway / I-15 interchange.	No[a]	600 Units 120 PM Peak Hour Trips
West 9th Street / Auto Park Way	City of Escondido	Cumulative	Contribute a fair share towards restriping eastbound West 9th Street at Auto Parkway to provide a right-turn lane, a shared through / right lane, a left-turn lane, and provide right-turn overlap phasing at the eastbound approach.	No	1 Unit
Via Rancho Parkway / I-15 SB Ramps (signalized intersection and the SB on-ramp meter)	City of Escondido / Caltrans	Cumulative	Contribute a fair share towards the future improvements of the I-15 / Via Rancho Parkway interchange.	No[a]	1 Unit 10 AM/PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–2 *(CONTINUED)*
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES (VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections *(continued)*					
Citracado Parkway / Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the future signalization of the Citracado Parkway / Country Club Drive intersection. This improvement is part of the City CIP.	No[a]	1 Unit 10 AM/PM Peak Hour Trips
Harmony Grove Road / Village Road	County of San Diego	Direct	Signalize the Harmony Grove Road / Village Road intersection when signal warrants are met. Provide an eastbound left-turn lane on Harmony Grove Road. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it. A Conceptual Striping Plan is shown in Appendix Q	Yes	1 Unit 10 AM/PM Peak Hour Trips
Harmony Grove Road / Enterprise Street	City of Escondido	Cumulative	Contribute a fair share towards the signalization of this intersection, the provision of dedicated left-turn lanes on each approach and northbound right-turn overlap phasing.	No[a]	500 Units 160 PM Peak Hour Trips
Hale Avenue / W. 11th Street	City of Escondido	Cumulative	Contribute a fair share toward the signalization of this intersection.	No[a]	100 Units 20 AM Peak Hour Trips
Hale Avenue / Harmony Grove Road	City of Escondido	Cumulative	Signalize this intersection and contribute a fair share towards providing dual eastbound left-turn lanes.	No[a]	1 Unit 30 PM Peak Hour Trips
Hale Avenue / Avenida Del Diablo	City of Escondido	Direct	Install a traffic signal and provide an eastbound left-turn lane to the satisfaction of the City Engineer; or cul-de-sac Avenida del Diablo just east of Citracado Parkway.	Yes	1 Unit 20 PM Peak Hour Trips
Valley Parkway / Avenida Del Diablo	City of Escondido	Direct	Cul-de-sac or implement turn restrictions with a raised median on Avenida Del Diablo just east of Citracado Parkway.	Yes	300 Unit[e] 10 AM/PM Peak Hour Trips

The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–2 *(CONTINUED)*
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
C. Freeways					
SR-78	Caltrans	Cumulative	Contribute a fair share towards the future improvements of SR-78 between Twin Oaks Valley Road and I-15.	No[a]	300 Units 70 AM/PM Peak Hour Trips
I-15	Caltrans	Cumulative	Contribute a fair share towards the future improvements of I-15 between SR-78 and SR-56	No[a]	600 units 90 AM/PM Peak Hour Trips
D. Project Access					
Harmony Grove Road / Entrance #1	County of San Diego	Direct	Install a traffic signal at the main project entrance on Harmony Grove Road when signal warrants are met. Provide dedicated left-turn lanes and right-turn lanes on Harmony Grove Road. Also provide a dedicated left-turn lane and a right-turn lane in the southbound direction at the project driveway. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it.	Yes	1 Unit[d]
Harmony Grove Road / Wilgen Road	County of San Diego	Direct	Provide an eastbound left-turn pocket on Harmony Grove Road at the Harmony Grove Road / Wilgen Road intersection.	Yes	1 Unit 10 AM/PM Peak Hour Trips

TABLE 15–2 *(CONTINUED)*
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES (VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
Country Club Drive					
Harmony Grove Road to Village Road: 40 mph	County of San Diego	Cumulative	Obtain a GPA to allow LOS D.	Yes	1 Unit
35 mph	County of San Diego	Cumulative	Add left-turn lanes at project driveways and dedicated turn lanes at the intersections of Country Club Drive with Harmony Grove Road and Village Road. (Refer to Figure 15-1 of the TIA.)	No	1 Unit
30 mph and Retention of Existing Conditions	County of San Diego	Cumulative	Add left-turn lanes at project driveways and dedicated turn lanes at the intersections of Country Club Drive with Harmony Grove Road and Village Road. (Refer to Figure 15-1 of the TIA.)	No	1 Unit
Village Road to Kauana Loa Drive: 35 mph	County of San Diego	Cumulative	Add dedicated left-turn lanes at the intersection of Village Road with Country Club Drive. (Refer to Figure 15-1 of the TIA.)	No	1 Unit
30 mph and Retention of Existing Conditions	County of San Diego	Cumulative	Add dedicated left-turn lanes at the intersection of Village Road with Country Club Drive (Refer to Figure 15-1 of the TIA.)	No	1 Unit
Village Road					
Country Club Drive to Harmony Grove Road: 35 mph	County of San Diego	Cumulative	Obtain a GPA to allow LOS D.	Yes	1 Unit
30 mph	County of San Diego	Direct	Add left-turn lanes at Village Road project driveways and dedicated turn lanes at the intersections of Village Road with Country Club Drive and Harmony Grove Road. (Refer to Figure 15-1 of the TIA.)	No	1 Unit
Harmony Grove Road					
Country Club Drive to Village Road: 35 mph, 30 mph and Retention of Existing Conditions	County of San Diego	Cumulative	Install turn lanes at the intersections of Harmony Grove Road with Village Road and Country Club Drive. (Refer to Figure 15-1 of the TIA.)	No	1 Unit

The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–2 *(CONTINUED)*
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
E. Project Construction					
	City of Escondido / County of San Diego	Direct	Prepare traffic control plans to manage construction traffic. Also ensure only City of Escondido and County of San Diego designated truck routes are used by heavy vehicles and trucks.	Yes	1 Unit 10 AM/PM Peak Hour Trips
	County of San Diego	Direct	Obtain construction and encroachment permits for any work performed with the County right-of-way.	Yes	1 Unit 10 AM/PM Peak Hour Trips

General Notes:

There are several roadway improvements that are part of the project description and will become conditions of approval for the project. They are not, however, technically considered to be mitigation measures because by definition they are already part of the project. These improvements are discussed in Section 2.3 of the report and again, shall be conditions of approval for the project.

The number of trips that could be added to the location before a significant impact is shown in parenthesis.

Footnotes:

a. The majority of the mitigation measures recommend reducing direct project impacts to a less than significant level, require construction in the City of Escondido while others require a "fair share" contribution to the City of Escondido.

Approval of the construction of physical improvements by the City of Escondido are reasonably anticipated but cannot be guaranteed. The City of Escondido does not have a defined traffic mitigation fee program or other program or payment plan that would assure that fair share payments were used for the relevant mitigation measures. Therefore, the project impacts in the City of Escondido are considered to be significant and cannot be mitigated to less than a significant level because the County of San Diego cannot reasonably assure or guarantee the City of Escondido will implement the recommended mitigation. Fair share contributions are also recommended to be paid to Caltrans in mitigation of project impacts. Caltrans has no fee mitigation program that would assure such payments would be used for the relevant mitigation measures that would lessen the project's significant impacts on the freeway, although such mitigation would reduce the project impact to a level less than significant.

b. An iterative process was conducted to determine the number of units to be built before each mitigation measure is required. For further information on the phasing analysis calculations see Section 15.3: Mitigation Measure Phasing of this report.

c. Assumes one-half of non-residential uses are built.

d. Turn lanes needed at 1 unit, signal installed when warrants met.

e. Mitigation needed when Village Road is extended to Citracado Parkway.

TABLE 15–3
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Nordahl Road					
SR-78 to Mission Road	City of Escondido	Direct	Contribute a fair share towards the City planned widening of Nordahl Road between SR-78 westbound ramps and East Mission Road (including the bridge) to six lanes. A joint City / Caltrans project study report is on-going at the interchange that will lead to the eventual improvement of the interchange.	No[a]	200 Units (740 ADT)
Mission Road to Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the City planned improvements of the Nordahl Road / East Mission Road intersection. The improvements are part of a City capital improvement project (CIP).	No[a]	200 Units (740 ADT)
Andreason Drive					
Vineyard Avenue to Enterprise Street	City of Escondido	Cumulative	Contribute a fair share towards the restriping of Andreason Drive to City of Escondido 4-lane Collector standards	No[a]	100 Units (300 ADT)

Footnotes:
The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–3 *(CONTINUED)*
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments *(continued)*					
Auto Park Way					
Hale Avenue to Valley Parkway	City of Escondido	Cumulative	Contribute a fair share toward upgrading the signal at the Hale Avenue / Auto Park Way intersection to include (1) right-turn lane, (1) shared through / left lane, and (1) left-turn lane on the southbound approach with split phasing on the north / south approaches. The additional intersection capacity mitigates the cumulative segment impact.	No[a]	600 Units (680 ADT)
Hale Avenue					
W. 9th Street to Harmony Grove Road	City of Escondido	Direct	Upgrade Hale Avenue to City Local Collector Standards between W. 9th Street and Harmony Grove. This is also a condition of the Escondido Research and Technology Park (ERTC).	No[a]	1 Units (200 ADT)
West 9th Street					
Hale Avenue to Valley Parkway	City of Escondido	Cumulative	Contribute a fair share towards the widening of W. 9th Street to City of Escondido Collector standards between Hale Avenue and Valley Parkway	No[a]	100 Units (300 ADT)
Valley Parkway to Auto Park Way	City of Escondido	Direct	Restripe the eastbound approach on West 9th Street at Auto Park Way to a right-turn lane, a shared through / right lane, and a left-turn lane and the provision of right-turn overlap phasing on the eastbound approach.	No[a]	100 Units (300 ADT)
Auto Park Way to I-15	City of Escondido	Direct	Restripe the eastbound approach on West 9th Street at Auto Park Way to a right-turn lane, a shared through / right lane, and a left-turn lane and the provision of right-turn overlap phasing on the eastbound approach.	No[a]	300 Units (680 ADT)

Footnotes:

The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–3 *(CONTINUED)*
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments *(continued)*					
Via Rancho Parkway					
East of Valley Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	100 Units (200 ADT)
Valley Parkway					
Avenida del Diablo to Citracado Parkway	City of Escondido	Cumulative	Contribute a fair share towards the City planned widening of Valley Parkway between Avenida del Diablo and Citracado Parkway to four lanes.	No[a]	300 Units (300 ADT)
Citracado Parkway to Via Rancho Parkway	County of San Diego and City of Escondido	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact. In addition, install left-turn phasing on all four approaches at the Citracado Parkway / Via Rancho Parkway intersection and contribute a fair share toward the widening of Valley Parkway between Citracado Parkway and Via Rancho Parkway to 4-lanes to the satisfaction of both the City of Escondido and the County of San Diego.	Yes	1 Units (100 ADT)
South of Via Rancho Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	100 Units (100 ADT)

Footnotes:

The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–3 *(CONTINUED)*
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections					
Nordahl Road / SR-78 EB Ramps	City of Escondido / Caltrans	Direct	Contribute a fair share toward the planned improvement of the SR-78 / Nordahl Road interchange to provide a six-lane bridge with dual left-turn lanes onto the ramps. A joint City / Caltrans PSR is on-going at the interchange that will lead to the eventual improvement of the interchange.	No[a]	1 Unit 20 PM Peak Hour Trips
Nordahl Road / Mission Road	City of Escondido	Direct	Contribute a fair share toward the City planned widening of Nordahl Road between SR-78 and E. Mission Road to six-lanes. In addition to the City planned improvements, other additional turn lanes are needed to meet City LOS standards. The improvements are part of a City CIP.	No[a]	1 Unit 40 PM Peak Hour Trips
Valley Parkway / I-15 SB Ramps	City of Escondido / Caltrans	Cumulative	Contribute a fair share toward the future improvements of the Valley Parkway / I-15 interchange.	No[a]	600 Units
Via Rancho Parkway / I-15 SB Ramps (signalized intersection and the SB on-ramp meter)	City of Escondido / Caltrans	Cumulative	Contribute a fair share towards the future improvements of the I-15 / Via Rancho Parkway interchange.	No[a]	1 Unit 10 AM/PM Peak Hour Trips
Citracado Parkway / Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the future signalization of the Citracado Parkway / Country Club Drive intersection. This improvement is part of the City CIP.	No[a]	1 Unit 10 AM/PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–3 *(CONTINUED)*
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections *(continued)*					
Harmony Grove Road / Village Road	County of San Diego	Direct	Signalize the Harmony Grove Road / Village Road intersection once signal warrants are met and provide an eastbound left-turn lane on Harmony Grove Road. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it. A conceptual striping plan is shown in Appendix Q.	Yes	1 Unit[d] 10 AM/PM Peak Hour Trips
Harmony Grove Road / Kauana Loa Drive	City of Escondido	Cumulative	Contribute a fair share towards the future signalization of this intersection.	Yes	200 Units 190 PM Peak Hour Trips
Andreason Drive / Enterprise Street	City of Escondido	Cumulative	Contribute a fair share toward the installation of a traffic signal to the satisfaction of the city engineer.	No[a]	600 Units 150 PM Peak Hour Trips
Harmony Grove Road / Enterprise Street	City of Escondido	Direct	Contribute a fair share towards the signalization of this intersection, the provision of dedicated left-turn lanes on each approach and northbound right-turn overlap phasing.	No[a]	1 Unit 10 AM/Peak Hour Trips
Harmony Grove Road / Howard Avenue	City of Escondido	Direct	Signalize this intersection with and provide dedicated left-turn lanes.	No[a]	1 Unit 50 PM Peak Hour Trips
Hale Avenue / West 11th Street	City of Escondido	Cumulative	Contribute a fair share toward the signalization of this intersection.	No[a]	100 Units 60 PM Peak Hour Trips
Harmony Grove Road / Hale Avenue	City of Escondido	Direct	Signalize the intersection and provide 2 eastbound lanes (one left-turn lane and one shared left / right lane and dual southbound right-turn lanes).	No[a]	1 Unit 10 PM Peak Hour Trips
Valley Parkway / Avenida Del Diablo	City of Escondido	Cumulative	Contribute a fair share toward the Installation of a traffic signal at this location. This improvement is part of the City CIP.	No[a]	1 Unit 10 AM/PM Peak Hour Trips

Footnotes:
*. See Option A
The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–3 *(CONTINUED)*
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES (IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
C. Freeways					
SR-78	Caltrans	Cumulative	Contribute a fair share towards the future improvements of SR-78 between Twin Oaks Valley Road and I-15.	No[a]	300 Units 70 AM/PM Peak Hour Trips
I-15	Caltrans	Cumulative	Contribute a fair share towards the future improvements of I-15 between SR-78 and SR-56	No[a]	600 Units 90 AM Peak Hour Trips
D. Project Access					
Harmony Grove Road / Entrance #1	County of San Diego	Direct	Install a traffic signal at the main project entrance on Harmony Grove Road when signal warrants are met. Provide dedicated left-turn lanes and right-turn lanes on Harmony Grove Road. Also provide a dedicated left-turn lane and a right-turn lane in the southbound direction at the project driveway. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it.	Yes	1 Unit[d] 10 AM/PM Peak Hour Trips
Country Club Drive, Harmony Grove, and Village Rd Segments	County of San Diego	-	See *Table 15–2* for mitigation.	-	-
Harmony Grove Road / Wilgen Road	County of San Diego	Direct	Provide an eastbound left-turn pocket on Harmony Grove Road at the Harmony Grove Road / Wilgen Road intersection.	Yes	1 Unit 10 AM/PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact is shown in parenthesis. See last page of table for footnote explanations.

TABLE 15–3 *(CONTINUED)*
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES (IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
E. Project Construction					
	City of Escondido / County of San Diego	Direct	Prepare traffic control plans to manage construction traffic. Also ensure only City of Escondido and County of San Diego designated truck routes are used by heavy vehicles and trucks.	Yes	1 Unit 10 AM/PM Peak Hour Trips
	County of San Diego	Direct	Obtain construction and encroachment permits for any work performed with the County right-of-way.	Yes	1 Unit
F. Plan-to-Plan Analysis					
Hale Avenue					
West 9th Street to Harmony Grove Road	City of Escondido	Direct	Upgrade this roadway to City Local Collector standards.	Yes	1 Unit

General Notes:

There are several roadway improvements that are part of the project description and will become conditions of approval for the project. They are not, however, technically considered to be mitigation measures because by definition they are already part of the project. These improvements are discussed in Section 2.3 of the report and again, shall be conditions of approval for the project. The number of trips that could be added to the location before a significant impact is shown in parenthesis.

Footnotes:

a. The majority of the mitigation measures recommend reducing direct project impacts to a less than significant level, require construction in the City of Escondido while others require a "fair share" contribution to the City of Escondido.

Approval of the construction of physical improvements by the City of Escondido are reasonably anticipated but cannot be guaranteed. The City of Escondido does not have a defined traffic mitigation fee program or other program or payment plan that would assure that fair share payments were used for the relevant mitigation measures. Therefore, the project impacts in the City of Escondido are considered to be significant and cannot be mitigated to less than a significant level because the County of San Diego cannot reasonably assure or guarantee the City of Escondido will implement the recommended mitigation. Fair share contributions are also recommended to be paid to Caltrans in mitigation of project impacts. Caltrans has no fee mitigation program that would assure such payments would be used for the relevant mitigation measures that would lessen the project's significant impacts on the freeway, although such mitigation would reduce the project impact to a level less than significant.

b. An iterative process was conducted to determine the number of units to be built before each mitigation measure is required. For further information on the phasing analysis calculations see Section 15.3: Mitigation Measure Phasing of this report.

c. Assumes one half of non-residential uses are built.

d. Turn lanes needed at unit 1, signal installed when warrants are met.

TABLE 15–4
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Harmony Grove Road					
Enterprise Street to Howard Avenue	City of Escondido	Cumulative	Contribute a fair share toward the upgrade of Harmony Grove Road between Enterprise Street and Howard Avenue to Local Collector Standards including dedicated left-turn lanes on Harmony Grove Road and Enterprise Street, Howard Avenue and Hale Avenue.	No	1 Units (300 ADT)
Howard Avenue to Hale Avenue	City of Escondido	Cumulative	Contribute a fair share toward the upgrade of Harmony Grove Road between Howard Avenue and Hale Avenue to Local Collector Standards including dedicated left-turn lanes on Harmony Grove Road and Enterprise Street, Howard Avenue and Hale Avenue.	No	1 Units (200 ADT)
Valley Parkway					
Citracado Parkway to Via Rancho Parkway	County of San Diego and City of Escondido	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact. In addition, install left-turn phasing on all four approaches at the Citracado Parkway / Via Rancho Parkway intersection and contribute a fair share toward the widening of Valley Parkway between Citracado Parkway and Via Rancho Parkway to 4-lanes to the satisfaction of both the City of Escondido and the County of San Diego.	Yes	1 Units (100 ADT)
B. Intersections					
Nordahl Road / SR-78 EB Ramps	City of Escondido / Caltrans	Direct	Contribute a fair share toward the City / Caltrans planned improvement of the SR-78 / Nordahl Road interchange to provide a six-lane bridge with dual left-turn lanes onto the ramps. A joint City / Caltrans project study report (PSR) is on-going at the interchange that will lead to the eventual improvement of the interchange.	No	1 Unit (20 PM Peak Hour Trips)
Nordahl Road / Mission Road	City of Escondido	Direct	Contribute a fair share toward the City planned widening of Nordahl Road between SR-78 and E. Mission Road to six-lanes. The improvements are part of a past City capital improvement program (CIP).	No	1 Unit (30 PM Peak Hour Trips)

Footnotes: The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–4
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections *(continued)*					
Via Rancho Parkway / I-15 SB Ramps (signalized intersection and the SB on-ramp meter)	City of Escondido / Caltrans	Cumulative	Contribute a fair share towards the future improvements of the I-15 / Via Rancho Parkway interchange.	No	1 Unit (10 AM/PM Peak Hour Trips)
Citracado Parkway / Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the future signalization of the Citracado Parkway / Country Club Drive intersection. The improvements are part of a City capital improvement program (CIP).	No	1 Unit (10 AM/PM Peak Hour Trips)
Harmony Grove Road / Village Road	County of San Diego	Direct	Signalize the Harmony Grove Road / Village Road intersection. When warrants are met, provide an eastbound left-turn lane on Harmony Grove Road. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it.	Yes	1 Unit[d] (10 AM/PM Peak Hour Trips)
Andreason Drive / Enterprise Street	City of Escondido	Cumulative	Contribute a fair share toward the installation of a traffic signal to the satisfaction of the city engineer.	No	1 Unit (10 AM/PM Peak Hour Trips)
Valley Parkway / Avenida Del Diablo	City of Escondido	Cumulative	Contribute a fair share toward the installation of a traffic signal at this location. The improvements are part of a City capital improvement program (CIP).	No	1 Unit (10 AM/PM Peak Hour Trips)

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–4
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
D. Project Access					
Harmony Grove Road / Entrance #1	County of San Diego	Direct	Install a traffic signal at the main project entrance on Harmony Grove Road when signal warrants are met. Provide dedicated left-turn lanes and right-turn lanes on Harmony Grove Road. Also provide a dedicated left-turn lane and a right-turn lane in the southbound direction at the project driveway. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it.	Yes	1 Unit[d] (10 AM/PM Peak Hour Trips)
Country Club Drive and Village Rd Segments	County of San Diego	Direct	Provide the lane configuration depicted on Figure 15-1 on Village Rd and Country Club Drive. Ensure County intersection standards are met. Install signals when warrants are met. Conceptual striping plans are provided in Appendix Q. Classify these two roads at a classification greater than a Residential Collector.	Yes	1 Unit (10 AM/PM Peak Hour Trips)
Harmony Grove Road / Wilgen Road	County of San Diego	Direct	Provide an eastbound left-turn pocket on Harmony Grove Road at the Harmony Grove Road / Wilgen Road intersection.	Yes	1 Unit (10 AM/PM Peak Hour Trips)
E. Project Construction					
	City of Escondido / County of San Diego	Direct	Prepare traffic control plans to manage construction traffic. Also ensure only City of Escondido and County of San Diego designated truck routes are used by heavy vehicles and trucks.	Yes	1 Unit

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–4
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
E. Project Construction *(continued)*					
	County of San Diego	Direct	Obtain construction and encroachment permits for any work performed with the County right-of-way.	Yes	1 Unit
F. Plan-to-Plan Analysis					
Hale Avenue					
West 9th Avenue to Harmony Grove Road	City of Escondido	Direct	Upgrade this roadway to City Local Collector standards.	Yes	1 Unit
Auto Parkway					
Andreason Dr to Valley Pkwy.	City of Escondido	Direct	Improve the Hale Avenue / Auto Park Way intersection to include (1) right-turn lane, (1) shared through / left lane, and (1) left-turn lane on the southbound approach with split phasing on the north / south approaches. The additional intersection capacity mitigates the direct segment impact.	Yes	1 Unit

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–4
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [100 UNIT]
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Auto Park Way					
Hale Avenue to Valley Parkway	City of Escondido	Direct	Improve the Hale Avenue / Auto Park Way intersection to include (1) right-turn lane, (1) shared through / left lane, and (1) left-turn lane on the southbound approach with split phasing on the north / south approaches. The additional intersection capacity mitigates the direct segment impact.	No	100 Units (680 ADT)
Via Rancho Parkway					
East of Valley Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	100 Units (200 ADT)
Valley Parkway					
South of Via Rancho Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	100Units (100 ADT)

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–4
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [200 UNIT]
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Nordahl Road					
SR-78 to Mission Road	City of Escondido	Direct	Contribute a fair share towards the City planned widening of Nordahl Road between SR-78 westbound ramps and East Mission Road (including the bridge) to six lanes. A joint City / Caltrans project study report (PSR) is on-going at the interchange that will lead to the eventual improvement of the interchange.	No	200 Units (740 ADT)
Mission Road to Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the City planned improvements of the Nordahl Road / East Mission Road intersection. The improvements are part of a past City capital improvement program (CIP).	No	200 Units (740 ADT)
Auto Park Way					
Andreason Drive to Hale Avenue	City of Escondido	Cumulative	Contribute a fair share towards improving the Hale Avenue / Auto Park Way intersection to include (1) right-turn lane, (1) shared through / left lane, and (1) left-turn lane on the southbound approach with split phasing on the north / south approaches. In addition, part of the project includes the provision of a second left-turn lane on Andreason Drive at Auto Park Way. These additional intersection capacities mitigate the significant segment impact.	No	200 Units (770 ADT)

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–4
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [300 UNIT]
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
West 9th Street					
Auto Park Way to I-15	City of Escondido	Direct	Restripe the eastbound approach on West 9th Street at Auto Park Way to a right-turn lane, a shared through / right lane, and a left-turn lane and the provision of right-turn overlap phasing on the eastbound approach.	No	300 Units (680 ADT)
Valley Parkway					
Avenida del Diablo to Citracado Parkway	City of Escondido	Cumulative	Contribute a fair share towards the City planned widening of Valley Parkway between Avenida del Diablo and Citracado Parkway to four lanes.	No	300 Units (300 ADT)
B. Intersections					
Hale Avenue / Harmony Grove Road	City of Escondido	Cumulative	Signalize this intersection and contribute a fair share towards the provision of dual eastbound left-turn lanes.	No	300 Units (80 PM Peak Hour Trips)
C. Freeways					
SR-78	Caltrans	Direct / Cumulative	Contribute a fair share towards the future improvements of SR-78 between Twin Oaks Valley Road and I-15.	No	300 Units (70 AM/PM Peak Hour Trips)

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–4
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [400 UNIT]
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Andreason Drive					
Vineyard Avenue to Enterprise Street	City Of Escondido	Direct	Upgrade existing Andreason Drive to City of Escondido four-Lane Collector standards per City Circulation Element.	No	400 Units (1950 ADT)
B. Intersections					
Valley Parkway / I-15 SB Ramps	City of Escondido / Caltrans	Cumulative	Contribute a fair share toward the future improvements of the Valley Parkway / I-15 interchange.	No	400 Units (80 PM Peak Hour Trips)
Harmony Grove Road / Howard Avenue	City of Escondido	Cumulative	Contribute a fair share towards the future signalization of this intersection and the provision of dedicated left-turn lanes.	No	400 Units (130 PM Peak Hour Trips)

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–4
OPTION A: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [600 UNIT]
(HARMONY GROVE ROAD CUL-DE-SAC)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Hale Avenue					
W. 9th Street to Harmony Grove Road	City of Escondido	Cumulative	Contribute a fair share towards the future upgrade of Hale Avenue to City Local Collector Standards between W. 9th Street and Harmony Grove Road. Also, to mitigate the "plan-to-plan" impact, this roadway needs to be upgraded to City Local Collector standards.	No	600 Units (200 ADT)
Harmony Grove Road to Avenida del Diablo	City of Escondido	Cumulative	Contribute a fair share towards the future upgrade of Hale Avenue to City Local Collector Standards between Harmony Grove Road and Avenida del Diablo.	No	600 Units (1170 ADT)
B. Intersections					
Harmony Grove Road / Kauana Loa Drive	City of Escondido	Direct	When warrants are met, signalize the Harmony Grove Road / Kauana Loa Drive intersection.	Yes	600 Units (60 PM Peak Hour Trips)

General Notes:

There are several roadway improvements that are part of the project description and will become conditions of approval for the project. They are not, however, technically considered to be mitigation measures because by definition they are already part of the project. These improvements are discussed in Section 2.3 of the report and again, shall be conditions of approval for the project.

Footnotes:

a. The majority of the mitigation measures recommend reducing direct project impacts to a less than significant level, require construction in the City of Escondido while others require a "fair share" contribution to the City of Escondido.
Approval of the construction of physical improvements by the City of Escondido are reasonably anticipated but cannot be guaranteed. The City of Escondido does not have a defined traffic mitigation fee program or other program or payment plan that would assure that fair share payments were used for the relevant mitigation measures. Therefore, the project impacts in the City of Escondido are considered to be significant and cannot be mitigated to less than a significant level because the County of San Diego cannot reasonably assure or guarantee the City of Escondido will implement the recommended mitigation. Fair share contributions are also recommended to be paid to Caltrans in mitigation of project impacts. Caltrans has no fee mitigation program that would assure such payments would be used for the relevant mitigation measures that would lessen the project's significant impacts on the freeway, although such mitigation would reduce the project impact to a level less than significant.

b. An iterative process was conducted to determine the number of units to be built before each mitigation measure is required. For further information on the phasing analysis calculations see Section 15.3: Mitigation Measure Phasing of this report.

c. Assumes one-half of non-residential uses are built. Additional residential uses could be built if a portion of the non-residential uses were not built.

d. Turn lanes needed at unit 1, signal installed when warrants are met.

TABLE 15–5
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Hale Avenue					
W. 9th Street to Harmony Grove Road	City of Escondido	Cumulative	Contribute a fair share towards the future upgrade of Hale Avenue to City Local Collector standards between W. 9th Street and Harmony Grove Road. Also, to mitigate the plan-to-plan impact, this roadway needs to be upgraded to City Local Collector standards.	No	1 Units (200 ADT)

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–5
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections					
Nordahl Road / SR-78 EB Ramps	City of Escondido / Caltrans	Direct	Contribute a fair share toward the City / Caltrans planned improvement of the SR-78 / Nordahl Road interchange to provide a six-lane bridge with dual left-turn lanes onto the ramps. A joint City / Caltrans project study report (PSR) is on-going at the interchange that will lead to the eventual improvement of the interchange.	No	1 Unit 20 PM Peak Hour Trips
Nordahl Road / Mission Road	City of Escondido	Direct	Contribute a fair share toward the City planned widening of Nordahl Road between SR-78 and E. Mission Road to six-lanes. The improvements are part of a past City capital improvement program (CIP).	No	1 Unit 40 PM Peak Hour Trips
West 9th Street / Auto Park Way	City of Escondido	Cumulative	Contribute a fair share towards restriping eastbound West 9th Street at Auto Parkway to provide a right-turn lane, a shared through / right lane, a left-turn lane, and provide right-turn overlap phasing at the eastbound approach.	No	1 Unit 10 AM/PM Peak Hour Trips
Via Rancho Parkway / I-15 SB Ramps (signalized intersection and the SB on-ramp meter)	City of Escondido / Caltrans	Cumulative	Contribute a fair share towards the future improvements of the I-15 / Via Rancho Parkway interchange.	No	1 Unit 10 AM/PM Peak Hour Trips
Citracado Parkway / Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the future signalization of the Citracado Parkway / Country Club Drive intersection. This improvement is part of the City CIP.	No	1 Unit 10 AM/PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–5
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections *(continued)*					
Harmony Grove Road / Village Road	County of San Diego	Direct	Signalize the Harmony Grove Road / Village Road intersection when signal warrants are met and provide an eastbound left-turn lane on Harmony Grove Road. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it. A Conceptual Striping Plan is shown in Appendix Q.	Yes	1 Unit[d] 10 AM/PM Peak Hour Trips
Hale Avenue / Harmony Grove Road	City of Escondido	Cumulative	Signalize this intersection and contribute a fair share towards providing dual eastbound left-turn lanes.	No	1 Unit 30 PM Peak Hour Trips
Hale Avenue / Avenida Del Diablo	City of Escondido	Direct	Install a traffic signal and provide an eastbound left-turn lane to the satisfaction of the City Engineer; or cul-de-sac Avenida del Diablo just east of Citracado Parkway.	Yes	1 Unit 20 PM Peak Hour Trips
D. Project Access					
Harmony Grove Road / Entrance #1	County of San Diego	Direct	Install a traffic signal at the main project entrance on Harmony Grove Road when signal warrants are met. Provide dedicated left-turn lanes and right-turn lanes on Harmony Grove Road. Also provide a dedicated left-turn lane and a right-turn lane in the southbound direction at the project driveway. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it.	Yes	1 Unit 10 AM/PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–5
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
D. Project Access *(continued)*					
Harmony Grove Road / Wilgen Road	County of San Diego	Direct	Provide an eastbound left-turn pocket on Harmony Grove Road at the Harmony Grove Road / Wilgen Road intersection.	Yes	1 Unit 10AM/PM Peak Hour Trips
Country Club Drive					
Harmony Grove Road to Village Road: 40 mph	County of San Diego	Cumulative	Obtain a GPA to allow LOS D.	Yes	1 Unit
35 mph	County of San Diego	Cumulative	Add left-turn lanes at project driveways and dedicated turn lanes at the intersections of Country Club Drive with Harmony Grove Road and Village Road. (Refer to Figure 15-1 of the TIA.)	No	1 Unit
30 mph and Retention of Existing Conditions	County of San Diego	Cumulative	Add left-turn lanes at project driveways and dedicated turn lanes at the intersections of Country Club Drive with Harmony Grove Road and Village Road. (Refer to Figure 15-1 of the TIA.)	No	1 Unit
Village Road to Kauana Loa Drive: 35 mph	County of San Diego	Cumulative	Add dedicated left-turn lanes at the intersection of Village Road with Country Club Drive. (Refer to Figure 15-1 of the TIA.)	No	1 Unit
30 mph and Retention of Existing Conditions	County of San Diego	Cumulative	Add dedicated left-turn lanes at the intersection of Village Road with Country Club Drive (Refer to Figure 15-1 of the TIA.)	No	1 Unit
Village Road					
Country Club Drive to Harmony Grove Road: 35 mph	County of San Diego	Cumulative	Obtain a GPA to allow LOS D.	Yes	1 Unit
30 mph	County of San Diego	Direct	Add left-turn lanes at Village Road project driveways and dedicated turn lanes at the intersections of Village Road with Country Club Drive and Harmony Grove Road. (Refer to Figure 15-1 of the TIA.)	No	1 Unit

TABLE 15–5
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
Harmony Grove Road					
Country Club Drive to Village Road: 35 mph, 30 mph and Retention of Existing Conditions	County of San Diego	Cumulative	Install turn lanes at the intersections of Harmony Grove Road with Village Road and Country Club Drive. (Refer to Figure 15-1 of the TIA.)	No	1 Unit
E. Project Construction					
	City of Escondido / County of San Diego	Direct	Prepare traffic control plans to manage construction traffic. Also ensure only City of Escondido and County of San Diego designated truck routes are used by heavy vehicles and trucks.	Yes	1 Unit 10 AM/PM Peak Hour Trips
	County of San Diego	Direct	Obtain construction and encroachment permits for any work performed with the County right-of-way.	Yes	1 Unit 10 AM/PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–5
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [100 UNIT]
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Harmony Grove Road					
Enterprise Street to Howard Avenue	City of Escondido	Cumulative	Contribute a fair share toward the upgrade of Harmony Grove Road between Enterprise Street and Howard Avenue to Local Collector Standards including dedicated left-turn lanes on Harmony Grove Road and Enterprise Street, Howard Avenue and Hale Avenue.	No	100 Units (300 ADT)
Howard Avenue to Hale Avenue	City of Escondido	Cumulative	Contribute a fair share toward the upgrade of Harmony Grove Road between Howard Avenue and Hale Avenue to Local Collector Standards including dedicated left-turn lanes on Harmony Grove Road and Enterprise Street, Howard Avenue and Hale Avenue.	No	100 Units (200 ADT)
West 9th Street					
Valley Parkway to Auto Park Way	City of Escondido	Cumulative	Contribute a fair share towards restriping eastbound West 9th Street at Auto Park Way to provide a right-turn lane, a shared through / right lane, and a left-turn lane and provide right-turn overlap phasing at the eastbound approach. This intersection improvement would mitigate the segment impact.	No	100 Unit (300 ADT)
Via Rancho Parkway					
East of Valley Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	100 Units (200 ADT)

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–5
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [100 UNIT]
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
Valley Parkway					
W. 11th Street to Avenida del Diablo	City of Escondido	Cumulative	Contribute a fair share towards the widening of Valley Parkway between W. 11th Street and Avenida del Diablo to 4 lanes.	No	100 Units (300 ADT)
Citracado Parkway to Via Rancho Parkway	County of San Diego and City of Escondido	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact. In addition, install left-turn phasing on all four approaches at the Citracado Parkway / Via Rancho Parkway intersection and contribute a fair share toward the widening of Valley Parkway between Citracado Parkway and Via Rancho Parkway to 4-lanes to the satisfaction of both the City of Escondido and the County of San Diego.	Yes	100 Units (100 ADT)
B. Intersections					
Hale Avenue / W. 11th Street	City of Escondido	Cumulative	Contribute a fair share toward the signalization of this intersection.	No	100 Units 20 AM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–5
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [200 UNIT]
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Nordahl Road					
SR-78 to Mission Road	City of Escondido	Direct	Contribute a fair share towards the City planned widening of Nordahl Road between SR-78 westbound ramps and East Mission Road (including the bridge) to six lanes. A joint City / Caltrans project study report (PSR) is on-going at the interchange that will lead to the eventual improvement of the interchange.	No	200 Units (740 ADT)
Mission Road to Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the City planned improvements of the Nordahl Road / East Mission Road intersection. The improvements are part of a past City capital improvement program (CIP).	No	200 Units (740 ADT)
West 9th Street					
Hale Avenue to Valley Parkway	City of Escondido	Cumulative	Contribute a fair share towards the widening of W. 9th Street to City of Escondido Collector standards between Hale Avenue and Valley Parkway	No	200 Units (300 ADT)
Valley Parkway					
South of Via Rancho Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	200 Units (100 ADT)

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–5
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [300 UNIT]
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Andreason Drive					
Vineyard Avenue to Enterprise Street	City of Escondido	Cumulative	Contribute a fair share towards the widening of Andreason Drive to City of Escondido 4-lane Collector standards	No	300 Units (300 ADT)
West 9th Street					
Auto Park Way to I-15	City of Escondido	Direct	Contribute fair share towards restriping the eastbound approach on West 9th Street at Auto Park Way to a right-turn lane, a shared through / right lane, and a left-turn lane and the provision of right-turn overlap phasing on the eastbound approach.	No	300 Units (680 ADT)
Avenida del Diablo					
Citracado Parkway to Hale Avenue	City of Escondido	Cumulative	Install a cul-de-sac or implement turn restrictions on Avenida del Diablo, east of Citracado Parkway.	Yes	300 Unit (1810 ADT)
B. Intersections					
Valley Parkway / Avenida Del Diablo	City of Escondido	Direct	Cul-de-sac or implement turn restrictions on Avenida Del Diablo just east of Citracado Parkway.	Yes	300 Unit[e] 10 AM/PM Peak Hour Trips
C. Freeways					
SR-78	Caltrans	Cumulative	Contribute a fair share towards the future improvements of SR-78 between Twin Oaks Valley Road and I-15.	No	300 Units[e] 70 AM/PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–5
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [500 UNIT]
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections					
Harmony Grove Road / Enterprise Street	City of Escondido	Cumulative	Contribute a fair share towards the signalization of this intersection, the provision of dedicated left-turn lanes on each approach and northbound right-turn overlap phasing.	No	500 Units 160 PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–5
OPTION B: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [600 UNIT]
(VILLAGE ROAD / CITRACADO PARKWAY CONNECTION)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections					
Valley Parkway / I-15 SB Ramps	City of Escondido / Caltrans	Cumulative	Contribute a fair share toward the future improvements of the Valley Parkway / I-15 interchange.	No	600 Units 120 PM Peak Hour Trips
C. Freeways					
I-15	Caltrans	Cumulative	Contribute a fair share towards the future improvements of I-15 between SR-78 and SR-56	No	600 units 90 AM/PM Peak Hour Trips

General Notes:

There are several roadway improvements that are part of the project description and will become conditions of approval for the project. They are not, however, technically considered to be mitigation measures because by definition they are already part of the project. These improvements are discussed in Section 2.3 of the report and again, shall be conditions of approval for the project.

Footnotes:

a. The majority of the mitigation measures recommend reducing direct project impacts to a less than significant level, require construction in the City of Escondido while others require a "fair share" contribution to the City of Escondido.
Approval of the construction of physical improvements by the City of Escondido are reasonably anticipated but cannot be guaranteed. The City of Escondido does not have a defined traffic mitigation fee program or other program or payment plan that would assure that fair share payments were used for the relevant mitigation measures. Therefore, the project impacts in the City of Escondido are considered to be significant and cannot be mitigated to less than a significant level because the County of San Diego cannot reasonably assure or guarantee the City of Escondido will implement the recommended mitigation. Fair share contributions are also recommended to be paid to Caltrans in mitigation of project impacts. Caltrans has no fee mitigation program that would assure such payments would be used for the relevant mitigation measures that would lessen the project's significant impacts on the freeway, although such mitigation would reduce the project impact to a level less than significant.

b. An iterative process was conducted to determine the number of units to be built before each mitigation measure is required. For further information on the phasing analysis calculations see Section 15.3: Mitigation Measure Phasing of this report.

c. Assumes one-half of non-residential uses are built.

d. Turn lanes needed at 1 unit, signal installed when warrants met.

e. Mitigation needed when Village Road is extended to Citracado Parkway.

TABLE 15–6
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Hale Avenue					
W. 9th Street to Harmony Grove Road	City of Escondido	Direct	Upgrade Hale Avenue to City Local Collector Standards between W. 9th Street and Harmony Grove. This is also a condition of the Escondido Research and Technology Park (ERTC).	No	1 Units (200 ADT)
Valley Parkway					
Citracado Parkway to Via Rancho Parkway	County of San Diego and City of Escondido	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact. In addition, install left-turn phasing on all four approaches at the Citracado Parkway / Via Rancho Parkway intersection and contribute a fair share toward the widening of Valley Parkway between Citracado Parkway and Via Rancho Parkway to 4-lanes to the satisfaction of both the City of Escondido and the County of San Diego.	Yes	1 Units (100 ADT)
B. Intersections					
Nordahl Road / SR-78 EB Ramps	City of Escondido / Caltrans	Direct	Contribute a fair share toward the planned improvement of the SR-78 / Nordahl Road interchange to provide a six-lane bridge with dual left-turn lanes onto the ramps. A joint City / Caltrans PSR is on-going at the interchange that will lead to the eventual improvement of the interchange.	No	1 Unit 20 PM Peak Hour Trips
Nordahl Road / Mission Road	City of Escondido	Direct	Contribute a fair share toward the City planned widening of Nordahl Road between SR-78 and E. Mission Road to six-lanes. In addition to the City planned improvements, other additional turn lanes are needed to meet City LOS standards. The improvements are part of a past City CIP.	No	1 Unit 40 PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–6
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections *(continued)*					
Via Rancho Parkway / I-15 SB Ramps (signalized intersection and the SB on-ramp meter)	City of Escondido / Caltrans	Cumulative	Contribute a fair share towards the future improvements of the I-15 / Via Rancho Parkway interchange.	No	1 Unit 10 AM/PM Peak Hour Trips
Citracado Parkway / Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the future signalization of the Citracado Parkway / Country Club Drive intersection. This improvement is part of the City CIP.	No	1 Unit 10 AM/PM Peak Hour Trips
Harmony Grove Road / Village Road	County of San Diego	Direct	Signalize the Harmony Grove Road / Village Road intersection once signal warrants are met. Provide an eastbound left-turn lane on Harmony Grove Road. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it.	Yes	1 Unit[d] 10 AM/PM Peak Hour Trips
Harmony Grove Road / Enterprise Street	City of Escondido	Direct	Contribute a fair share towards the signalization of this intersection, the provision of dedicated left-turn lanes on each approach and northbound right-turn overlap phasing.	No	1 Unit 10 AM/Peak Hour Trips
Harmony Grove Road / Howard Avenue	City of Escondido	Direct	Signalize this intersection with and provide dedicated left-turn lanes.	No	1 Unit 50 PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–6
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
B. Intersections *(continued)*					
Harmony Grove Road / Hale Avenue	City of Escondido	Direct	Signalize the intersection and provide 2 eastbound lanes (one left-turn lane and one shared left / right lane and dual southbound right-turn lanes).	No	1 Unit 10 PM Peak Hour Trips
Valley Parkway / Avenida Del Diablo	City of Escondido	Cumulative	Contribute a fair share toward the Installation of a traffic signal at this location. This improvement is part of the City CIP.	No	1 Unit 10 AM/PM Peak Hour Trips
D. Project Access					
Harmony Grove Road / Entrance #3	County of San Diego	Direct	Install a traffic signal at the main project entrance on Harmony Grove Road when signal warrants are met. Provide dedicated left-turn lanes and right-turn lanes on Harmony Grove Road. Also provide a dedicated left-turn lane and a right-turn lane in the southbound direction at the project driveway. It should be noted that a traffic signal warrant for this intersection must be submitted to the Traffic Advisory Committee for review and ultimate recommendation to the Board of Supervisors upon which the Board must approve it.	Yes	1 Unit 10 AM/PM Peak Hour Trips
Country Club Drive and Village Rd Segments	County of San Diego	Direct	Provide the lane configuration depicted on Figure 15-1 on Village Rd and Country Club Drive. Ensure County intersection standards are met. Install signals when warrants are met. Conceptual striping plans are provided in Appendix Q.	Yes	1 Unit 10 AM/PM Peak Hour Trips
Harmony Grove Road / Wilgen Road	County of San Diego	Direct	Provide an eastbound left-turn pocket on Harmony Grove Road at the Harmony Grove Road / Wilgen Road intersection.	Yes	1 Unit 10 AM/PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–6
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [1 UNIT]
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
E. Project Construction					
	City of Escondido / County of San Diego	Direct	Prepare traffic control plans to manage construction traffic. Also ensure only City of Escondido and County of San Diego designated truck routes are used by heavy vehicles and trucks.	Yes	1 Unit 10 AM/PM Peak Hour Trips
	County of San Diego	Direct	Obtain construction and encroachment permits for any work performed with the County right-of-way.	Yes	1 Unit 10 AM/PM Peak Hour Trips
F. Plan-to-Plan Analysis					
Hale Avenue					
West 9th Street to Harmony Grove Road	City of Escondido	Direct	Upgrade this roadway to City Local Collector standards.	Yes	1 Unit 10 ADT

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–6
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [100 UNIT]
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Andreason Drive					
Vineyard Avenue to Enterprise Street	City of Escondido	Cumulative	Contribute a fair share towards the widening of Andreason Drive to City of Escondido 4-lane Collector standards	No	100 Units (300 ADT)
West 9th Street					
Hale Avenue to Valley Parkway	City of Escondido	Cumulative	Contribute a fair share towards the widening of W. 9th Street to City of Escondido Collector standards between Hale Avenue and Valley Parkway	No	100 Units (300 ADT)
Valley Parkway to Auto Park Way	City of Escondido	Direct	Restripe the eastbound approach on West 9th Street at Auto Park Way to a right-turn lane, a shared through / right lane, and a left-turn lane and the provision of right-turn overlap phasing on the eastbound approach.	No	100 Units (300 ADT)
Via Rancho Parkway					
East of Valley Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	100 Units (200 ADT)
Valley Parkway					
South of Via Rancho Parkway	County of San Diego	Direct	The project is providing an additional NB through lane and a NB dedicated right-turn lane at the Via Rancho Parkway / Valley Parkway intersection. This improvement will reduce delay significantly at this intersection, mitigating the segment impact.	Yes	100 Units (100 ADT)
B. Intersections					
Hale Avenue / West 11th Street	City of Escondido	Cumulative	Contribute a fair share toward the signalization of this intersection.	No	100 Units 60 PM Peak Hour Trips

Footnotes:
The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [200 UNIT] (IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Nordahl Road					
SR-78 to Mission Road	City of Escondido	Direct	Contribute a fair share towards the City planned widening of Nordahl Road between SR-78 westbound ramps and East Mission Road (including the bridge) to six lanes. A joint City / Caltrans project study report is on-going at the interchange that will lead to the eventual improvement of the interchange.	No	200 Units (740 ADT)
Mission Road to Country Club Drive	City of Escondido	Cumulative	Contribute a fair share toward the City planned improvements of the Nordahl Road / East Mission Road intersection. The improvements are part of a past City capital improvement project (CIP).	No	200 Units (740 ADT)
B. Intersections					
Harmony Grove Road / Kauana Loa Drive	City of Escondido	Cumulative	Contribute a fair share toward the future signalization of this intersection.	Yes	200 Units 190 PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–6
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [300 UNIT]
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
West 9th Street					
Auto Park Way to I-15	City of Escondido	Direct	Restripe the eastbound approach on West 9th Street at Auto Park Way to a right-turn lane, a shared through / right lane, and a left-turn lane and the provision of right-turn overlap phasing on the eastbound approach.	No	300 Units (680 ADT)
Valley Parkway					
Avenida del Diablo to Citracado Parkway	City of Escondido	Cumulative	Contribute a fair share towards the City planned widening of Valley Parkway between Avenida del Diablo and Citracado Parkway to four lanes.	No	300 Units (300 ADT)
C. Freeways					
SR-78	Caltrans	Cumulative	Contribute a fair share towards the future improvements of SR-78 between Twin Oaks Valley Road and I-15.	No	300 Units 70 AM/PM Peak Hour Trips

Footnotes:

The number of trips that could be added to the location before a significant impact would occur is shown in parentheses. See last page of table for footnote explanations.

TABLE 15–6
OPTION C: SIGNIFICANT IMPACTS AND MITIGATION MEASURES [600 UNIT]
(IMPROVEMENTS TO THE EXISTING ROADWAY NETWORK)

Location	Jurisdiction	Impact Type	Mitigation Measures	Mitigated to a Level Below Significance?	Improvement Required Before X Number of Units are Occupied[b,c]
A. Street Segments					
Auto Park Way					
Hale Avenue to Valley Parkway	City of Escondido	Cumulative	Contribute a fair share toward upgrading the signal at the Hale Avenue / Auto Park Way intersection to include (1) right-turn lane, (1) shared through / left lane, and (1) left-turn lane on the southbound approach with split phasing on the north / south approaches. The additional intersection capacity mitigates the cumulative segment impact.	No	600 Units (680 ADT)
B. Intersections					
Valley Parkway / I-15 SB Ramps	City of Escondido / Caltrans	Cumulative	Contribute a fair share toward the future improvements of the Valley Parkway / I-15 interchange.	No	600 Units 112 PM Peak Hour Trips
Andreason Drive / Enterprise Street	City of Escondido	Cumulative	Contribute a fair share toward the installation of a traffic signal to the satisfaction of the city engineer.	No	600 Units 150 PM Peak Hour Trips
C. Freeways					
I-15	Caltrans	Cumulative	Contribute a fair share towards the future improvements of I-15 between SR-78 and SR-56	No	600 Units 90 AM Peak Hour Trips

General Notes:

There are several roadway improvements that are part of the project description and will become conditions of approval for the project. They are not, however, technically considered to be mitigation measures because by definition they are already part of the project. These improvements are discussed in Section 2.3 of the report and again, shall be conditions of approval for the project.

Footnotes:

a. The majority of the mitigation measures recommend reducing direct project impacts to a less than significant level, require construction in the City of Escondido while others require a "fair share" contribution to the City of Escondido.

Approval of the construction of physical improvements by the City of Escondido are reasonably anticipated but cannot be guaranteed. The City of Escondido does not have a defined traffic mitigation fee program or other program or payment plan that would assure that fair share payments were used for the relevant mitigation measures. Therefore, the project impacts in the City of Escondido are considered to be significant and cannot be mitigated to less than a significant level because the County of San Diego cannot reasonably assure or guarantee the City of Escondido will implement the recommended mitigation. Fair share contributions are also recommended to be paid to Caltrans in mitigation of project impacts. Caltrans has no fee mitigation program that would assure such payments would be used for the relevant mitigation measures that would lessen the project's significant impacts on the freeway, although such mitigation would reduce the project impact to a level less than significant.

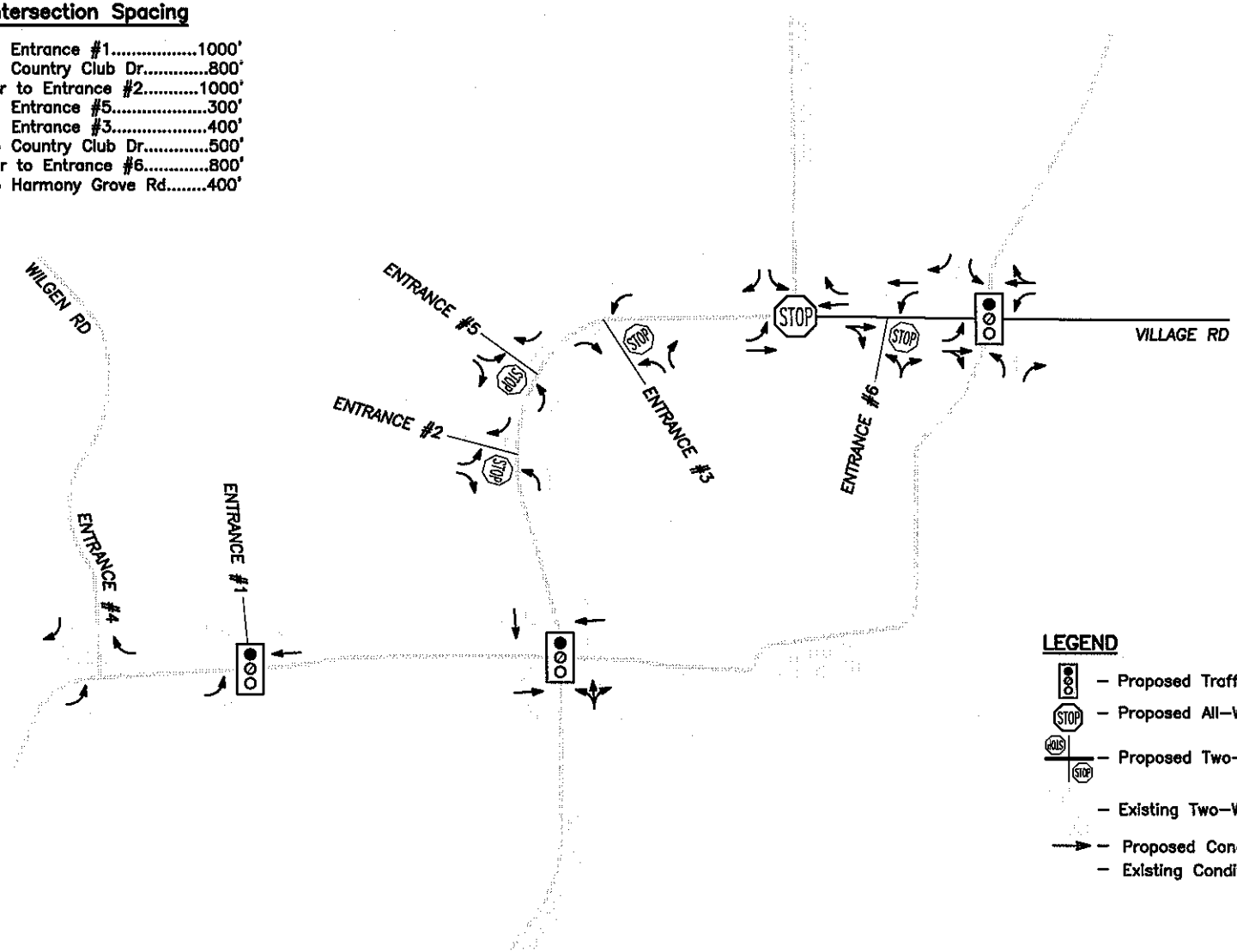
b. An iterative process was conducted to determine the number of units to be built before each mitigation measure is required. For further information on the phasing analysis calculations see Section 15.3: Mitigation Measure Phasing of this report.

c. Assumes atone-half of non-residential uses are built.

d. Turn lanes needed at 1 unit, signal installed when warrants met.

Approximate Intersection Spacing

- Entrance #4 to Entrance #1.....1000'
- Entrance #1 to Country Club Dr.....800'
- Country Club Dr to Entrance #2.....1000'
- Entrance #2 to Entrance #5.....300'
- Entrance #5 to Entrance #3.....400'
- Entrance #3 to Country Club Dr.....500'
- Country Club Dr to Entrance #6.....800'
- Entrance #6 to Harmony Grove Rd.....400'



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LINSCOTT LAW & GREENSPAN engineers

Figure 15-1

Proposed Lane Configuration

Harmony Grove

15.2 Signal Warrant Analysis

A peak hour signal warrant analysis was conducted for locations where intersection signalization is recommended based on forecast traffic volumes. The methodology for these analyses is specified in the Manual on Uniform Traffic Control Devices (MUTCD, 2003) and the associated California Supplement. ***Table 15–7*** summarizes the results of the analyses for each of the three options and ***Appendix N*** contains the warrant plots as presented in the MUTCD.

The value represented in the table, if 'yes', suggests that the total volume of both approaches on the major street *and* the higher-volume approach on the minor street exceed the minimum values plotted by the graph curve. This means that a traffic signal will likely be warranted based on the forecast volumes. If the value represented in *Table 15–7* is 'no', either one of the above-mentioned volume criteria was not met.

TABLE 15–7
PRELIMINARY SIGNAL WARRANT ANALYSES SUMMARY

Location[a]	Option A	Option B	Option C
Harmony Grove Road / Village Road	Yes[b]	Yes	Yes
Harmony Grove Road / Kauana Loa Drive	Yes	—[c]	—
Harmony Grove Road / Country Club Drive	Yes	Yes	Yes
Harmony Grove Road / Entrance #1	Yes	Yes	Yes
Hale Avenue / Avenida del Diablo	No[d]	Yes	—
Hale Avenue / Harmony Grove Road	—	Yes	Yes

Footnotes:

a. Locations obtained from the mitigation measure tables (i.e. *Table 15–1*, *Table 15–2*, and *Table 15–3*)
b. A signal is warranted at this location for this option.
c. No signalization was recommended to mitigate an impact at this intersection for this specific option
d. A signal is not warranted at this location for this option

15.3 Mitigation Measure Phasing

An analysis was conducted to determine the timing of the need for the various mitigation measures. The number of dwelling units that could be occupied before the significant impact would occur was determined for each impact. It is important to note that the phasing thresholds are in terms of occupied units. The corresponding mitigation measures would need to be implemented at the indicated threshold.

15.3.1 *Methodology*

The proposed project consists of various components including residential, non-residential, live / work, and equestrian land uses (as detailed in this traffic report). For the purposes of this analysis, , it was assumed that one-half of the non-residential uses were completed and generating traffic in the baseline condition. It should be noted that, based on trip rate equivalence, if 20,000 square feet of retail space was not occupied, 50 additional dwelling units could be added to each of the thresholds listed on the following three pages. Alternatively, if more than one-half of the retail space was developed prior to the residential uses, the number of units would need to be decreased.

The residential and non-residential uses will be developed concurrently, but the majority of non-residential uses are expected later in the development since they rely on the residential units to support them.

The phasing was assumed to take place in 100-unit increments (i.e. 0 units, 100 units, 200 units, ..., 700 units). Each roadway network option (i.e. Option A, Option B, and Option C) was considered and the development threshold is shown in *Table 15–1*, *15–2*, and *15–3*, respectively. Within each table, the intersections, street segments, and freeway mainlines are assessed. Appendix P contains further data regarding the unit threshold, which would trigger a significant impact.

The number of units to be built before an impact to the street network occurred was determined in the following manner:

Signalized Intersections – the increase in delay between the Baseline and Baseline + Project scenarios could not be more that 2.0 seconds. The number of units was incrementally increased from a minimum of 0 units to a maximum of 700 units until the 2.0-second threshold was reached. The result is the number of units that may be built before a significant impact occurs at the intersection. The individual intersections and the corresponding number of dwelling units are shown in *Tables 15–1, 15–2, and 15–3*.

Unsignalized Intersections – unsignalized intersections are highly sensitive to traffic volume increases especially when the intersection, and more specifically the minor street approach, is operating at poor levels of service under existing conditions. It is for this reason that implementation of the mitigation measures for poorly operating (LOS E/F) unsignalized intersections are recommended prior to the construction of the first dwelling unit. One exception concerns the installation of traffic signals. Signals shall not be implemented until signal warrants are met and the County Traffic Advisory Committee approves it.

Street Segments – the increase in volume to capacity (v / c) ratio between the Baseline and Baseline + Project scenarios could not be more than 0.02. The number of units was incrementally increased from a minimum of 0 units to a maximum of 700 units until the 0.02 v / c ratio threshold was reached. The result is the number of units that may be built before a significant impact occurs on the street segment. The street segments and the corresponding number of dwelling units are shown in *Tables 15–1, 15–2, and 15–3*.

Freeway Mainline – the increase in volume to capacity (v / c) ratio between the Baseline and Baseline + Project scenarios could not be more than 0.01. The number of units was incrementally increased from a minimum of 0 units to a maximum of 700 units until the 0.01 - v / c ratio threshold was reached. The result is the number of units that may be built before a significant impact occurs on the freeway mainline. The individual freeway mainline and the corresponding number of dwelling units are shown in *Tables 15–1, 15–2, and 15–3*.

Separate from a determination of the development-timing threshold for the mitigation measures, timing-thresholds for the circulation network improvements that are part of the project (i.e. Harmony Grove Road widening, Valley Parkway / Via Rancho Parkway intersection improvements, and Andreason Drive / Auto Park Way intersection improvements) were determined.

Option A:

Harmony Grove Road street segment widening (Village Road to Kauana Loa Drive) = 300 Dwelling Units (DU)

Valley Parkway / Via Rancho Parkway intersection = 100 DU

Andreason Drive / Auto Park Way intersection = 200 DU

Option B:

New connection from Harmony Grove Road to the Citracado Parkway extension (Village Road) = 300 DU

Valley Parkway / Via Rancho Parkway intersection = 100 DU

Option C:

Harmony Grove Road street segment (Village Road to Kauana Loa Drive) = 300 DU

Harmony Grove Road street segment (Kauana Loa Drive to Enterprise Street) = 100 DU

Harmony Grove Road street segment (Enterprise Street to Hale Avenue) = 100 DU

Valley Parkway / Via Rancho Parkway intersection = 100 DU

15.3.2 *Determinations of Whether Impacts are mitigated to Below a Level of Significance*

The mitigation tables also indicate whether or not the significant impacts have been mitigated to a level below that of significance. The following discussion is intended to explain why in certain instances, an impact was considered not to be mitigated to below a level of significance.

The majority of the mitigation measures recommended, to reduce direct project impacts to a less than significant level, are required to be constructed in the City of Escondido while others require a "fair share" contribution to the City of Escondido.

Approval by the City of Escondido of construction of the physical improvements although reasonably anticipated cannot be guaranteed. The City of Escondido has no defined traffic mitigation fee program or other program or payment plan that would assure that any fair share payment was used for the relevant mitigation. Therefore, the project's impacts in the City of Escondido are considered to be significant and cannot be mitigated to a less than significant level because the County of San Diego cannot reasonably assure or guarantee that the City of Escondido will implement the recommend mitigation.

Fair share contributions are also recommended to be paid to Caltrans for mitigation of project impacts. Caltrans has no fee mitigation program that would assure such payments would be used for the relevant mitigation that would lessen the project's significant impacts on the freeway; therefore, such mitigation would not reduce the project's impact to a less than significant level.

16.0 MITIGATED OPERATIONS

Table 16-1 summarizes the mitigated segment operations, while ***Table 16-2*** summarizes the mitigated intersection operations for the three Options A, B and C. As these tables show, all impacts are mitigated to a level below significance with the recommended measures.

TABLE 16–1
MITIGATED SEGMENT OPERATIONS

Segment	Option A Mitigated [b]		Option B Mitigated[b]		Option C Mitigated[b]	
	Volume[c]	LOS[d]	Volume	LOS	Volume	LOS
Harmony Grove Road						
Enterprise St. to Howard Ave	e	D	e	D	f	f
Howard Ave to Hale Ave	e	D	e	D	f	f
Nordahl Road						
SR-78 to Mission Rd	46,700	D[a]	46,700	D[a]	46,700	D[a]
Mission Rd to Country Club Dr.	39,280	C[a]	39,280	C[a]	41,980	C[a]
Andreason Drive[h]						
Vineyard Ave to Enterprise St.	15,740	D[h]	13,040	C[h]	13,690	C[h]
Auto Park Way						
Andreason Dr. to Hale Ave (north)	i	D	f	f	f	f
Andreason Dr. to Hale Ave (south)	i	D	f	f	f	f
Hale Ave to Valley Pkwy	i	D	f	f	i	i

Footnotes:

a. Mitigated LOS with widening to six lanes.
b. Mitigated LOS determined using Baseline + Project + Cumulative Projects traffic volumes.
c Average Daily Traffic (ADT) volume
d Level of Service.
e. Improvement to full Local Collector standards with additional turn lanes at each intersection mitigates the cumulative impact
f. Not applicable because there is no significant impact.
h Improvements to Andreason Drive include upgrading the street to its ultimate classification of a four-lane Collector with parking
i Improvements to the Hale Avenue/ Auto Park Way intersections improve traffic flow on this segment and mitigates the cumulative project impact to LOS

TABLE 16–1 *(CONTINUED)*
MITIGATED SEGMENT OPERATIONS

Segment	Option A Mitigated [b]		Option B Mitigated[b]		Option C Mitigated[b]	
	Volume[c]	LOS[d]	Volume	LOS	Volume	LOS
Hale Avenue						
W. 9th St. to Harmony Grove Rd	11,440	D	12,270	D	13,750	E[j]
Harmony Grove Rd to Avenida del Diablo	7,970	C	f	f	f	f
West 9th Street						
Hale Ave to Valley Pkwy	f	f	14,620	D	15,960	D
Valley Pkwy to Auto Park Way	f	f	14,000	C	14,270	D
Auto Park Way to I-15	m	D	m	D	m	D
Avenida del Diablo						
Citracado Pkwy to Hale Ave	f	f	k	k	f	f
Via Rancho Parkway						
East of Valley Pkwy	l	D	l	D	l	D
Valley Parkway						
W 11th St to Avenida del Diablo	f	f	30,390	D	f	f
Avenida del Diablo to Citracado Pkwy	22,400	B	f	f	22,160	B
Citracado Pkwy to Via Rancho Pkwy	22,520	B	24,310	C	20,080	B
South of Via Rancho Pkwy	i	D	l	D	l	D

Footnotes:

b. Mitigated LOS determined using Baseline + Project + Cumulative Projects traffic volumes
c Average Daily Traffic (ADT) volume.
d Level of Service.
e Improvement to full Local Collector standards with additional turn lanes at each intersection mitigate the cumulative impact
f. Not applicable because there is no significant impact
g LOS C capacity
h. Improvements to Andreason Drive include upgrading the street to its ultimate classification of a four-lane Collector with parking
i Improvements to the Hale Avenue/ Auto Park Way intersections improve traffic flow on this segment and mitigates the cumulative project impact to LOS D.
j Mitigation adds more capacity than the project adds traffic volume
k. Cul-de-sac on Avenida del Diablo recommended as mitigation
l Improvements to the Valley Parkway / Via Rancho Parkway intersection improve traffic flow on this segment and mitigates the direct project impact to LOS D
m. Intersection improvement mitigates segment impact.

TABLE 16–2
MITIGATED INTERSECTION OPERATIONS

Intersection	Peak Period	Option A Mitigated[a]		Option B Mitigated[a]		Option C Mitigated[a]	
		Delay[b]	LOS[c]	Delay	LOS	Delay	LOS
2 Nordahl Rd / SR-78 EB Ramps	AM	43.8	D	44.2	D	43.6	D
	PM	71 8	E[d]	104.6	F[e]	72.2	E[d]
3 Nordahl Rd / Mission Rd	AM	117 9	F[e]	117 7	F[e]	116.6	F[e]
	PM	67.9	E[d]	67.9	E[d]	67 8	E[d]
4. Citracado Pkwy / Country Club Dr	AM	71 0	E[d]	54.7	D	71.0	E[d]
	PM	23 9	C	25 1	C	23 9	C
8. Harmony Grove Rd / Village Dr	AM	13.7	B	21.1	C	13 7	B
	PM	9 6	A	20.9	C	9.6	A
11. Harmony Grove Rd / Entrance #1	AM	7.5	A	8 4	A	7 9	A
	PM	5.4	A	6.7	A	6 3	A
12. Harmony Grove Rd / Wilgen Rd	AM	18.9	C	19.0	C	18 9	C
	PM	24 4	C	24.1	C	24.4	C
14 Harmony Grove Rd / Kauana Loa Dr	AM	8.6	A	f	f	g	g
	PM	7 9	A	f	f	g	g
16. Andreason Dr / Enterprise St.	AM	49 0	D	f	f	45.2	D
	PM	33 6	C	f	f	38.6	D
17 Harmony Grove Rd / Enterprise St.	AM	f	f	19.4	B	20 4	C
	PM	f	f	53.0	D	34.8	C

Footnotes:

a Mitigated delay and LOS determined using baseline + project + cumulative projects volumes

b Delay – measured in seconds.

c. LOS – Level of Service

d. Intersection LOS F (or an even worse LOS E) without mitigation. Mitigation improves delay by an amount greater than the project degrades the delay

e. Mitigation improves delay by amount greater than the project degrades the delay.

f. Mitigation not required.

g. A traffic impact fee (TIF) contribution is recommended as mitigation for this intersection impact.

TABLE 16–2 *(CONTINUED)*
MITIGATED INTERSECTION OPERATIONS

Intersection	Peak Period	Option A Mitigated[a]		Option B Mitigated[a]		Option C Mitigated[a]	
		Delay[b]	LOS[c]	Delay	LOS	Delay	LOS
18 Harmony Grove Rd / Howard Ave	AM	23.9	C	f	f	30.3	C
	PM	14.7	A	f	f	28.7	C
20. Hale Ave / W 11th St.	AM	f	f	46.2	D	8.9	A
	PM	f	f	79.2	E[d]	10.6	B
21 Harmony Grove Rd / Hale Ave	AM	21.0	C	17.5	B	33.9	C
	PM	32.9	C	26.0	C	21.1	C
23. Hale Ave / Avenida del Diablo	AM	f	f	27.2	C	f	f
	PM	f	f	30.6	C	f	f
25 Valley Pkwy / I-15 SB Ramps	AM	g	g	h	h	h	h
	PM	g	g	h	h	h	h
29 Valley Pkwy / Avenida del Diablo	AM	12.3	B	23.4	C	16.6	B
	PM	14.5	B	32.0	C	45.1	D
32. West 9th Street / Auto Parkway	AM	f	f	h	h	f	f
	PM	f	f	h	h	f	f
36 Via Rancho Pkwy / I-15 SB Ramps	AM	g	g	h	h	h	h
	PM	g	g	h	h	h	h

Footnotes:

a. Mitigated delay and LOS determined using baseline + project + cumulative projects volumes.
b. Delay – measured in seconds
c. LOS – Level of Service.
d. Intersection LOS F (or an even worse LOS E) without mitigation. Mitigation improves delay by an amount greater than the project degrades the delay
e. Mitigation improves delay by amount greater than the project degrades the delay
f. Mitigation not required.
g. A traffic impact fee (TIF) contribution is recommended as mitigation for this intersection impact
h. A fair share contribution is recommended for this intersection

HARMONY GROVE VILLAGE

VOLUME 2 OF 2
(Appendix to TIA)

~~APPENDIX D~~

TRAFFIC IMPACT ANALYSIS

VTM 5365; GPA 04-04; MUP 04-012, MUP 04-013, and MUP 04-014;
REZ 04-010; SP 04-03; Log No. 04-08-011; SCH No. 2004071004

for the

DRAFT ENVIRONMENTAL IMPACT REPORT

AUGUST 2006

APPENDIX A

MANUAL TRAFFIC COUNTS

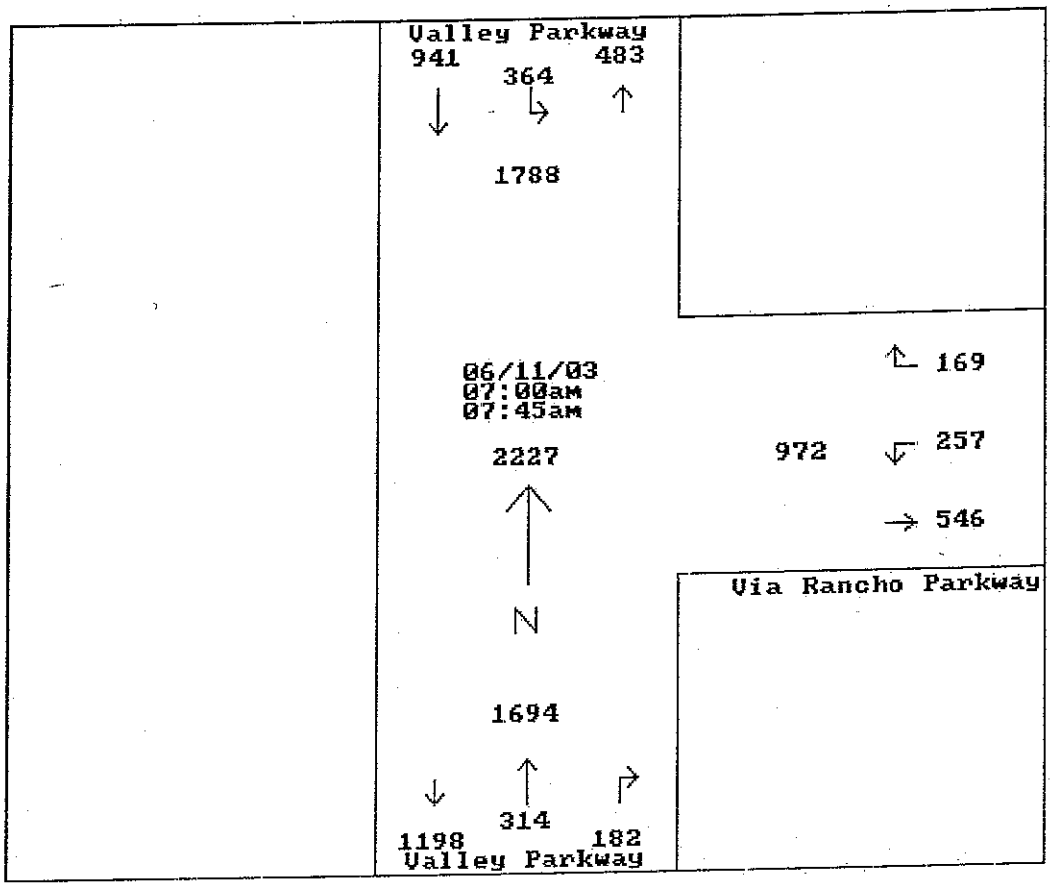
Weather : Clear & Dry
Counted by : J.Rice
Board # : D1-1307
Location :Valley Pkwy & Via Rancho Pkwy

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03135010
Site Code : 00135010
Start Date: 06/11/03

Group 1

Start Time	Valley Parkway Southbound Left	Thru	Peds	Via Rancho Parkway Westbound Left	Right	Peds	Valley Parkway Northbound Thru	Right	Peds	Intrvl. Total



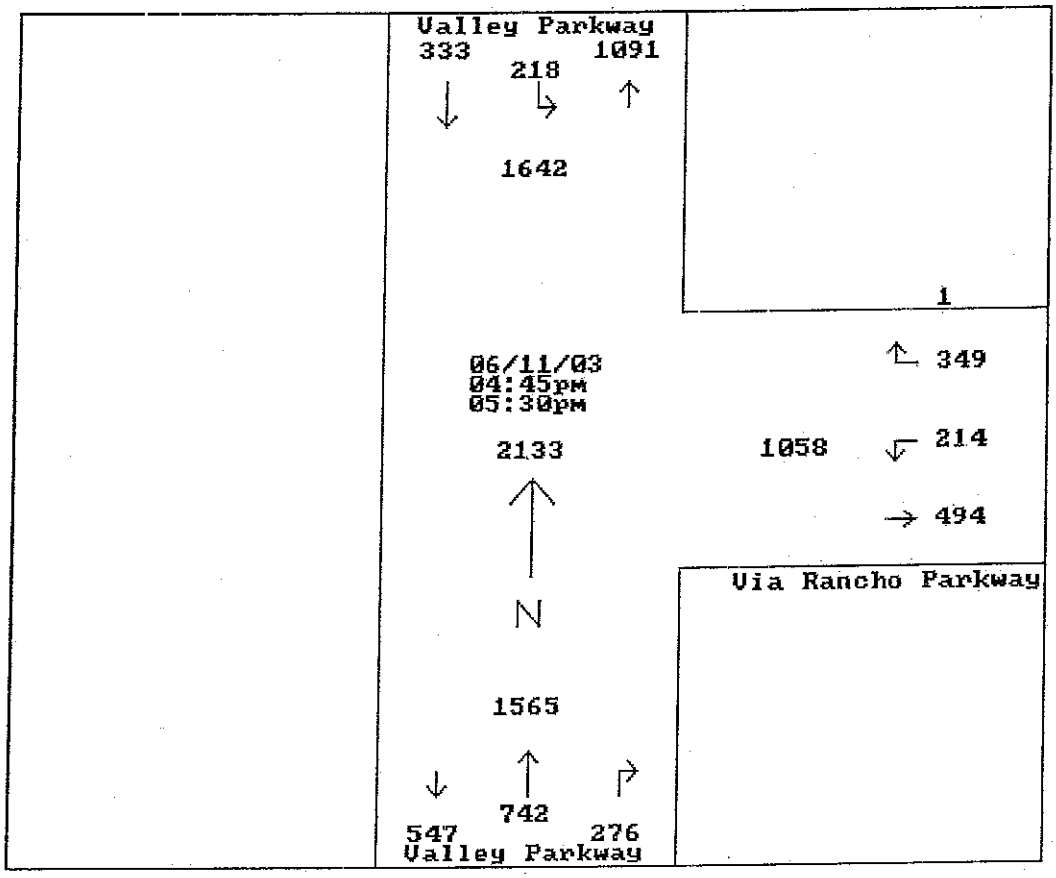
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : J.Rice
Board # : D1-1307
Location :Valley Pkwy & Via Rancho Pkwy

Study Name: 03135011
Site Code : 00305011
Start Date: 06/11/03
Page : 2

Group 1

Start Time	Valley Parkway Southbound Left	Thru	Peds	Via Rancho Parkway Westbound Left	Right	Peds	Valley Parkway Northbound Thru	Right	Peds	Intrvl. Total



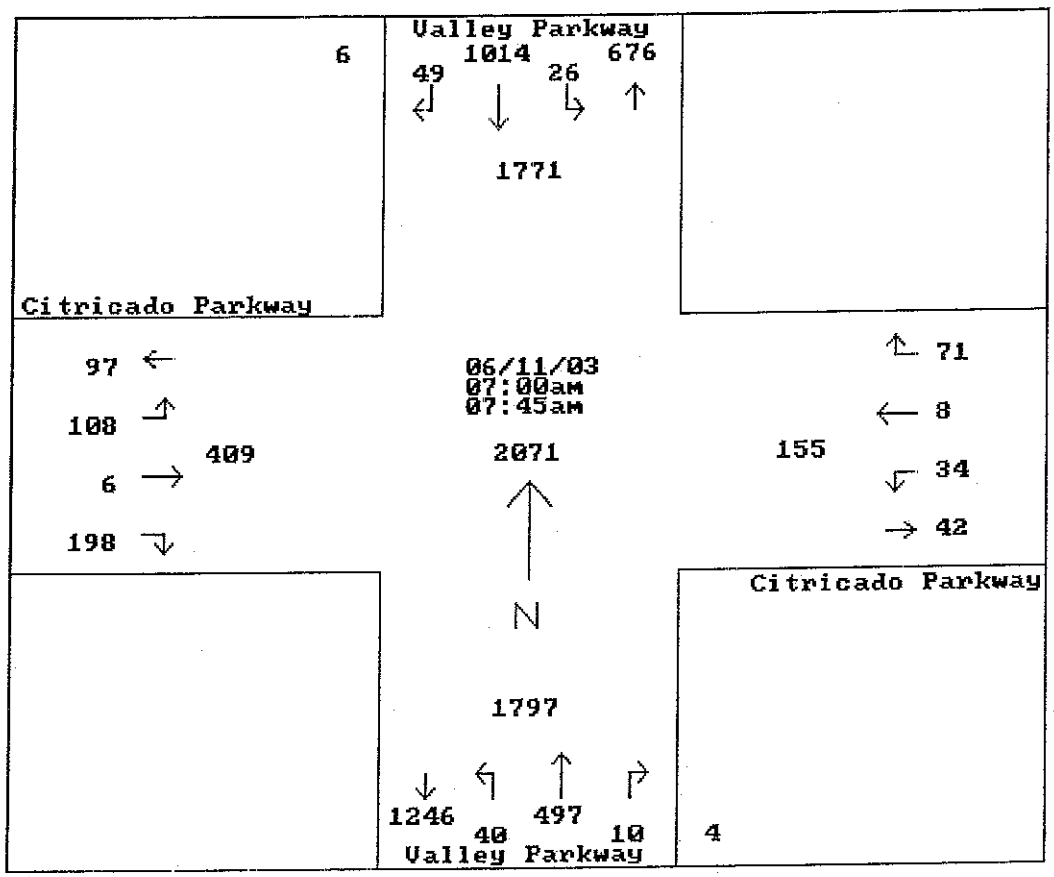
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : R.Fitzgerald
Board # : D1-1306
Location : Valley Pkwy & Citricado Pkwy

Study Name: 03135020
Site Code : 00135020
Start Date: 06/11/03
Page : 2

Group 1

Start Time	Valley Parkway Southbound				Citricado Parkway Westbound				Valley Parkway Northbound				Citricado Parkway Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



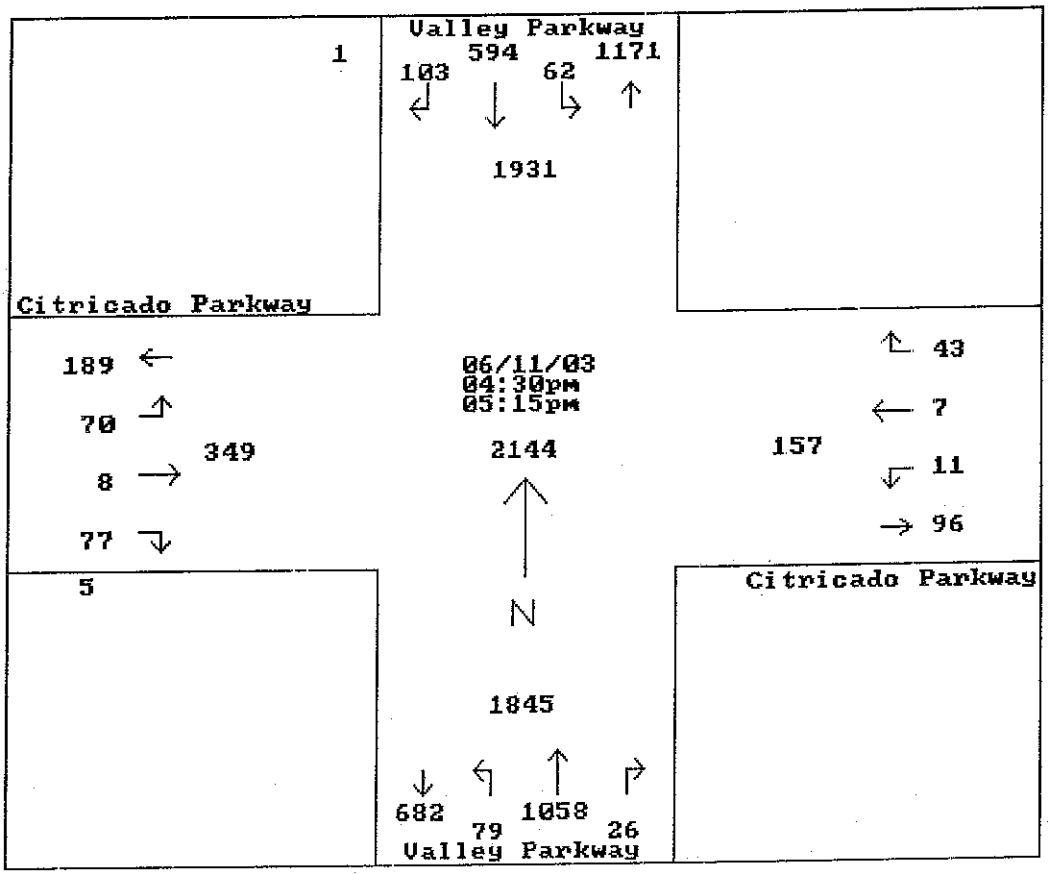
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : R.Fitzgerald
Board # : D1-1306
Location : Valley Pkwy & Citricado Pkwy

Study Name: 03135021
Site Code : 00135021
Start Date: 06/11/03
Page : 2

Group 1

Start Time	Valley Parkway Southbound				Citricado Parkway Westbound				Valley Parkway Northbound				Citricado Parkway Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



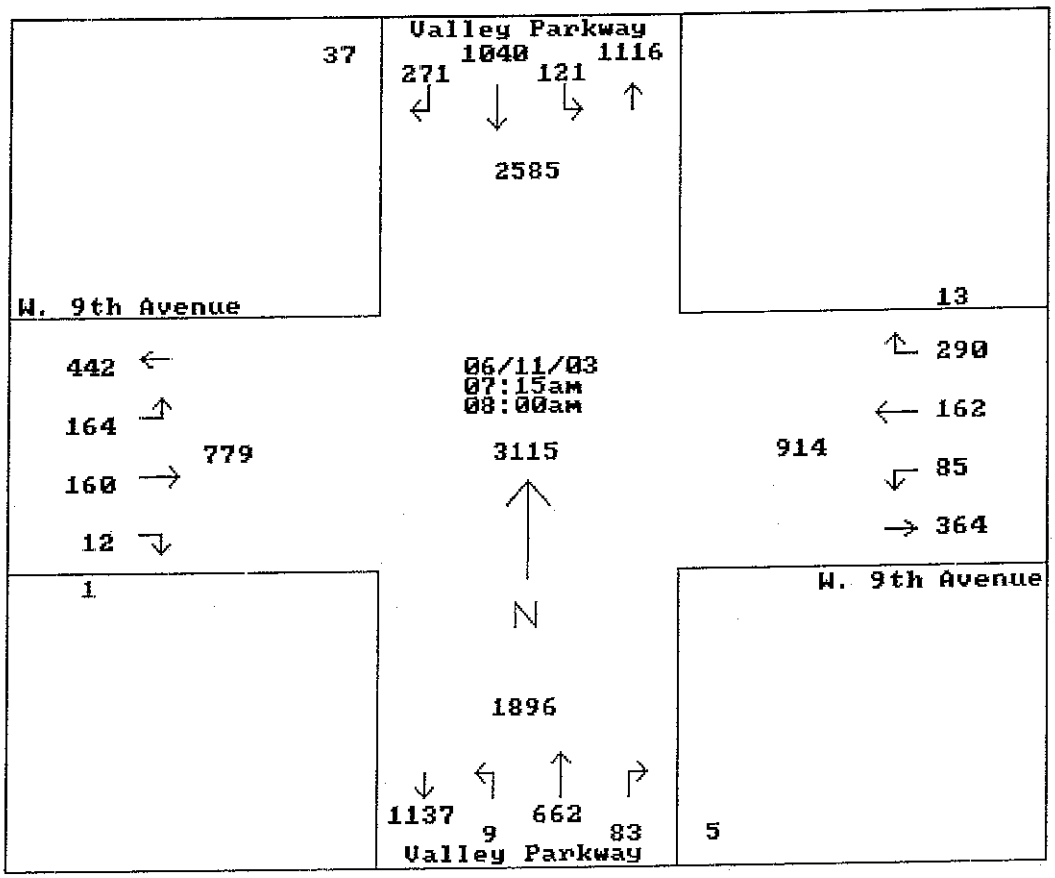
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : M.Archibald
Board # : D1-2172
Location : Valley Pkwy & W.9th Ave

Study Name: 03135030
Site Code : 00135030
Start Date: 06/11/03
Page : 2

Group 1

Start Time	Valley Parkway Southbound				W. 9th Avenue Westbound				Valley Parkway Northbound				W. 9th Avenue Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



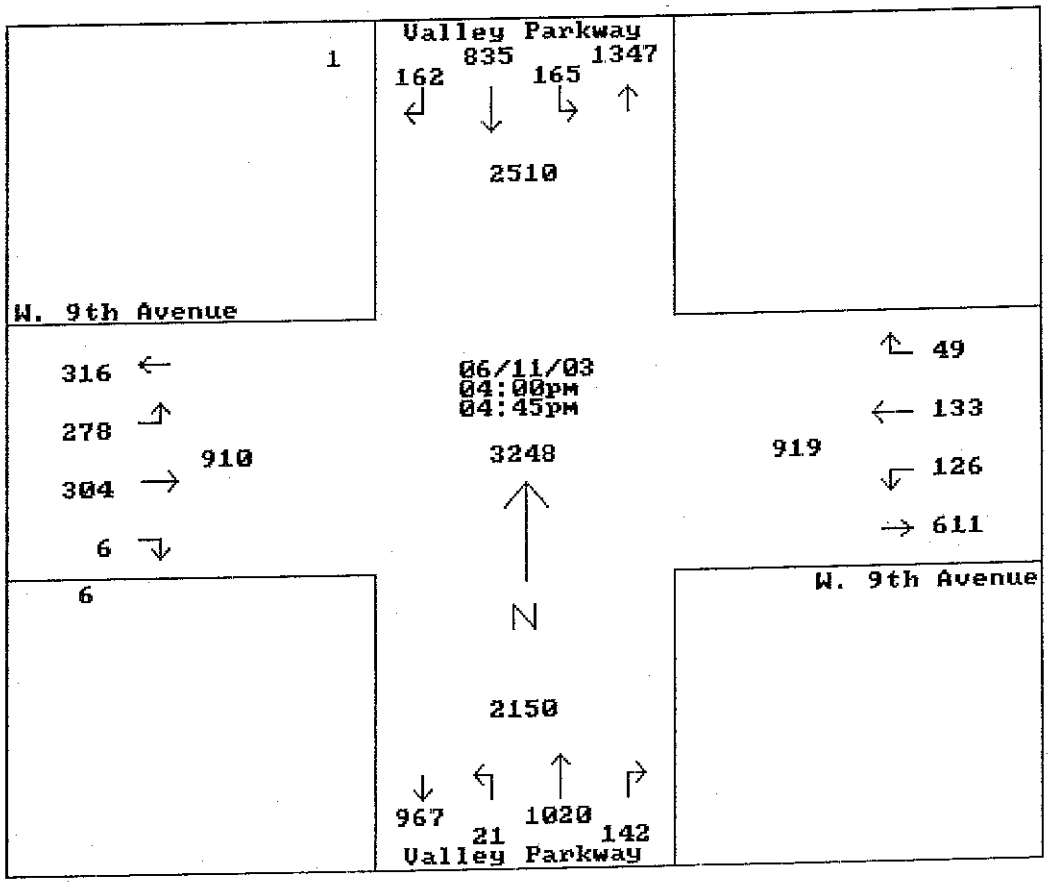
Weather : Clear & Dry
Counted by : J.Green
Board # : D1-2172
Location : Valley Pkwy & W. 9th Av

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03135031
Site Code : 00135031
Start Date: 06/11/03
Page : 2

Group 1

Start Time	Valley Parkway Southbound				W. 9th Avenue Westbound				Valley Parkway Northbound				W. 9th Avenue Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



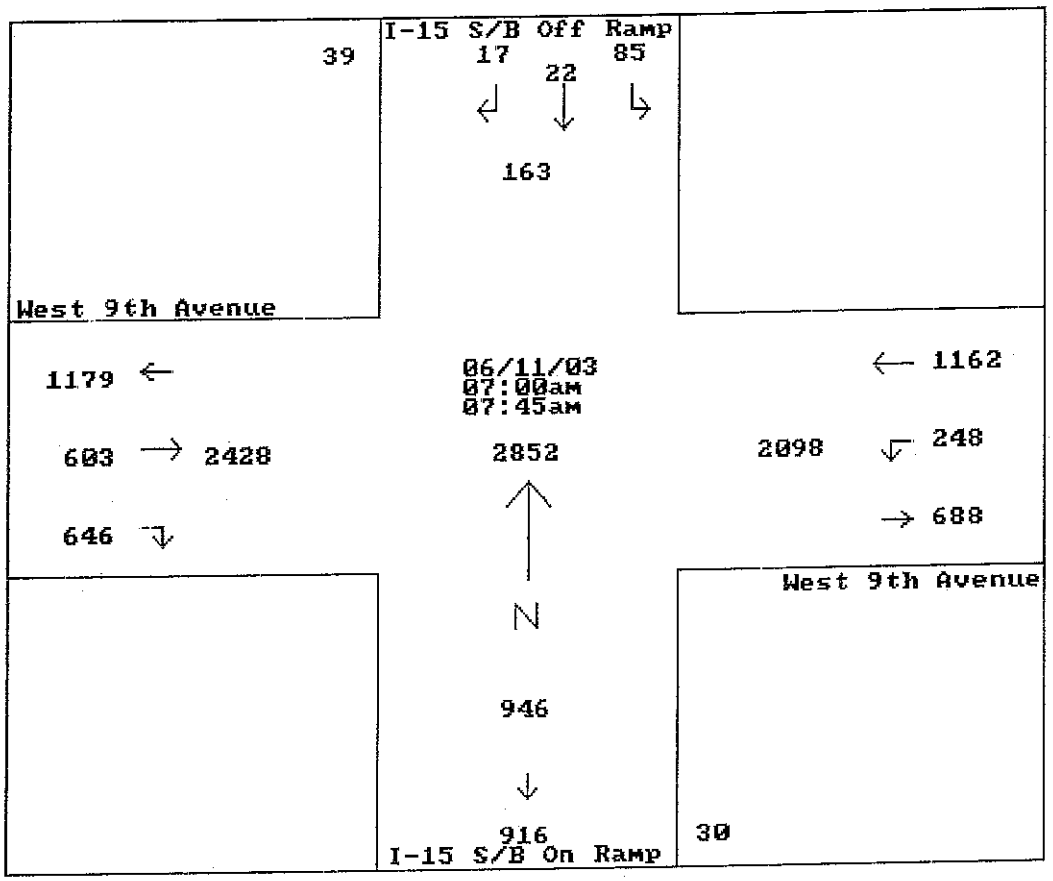
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by: S.Mockler
Board # : D1-1433
Location :I-15 S/B Ramps @ West 9th Ave

Study Name: 03135050
Site Code : 00135050
Start Date: 06/11/03
Page : 2

Group 1

Start Time	I-15 S/B Off Ramp Southbound Left	Thru	Right	Peds	West 9th Avenue Westbound Left	Thru	Right	Peds	I-15 S/B On Ramp Northbound Left	Thru	Right	Peds	West 9th Avenue Eastbound Left	Thru	Right	Peds	Intvl. Total



Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by: J.Green
Board # : D1-1426
Location : I-15 N/B Ramps @ W.9th Ave

Study Name: 03135060
Site Code : 00135060
Start Date: 06/11/03
Page : 2

Group 1

Start Time	I-15 N/B On Ramp Southbound				West 9th Avenue Westbound				I-15 N/B Off Ramp Northbound				West 9th Avenue Eastbound				Intvl. Total
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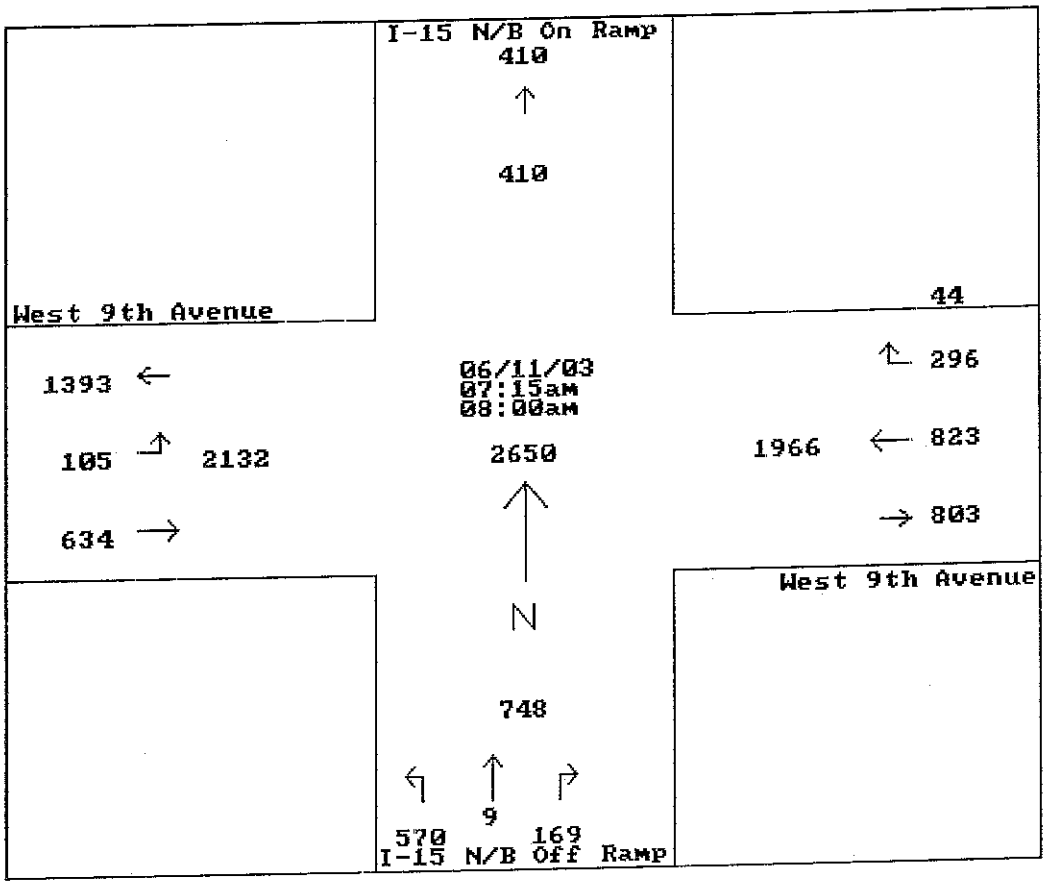


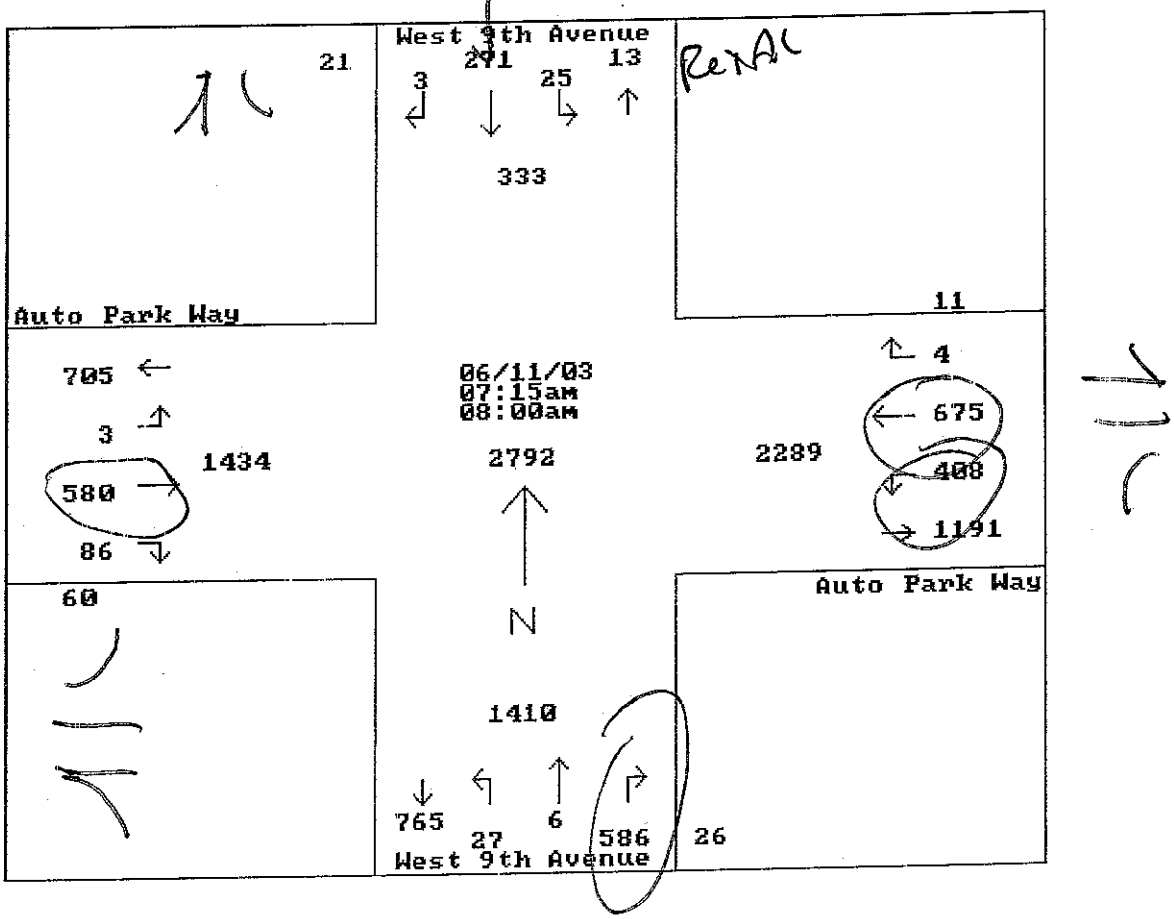
Weather : Clear & Dry
Counted by: M.Parish
Board # : D1-1427
Location : West 9th Av @ Auto Park Way

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03135040
Site Code : 00135040
Start Date: 06/11/03
Page : 2

Group 1

Start Time	West 9th Avenue Southbound Left	Thru	Right	Peds	Auto Park Way Westbound Left	Thru	Right	Peds	West 9th Avenue Northbound Left	Thru	Right	Peds	Auto Park Way Eastbound Left	Thru	Right	Peds	Intvl. Total



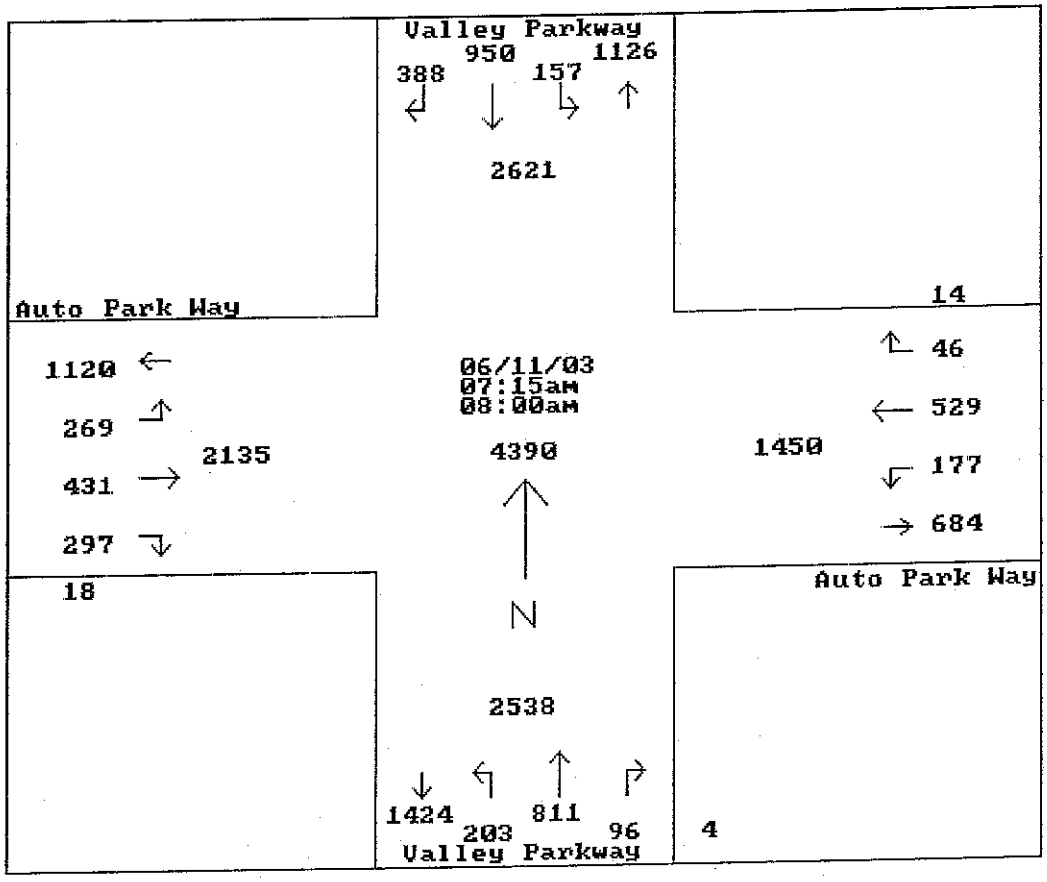
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : J.Stutz & E.Stutz
Board # : D1-1431 & D1-1432
Location : Valley Pkwy & Auto Park Wy

Study Name: 03135070
Site Code : 00135070
Start Date: 06/11/03
Page : 2

Group 1

Start Time	Valley Parkway Southbound				Auto Park Way Westbound				Valley Parkway Northbound				Auto Park Way Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



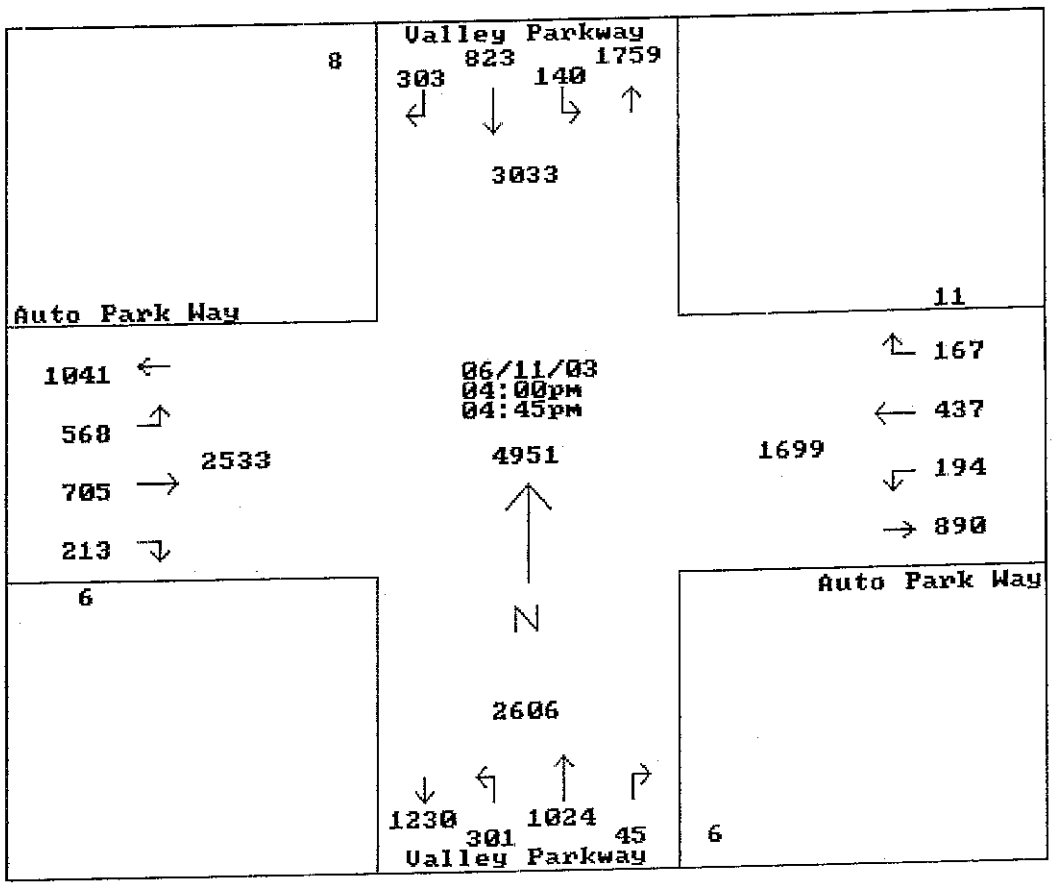
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : J.Stutz & E.Stutz
Board # : D1-1431 & D1-1432
Location : Valley Pkwy & Auto Park Way

Study Name: 03135071
Site Code : 00135071
Start Date: 06/11/03
Page : 2

Group 1

Start Time	Valley Parkway Southbound				Auto Park Way Westbound				Valley Parkway Northbound				Auto Park Way Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



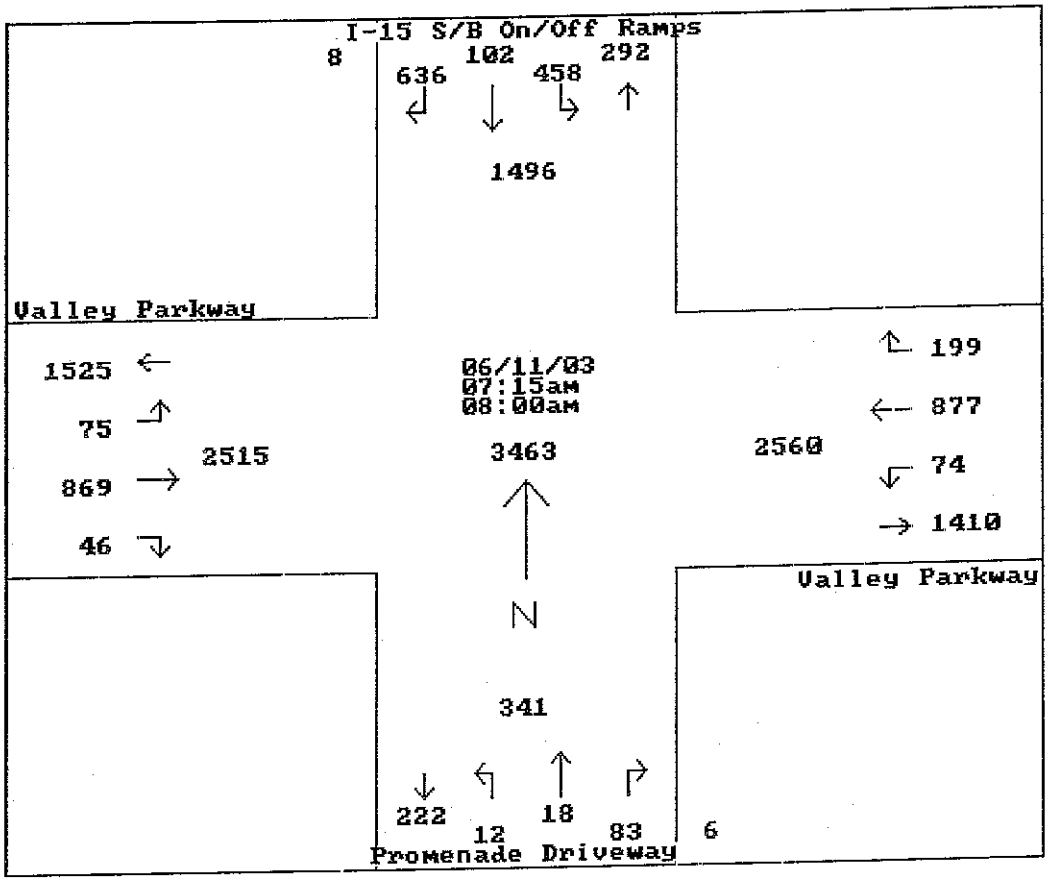
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : R.Laney & S.Dodson
Board # : D1-1424 & D1-1425
Location :Valley Pkwy & I-15 S/B Ramps

Study Name: 03135080
Site Code : 00135080
Start Date: 06/11/03
Page : 2

Group 1

Start Time	I-15 S/B On/Off Ramps Southbound Left	Thru	Right	Peds	Valley Parkway Westbound Left	Thru	Right	Peds	Promenade Driveway Northbound Left	Thru	Right	Peds	Valley Parkway Eastbound Left	Thru	Right	Peds	Intvl. Total



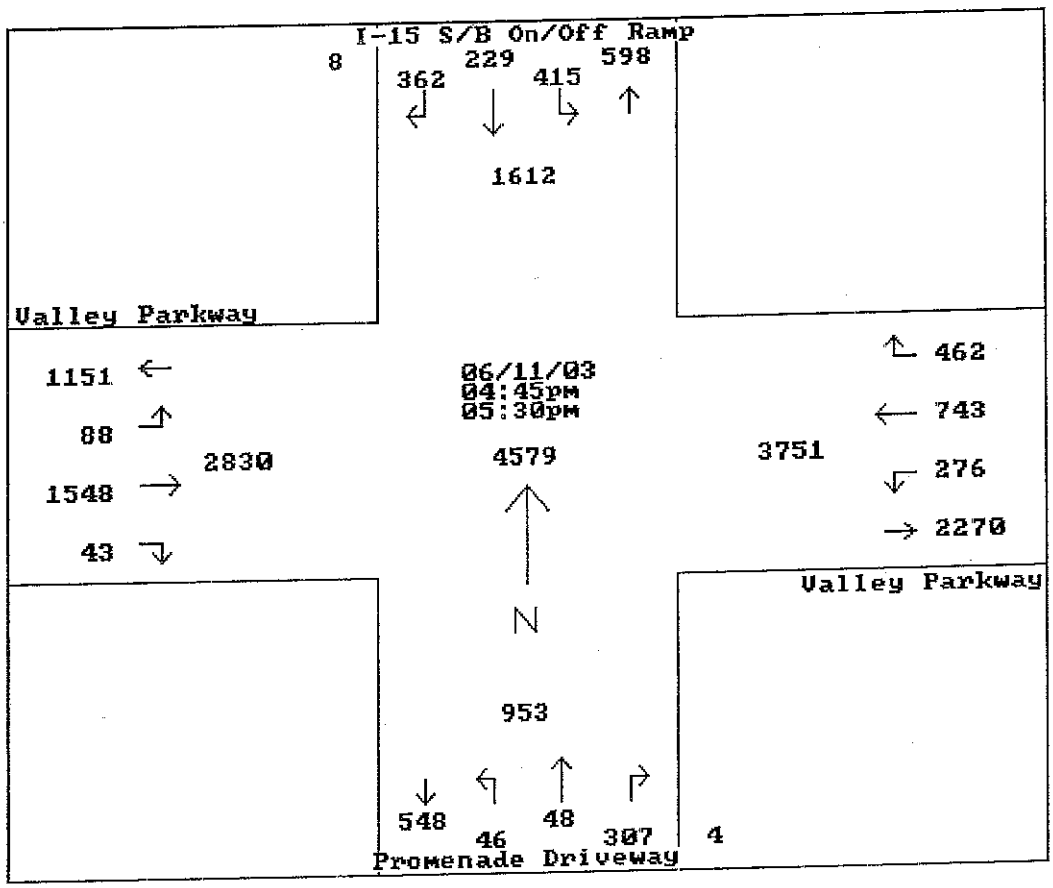
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : R.Laney & S.Dodson
Board # : D1-1424 & D1-1425
Location :Valley Pkwy & I-15 S/B Ramps

Study Name: 03135081
Site Code : 00135081
Start Date: 06/11/03
Page : 2

Group 1

Start Time	I-15 S/B On/Off Ramp Southbound				Valley Parkway Westbound				Promenade Driveway Northbound				Valley Parkway Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



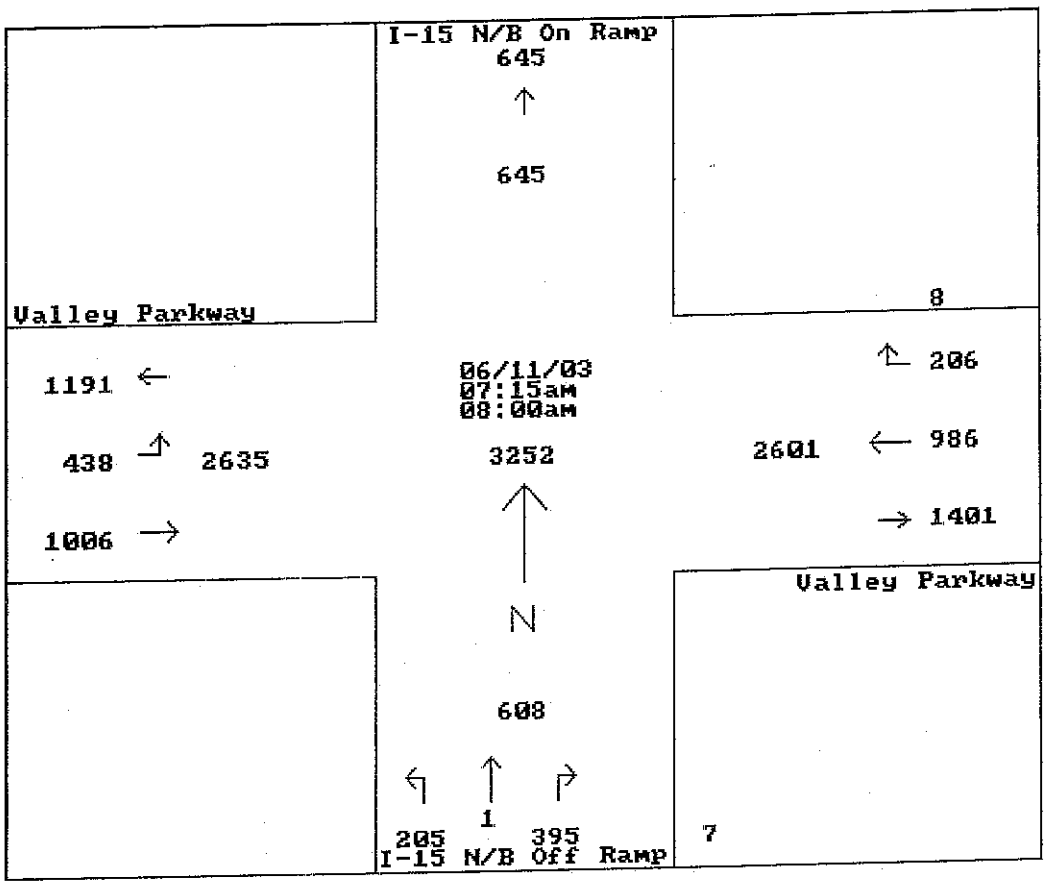
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by: R.Taylor & M.Adams
Board # : D1-1429 & D1-1430
Location : I-15 N/B Ramps @ Valley Pkwy

Study Name: 03135090
Site Code : 00135090
Start Date: 06/11/03
Page : 2

Group 1

Start Time	I-15 N/B On Ramp Southbound Left	Thru	Right	Peds	Valley Parkway Westbound Left	Thru	Right	Peds	I-15 N/B Off Ramp Northbound Left	Thru	Right	Peds	Valley Parkway Eastbound Left	Thru	Right	Peds	Intvl. Total



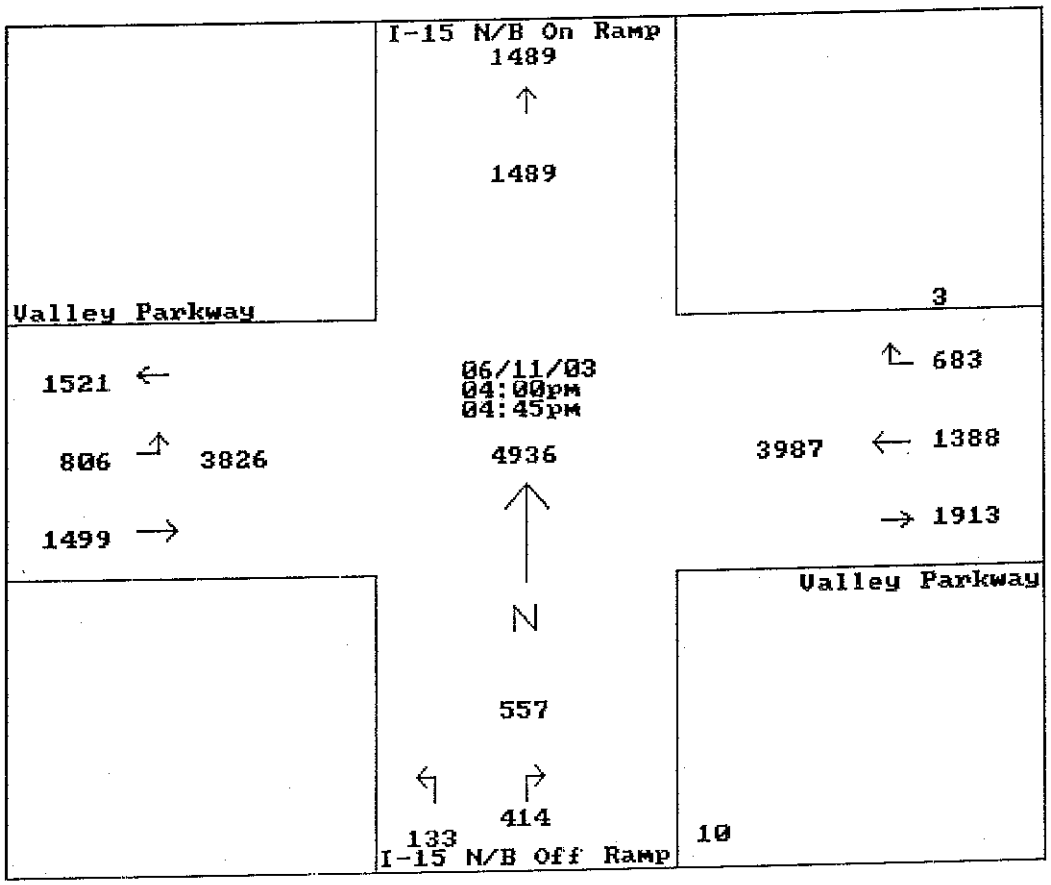
Weather : Clear & Dry
Counted by: R. Taylor & M. Adams
Board # : D1-1429 & D1-1430
Location : I-15 N/B Ramps @ Valley Pkwy

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03135091
Site Code : 00135091
Start Date: 06/11/03
Page : 2

Group 1

Start Time	I-15 N/B On Ramp Southbound				Valley Parkway Westbound				I-15 N/B Off Ramp Northbound				Valley Parkway Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



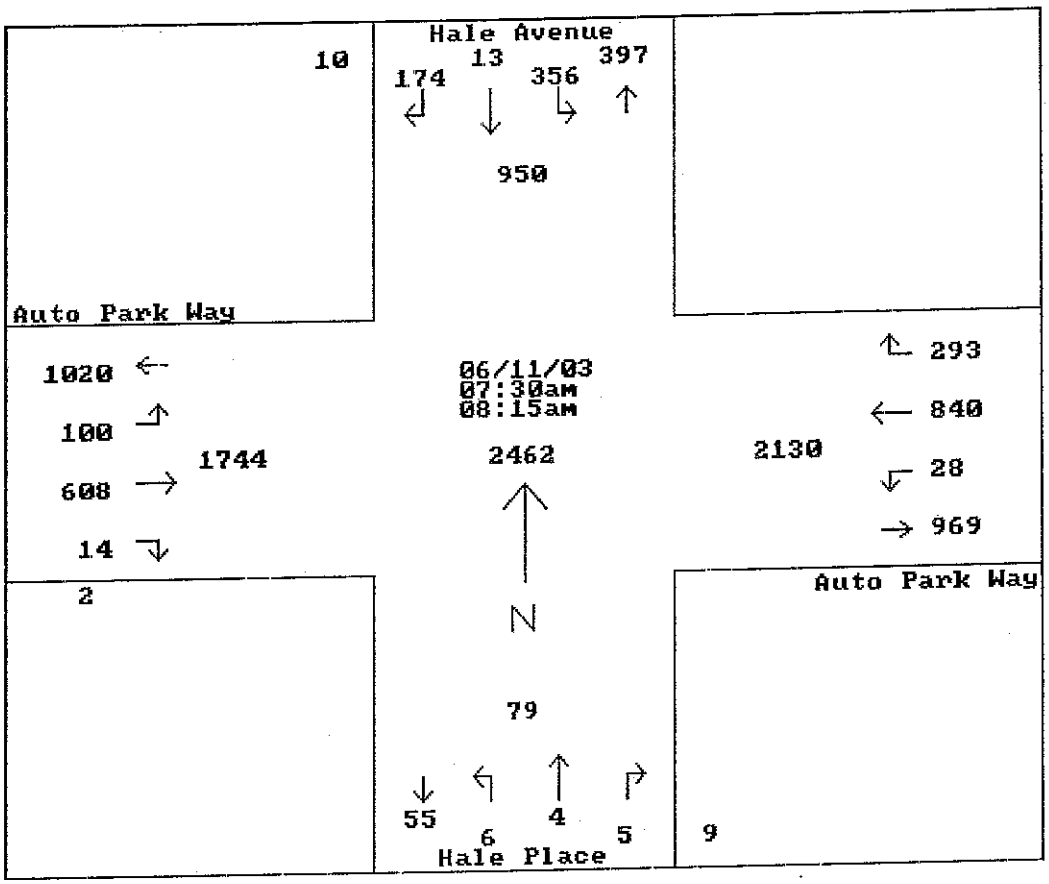
Weather : Clear & Dry
Counted by : S.Wood
Board # : D1-2173
Location : Hale Av & Auto Park Way

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03135100
Site Code : 00135100
Start Date: 06/11/03
Page : 2

Group 1

Start Time	Hale Avenue Southbound Left	Thru	Right	Peds	Auto Park Way Westbound Left	Thru	Right	Peds	Hale Place Northbound Left	Thru	Right	Peds	Auto Park Way Eastbound Left	Thru	Right	Peds	Intvl. Total



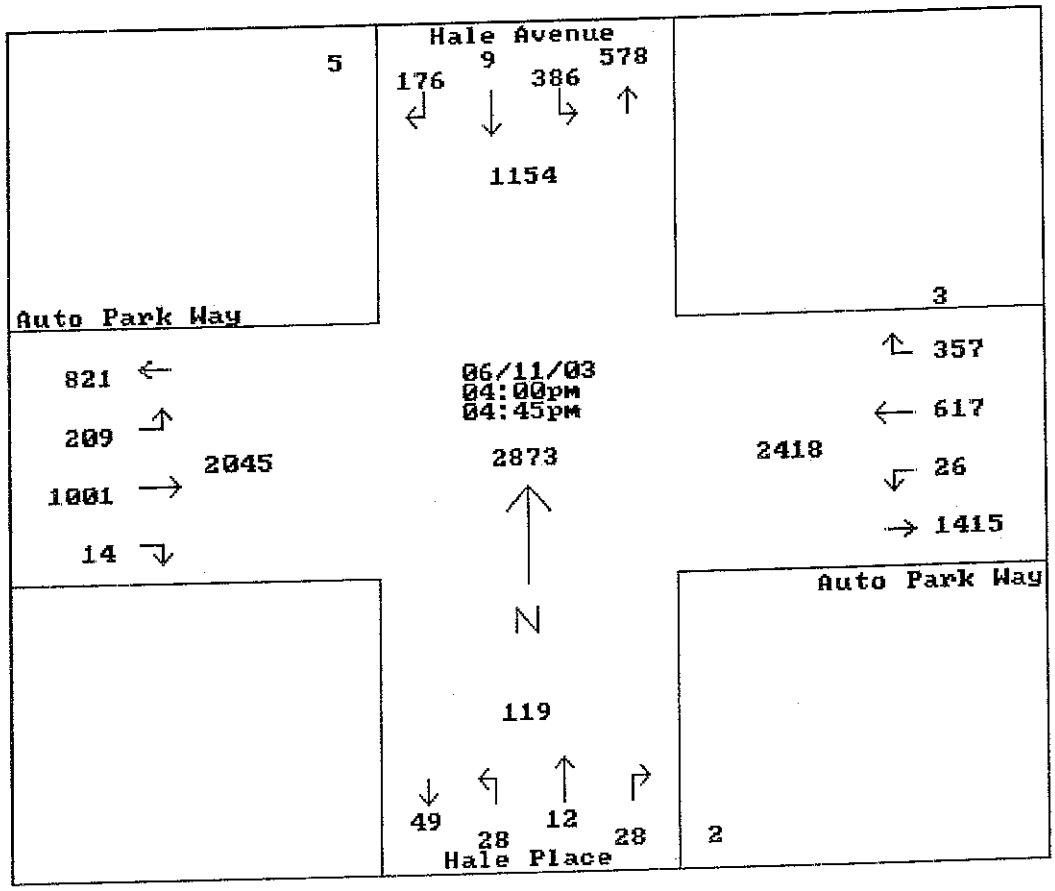
Weather : Clear & Dry
Counted by : S.Wood
Board # : D1-2173
Location : Hale Av & Auto Park Way

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03135101
Site Code : 00135101
Start Date: 06/11/03
Page : 2

Group 1

Start Time	Hale Avenue Southbound Left	Thru	Right	Peds	Auto Park Way Westbound Left	Thru	Right	Peds	Hale Place Northbound Left	Thru	Right	Peds	Auto Park Way Eastbound Left	Thru	Right	Peds	Intvl. Total



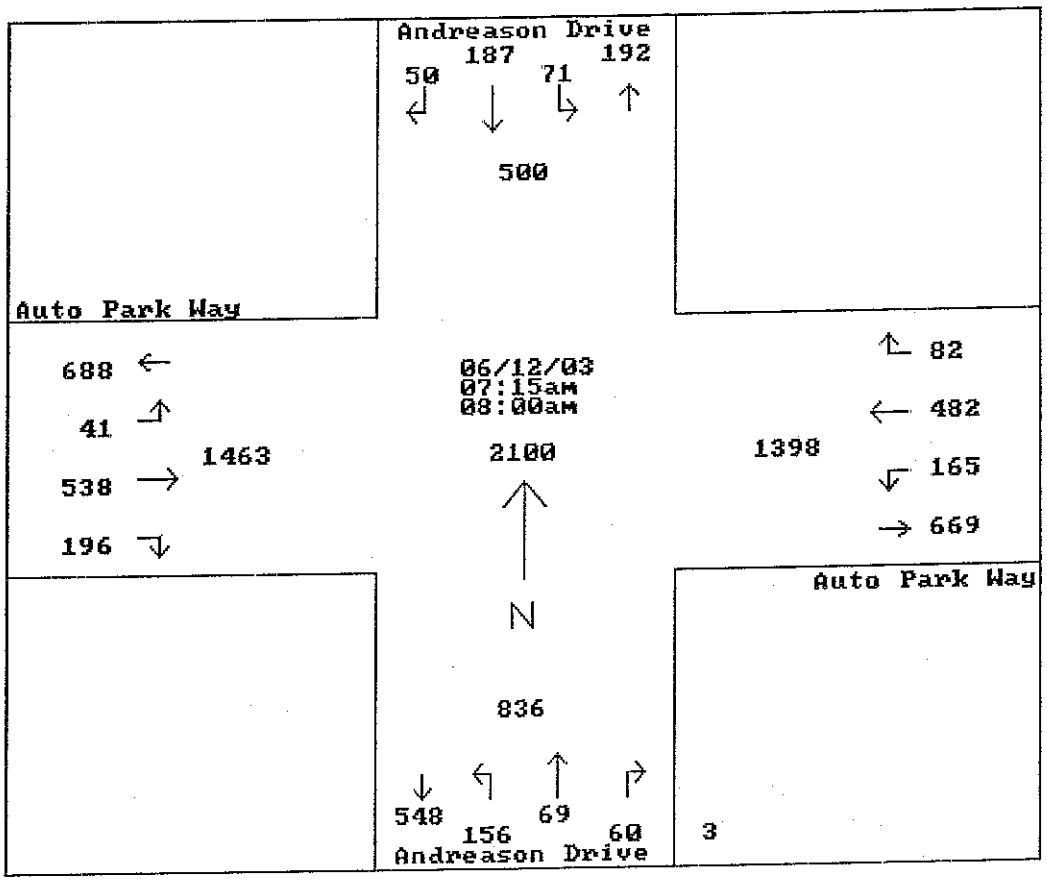
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : S.Wood
Board # : D1-2173
Location :Andreason Dr & Auto Park Way

Study Name: 03135110
Site Code : 00135110
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Andreason Drive Southbound				Auto Park Way Westbound				Andreason Drive Northbound				Auto Park Way Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



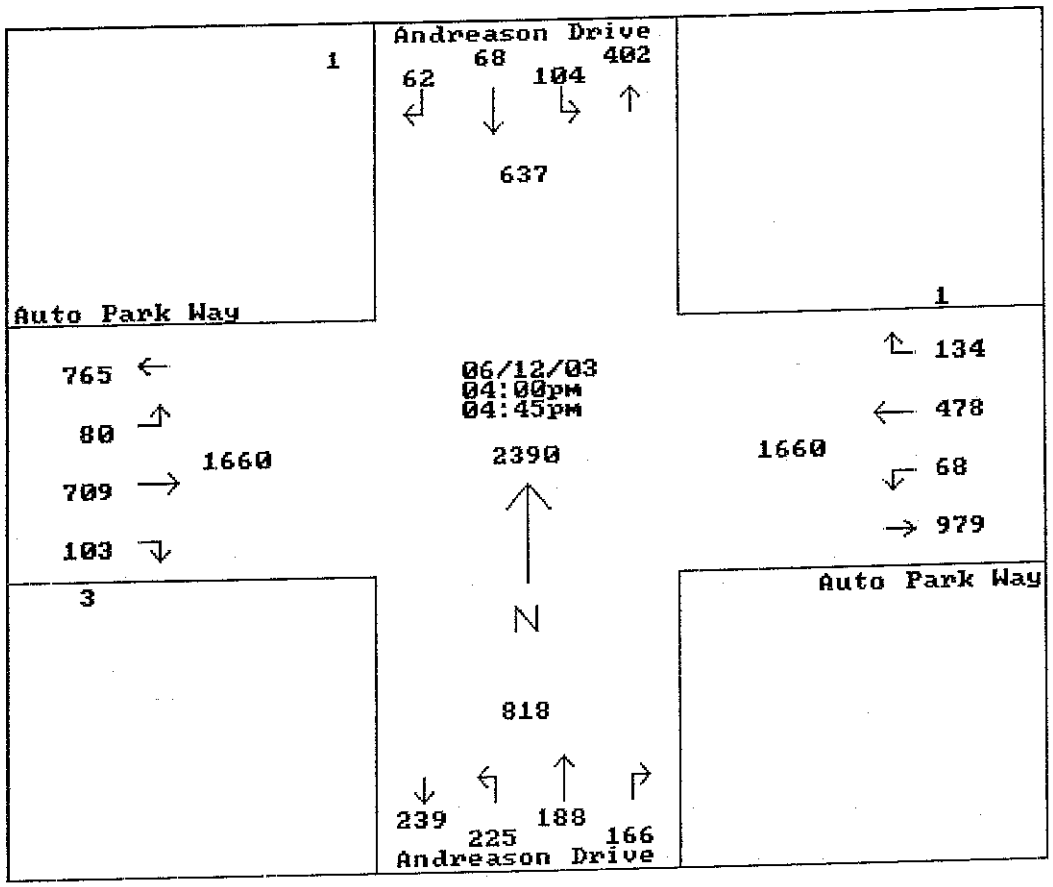
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : S.Wood
Board # : D1-2173
Location :Andreason Dr & Auto Park Way

Study Name: 03135111
Site Code : 00135111
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Andreason Drive Southbound Left	Thru	Right	Peds	Auto Park Way Westbound Left	Thru	Right	Peds	Andreason Drive Northbound Left	Thru	Right	Peds	Auto Park Way Eastbound Left	Thru	Right	Peds	Intvl. Total



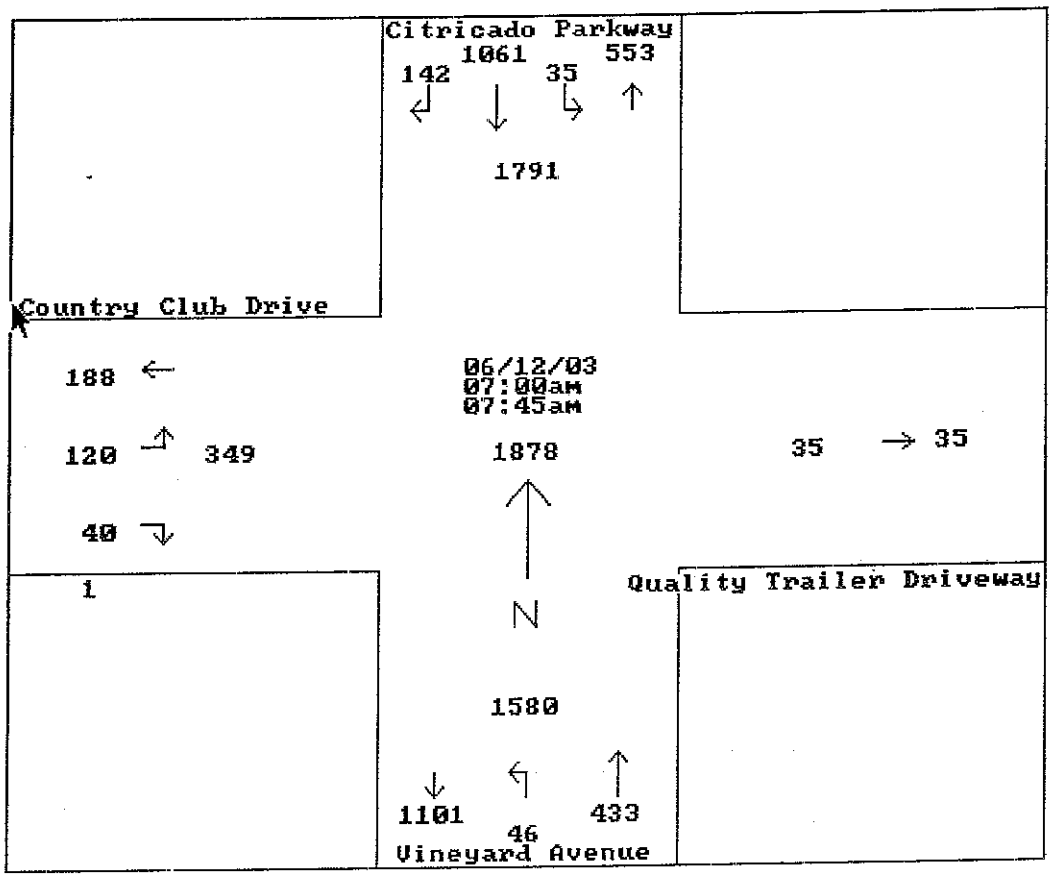
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : M.Archibald
Board # : D1-2172
Site: Country Club Dr & Auto Park Way

Study Name: 03135120
Site Code : 00135120
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Citricado Parkway Southbound				Quality Trailer Driveway Westbound				Vineyard Avenue Northbound				Country Club Drive Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



Traffic Data Service Southwest
9773 Maine Avenue
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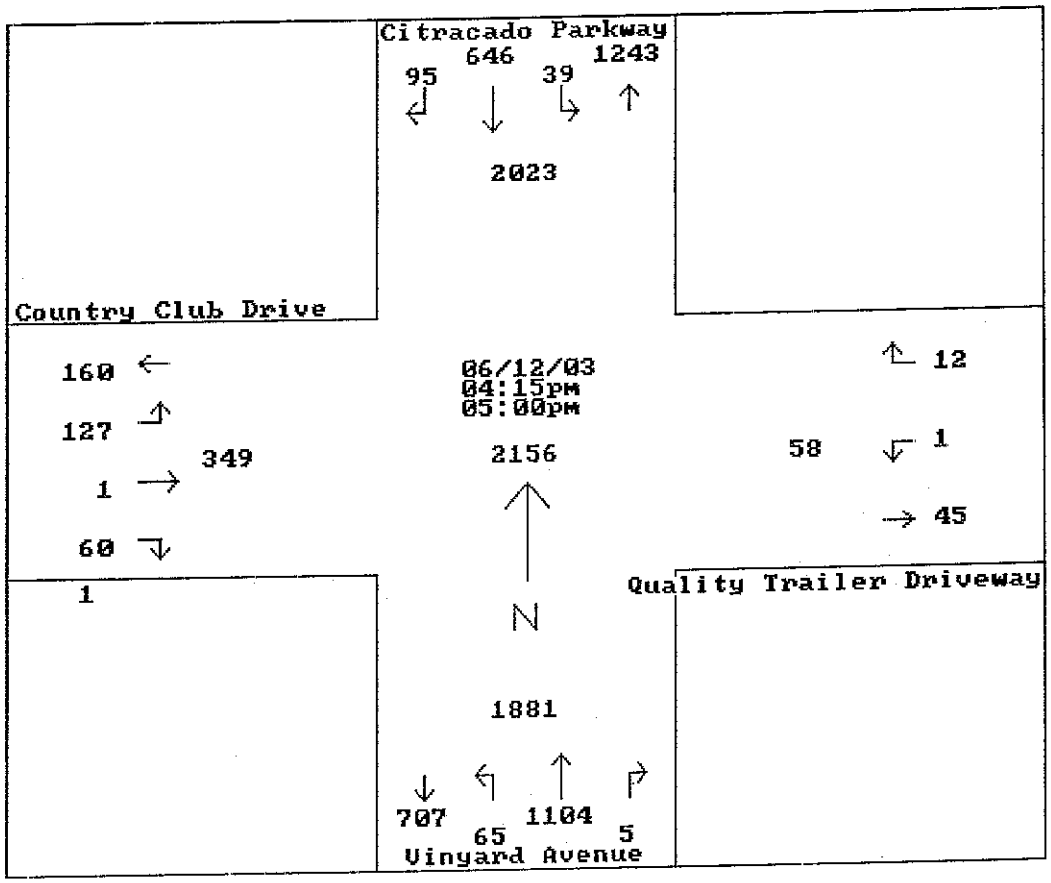
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : M.Archibald
Board # : D1-2172
Location:Country Club Dr & Auto Park Way

Study Name: 03135121
Site Code : 00135121
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Citracado Parkway Southbound				Quality Trailer Driveway Westbound				Vinyard Avenue Northbound				Country Club Drive Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



Traffic Data Service Southwest
9773 Maine Avenue
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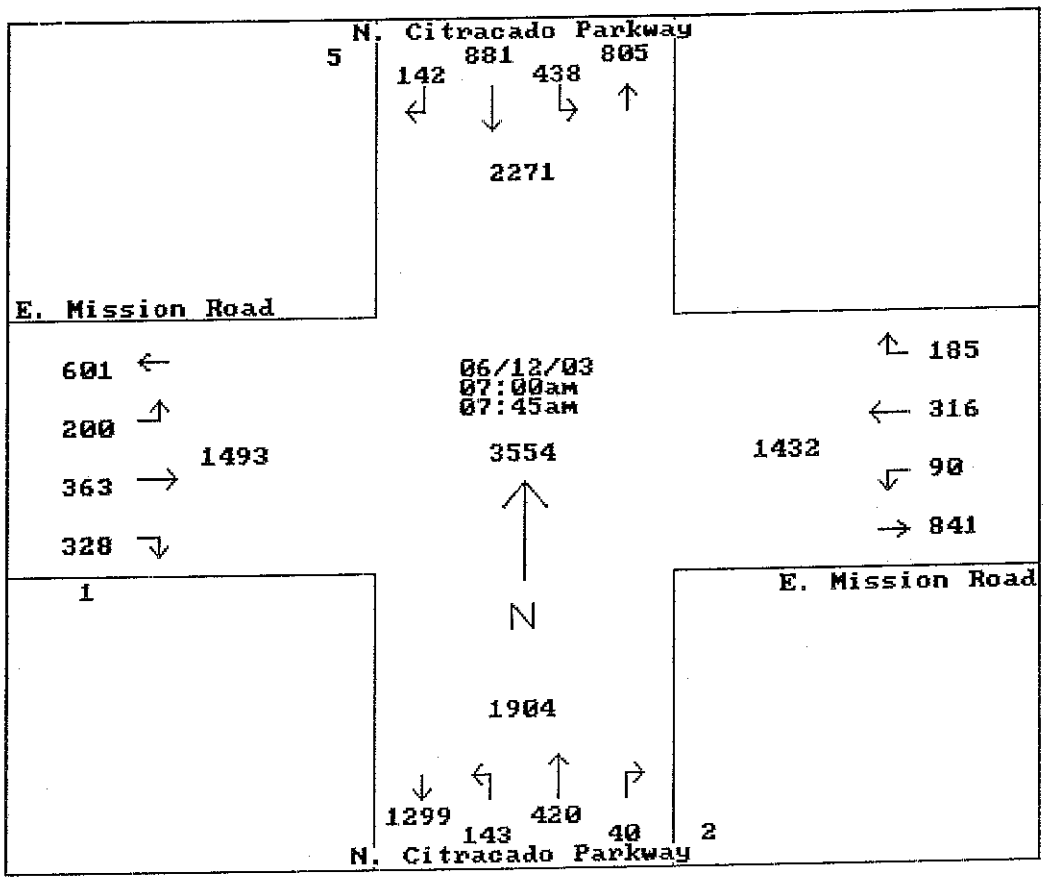
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : R.Taylor & M.Adams
Board # : D1-1429 & D1-1430
Location:N.Citracado Pkwy & E.Mission Rd

Study Name: 03135130
Site Code : 00135130
Start Date: 06/12/03
Page : 2

Group 1

Start Time	N. Citracado Parkway Southbound				E. Mission Road Westbound				N. Citracado Parkway Northbound				E. Mission Road Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



Traffic Data Service Southwest
9773 Maine Avenue
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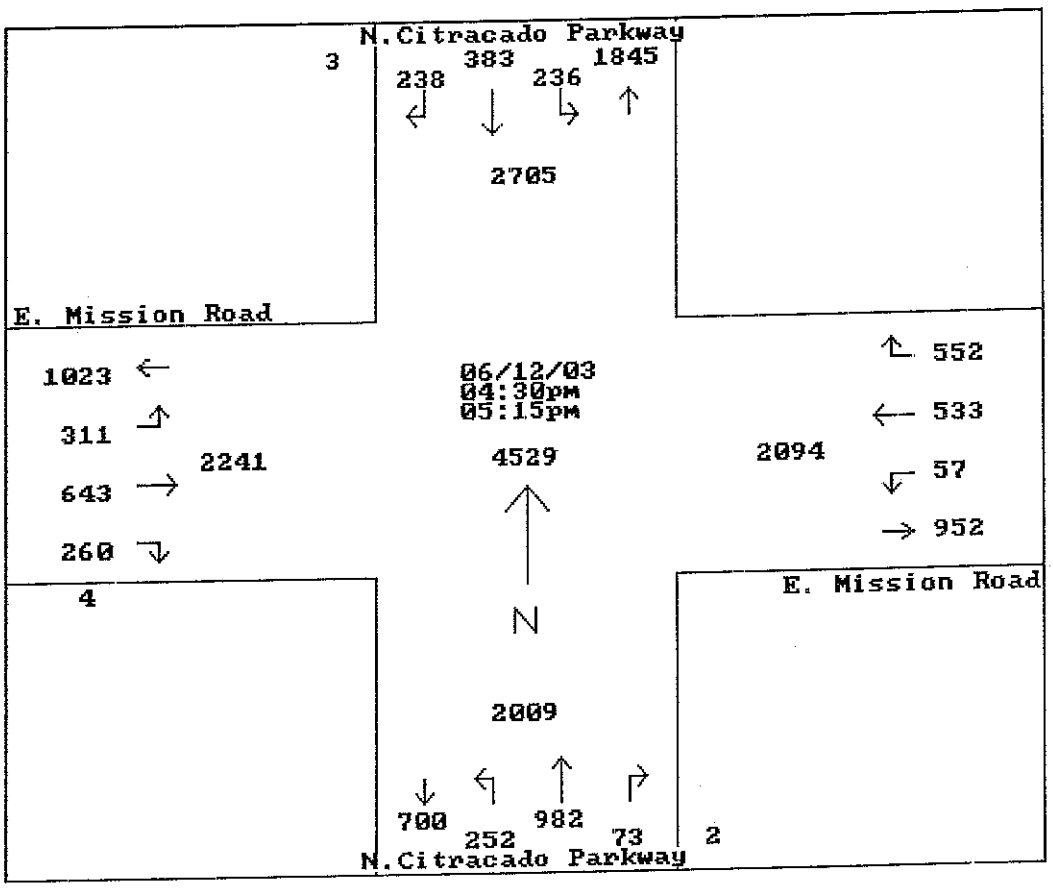
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : R.Taylor & M.Adams
Board # : D1-1429 & D1-1430
Location:N.Citracado Pkwy & E.Mission Rd

Study Name: 03135131
Site Code : 00135131
Start Date: 06/12/03
Page : 2

Group 1

Start Time	N.Citracado Parkway Southbound				E. Mission Road Westbound				N.Citracado Parkway Northbound				E. Mission Road Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



Traffic Data Service Southwest
9773 Maine Avenue
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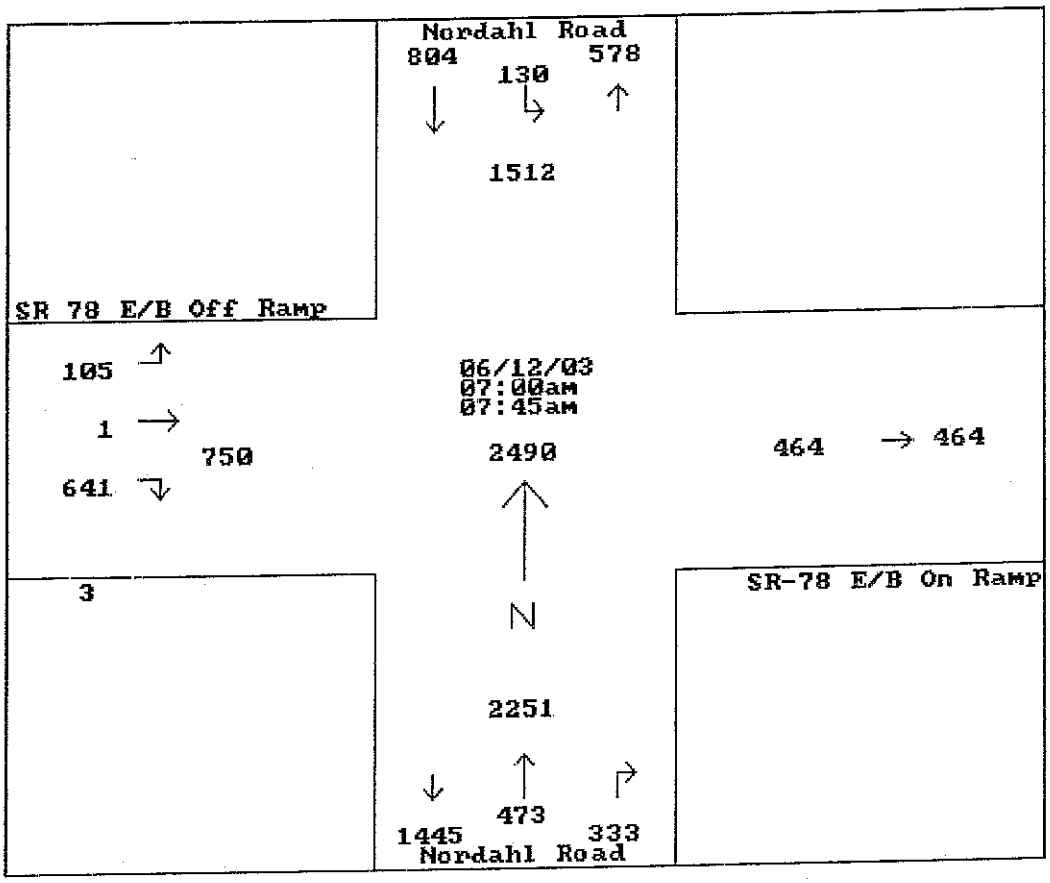
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : S.Dodson
Board # : D1-1425
Location : Nordahl Rd & SR78 E/B Ramp

Study Name: 03135140
Site Code : 00135140
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Nordahl Road Southbound				SR-78 E/B On Ramp Westbound				Nordahl Road Northbound				SR 78 E/B Off Ramp Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



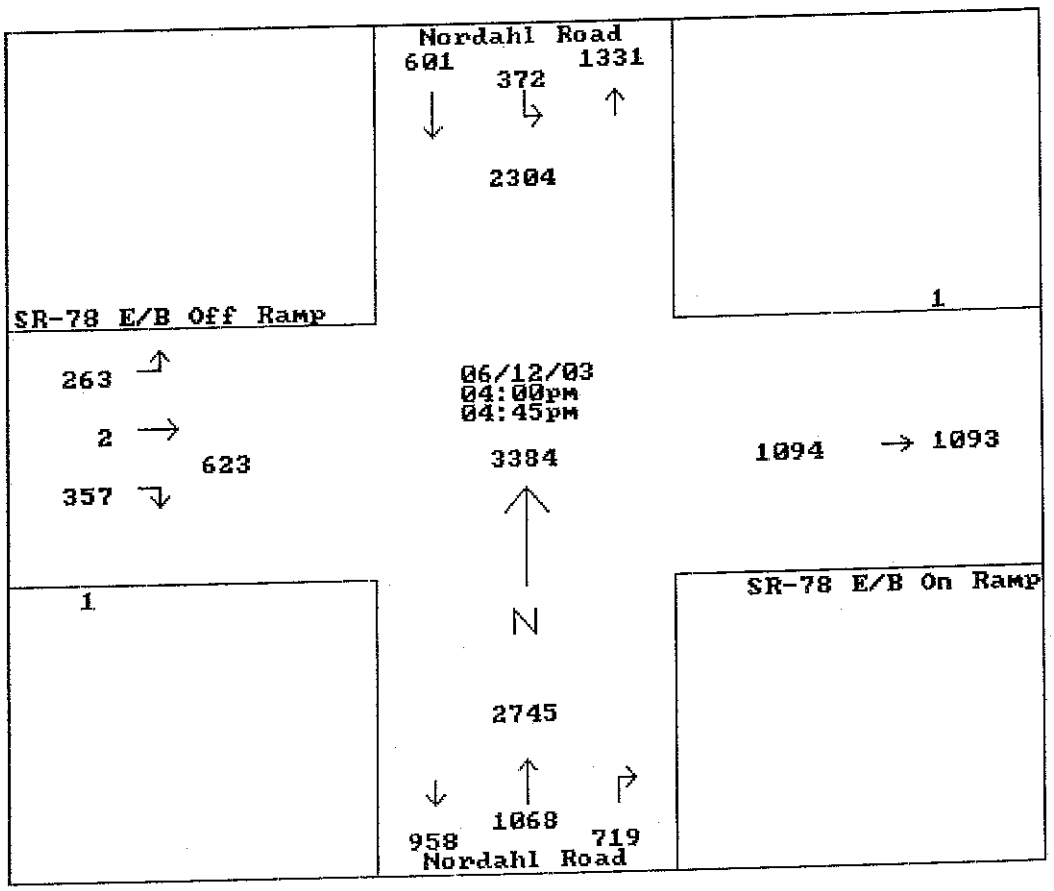
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : S.Dodson
Board # : D1-1425
Location :Nordahl Rd & SR78 E/B Ramps

Study Name: 03135141
Site Code : 00135141
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Nordahl Road Southbound				SR-78 E/B On Ramp Westbound				Nordahl Road Northbound				SR-78 E/B Off Ramp Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



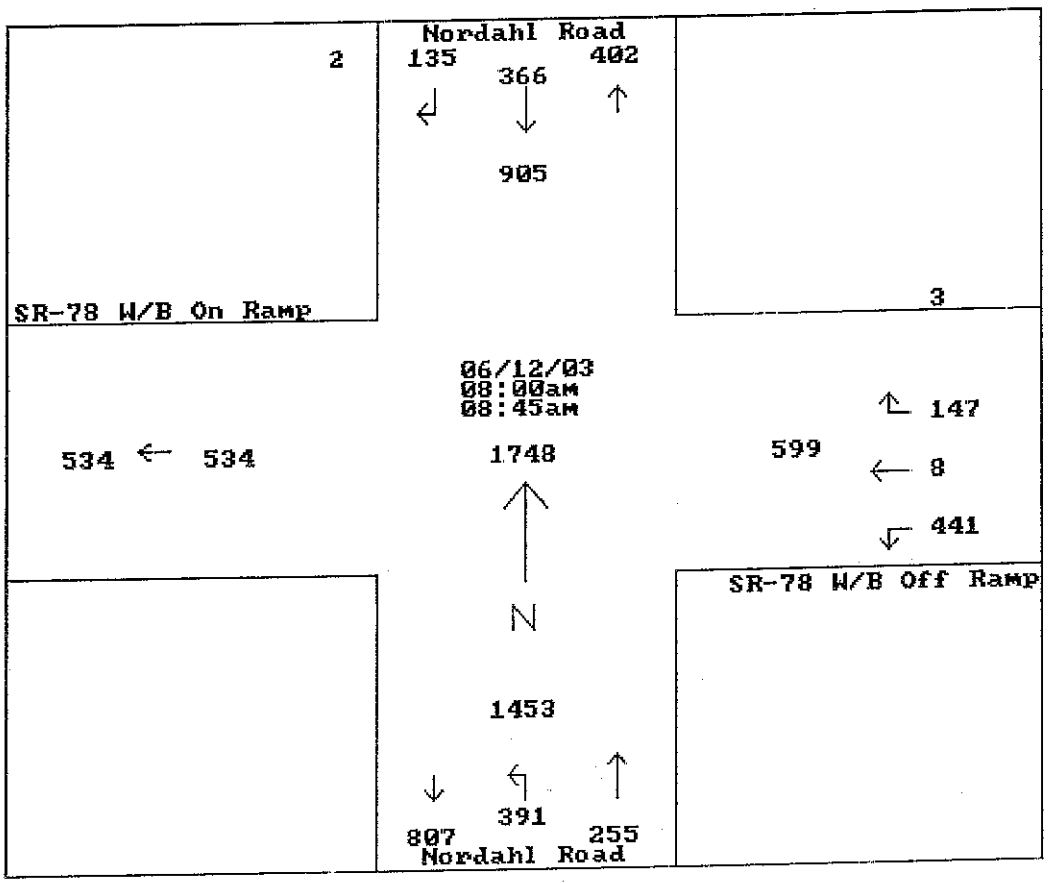
Weather : Clear & Dry
Counted by : R.Laney
Board # : D1-1424
Location : Nordahl Rd & SR78 W/B Ramps

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03135150
Site Code : 00135150
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Nordahl Road Southbound Left	Thru	Right	Peds	SR-78 W/B Off Ramp Westbound Left	Thru	Right	Peds	Nordahl Road Northbound Left	Thru	Right	Peds	SR-78 W/B On Ramp Eastbound Left	Thru	Right	Peds	Intvl. Total



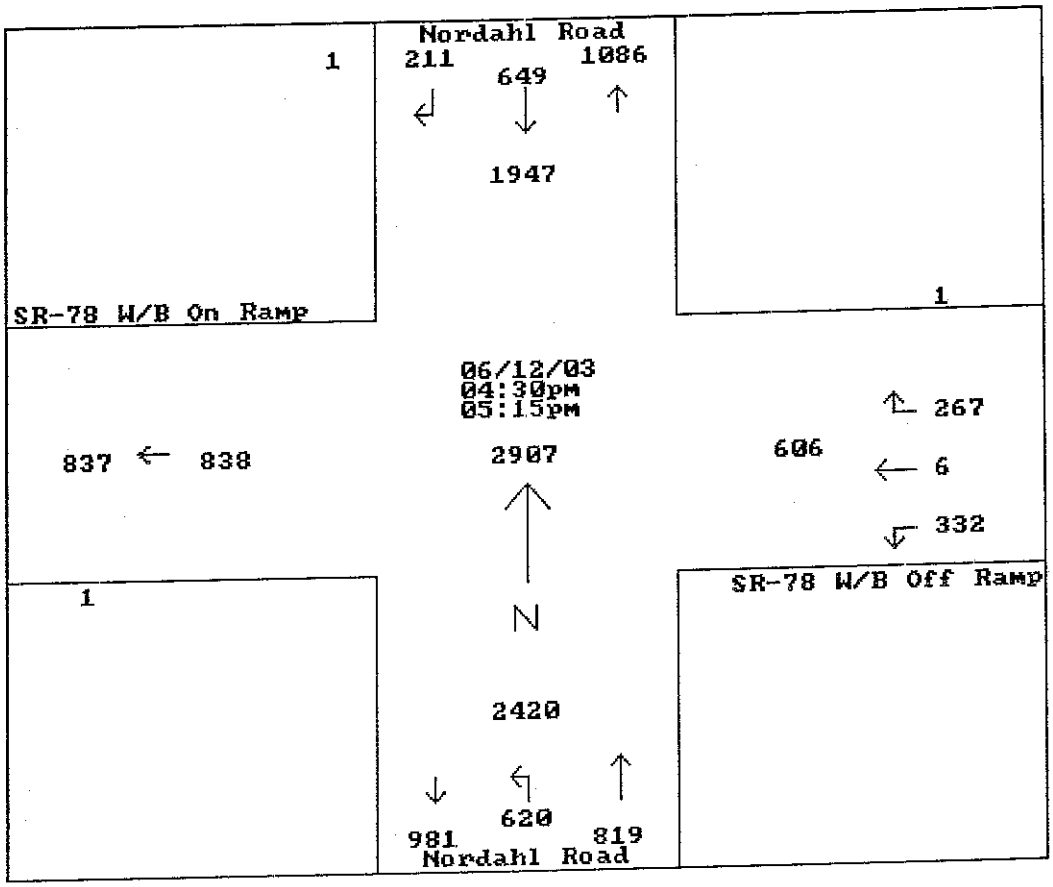
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : R.Laney
Board # : D1-1424
Location :Nordahl Rd & SR78 W/B Ramps

Study Name: 03135151
Site Code : 00135151
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Nordahl Road Southbound				SR-78 W/B Off Ramp Westbound				Nordahl Road Northbound				SR-78 W/B On Ramp Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



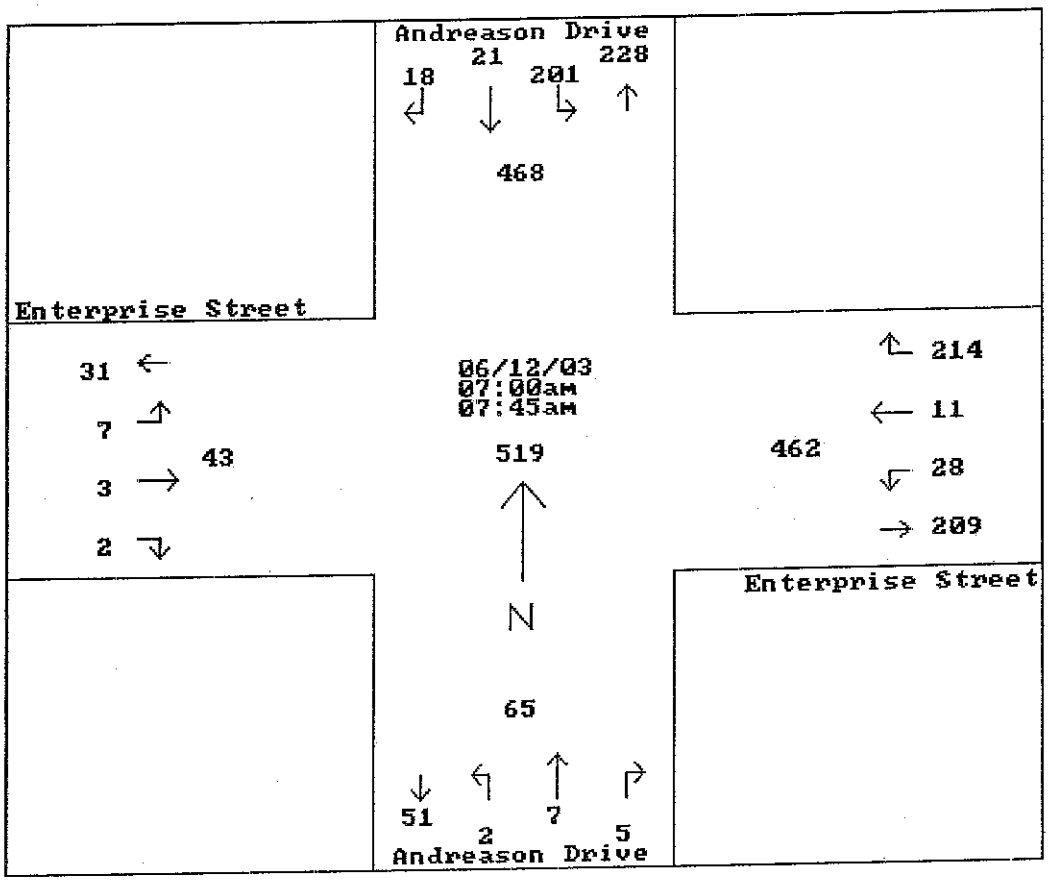
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : R.Fitzgerald
Board # : D1-1306
Location : Andreason Dr & Harmony Grove

Study Name: 03135160
Site Code : 00135160
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Andreason Drive Southbound				Enterprise Street Westbound				Andreason Drive Northbound				Enterprise Street Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



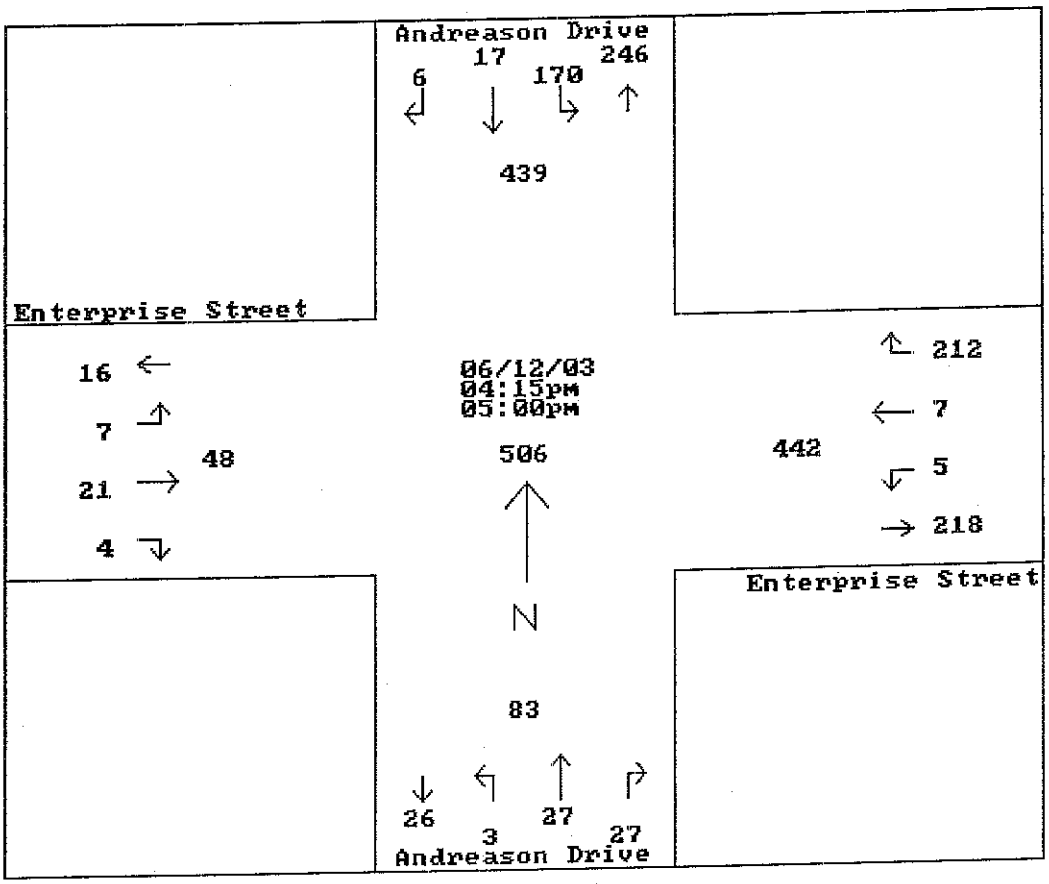
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : R.Fitzgerald
Board # : D1-1306
Location :Andreason Dr & Harmony Grove

Study Name: 03135161
Site Code : 00135161
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Andreason Drive Southbound				Enterprise Street Westbound				Andreason Drive Northbound				Enterprise Street Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



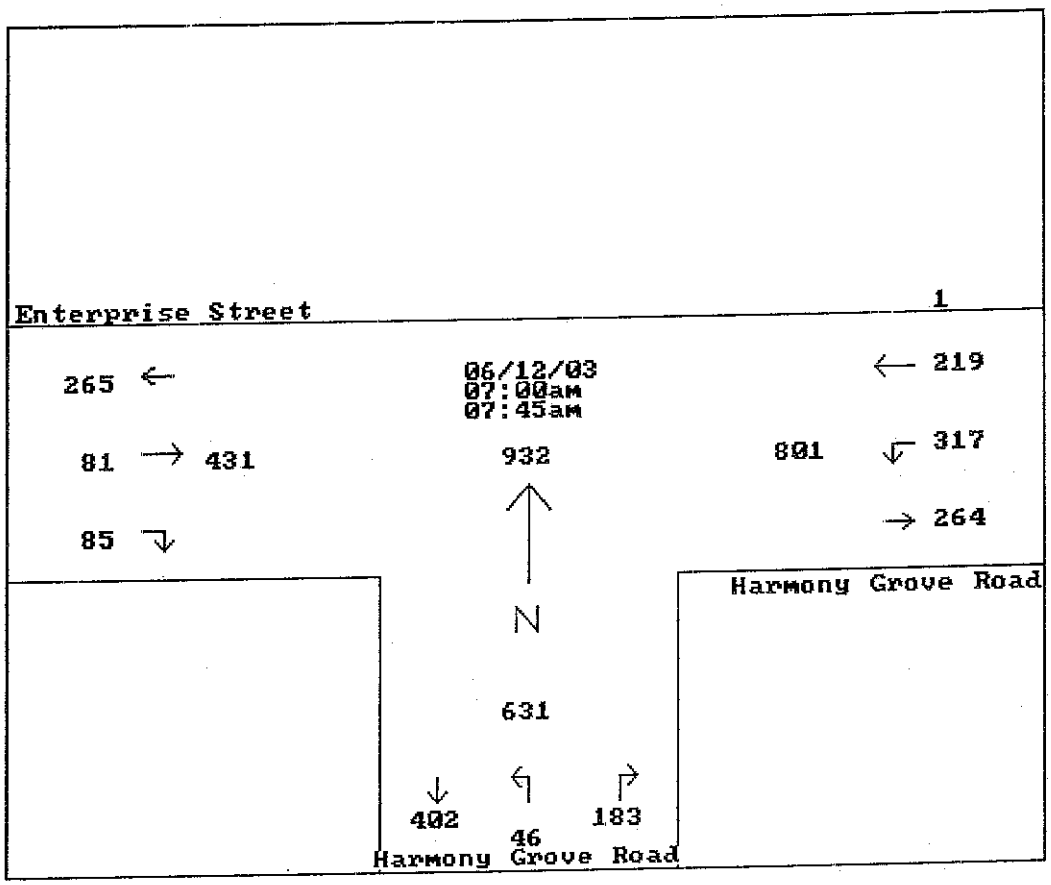
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : J.Rice
Board # : D1-1307
Location : Harmony Grove & Enterprise

Study Name: 03135170
Site Code : 00135170
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Harmony Grove Road Westbound			Harmony Grove Road Northbound			Enterprise Street Eastbound			Intrvl. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	



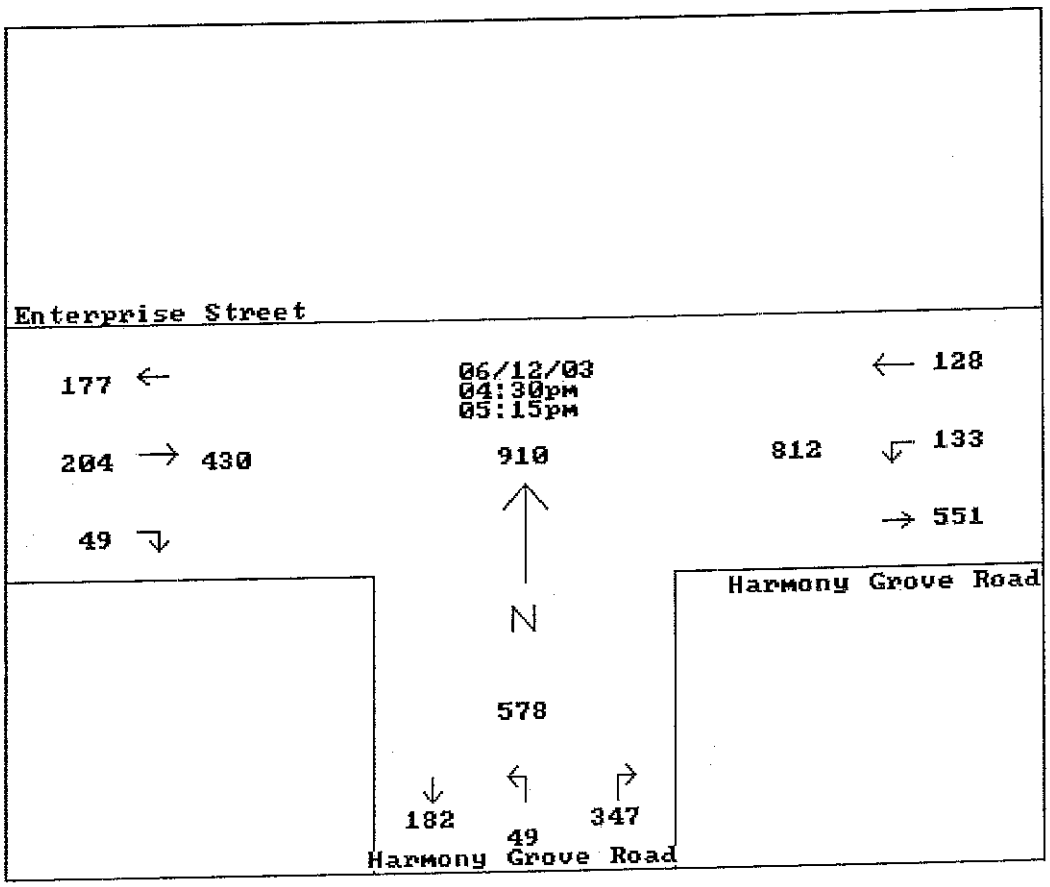
Weather : Clear & Dry
Counted by : J.Rice
Board # : D1-1307
Location : Harmony Grove & Enterprise St

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03135171
Site Code : 00135171
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Harmony Grove Road Westbound			Harmony Grove Road Northbound			Enterprise Street Eastbound			Intrvl. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	



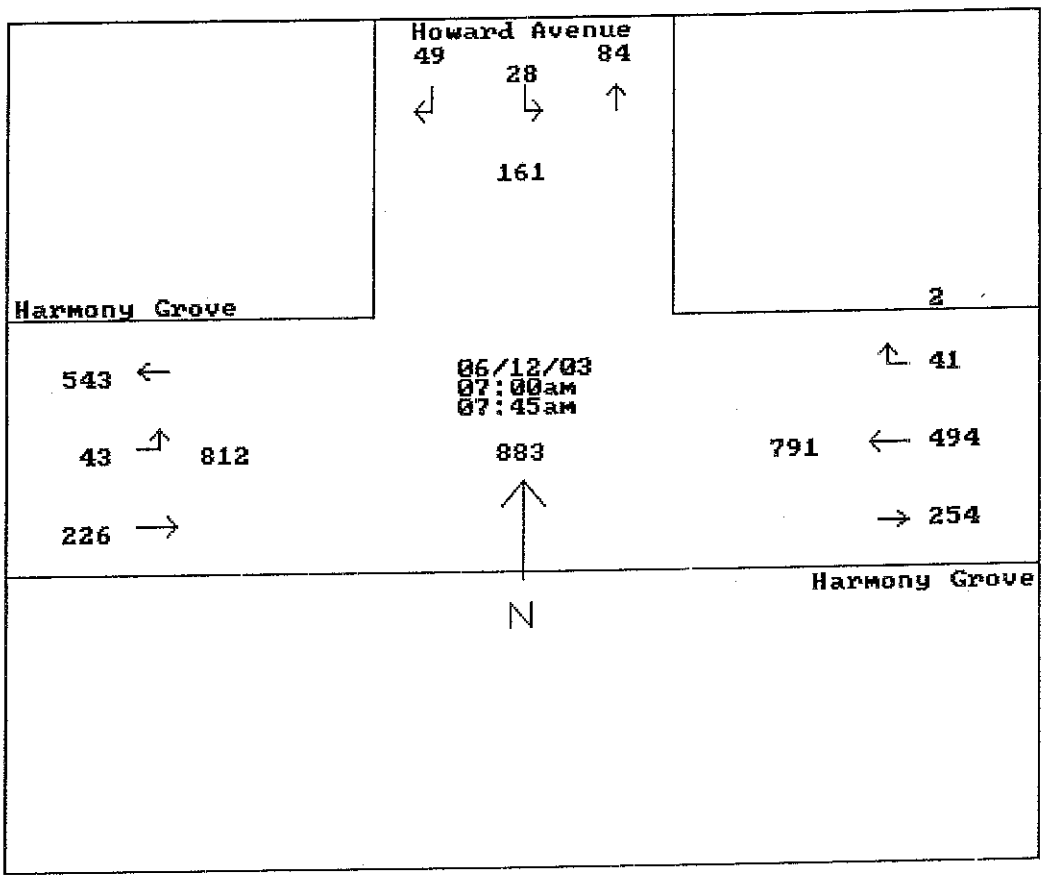
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : J.Green
Board # : D1-1426
Location : Howard Av & Harmony Grove

Study Name: 03135180
Site Code : 00135180
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Howard Avenue Southbound Left	Right	Peds	Harmony Grove Westbound Thru	Right	Peds	Harmony Grove Eastbound Left	Thru	Peds	Intrvl. Total



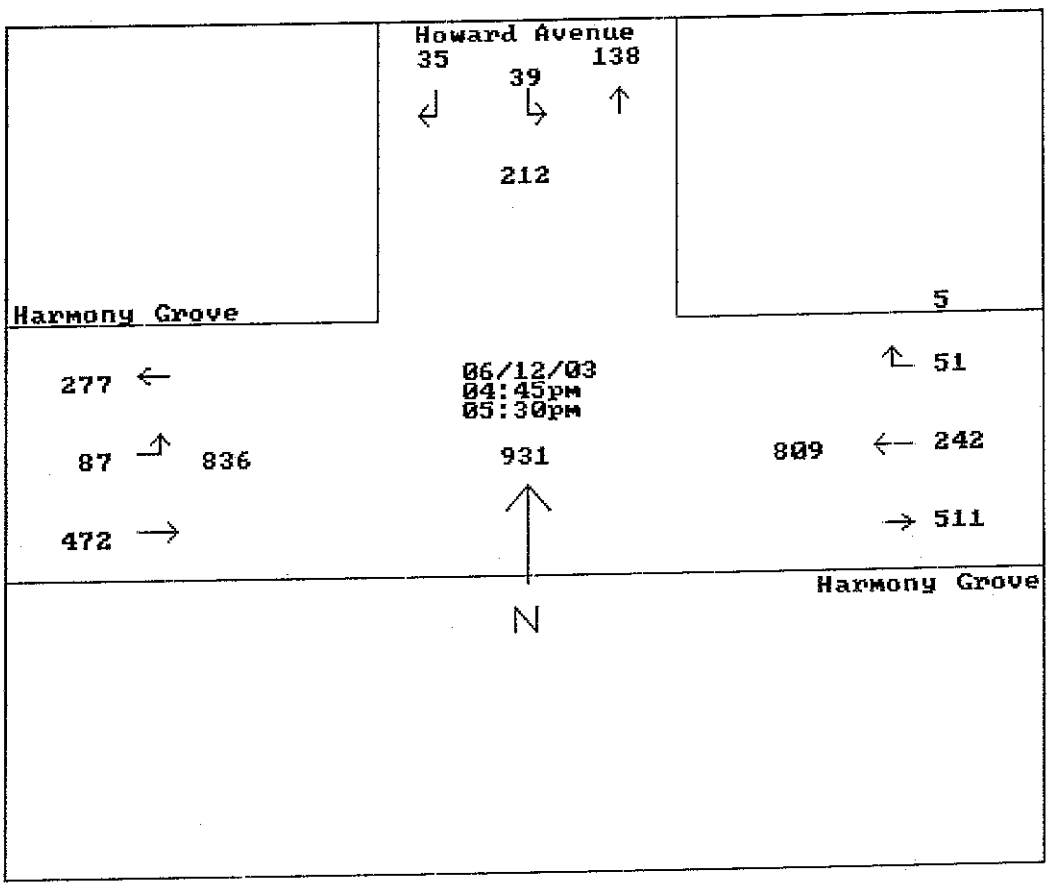
Weather : Clear & Dry
Counted by : J.Green
Board # : D1-1426
Location : Howard Av & Harmony Grove

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03135181
Site Code : 00135181
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Howard Avenue Southbound Left	Right	Peds	Harmony Grove Westbound Thru	Right	Peds	Harmony Grove Eastbound Left	Thru	Peds	Intrvl. Total



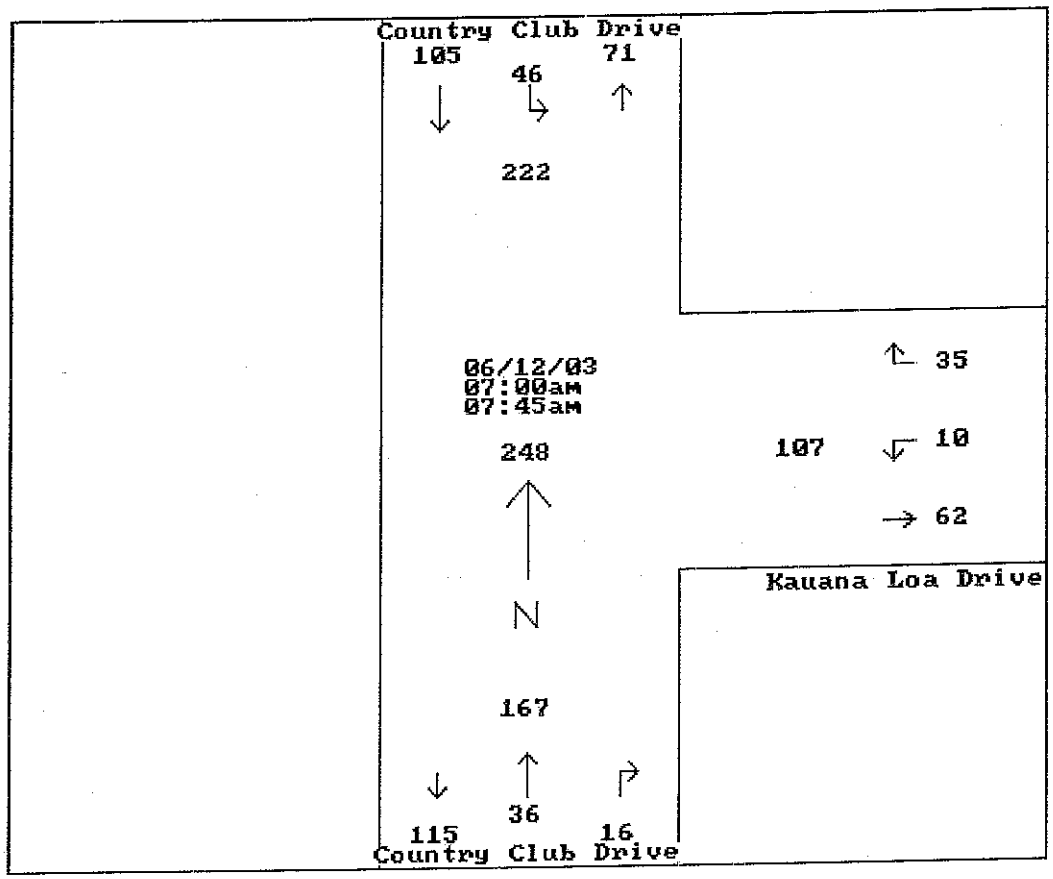
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : S.Mockler
Board # : D1-1433
Location :Country Club Dr & Kauana Loa

Study Name: 03135190
Site Code : 00135190
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Country Club Drive Southbound Left	Thru	Peds	Kauana Loa Drive Westbound Left	Right	Peds	Country Club Drive Northbound Thru	Right	Peds	Intrvl. Total



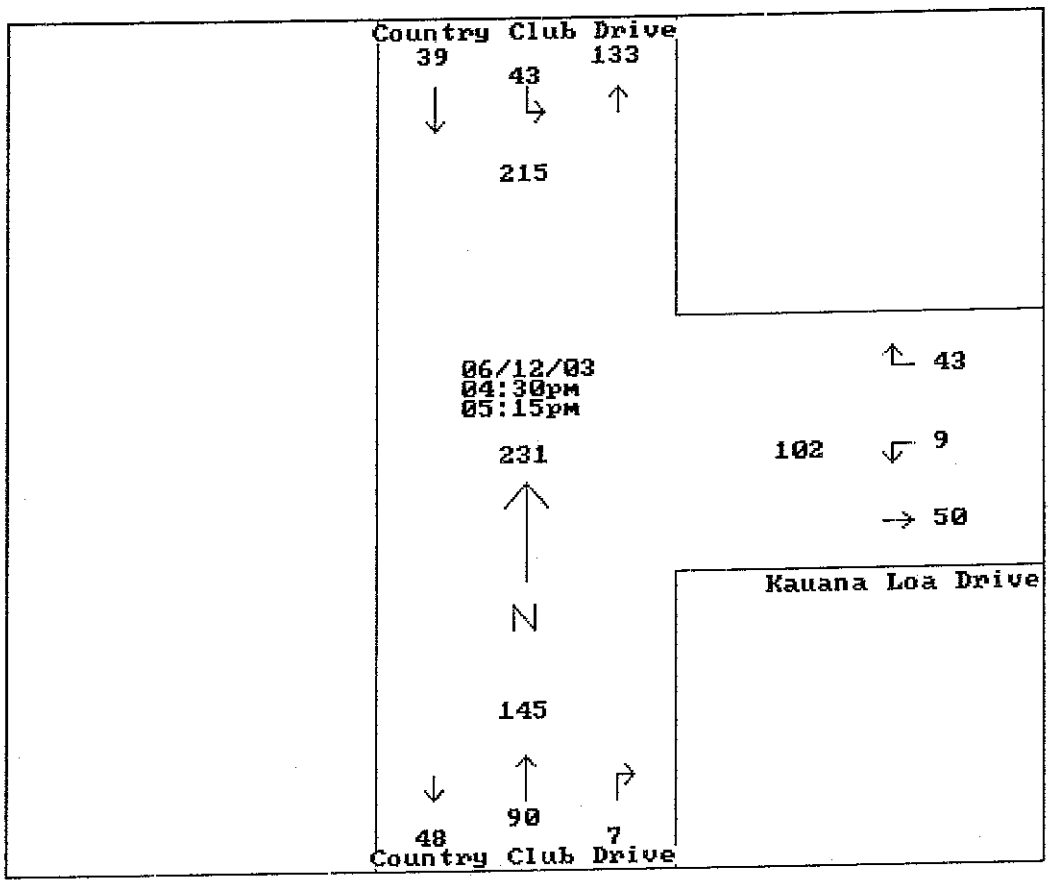
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : S.Mockler
Board # : D1-1433
Location : Country Club Dr & Kauana Loa

Study Name: 03135191
Site Code : 00135191
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Country Club Drive Southbound Left	Thru	Peds	Kauana Loa Drive Westbound Left	Right	Peds	Country Club Drive Northbound Thru	Right	Peds	Intrvl. Total



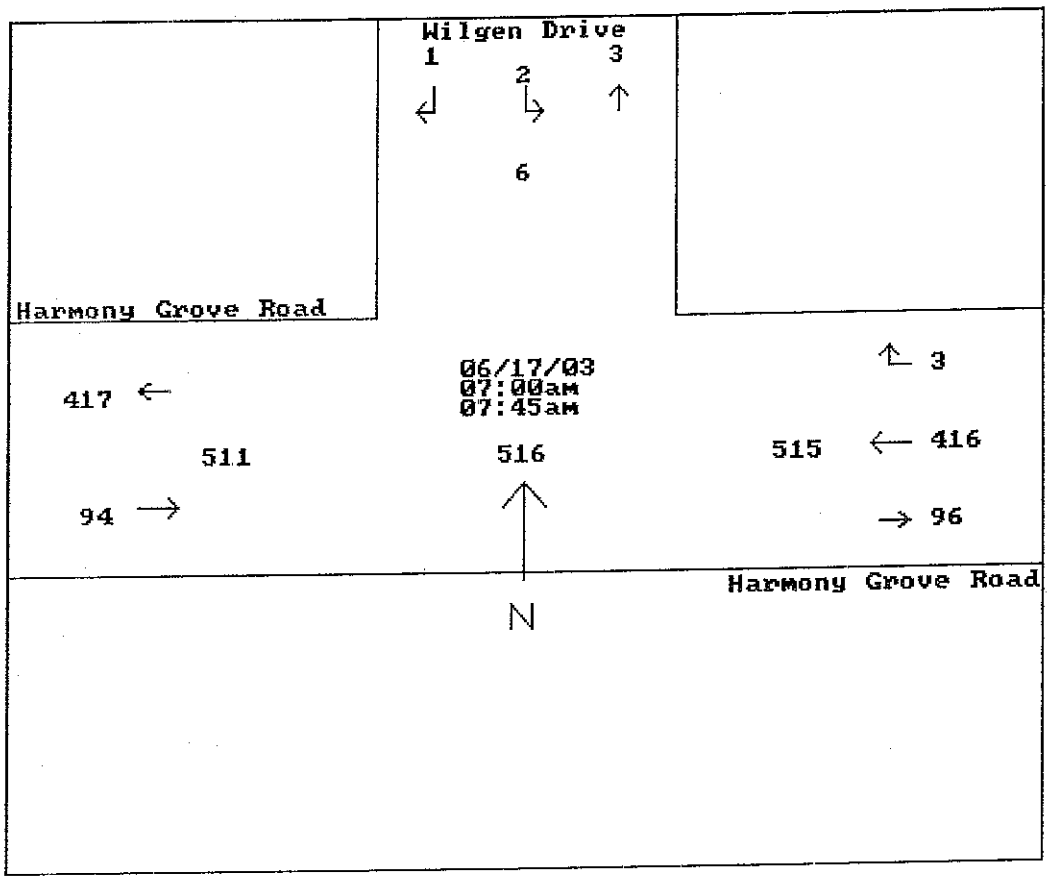
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : R.Fitzgerald
Board # : D1-1306
Location :Wilgen Dr & Harmony Grove Rd

Study Name: 03135210
Site Code : 00135210
Start Date: 06/17/03
Page : 2

Group 1

Start Time	Wilgen Drive Southbound Left	Right	Peds	Harmony Grove Road Westbound Thru	Right	Peds	Harmony Grove Road Eastbound Left	Thru	Peds	Intrvl. Total



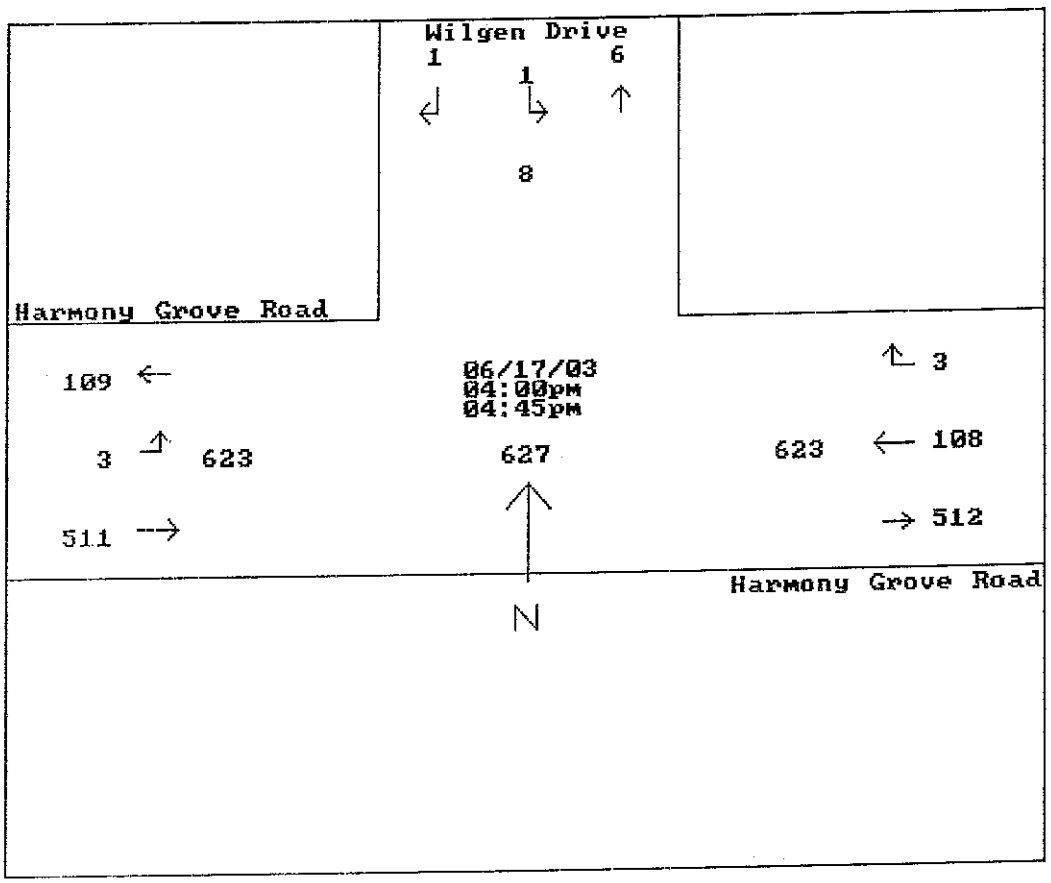
Weather : Clear & Dry
Counted by : R.Fitzgerald
Board # : D1-1306
Location :Wilgen Dr & Harmony Grove Rd

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03135211
Site Code : 00135211
Start Date: 06/17/03
Page : 2

Group 1

Start Time	Wilgen Drive Southbound Left	Right	Peds	Harmony Grove Road Westbound Thru	Right	Peds	Harmony Grove Road Eastbound Left	Thru	Peds	Intrvl. Total



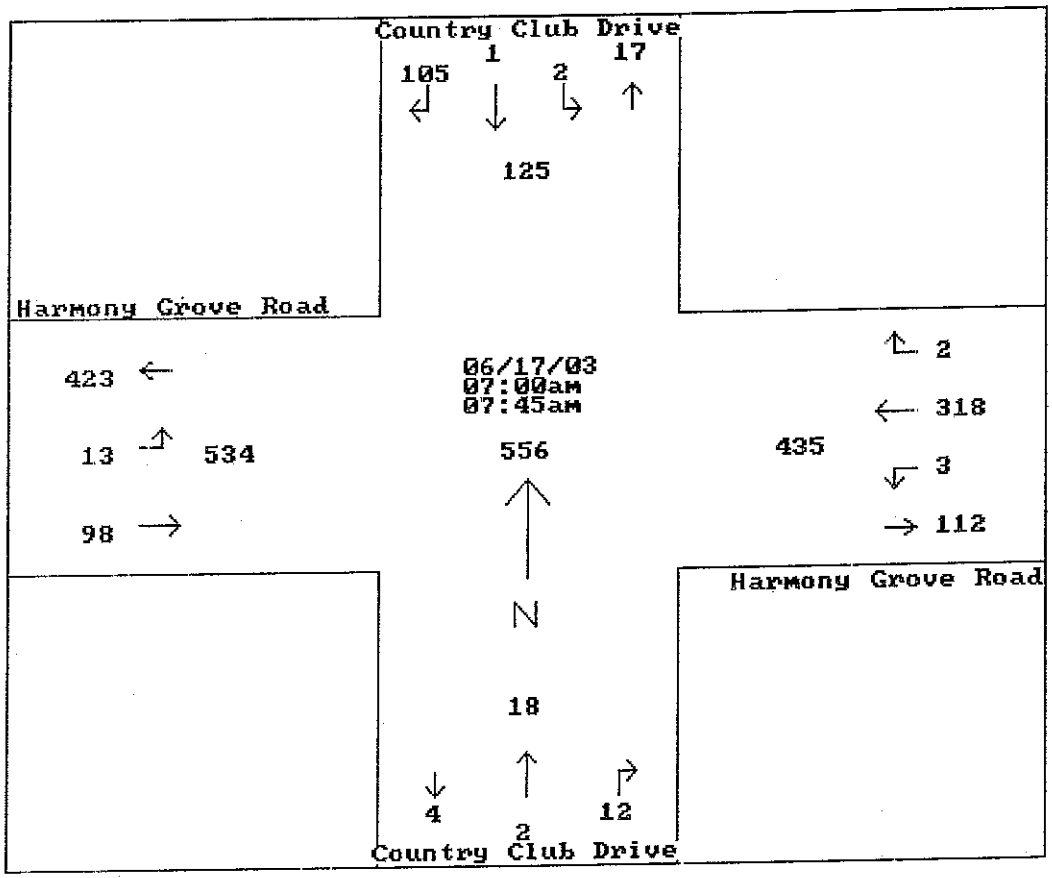
Weather : Clear & Dry
Counted by : J.Rice
Board # : D1-1307
Site: Country Club Dr & Harmony Grove Rd

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03135220
Site Code : 00135220
Start Date: 06/17/03
Page : 2

Group 1

Start Time	Country Club Drive Southbound				Harmony Grove Road Westbound				Country Club Drive Northbound				Harmony Grove Road Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



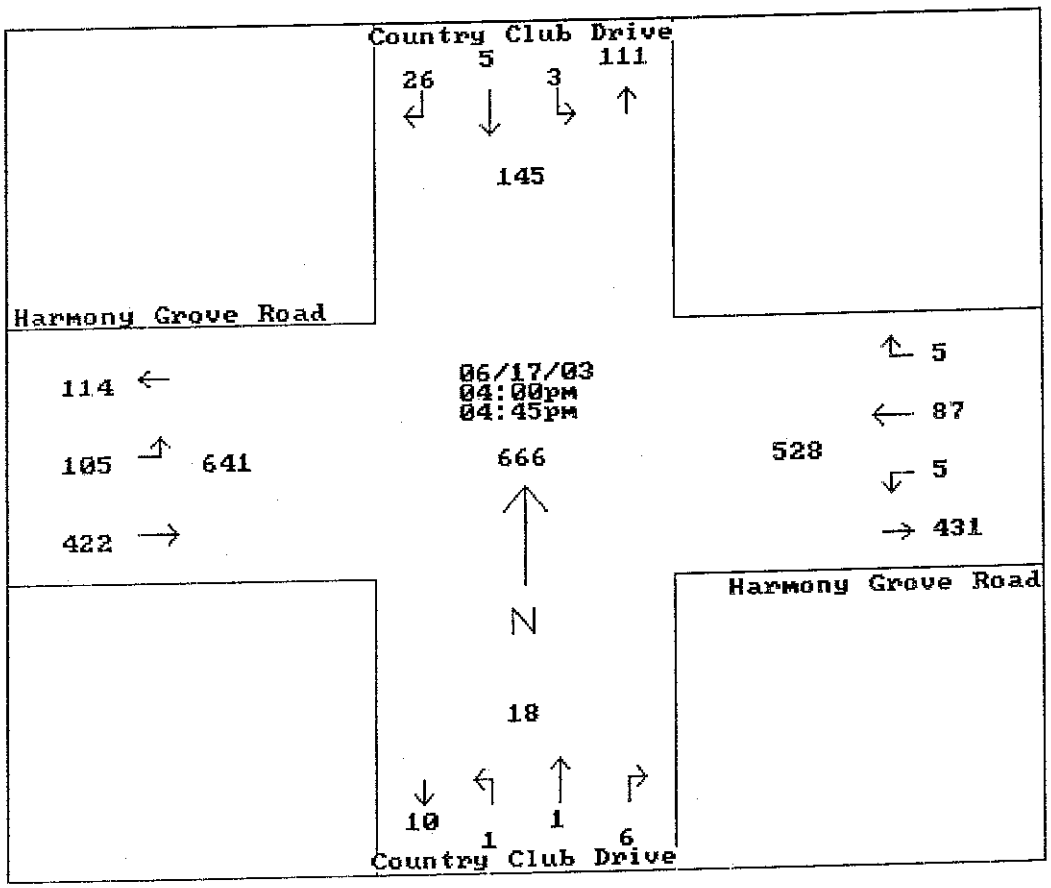
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : J.Rice
Board # : D1-1307
Site: Country Club Dr & Harmony Grove Rd

Study Name: 03135221
Site Code : 00135221
Start Date: 06/17/03
Page : 2

Group 1

Start Time	Country Club Drive Southbound				Harmony Grove Road Westbound				Country Club Drive Northbound				Harmony Grove Road Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



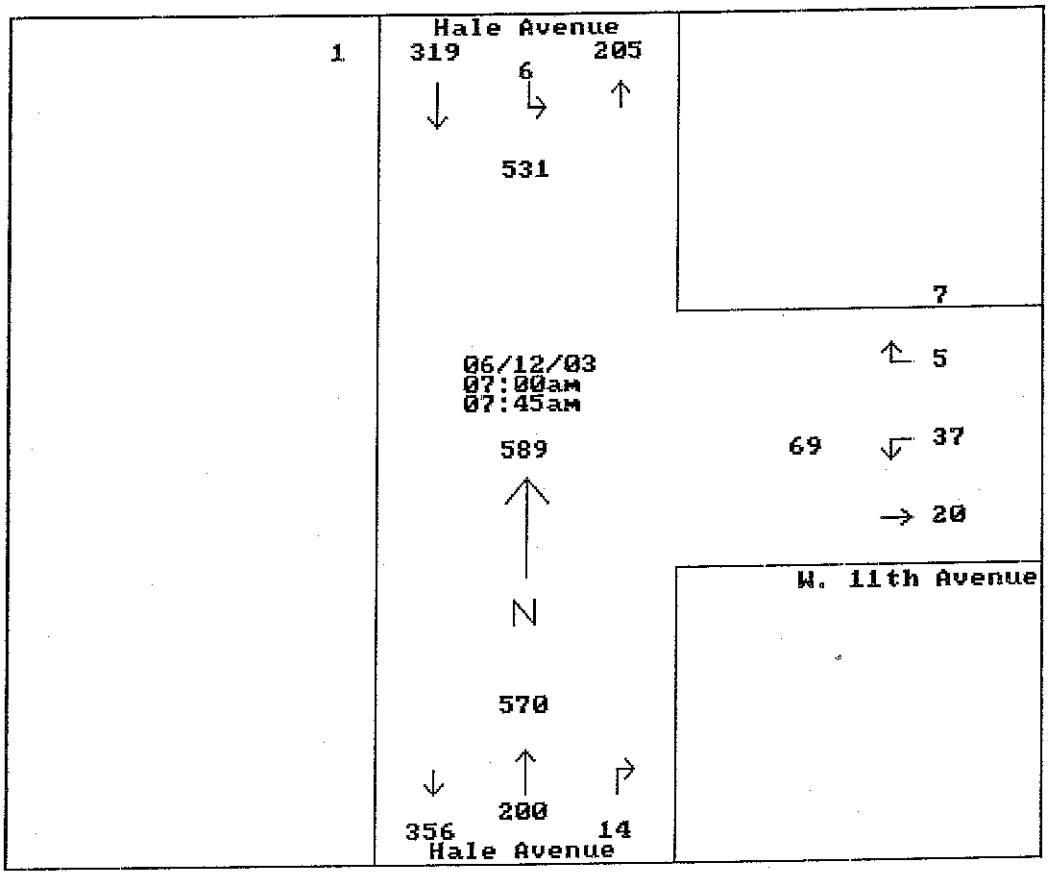
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : J. Stutz
Board # : D1-1432
Location : Hale Ave & W. 11th Ave

Study Name: 03135230
Site Code : 00135230
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Hale Avenue Southbound Left	Thru	Peds	W. 11th Avenue Westbound Left	Right	Peds	Hale Avenue Northbound Thru	Right	Peds	Intrvl. Total



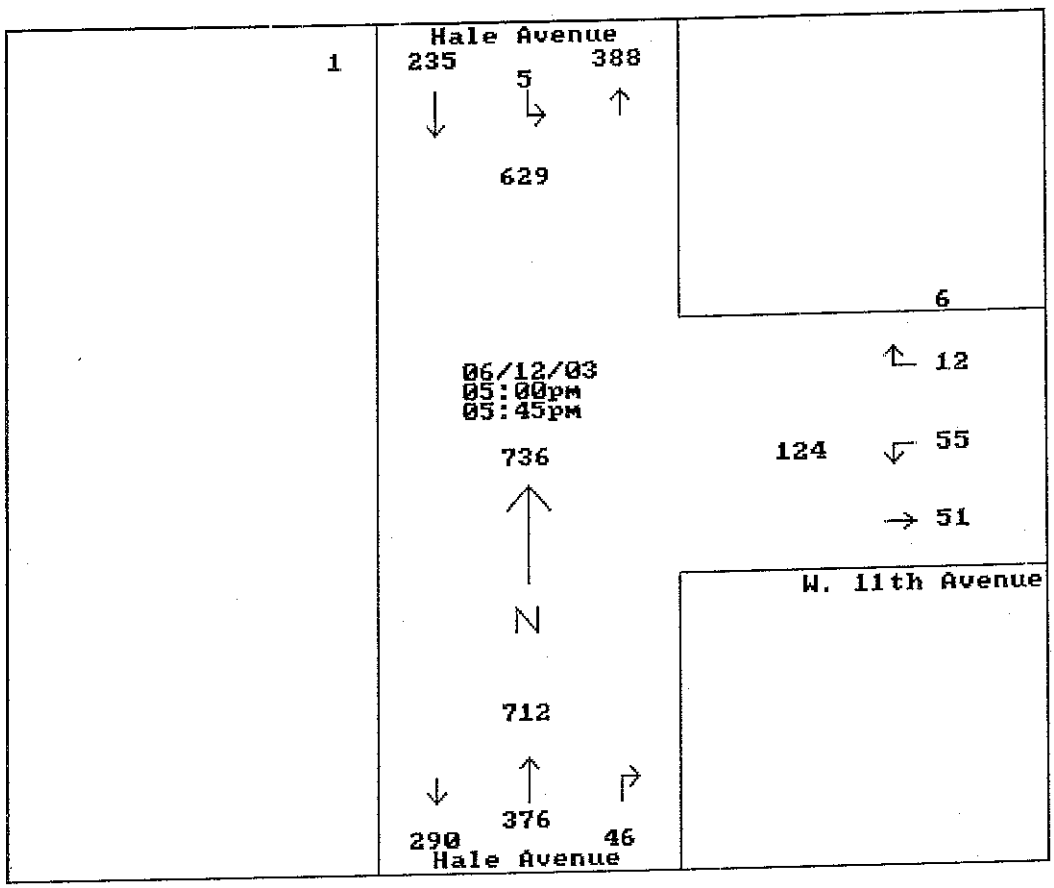
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : J.Stutz
Board # : D1-1432
Location : Hale Av & W.11th Av

Study Name: 03135231
Site Code : 00135231
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Hale Avenue Southbound Left	Thru	Peds	W. 11th Avenue Westbound Left	Right	Peds	Hale Avenue Northbound Thru	Right	Peds	Intrvl. Total



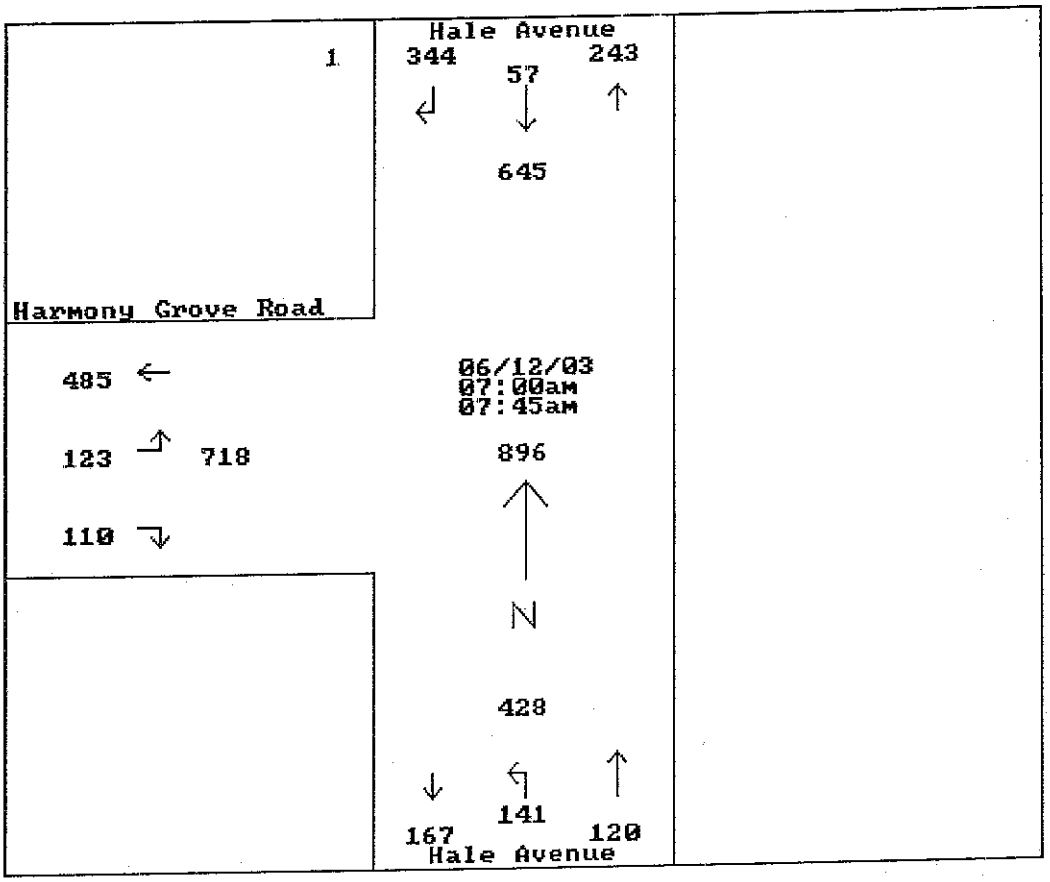
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : E.Stutz
Board # : D1-1431
Location : Hale Av & Harmony Grove Rd

Study Name: 03135240
Site Code : 00135240
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Hale Avenue Southbound Thru	Right	Peds	Hale Avenue Northbound Left	Thru	Peds	Harmony Grove Road Eastbound Left	Right	Peds	Intrvl. Total



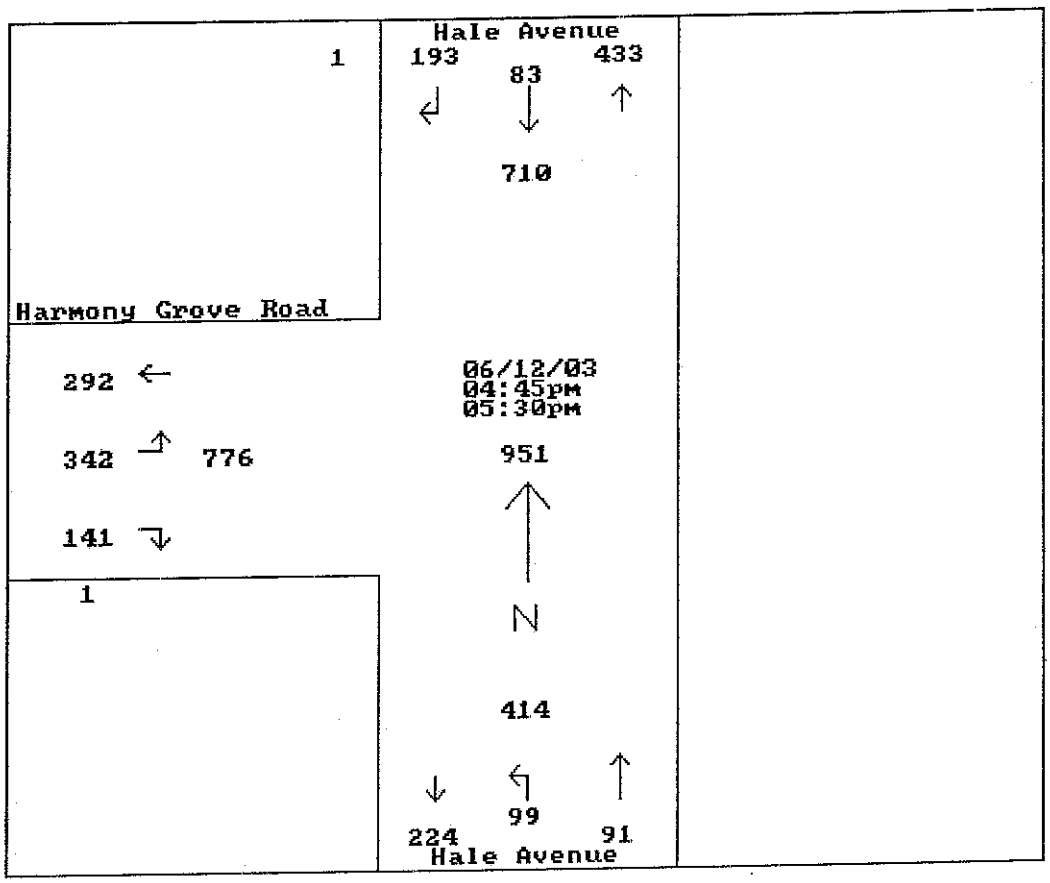
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : E.Stutz
Board # : D1-1431
Location : Hale Av & Harmony Grove Rd

Study Name: 03135241
Site Code : 00135241
Start Date: 06/12/03
Page : 2

Group 1

Start Time	Hale Avenue Southbound Thru	Right	Peds	Hale Avenue Northbound Left	Thru	Peds	Harmony Grove Road Eastbound Left	Right	Peds	Intrvl. Total



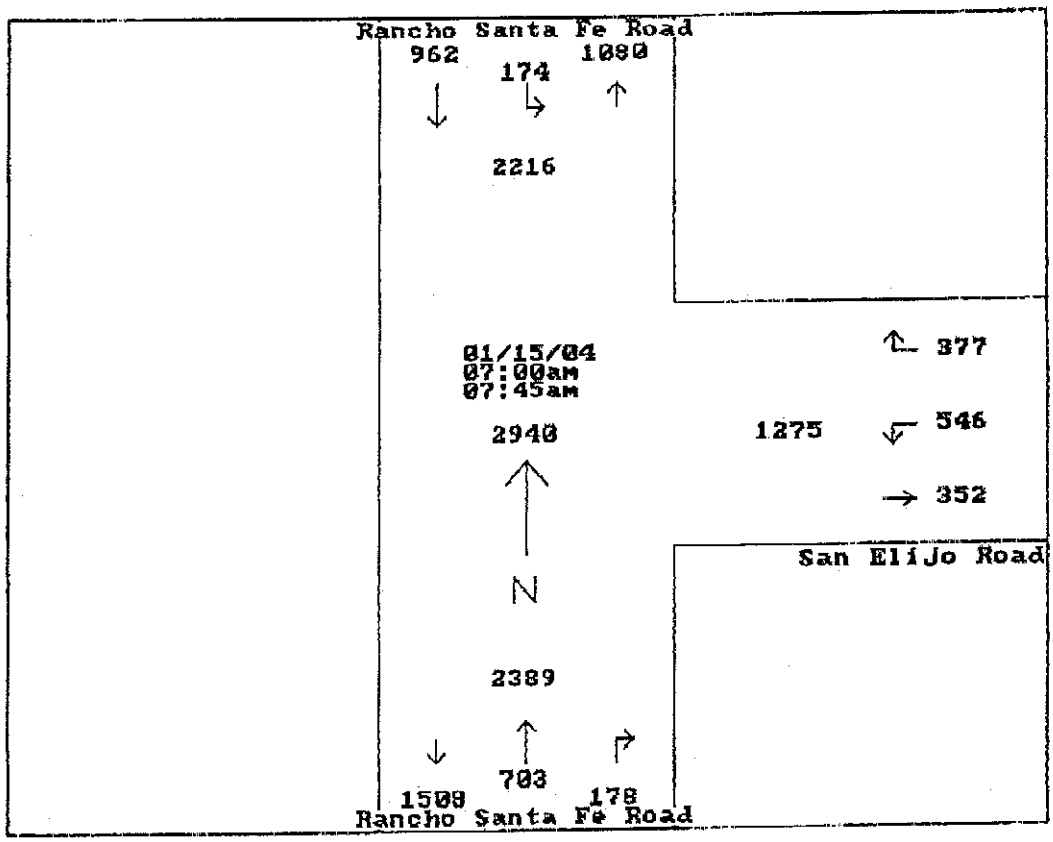
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : S.Mockler
Board # : 01-2173
Location:Rancho Santa Fe Rd & San Elijo

Study Name: 04011010
Site Code : 00011010
Start Date: 01/15/04
Page : 2

Group 1

Start Time	Rancho Santa Fe Road Southbound			San Elijo Road Westbound			Rancho Santa Fe Road Northbound			Intrvl. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	



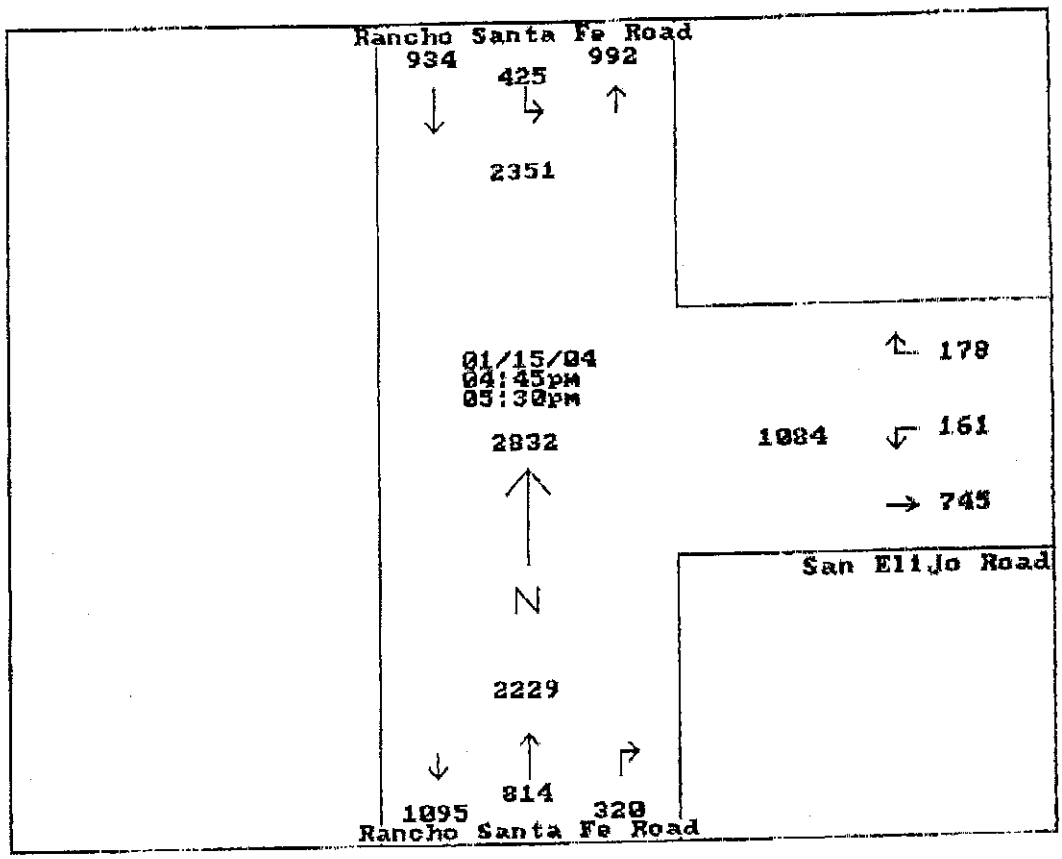
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : S.Mockler
Board # : D1-2173
Location:Rancho Santa Fe Rd & San Elijo

Study Name: 04011011
Site Code : 00011011
Start Date: 01/15/04
Page : 2

Group 1

Start Time	Rancho Santa Fe Road Southbound Left	Thru	Peds	San Elijo Road Westbound Left	Right	Peds	Rancho Santa Fe Road Northbound Thru	Right	Peds	Intrvl. Total



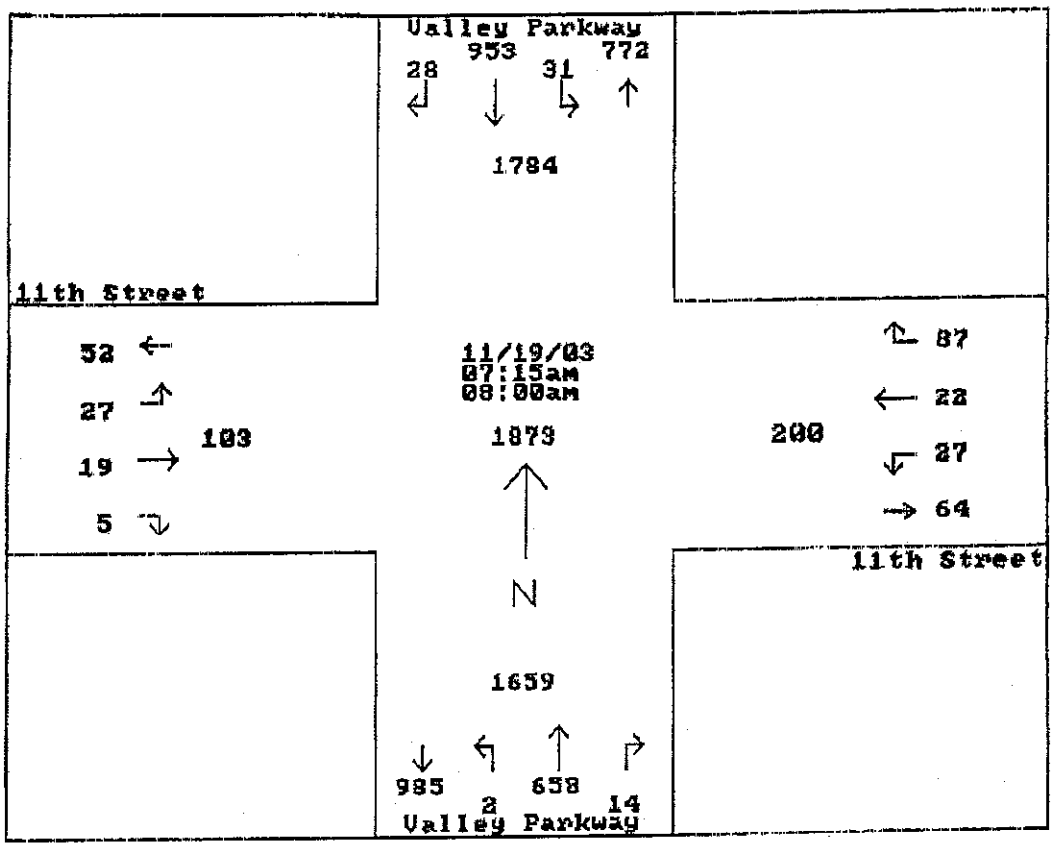
Weather : Clear & Dry
Counted by : J.Green
Board # : D1-1424
Location : Valley Pkwy & 11th St

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 03341010
Site Code : 00341010
Start Date: 11/19/03
Page : 2

Group 1

Start Time	Valley Parkway Southbound Left	Thru	Right	Peds	11th Street Westbound Left	Thru	Right	Peds	Valley Parkway Northbound Left	Thru	Right	Peds	11th Street Eastbound Left	Thru	Right	Peds	Intvl. Total



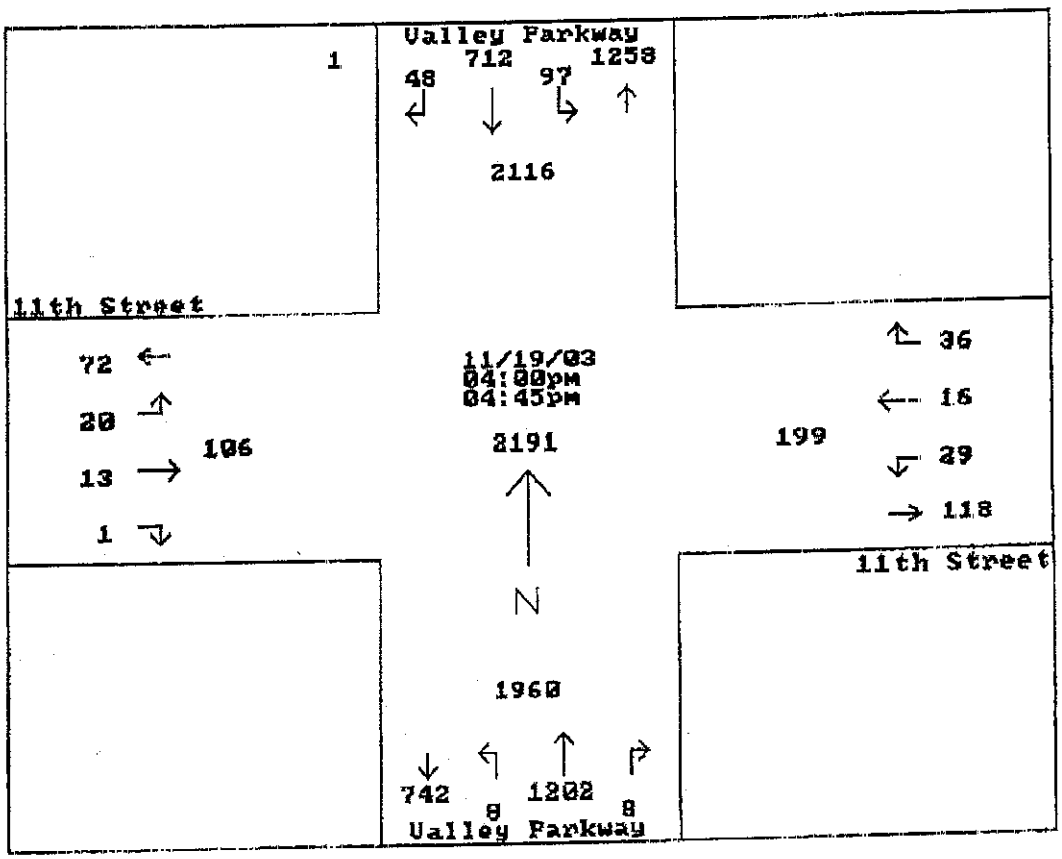
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : J.Green
Board # : D1-1424
Location : Valley Pkwy & 11th St

Study Name: 03341011
Site Code : 00341011
Start Date: 11/19/03
Page : 2

Group 1

Start Time	Valley Parkway Southbound Left	Thru	Right	Peds	11th Street Westbound Left	Thru	Right	Peds	Valley Parkway Northbound Left	Thru	Right	Peds	11th Street Eastbound Left	Thru	Right	Peds	Intvl. Total



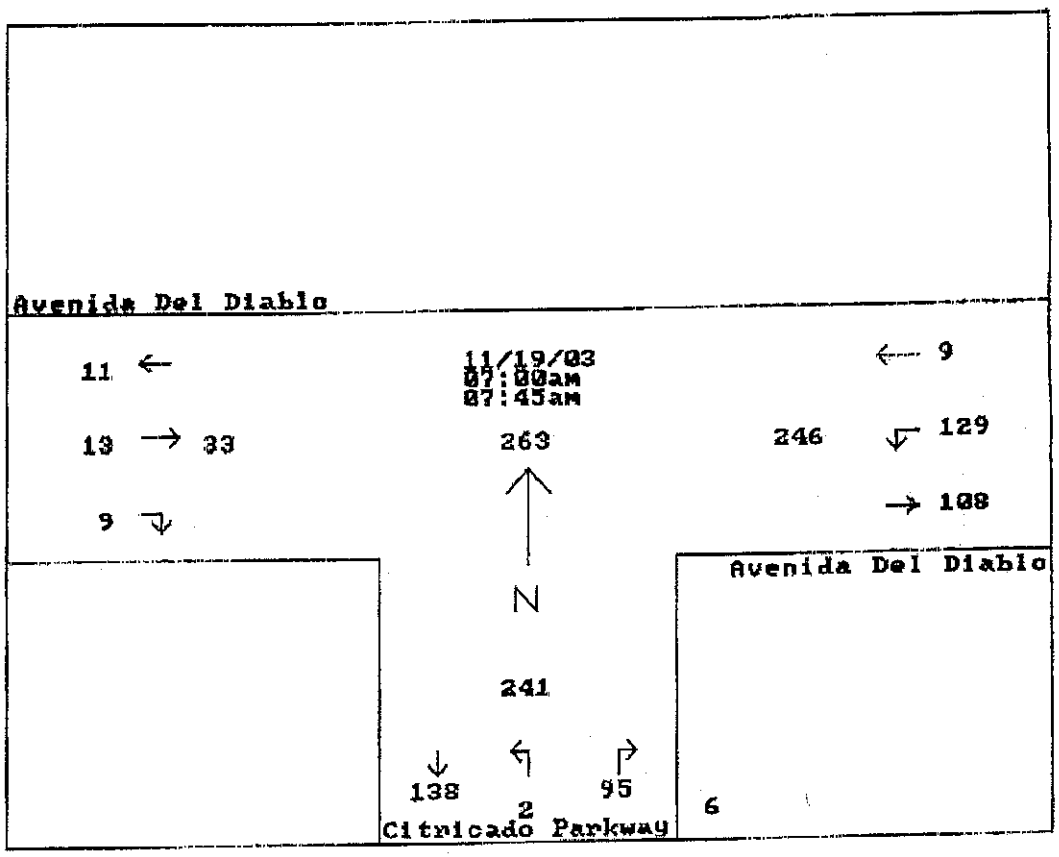
Weather : Clear & Dry
Counted by : L.Cofrancesco
Board # : D1-1426
Location:Citricado Pkwy & Ave del Diablo

Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Study Name: 14261020
Site Code : 00341020
Start Date: 11/19/03
Page : 2

Group 1

Start Time	Avenida Del Diablo Westbound Left	Thru	Peds	Citricado Parkway Northbound Left	Right	Peds	Avenida Del Diablo Eastbound Thru	Right	Peds	Intrvl. Total



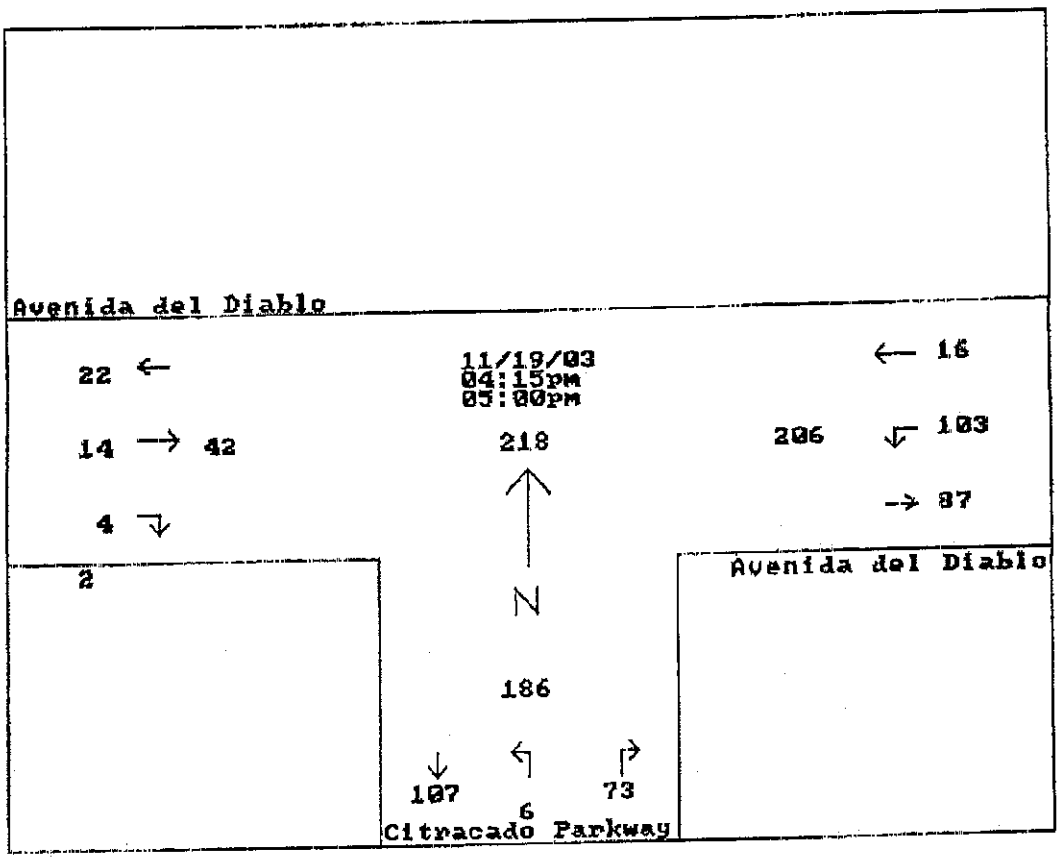
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : L.Cofrancesco
Board # : D1-1426
Location: Citracado Pkwy & Ave del Diablo

Study Name: 03341021
Site Code : 00341021
Start Date: 11/19/03
Page : 2

Group 1

Start Time	Avenida del Diablo Westbound Left	Thru	Peds	Citracado Parkway Northbound Left	Right	Peds	Avenida del Diablo Eastbound Thru	Right	Peds	Intrvl. Total



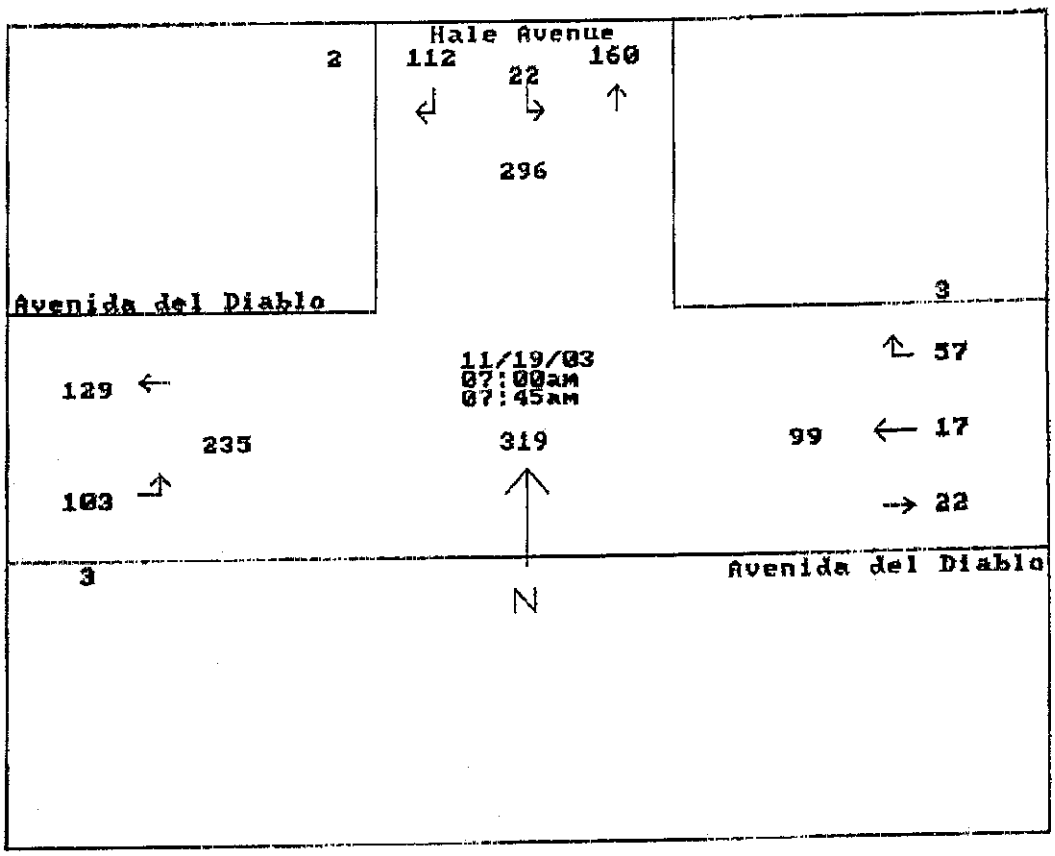
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : D.Wellman
Board # : D1-1425
Location : Hale Ave & Ave del Diablo

Study Name: 03341030
Site Code : 00341030
Start Date: 11/19/03
Page : 2

Group 1

Start Time	Hale Avenue Southbound Left	Right	Peds	Avenida del Diablo Westbound Thru	Right	Peds	Avenida del Diablo Eastbound Left	Thru	Peds	Intrvl. Total



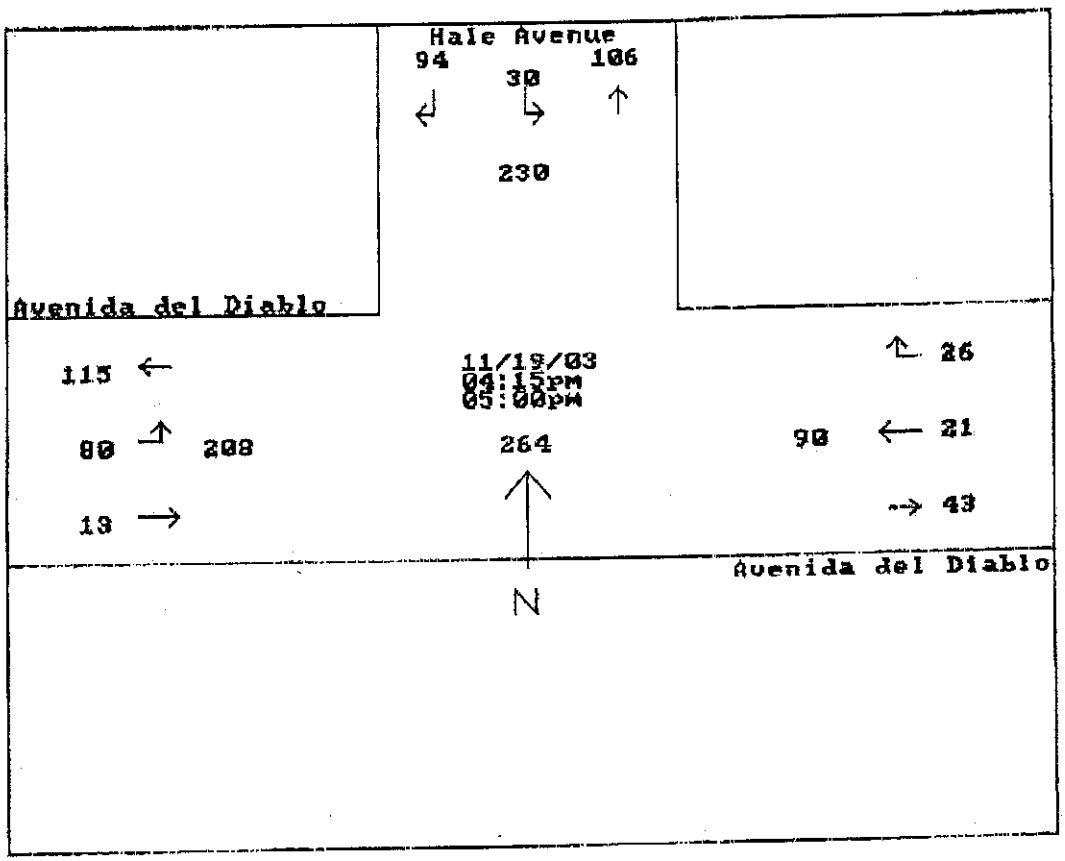
Traffic Data Service SouthWest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : D.Wellman
Board # : D1-1425
Location : Hale Ave & Ave del Diablo

Study Name: 03341031
Site Code : 00341031
Start Date: 11/19/03
Page : 2

Group 1

Start Time	Hale Avenue Southbound Left	Right	Peds	Avenida del Diablo Westbound Thru	Right	Peds	Avenida del Diablo Eastbound Left	Thru	Peds	Intrvl. Total



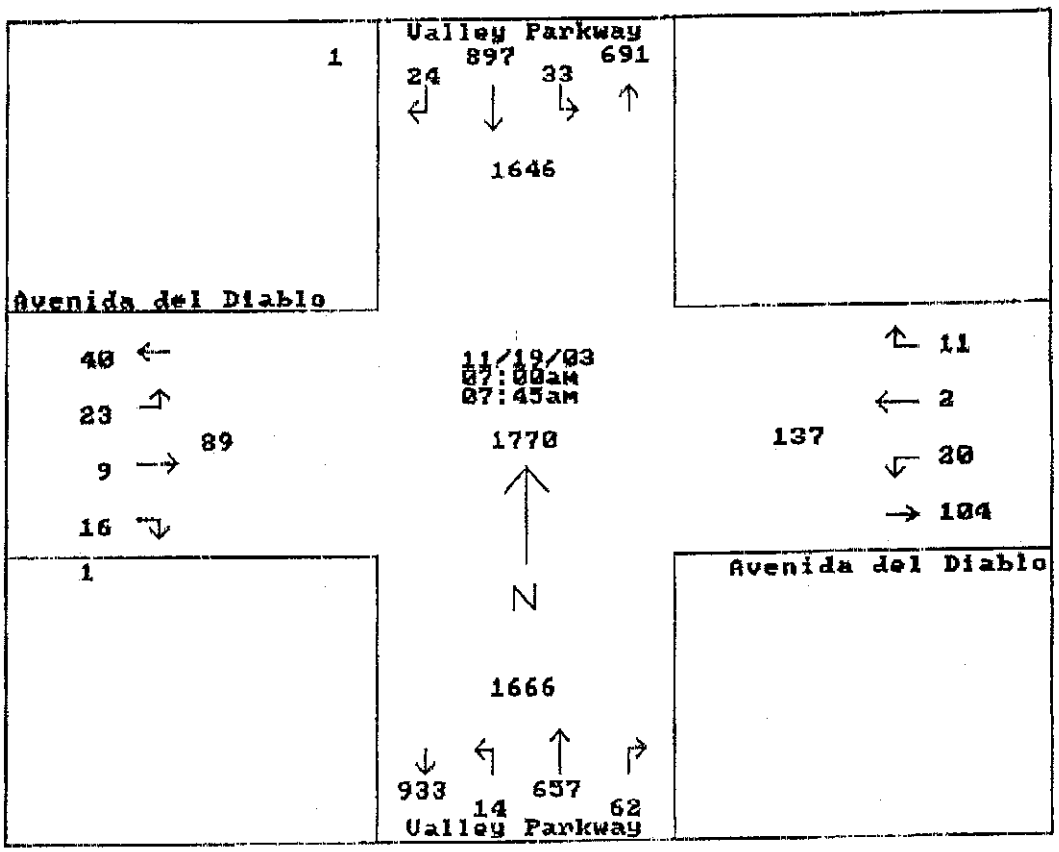
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : M.Archibald
Board # : D1-2172
Location :Valley Pkwy & Ave del Diablo

Study Name: 03341040
Site Code : 00341040
Start Date: 11/19/03
Page : 2

Group 1

Start Time	Valley Parkway Southbound				Avenida del Diablo Westbound				Valley Parkway Northbound				Avenida del Diablo Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



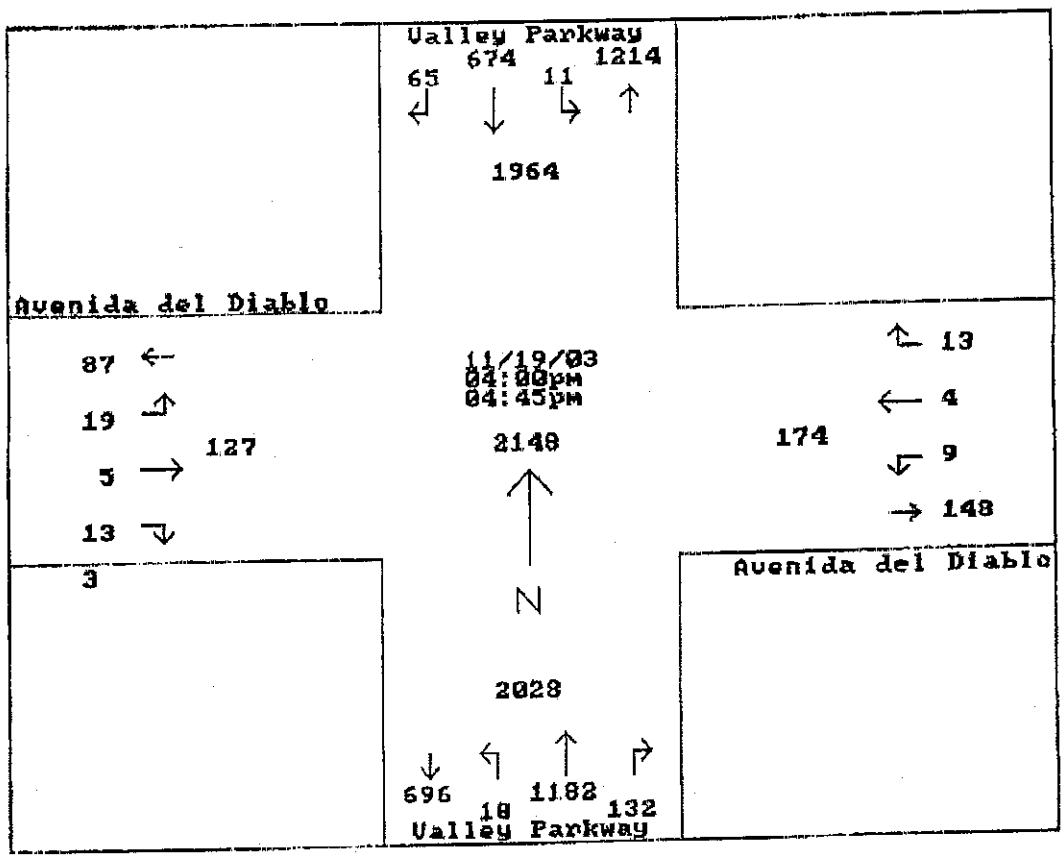
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : M.Archibald
Board # : D1-2172
Location :Valley Pkwy & Ave del Diablo

Study Name: 03341041
Site Code : 00341041
Start Date: 11/19/03
Page : 2

Group 1

Start Time	Valley Parkway Southbound Left	Thru	Right	Peds	Avenida del Diablo Westbound Left	Thru	Right	Peds	Valley Parkway Northbound Left	Thru	Right	Peds	Avenida del Diablo Eastbound Left	Thru	Right	Peds	Intvl. Total



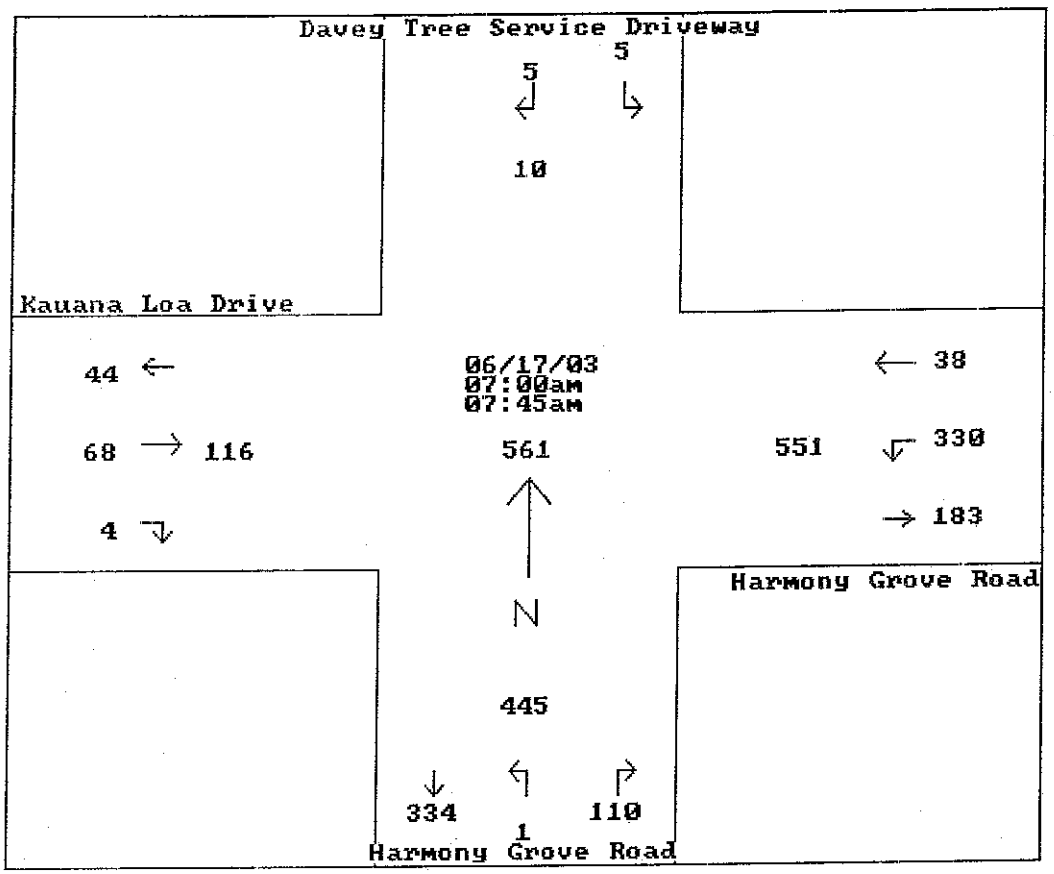
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : M.Adams
Board # : D1-1426
Location : Harmony Grove & Kauana Loa

Study Name: 03135200
Site Code : 00135200
Start Date: 06/17/03
Page : 2

Group 1

Start Time	Davey Tree Service Drivewa Southbound				Harmony Grove Road Westbound				Harmony Grove Road Northbound				Kauana Loa Drive Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



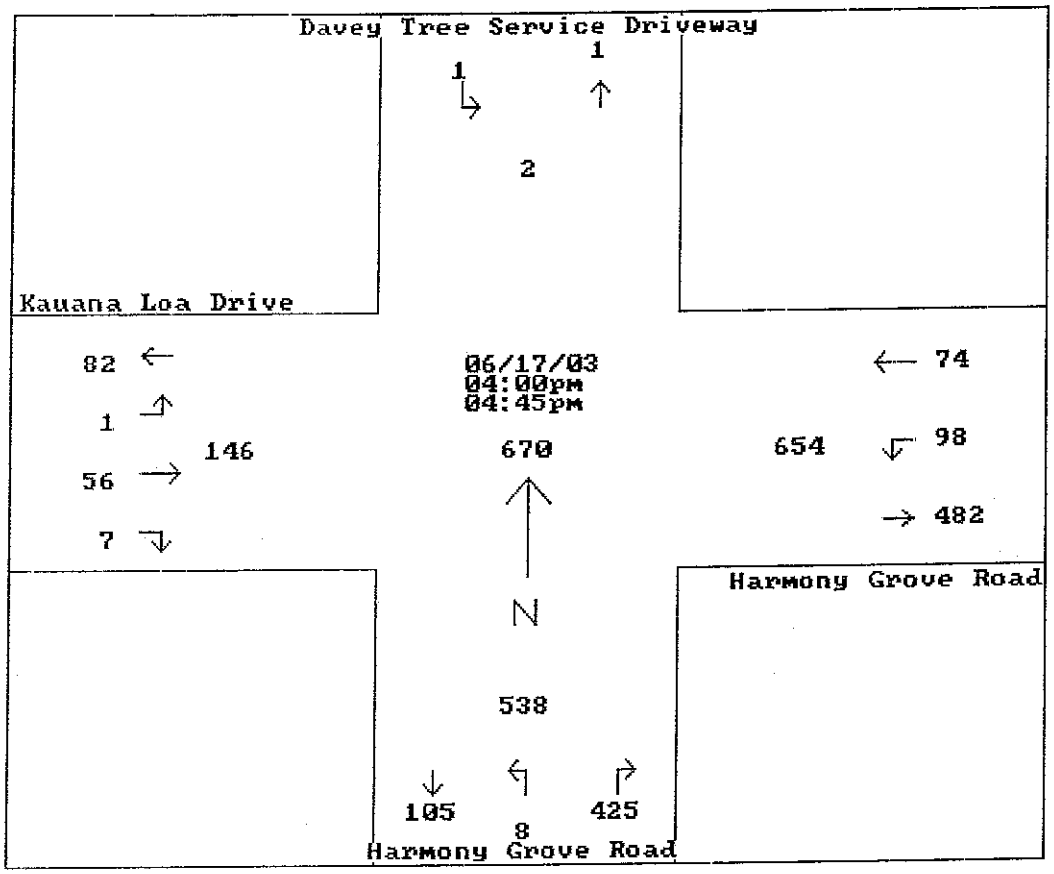
Traffic Data Service Southwest
9773 Maine Avenue
Lakeside, CA 92040
(619) 390-8495 fax (619) 390-8427

Weather : Clear & Dry
Counted by : M.Adams
Board # : D1-1426
Location : Harmony Grove & Kauana Loa

Study Name: 03135201
Site Code : 00135201
Start Date: 06/17/03
Page : 2

Group 1

Start Time	Davey Tree Service Drivewa Southbound				Harmony Grove Road Westbound				Harmony Grove Road Northbound				Kauana Loa Drive Eastbound				Intvl. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	



Traffic Data Service Southwest
Vehicle Counts

Eastbound

VehicleCount-326 -- English (ENU)

Datasets:

Site: **[14401] Elfin Forrest Road West of Elfin Forest Lane**
Direction: 8 - East bound A>B, West bound B>A., **Lane:** 0
Survey Duration: 18:57 Monday, May 02, 2005 => 10:45 Thursday, May 05, 2005
File: Z:\mcdata\LLG\2005\144\1440105MAY2005.EC0 (Base)
Identifier: A567C54F MC56-1 [MC55] (c)Microcom 07/06/99
Algorithm: Factory default
Data type: Axle sensors - Paired (Class, Speed, Count)

Profile:

Filter time: **20:00 Monday, May 02, 2005 => 8:00 Thursday, May 05, 2005**
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: East (bound)
Separation: All - (Headway)
Name: Factory default profile
Scheme: Vehicle classification (Scheme F99)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: 6598 Vehicles

*** Monday, May 02, 2005 - Total=95 (Incomplete) , 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	39	23	2	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	12	9	0	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	13	4	1	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	5	3	0	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	9	7	1	0

*** Tuesday, May 03, 2005 - Total=3095, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
5	1	2	1	3	25	68	133	174	99	96	105	122	141	218	588	517	420	175	100	34	39	27	2	
2	0	0	0	0	4	12	30	48	23	20	31	22	34	39	106	117	111	63	28	12	7	11	0	0
0	0	2	1	2	6	12	27	52	23	17	27	31	33	45	139	136	126	40	25	11	11	7	0	0
3	1	0	0	0	7	22	35	32	25	31	19	35	32	65	169	148	101	47	30	7	14	6	1	1
0	0	0	0	1	8	22	41	42	28	28	28	34	42	69	174	116	82	25	17	4	7	3	1	1

AM Peak 0730 - 0830 (176), AM PHF=0.85 PM Peak 1515 - 1615 (599), PM PHF=0.86

W = 3107

*** Wednesday, May 04, 2005 - Total=3118, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
2	1	2	1	3	17	79	118	161	125	95	104	122	131	248	582	535	414	203	77	36	43	12	7	
0	0	0	0	0	1	14	24	38	24	28	29	31	27	42	94	140	114	60	21	12	12	4	5	1
0	0	1	1	0	4	21	26	48	31	21	18	22	30	64	141	147	108	63	21	9	14	4	0	2
1	1	0	0	1	4	18	27	35	38	22	27	34	40	60	185	115	92	46	22	8	7	1	0	1
1	0	1	0	2	8	26	41	40	32	24	30	35	34	82	162	133	100	34	13	7	10	3	2	1

AM Peak 0745 - 0845 (162), AM PHF=0.84 PM Peak 1530 - 1630 (634), PM PHF=0.86

*** Thursday, May 05, 2005 - Total=290 (Incomplete) , 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
5	0	2	1	3	19	81	179	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	0	0	0	0	4	15	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	0	0	0	0	1	23	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	0	1	1	1	4	14	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	0	1	0	2	10	29	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Eb = 3 107
Wb = 2 686
5 793

Traffic Data Service Southwest
Vehicle Counts

Westbound

VehicleCount-326 -- English (ENU)

Datasets:

Site: **[14401] Elfin Forrest Road West of Elfin Forest Lane**
Direction: 8 - East bound A>B, West bound B>A., **Lane:** 0
Survey Duration: 18:57 Monday, May 02, 2005 => 10:45 Thursday, May 05, 2005
File: Z:\mcdata\LLG\2005\144\1440105MAY2005.EC0 (Base)
Identifier: A567C54F MC56-1 [MC55] (c)Microcom 07/06/99
Algorithm: Factory default
Data type: Axle sensors - Paired (Class, Speed, Count)

Profile:

Filter time: **20:00 Monday, May 02, 2005 => 8:00 Thursday, May 05, 2005**
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: West (bound)
Separation: All - (Headway)
Name: Factory default profile
Scheme: Vehicle classification (Scheme F99)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: 6610 Vehicles

*** Monday, May 02, 2005 - Total=78 (Incomplete) , 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	25	16	8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	6	11	1	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	7	2	4	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	7	3	2	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	5	0	1	0

*** Tuesday, May 03, 2005 - Total=2690, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
5	3	1	2	3	56	568	556	294	126	74	81	104	92	101	104	125	146	111	61	31	29	11	6	
4	1	1	0	0	6	54	165	100	36	21	23	22	18	30	29	30	32	42	20	14	14	4	2	1
1	1	0	2	0	5	121	139	82	34	21	16	16	26	30	21	31	35	23	13	9	7	5	1	1
0	1	0	0	2	14	213	137	55	36	15	20	32	20	20	23	28	48	21	11	7	3	0	1	1
0	0	0	0	1	31	180	115	57	20	17	22	34	28	21	31	36	31	25	17	1	5	2	2	3

AM Peak 0630 - 0730 (697), AM PHF=0.82 PM Peak 1715 - 1815 (156), PM PHF=0.81

w = 2686

*** Wednesday, May 04, 2005 - Total=2682, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	0	1	2	8	50	603	495	315	137	80	78	115	98	104	115	116	117	111	48	27	32	15	9	
1	0	0	1	0	4	56	146	123	36	22	20	23	23	23	29	33	35	25	12	2	8	5	5	2
1	0	0	0	2	5	127	120	83	36	20	18	27	24	28	24	26	28	27	20	11	11	4	0	2
1	0	1	1	5	16	210	132	59	34	21	15	39	25	26	35	27	31	28	6	9	4	2	2	0
3	0	0	0	1	25	210	97	50	31	17	25	26	26	27	27	30	23	31	10	5	9	4	2	0

AM Peak 0615 - 0715 (693), AM PHF=0.82 PM Peak 1645 - 1745 (124), PM PHF=0.89

*** Thursday, May 05, 2005 - Total=1160 (Incomplete) , 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
4	2	2	1	3	53	538	557	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	0	1	0	0	4	58	167	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	1	0	0	2	7	122	147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	0	0	0	15	179	134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	1	1	1	1	27	179	109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX B

STANDARD STREET CLASSIFICATION TABLES

County of San Diego
DRAFT

August 11, 1998

TABLE 1

AVERAGE DAILY VEHICLE TRIPS

CIRCULATION ELEMENT ROADS		LEVEL OF SERVICE				
CLASS	**X-SECTION**	**A**	**B**	**C**	**D**	**E**
Expressway	126/146	<36,000	<54,000	<70,000	<86,000	<108,000
Prime Arterial	102/122	<22,200	<37,000	<44,600	<50,000	<57,000
Major Road	78/98	<14,800	<24,700	<29,600	<33,400	<37,000
Collector	64/84	<13,700	<22,800	<27,400	<30,800	<34,200
Town Collector	54/74	<3,000	<6,000	<9,500	<13,500	<19,000
Light Collector	40/60	<1,900	<4,100	<7,100	<10,900	<16,200
Rural Collector	40/84	<1,900	<4,100	<7,100	<10,900	<16,200
Rural Light Collector	40/60	<1,900	<4,100	<7,100	<10,900	<16,200
Recreational Parkway	40/100	<1,900	<4,100	<7,100	<10,900	<16,200
Rural Mountain	40/100	<1,900	<4,100	<7,100	<10,900	<16,200
		1 200	2 600	4 500	7 000	10 400

NON-CIRCULATION ELEMENT ROADS		LEVEL OF SERVICE				
CLASS	**X-SECTION**	**A**	**B**	**C**	**D**	**E**
Residential Collector	40/60	*	*	<4,500	*	*
Residential Road	36/56	*	*	<1,500	*	*
Residential Cul-de-sac or Loop Road	32/52	*	*	< 200	*	*

* Levels of service are not applicable to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

Table 2

CITY OF ESCONDIDO PROPOSED LEVEL OF SERVICE STANDARDS

STREET SEGMENT AVERAGE DAILY VEHICLE TRIP THRESHOLDS

Street Classification	Lanes	Cross Sections	Level Of Service					
			A	B	C	D	MID LOS D	E
Prime Arterial	(6 lanes)	106/126 (NP)	15,000	30,000	42,000	51,000	**46,500**	60,000
	(4 lanes)	(NP)	17,500	35,000	49,000	59,500	**54,250**	70,000
Major Road	(4 lanes)	82/102 (NP)	14,800	24,700	29,600	33,400	**31,500**	37,000
	(6 lanes)	(NP)	12,500	25,000	35,000	42,500	**38,750**	50,000
Collector	(4 lanes)	64/84 (NP)	13,700	22,800	27,400	30,800	**29,100**	34,200
	(4 lanes)	(WP)	5,000	10,000	14,000	17,500	**15,750**	20,000
Local Collector	(2 lanes)	42/66 (NP)	4,000	7,500	10,000	12,500	**11,250**	15,000
Rural Collector	(2 lanes)	(WP)	2,500	5,000	7,000	8,500	**7,750**	10,000

(NP) No Parking
(WP) With Parking

1) Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

2) This table is not applicable for street networks where two intersecting streets both operate at or below LOS C or where one street operates at or below LOS D. In those cases detailed peak hour capacity analyses are necessary.

APPENDIX C

EXISTING CONDITIONS: INTERSECTION ANALYSIS WORKSHEETS

Harmony Grove Village
Option C: Existing

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	31.7	0.566	C	31.7	0.566	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	D	53.1	0.998	D	53.1	0.998	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	D	46.2	0.880	D	46.2	0.880	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	195.5	0.000	F	195.5	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	7.9	0.198	A	7.9	0.198	+ 0.000 V/C
# 6 Country Club Drive/Entrance #	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 7 Country Club/ Village Road	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	B	11.4	0.000	B	11.4	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	B	11.5	0.000	B	11.5	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	A	9.3	0.000	A	9.3	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	35.1	0.615	D	35.1	0.615	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	B	10.2	0.376	B	10.2	0.376	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	B	14.6	0.000	B	14.6	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	B	14.9	0.000	B	14.9	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	27.9	0.611	C	27.9	0.611	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	B	13.0	0.000	B	13.0	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	C	16.0	0.000	C	16.0	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	A	8.8	0.000	A	8.8	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	A	9.1	0.000	A	9.1	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	C	30.9	0.686	C	30.9	0.686	+ 0.000 D/V

Harmony Grove Village
Option C: Existing

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	D	48.4	0.721	D	48.4	0.721	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	36.3	0.638	D	36.3	0.638	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	C	34.0	0.661	C	34.0	0.661	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	A	8.9	0.384	A	8.9	0.384	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	110.6	0.000	F	110.6	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	26.8	0.473	C	26.8	0.473	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	28.2	0.779	C	28.2	0.779	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	D	44.4	0.982	D	44.4	0.982	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	B	18.6	0.635	B	18.6	0.635	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	24.7	0.551	C	24.7	0.551	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	27.6	0.854	C	27.6	0.854	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	C	34.0	0.824	C	34.0	0.824	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	24.9	0.509	C	24.9	0.509	+ 0.000 D/V

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.566
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 31.7
Optimal Cycle: 64 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			0	0	24			7	0	0			0	7	24			7
Lanes:	2	0	2	0	0	0	0	2	0	1	0	0	0	0	0	1	0	1	0	1
Volume Module: >> Count Date: 13 Dec 2001 << AM																				
Base Vol:	391	255			0	0	366			135	0	0			0	441		8		147
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00
Initial Bse:	391	255			0	0	366			135	0	0			0	441		8		147
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90		0.90		0.90
PHF Volume:	434	283			0	0	407			150	0	0			0	490		9		163
Reduct Vol:	0	0			0	0	0			0	0	0			0	0		0		0
Reduced Vol:	434	283			0	0	407			150	0	0			0	490		9		163
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00
Final Vol..	434	283			0	0	407			150	0	0			0	490		9		163
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900		1900		1900
Adjustment:	0.71	0.73			1.00	1.00	0.93			0.83	1.00	1.00			1.00	0.71		0.71		0.71
Lanes:	2.00	2.00			0.00	0.00	2.00			1.00	0.00	0.00			0.00	1.73		0.03		1.24
Final Sat..	2693	2776			0	0	3538			1583	0	0			0	2344		36		1685
Capacity Analysis Module:																				
Vol/Sat:	0.16	0.10			0.00	0.00	0.11			0.09	0.00	0.00			0.00	0.21		0.25		0.10
Crit Moves:	****						****											****		
Green/Cycle:	0.28	0.49			0.00	0.00	0.20			0.20	0.00	0.00			0.00	0.44		0.44		0.44
Volume/Cap:	0.57	0.21			0.00	0.00	0.57			0.47	0.00	0.00			0.00	0.48		0.57		0.22
Delay/Veh:	37.6	17.6			0.0	0.0	44.1			43.2	0.0	0.0			0.0	24.3		25.9		21.1
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00
AdjDel/Veh:	37.6	17.6			0.0	0.0	44.1			43.2	0.0	0.0			0.0	24.3		25.9		21.1
HCM2kAvg:	8	3			0	0	7			5	0	0			0	8		10		3

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp [NS / EW]

Cycle (sec): 100 Critical Vol./Cap. (X): 0.998
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 53.1
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Permitted					Permitted				
Rights:	Include					Include					Include					Include				
Min. Green:	0	24			7	7	24			0	7	24			7	0	0			0
Lanes:	0	0	2	0	1	2	0	2	0	0	0	1	0	1	0	0	0	0	0	0
Volume Module: >> Count Date: 13 Dec 2001 << AM																				
Base Vol:	0	473			333	130	804			0	105		1		641	0		0		0
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00
Initial Bse:	0	473			333	130	804			0	105		1		641	0		0		0
User Adj:	1.00	1.00			0.50	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90		0.90		0.90
PHF Volume:	0	526			185	144	893			0	117		1		712	0		0		0
Reduct Vol:	0	0			0	0	0			0	0		0		0	0		0		0
Reduced Vol:	0	526			185	144	893			0	117		1		712	0		0		0
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00
Final Vol..	0	526			185	144	893			0	117		1		712	0		0		0
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900		1900		1900
Adjustment:	1.00	0.73			0.65	0.90	0.93			1.00	0.55	0.55			0.55	1.00		1.00		1.00
Lanes:	0.00	2.00			1.00	2.00	2.00			0.00	0.99	0.01			1.00	0.00		0.00		0.00
Final Sat..	0	2776			1242	3432	3538			0	1043		10		1053	0		0		0
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.19			0.15	0.04	0.25			0.00	0.11	0.11			0.68	0.00		0.00		0.00
Crit Moves:		****				****									****					
Green/Cycle:	0.00	0.24			0.24	0.07	0.31			0.00	0.60	0.60			0.60	0.00		0.00		0.00
Volume/Cap:	0.00	0.79			0.62	0.60	0.81			0.00	0.19	0.19			1.13	0.00		0.00		0.00
Delay/Veh:	0.0	41.9			37.9	49.4	36.6			0.0	9.0	9.0			94.0	0.0		0.0		0.0
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00
AdjDel/Veh:	0.0	41.9			37.9	49.4	36.6			0.0	9.0	9.0			94.0	0.0		0.0		0.0
HCM2kAvg:	0	10			6	3	15			0	2	2			40	0		0		0

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.880
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 46.2
Optimal Cycle: 110 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	2	0 1	2	0	1	1 0	2	0	2	0 1	2	0	2	0 1
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	143	420		40	438	881		142	200	363		328	90	316		185
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	143	420		40	438	881		142	200	363		328	90	316		185
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	159	467		44	487	979		158	222	403		364	100	351		206
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	159	467		44	487	979		158	222	403		364	100	351		206
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	159	467		44	487	979		158	222	403		364	100	351		206
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.73	0.73		0.65	0.71	0.72		0.72	0.90	0.93		0.83	0.90	0.93		0.83
Lanes:	1.00	2.00		1.00	2.00	1.72		0.28	2.00	2.00		1.00	2.00	2.00		1.00
Final Sat..	1388	2776		1242	2693	2341		377	3432	3538		1583	3432	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.11	0.17		0.04	0.18	0.42		0.42	0.06	0.11		0.23	0.03	0.10		0.13
Crit Moves:	****					****						****	****			
Green/Cycle:	0.13	0.31		0.31	0.28	0.46		0.46	0.08	0.25		0.25	0.06	0.24		0.24
Volume/Cap:	0.91	0.54		0.12	0.65	0.91		0.91	0.85	0.45		0.91	0.50	0.42		0.55
Delay/Veh:	94.0	35.2		29.9	40.1	39.6		39.6	76.6	38.0		67.0	56.8	39.2		42.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	94.0	35.2		29.9	40.1	39.6		39.6	76.6	38.0		67.0	56.8	39.2		42.0
HCM2kAvg:	9	8		1	9	23		23	7	6		17	3	6		7

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club [NS / EW]

Average Delay (sec/veh): 17.1 Worst Case Level Of Service: F[195.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	2	0 1	1	0	1	0 1	0	1	0	0 1	0	0	1!	0 0
Volume Module: >> Count Date: 11 Dec 2001 << AM																
Base Vol:	46	433		0	35	1061		142	120		0	40	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	46	433		0	35	1061		142	120		0	40	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	51	481		0	39	1179		158	133		0	44	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	51	481		0	39	1179		158	133		0	44	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx		xxxxx	4.1	xxxx		xxxxx	6.4	xxxx		6.2	xxxxx	xxxx		xxxxx
FollowUpTim:	2.2	xxxx		xxxxx	2.2	xxxx		xxxxx	3.5	xxxx		3.3	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol.	1337	xxxx		xxxxx	481	xxxx		xxxxx	1599	xxxx		1179	xxxx	xxxx		xxxxx
Potent Cap..	516	xxxx		xxxxx	1081	xxxx		xxxxx	117	xxxx		232	xxxx	xxxx		xxxxx
Move Cap..	516	xxxx		xxxxx	1081	xxxx		xxxxx	105	xxxx		232	xxxx	xxxx		xxxxx
Volume/Cap:	0.10	xxxx		xxxx	0.04	xxxx		xxxx	1.27	xxxx		0.19	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	0.3	xxxx		xxxxx	0.1	xxxx		xxxxx	xxxxx	xxxx		0.7	xxxxx	xxxx		xxxxx
Stopped Del:	12.7	xxxx		xxxxx	8.5	xxxx		xxxxx	xxxxx	xxxx		24.2	xxxxx	xxxx		xxxxx
LOS by Move:	B	*		*	A	*		*	*	*		C	*	*		*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	105	xxxx		xxxxx	xxxx	0		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	9.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	252.6	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	F	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				195.5				xxxxxx			
ApproachLOS:	*				*				F				*			

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.198
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	36	16	46	105	0	0	0	0	10	0	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	36	16	46	105	0	0	0	0	10	0	35
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.00	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	40	0	51	117	0	0	0	0	11	0	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	40	0	51	117	0	0	0	0	11	0	39
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	40	0	51	117	0	0	0	0	11	0	39
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.30	0.70	0.00	0.00	0.00	0.00	0.22	0.00	0.78
Final Sat..	0	755	0	258	590	0	0	0	0	195	0	683
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.05	xxxx	0.20	0.20	xxxx	xxxx	xxxx	xxxx	0.06	xxxx	0.06
Crit Moves:		****		****						****		
Delay/Veh:	0.0	7.7	0.0	8.2	8.2	0.0	0.0	0.0	0.0	7.1	0.0	7.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	7.7	0.0	8.2	8.2	0.0	0.0	0.0	0.0	7.1	0.0	7.1
LOS by Move:	*	A	*	A	A	*	*	*	*	A	*	A
ApproachDel:		7.7			8.2			xxxxxx			7.1	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		7.7			8.2			xxxxxx			7.1	
LOS by Appr:		A			A			*			A	

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club Drive/Entrance # 3

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1 0	0	0 0	1 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	52	0	0	115	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	52	0	0	115	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	58	0	0	128	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	58	0	0	128	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		*			*			*			*	

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.01

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 1	1	0	1	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol.	0	52		0	0	115		0	0	0		0	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	52		0	0	115		0	0	0		0	0	0		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	58		0	0	128		0	0	0		0	0	0		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	0	58		0	0	128		0	0	0		0	0	0		0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	-	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	-	*	*	-	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.01

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	1	0 0	0	0	1	0 1	1	0	0	0 1	0	0	0	0 0
Volume Module:																
Base Vol:	0	111		0	0	334		0	0	0		0	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	111		0	0	334		0	0	0		0	0	0		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	123		0	0	371		0	0	0		0	0	0		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	0	123		0	0	371		0	0	0		0	0	0		0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	-	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	-	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0	0	0	0	1	0	0	0	0	1!	0	0	0
Volume Module:																
Base Vol:	0	52	0		0	115	0		0	0	0		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	52	0		0	115	0		0	0	0		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	52	0		0	115	0		0	0	0		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	52	0		0	115	0		0	0	0		0	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT	- LTR	- RT		LT	- LTR	- RT		LT	- LTR	- RT		LT	- LTR	- RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 COuntry Club/Harmony Grove

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: B[11.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1	0	0	0	1!	0	0	1	0	0	0	1!	0
Volume Module:																
Base Vol:	0	2	12		2	1	105		13	98	0		3	318	2	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	2	12		2	1	105		13	98	0		3	318	2	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	2	13		2	1	117		14	109	0		3	353	2	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	2	13		2	1	117		14	109	0		3	353	2	
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	xxxxx	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	500	109		507	499	354		356	xxxx	xxxxx		109	xxxx	xxxxx	
Potent Cap.:	xxxx	476	950		480	476	694		1214	xxxx	xxxxx		1494	xxxx	xxxxx	
Move Cap.:	xxxx	469	950		466	470	694		1214	xxxx	xxxxx		1494	xxxx	xxxxx	
Volume/Cap:	xxxx	0.00	0.01		0.00	0.00	0.17		0.01	xxxx	xxxx		0.00	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx		7.4	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT	- LTR	- RT		LT	- LTR	- RT		LT	- LTR	- RT		LT	- LTR	- RT	
Shared Cap.:	xxxx	xxxx	829		xxxx	685	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	0.1		xxxxx	0.6	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	9.4		xxxxx	11.4	xxxxx		8.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	A		*	B	*		A	*	*		*	*	*	
ApproachDel:	9.4				11.4				xxxxxx				xxxxxx			
ApproachLOS:	A				B				*				*			

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	0	1	0 0	0	0	1	0 0
Volume Module:																
Base Vol:	0	0		0	0	0		0	0	111		0	0	423		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	0	0		0	0	111		0	0	423		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	0	0		0	0	123		0	0	470		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	0	0		0	0	0		0	0	123		0	0	470		0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		*	*	*		*	*	*		*
Movement:	LT	- LTR	-	RT	LT	- LTR	-	RT	LT	- LTR	-	RT	LT	- LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	0		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	0	1	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0		0	2	0		1	0	94		0	0	416		3
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	2	0		1	0	94		0	0	416		3
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0	0		0	2	0		1	0	94		0	0	416		3
Reduct Vol.	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	0	0		0	2	0		1	0	94		0	0	416		3
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	6.4	xxxx		6.2	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	3.5	xxxx		3.3	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	512	xxxx		418	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	526	xxxx		640	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	526	xxxx		640	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	0.00	xxxx		0.00	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		*	*	*		*	*	*		*
Movement:	LT	- LTR	-	RT	LT	- LTR	-	RT	LT	- LTR	-	RT	LT	- LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	559		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	0.0		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	11.5		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	B		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				11.5				xxxxxx				xxxxxx			
ApproachLOS:	*				B				*				*			

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	775	0	0	688	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	775	0	0	688	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	0	0	0	0	861	0	0	764	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	0	861	0	0	764	0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa (NS / EW)

Average Delay (sec/veh): 6.0 Worst Case Level Of Service: A[9.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 0 1 0			0 0 1! 0 0		
Volume Module: >> Count Date: 28 Nov 2001 << AM												
Base Vol:	1	0	110	0	0	0	0	68	4	330	98	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	110	0	0	0	0	68	4	330	98	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	0	122	0	0	0	0	76	4	367	109	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	122	0	0	0	0	76	4	367	109	6

Critical Gap Module:

Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	923	xxxx	78	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	80	xxxx	xxxxx
Potent Cap.:	300	xxxx	983	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1518	xxxx	xxxxx
Move Cap.:	229	xxxx	983	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1518	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.12	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.24	xxxx	xxxx

Level Of Service Module:

Queue:	0.0	xxxx	0.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.9	xxxx	xxxxx
Stopped Del:	20.8	xxxx	9.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	C	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	9.3			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.615
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.1
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0	1	0	2	0
Volume Module: >> Count Date: 11 Dec 2001 << AM																
Base Vol:	156	69		60	71	187		50	41	538		196	165	482		82
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	156	69		60	71	187		50	41	538		196	165	482		82
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	173	77		67	79	208		56	46	598		218	183	536		91
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	173	77		67	79	208		56	46	598		218	183	536		91
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	173	77		67	79	208		56	46	598		218	183	536		91
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.98		0.83	0.93	0.98		0.83	0.93	0.89		0.89	0.93	0.93		0.83
Lanes:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.47		0.53	1.00	2.00		1.00
Final Sat.:	1769	1862		1583	1769	1862		1583	1769	2489		907	1769	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.10	0.04		0.04	0.04	0.11		0.04	0.03	0.24		0.24	0.10	0.15		0.06
Crit Moves:	****					****				****			****			
Green/Cycle:	0.16	0.28		0.28	0.08	0.20		0.20	0.12	0.38		0.38	0.16	0.42		0.42
Volume/Cap:	0.63	0.15		0.15	0.56	0.56		0.18	0.21	0.63		0.63	0.63	0.36		0.14
Delay/Veh:	52.2	33.0		33.1	57.9	45.1		40.1	47.8	31.3		31.3	51.2	23.8		21.4
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	52.2	33.0		33.1	57.9	45.1		40.1	47.8	31.3		31.3	51.2	23.8		21.4
HCM2kAvg:	7	2		2	4	7		2	2	13		13	8	7		2

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.376
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 10.2
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1	0
Volume Module: >> Count Date: 28 Nov 2001 << AM																
Base Vol:	2	7		5	201	21		18	7	3		2	28	11		214
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	2	7		5	201	21		18	7	3		2	28	11		214
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	2	8		6	223	23		20	8	3		2	31	12		238
Reduct Vol.:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	2	8		6	223	23		20	8	3		2	31	12		238
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	2	8		6	223	23		20	8	3		2	31	12		238
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Sat.:	525	566		637	594	644		735	523	564		633	583	634		728
Capacity Analysis Module:																
Vol/Sat:	0.00	0.01		0.01	0.38	0.04		0.03	0.01	0.01		0.00	0.05	0.02		0.33
Crit Moves:		****			****				****							****
Delay/Veh:	9.1	8.7		8.0	11.9	8.3		7.5	9.2	8.7		8.0	9.0	8.2		9.6
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	9.1	8.7		8.0	11.9	8.3		7.5	9.2	8.7		8.0	9.0	8.2		9.6
LOS by Move:	A	A		A	B	A		A	A	A		A	A	A		A
ApproachDel:		8.5				11.2				8.9				9.5		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		8.5				11.2				8.9				9.5		
LOS by Appr:		A				B				A				A		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. (NS / EW)

Average Delay (sec/veh): 6.5 Worst Case Level Of Service: B[14.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	0 1	0	0	1 0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << AM												
Base Vol:	46	0	183	0	0	0	0	81	85	317	219	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	0	183	0	0	0	0	81	85	317	219	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	51	0	203	0	0	0	0	90	94	352	243	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	51	0	203	0	0	0	0	90	94	352	243	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1085	xxxx	137	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	184	xxxx	xxxxx
Potent Cap..	240	xxxx	911	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1390	xxxx	xxxxx
Move Cap..	181	xxxx	911	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1390	xxxx	xxxxx
Volume/Cap:	0.28	xxxx	0.22	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.25	xxxx	xxxx
Level Of Service Module:												
Queue:	1.1	xxxx	0.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.0	xxxx	xxxxx
Stopped Del:	32.5	xxxx	10.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx
LOS by Move:	D	*	B	-	*	*	-	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:	14.6			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[14.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	1 0	0 0	1	0 1	0 0	0	0 0	0 1	0
Volume Module: >> Count Date: 12 Dec 2001 <<												
Base Vol:	0	0	0	28	0	49	43	226	0	0	494	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	28	0	49	43	226	0	0	494	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	31	0	54	48	251	0	0	549	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	31	0	54	48	251	0	0	549	46
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	918	xxxx	572	594	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	304	xxxx	524	992	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	292	xxxx	524	992	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.11	xxxx	0.10	0.05	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.4	xxxx	0.3	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	18.8	xxxx	12.7	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	B	A	-	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			14.9			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.611
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.9
Optimal Cycle: 51 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	0	7	7	24	0	0	24	7
Lanes:	0 1	0 1	0	1	0 0	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module: >> Count Date: 12 Dec 2001 << AM												
Base Vol:	8	4	5	356	13	174	90	621	14	28	840	293
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	4	5	356	13	174	90	621	14	28	840	293
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	9	4	6	396	14	193	100	690	16	31	933	326
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	4	6	396	14	193	100	690	16	31	933	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	9	4	6	396	14	193	100	690	16	31	933	326
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.93	0.84	0.84	0.93	0.93	0.93	0.93	0.93	0.83
Lanes:	0.94	0.47	0.59	1.00	0.07	0.93	1.00	1.96	0.04	1.00	2.00	1.00
Final Sat..	1555	777	972	1769	111	1492	1769	3449	78	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.22	0.13	0.13	0.06	0.20	0.20	0.02	0.26	0.21
Crit Moves:		****		****			****				****	
Green/Cycle:	0.01	0.01	0.01	0.37	0.37	0.37	0.09	0.48	0.48	0.04	0.43	0.43
Volume/Cap:	0.61	0.61	0.61	0.61	0.35	0.35	0.61	0.41	0.41	0.41	0.61	0.48
Delay/Veh:	90.1	90.1	90.1	32.8	28.1	28.1	59.0	20.3	20.3	59.7	27.0	24.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	90.1	90.1	90.1	32.8	28.1	28.1	59.0	20.3	20.3	59.7	27.0	24.9
HCM2kAvg:	1	1	1	13	6	6	5	8	8	2	14	9

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[13.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module: >> Count Date: 12 Dec 2001 <<												
Base Vol:	0	200	14	6	319	0	0	0	0	37	0	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	200	14	6	319	0	0	0	0	37	0	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	222	16	7	354	0	0	0	0	41	0	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	222	16	7	354	0	0	0	0	41	0	6
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	238	xxxx	xxxxx	xxxx	xxxx	xxxxx	598	xxxx	230
Potent Cap.:	xxxx	xxxx	xxxxx	1341	xxxx	xxxxx	xxxx	xxxx	xxxxx	469	xxxx	814
Move Cap..	xxxx	xxxx	xxxxx	1341	xxxx	xxxxx	xxxx	xxxx	xxxxx	467	xxxx	814
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	0.01
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	0.0
Stopped Del:	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.5	xxxx	9.5
LOS by Move:	*	*	*	A	*	*	*	*	*	B	*	A
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			13.0		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 5.5 Worst Case Level Of Service: C[16.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	141	120	0	0	57	344	123	0	110	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	141	120	0	0	57	344	123	0	110	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90				
PHF Volume:	157	133	0	0	63	382	137	0	122	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	157	133	0	0	63	382	137	0	122	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	446	xxxx	xxxxx	xxxx	xxxx	xxxxx	701	xxxx	254	xxxx	xxxx	xxxxx				
Potent Cap.:	1125	xxxx	xxxxx	xxxx	xxxx	xxxxx	408	xxxx	789	xxxx	xxxx	xxxxx				
Move Cap.:	1125	xxxx	xxxxx	xxxx	xxxx	xxxxx	360	xxxx	789	xxxx	xxxx	xxxxx				
Volume/Cap:	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	0.38	xxxx	0.15	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.7	xxxx	0.5	xxxxx	xxxx	xxxxx				
Stopped Del:	8.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	21.0	xxxx	10.4	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	C	*	B	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	8.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			16.0			xxxxxx						
ApproachLOS:	*			*			C			*						

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 7.1 Worst Case Level Of Service: A[8.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Yield Sign				Yield Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0
Volume Module:																
Base Vol:	2	0	95	0	0	0	0	13	9	129	9	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	2	0	95	0	0	0	0	13	9	129	9	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90				
PHF Volume:	2	0	106	0	0	0	0	14	10	143	10	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	2	0	106	0	0	0	0	14	10	143	10	0				
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	316	xxxx	19	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	24	xxxx	xxxxx				
Potent Cap.:	681	xxxx	1064	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1603	xxxx	xxxxx				
Move Cap.:	634	xxxx	1064	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1603	xxxx	xxxxx				
Volume/Cap:	0.00	xxxx	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	xxxx				
Level Of Service Module:																
Queue:	0.0	xxxx	0.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx				
Stopped Del:	10.7	xxxx	8.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx				
LOS by Move:	B	*	A	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	8.8			xxxxxx			xxxxxx			xxxxxx						
ApproachLOS:	A			*			*			*						

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 6.3 Worst Case Level Of Service: A[9.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 1	0 0	1	0 1	0 0	0	0 0	1 0	1
Volume Module:												
Base Vol:	0	0	0	22	0	112	103	3	0	0	17	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	22	0	112	103	3	0	0	17	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	24	0	124	114	3	0	0	19	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	24	0	124	114	3	0	0	19	63
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	251	xxxx	19	82	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	742	xxxx	1065	1528	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	696	xxxx	1065	1528	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	0.12	0.07	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.4	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.8	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	696	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	10.4	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			9.1			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.686
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 30.9
Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	0		0	24	7		0	0	0		7	24	7	
Lanes:	0 1	0 0	1		0 0	0 0	0		2 0	3 0	0		0 0	3 0	1	
Volume Module: >> Count Date: 12 Dec 2001 << AM																
Base Vol:	205	1	395		0	0	0		438	1006	0		0	986	206	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	205	1	395		0	0	0		438	1006	0		0	986	206	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	228	1	439		0	0	0		487	1118	0		0	1096	229	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol.	228	1	439		0	0	0		487	1118	0		0	1096	229	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	228	1	439		0	0	0		487	1118	0		0	1096	229	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.83	0.83	0.83		1.00	1.00	1.00		0.90	0.89	1.00		1.00	0.89	0.83	
Lanes:	0.99	0.01	1.00		0.00	0.00	0.00		2.00	3.00	0.00		0.00	3.00	1.00	
Final Sat..	1575	8	1583		0	0	0		3432	5083	0		0	5083	1583	
Capacity Analysis Module:																
Vol/Sat:	0.14	0.14	0.28		0.00	0.00	0.00		0.14	0.22	0.00		0.00	0.22	0.14	
Crit Moves:			****						****					****		
Green/Cycle:	0.40	0.40	0.40		0.00	0.00	0.00		0.21	0.52	0.00		0.00	0.31	0.31	
Volume/Cap:	0.36	0.36	0.69		0.00	0.00	0.00		0.69	0.42	0.00		0.00	0.69	0.46	
Delay/Veh:	25.2	25.2	32.6		0.0	0.0	0.0		46.8	17.8	0.0		0.0	37.2	33.7	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	25.2	25.2	32.6		0.0	0.0	0.0		46.8	17.8	0.0		0.0	37.2	33.7	
HCM2kAvg:	7	7	14		0	0	0		10	8	0		0	13	7	

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.721
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 48.4
Optimal Cycle: 64 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			0	0	24			7	7	0			7	0	0			0
Lanes:	1	0	1	0	1	0	1	0	1	0	2	0	3	0	1	2	0	3	1	1
Volume Module: >> Count Date: 12 Dec 2001 << AM																				
Base Vol:	12		18		83	458		102		636	75		869		46	74		877		199
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	12		18		83	458		102		636	75		869		46	74		877		199
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	13		20		92	509		113		707	83		966		51	82		974		221
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	13		20		92	509		113		707	83		966		51	82		974		221
PCE Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	13		20		92	509		113		707	83		966		51	82		974		221
Saturation Flow Module:																				
Sat/Lane:	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900		1900
Adjustment:	0.93		0.98		0.83	0.84		0.84		0.84	0.90		0.89		0.83	0.90		0.87		0.87
Lanes:	1.00		1.00		1.00	0.82		0.18		1.00	2.00		3.00		1.00	2.00		4.00		1.00
Final Sat..	1769		1862		1583	1306		291		1596	3432		5083		1583	3432		6588		1647
Capacity Analysis Module:																				
Vol/Sat:	0.01		0.01		0.06	0.39		0.39		0.44	0.02		0.19		0.03	0.02		0.15		0.13
Crit Moves:			****							****			****			****				
Green/Cycle:	0.20		0.20		0.20	0.49		0.49		0.49	0.07		0.21		0.21	0.03		0.17		0.17
Volume/Cap:	0.04		0.05		0.29	0.80		0.80		0.91	0.36		0.91		0.15	0.91		0.87		0.79
Delay/Veh:	38.7		38.9		41.3	28.5		28.5		36.5	54.5		57.2		38.9	122.5		55.1		50.8
User DelAdj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	38.7		38.9		41.3	28.5		28.5		36.5	54.5		57.2		38.9	122.5		55.1		50.8
HCM2kAvg:	0		1		3	21		21		28	2		15		2	3		12		10

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.638
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 36.3
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Ovl					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	1	1	0	2	0	1	1	0
Volume Module: >> Count Date: 9 Dec 2000 << AM																				
Base Vol:	203		811		96	157		950		388	269		431		297	177		529		46
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	203		811		96	157		950		388	269		431		297	177		529		46
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	226		901		107	174		1056		431	299		479		330	197		588		51
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	226		901		107	174		1056		431	299		479		330	197		588		51
PCE Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	226		901		107	174		1056		431	299		479		330	197		588		51
Saturation Flow Module:																				
Sat/Lane:	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900		1900
Adjustment:	0.90		0.89		0.83	0.90		0.89		0.83	0.90		0.87		0.87	0.90		0.92		0.92
Lanes:	2.00		3.00		1.00	2.00		3.00		1.00	2.00		1.18		0.82	2.00		1.84		0.16
Final Sat..	3432		5083		1583	3432		5083		1583	3432		1967		1355	3432		3216		280
Capacity Analysis Module:																				
Vol/Sat:	0.07		0.18		0.07	0.05		0.21		0.27	0.09		0.24		0.24	0.06		0.18		0.18
Crit Moves:	****							****					****			****				
Green/Cycle:	0.10		0.33		0.33	0.10		0.33		0.47	0.14		0.38		0.38	0.09		0.33		0.33
Volume/Cap:	0.64		0.53		0.20	0.53		0.64		0.58	0.61		0.64		0.64	0.64		0.56		0.56
Delay/Veh:	55.5		32.9		28.9	53.1		35.3		24.5	50.5		31.4		31.4	57.1		33.7		33.7
User DelAdj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	55.5		32.9		28.9	53.1		35.3		24.5	50.5		31.4		31.4	57.1		33.7		33.7
HCM2kAvg:	5		9		3	4		12		12	6		13		13	5		10		10

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.661
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 12 Dec 2001 << AM												
Base Vol:	9	662	83	121	1040	271	146	160	12	85	162	290
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	662	83	121	1040	271	146	160	12	85	162	290
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	10	736	92	134	1156	301	162	178	13	94	180	322
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	736	92	134	1156	301	162	178	13	94	180	322
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	10	736	92	134	1156	301	162	178	13	94	180	322
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.83	0.93	0.86	0.86	0.93	0.92	0.92	0.93	0.84	0.84
Lanes:	1.00	3.00	1.00	1.00	2.38	0.62	1.00	1.86	0.14	1.00	1.00	1.00
Final Sat..	1769	5083	1583	1769	3907	1018	1769	3258	244	1769	1599	1599
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.06	0.08	0.30	0.30	0.09	0.05	0.05	0.05	0.11	0.20
Crit Moves:	****				****		****					****
Green/Cycle:	0.06	0.35	0.35	0.13	0.42	0.42	0.13	0.32	0.32	0.09	0.29	0.29
Volume/Cap:	0.10	0.42	0.17	0.57	0.70	0.70	0.70	0.17	0.17	0.56	0.39	0.70
Delay/Veh:	53.9	29.9	27.2	52.3	29.5	29.5	59.0	29.0	29.0	56.4	34.5	41.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	29.9	27.2	52.3	29.5	29.5	59.0	29.0	29.0	56.4	34.5	41.2
HCM2kAvg:	0	7	2	6	15	15	7	2	2	4	5	12

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.384
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.9
Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	2	658	14	31	953	28	27	19	5	27	22	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	658	14	31	953	28	27	19	5	27	22	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	2	731	16	34	1059	31	30	21	6	30	24	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	731	16	34	1059	31	30	21	6	30	24	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	2	731	16	34	1059	31	30	21	6	30	24	97
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.97	0.97	0.95	0.88	0.88
Lanes:	1.00	1.96	0.04	1.00	2.00	1.00	1.00	0.79	0.21	1.00	0.20	0.80
Final Sat..	1805	3524	75	1805	3610	1615	1805	1458	384	1805	337	1335
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.02	0.29	0.02	0.02	0.01	0.01	0.02	0.07	0.07
Crit Moves:	****				****		****				****	
Green/Cycle:	0.00	0.70	0.70	0.06	0.76	0.76	0.04	0.11	0.11	0.12	0.19	0.19
Volume/Cap:	0.38	0.30	0.30	0.30	0.38	0.03	0.38	0.13	0.13	0.13	0.38	0.38
Delay/Veh:	87.2	5.6	5.6	46.0	4.0	2.8	49.7	40.7	40.7	39.3	36.2	36.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.2	5.6	5.6	46.0	4.0	2.8	49.7	40.7	40.7	39.3	36.2	36.2
HCM2kAvg:	0	4	4	1	6	0	1	1	1	1	4	4

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: F(110.6)

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	14	657	62	33	897	24	23	9	16	20	2	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	657	62	33	897	24	23	9	16	20	2	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	16	730	69	37	997	27	26	10	18	22	2	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	16	730	69	37	997	27	26	10	18	22	2	12
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1023	xxxx	xxxxx	799	xxxx	xxxxx	1873	1900	997	1858	1858	730
Potent Cap..	686	xxxx	xxxxx	833	xxxx	xxxxx	56	70	299	57	74	426
Move Cap..	686	xxxx	xxxxx	833	xxxx	xxxxx	50	65	299	45	69	426
Volume/Cap:	0.02	xxxx	xxxx	0.04	xxxx	xxxx	0.51	0.15	0.06	0.49	0.03	0.03
Level Of Service Module:												
Queue:	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	0.2	xxxxx	xxxx	0.1
Stopped Del:	10.4	xxxx	xxxxx	9.5	xxxx	xxxxx	xxxxx	xxxx	17.8	xxxxx	xxxx	13.7
LOS by Move:	B	*	*	A	*	*	*	*	C	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	54	xxxx	xxxxx	46	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx	2.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	157.1	xxxx	xxxxx	148.4	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			110.6			103.5		
ApproachLOS:	*			*			F			F		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.473
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.8
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0 1	1 0		1 0 1	1 0		1 0 1	0 1		1 0 1	0 1	
Volume Module: >> Count Date: 8 Jan 2002 << AM												
Base Vol:	40	497	10	26	1014	49	108	6	198	34	8	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	497	10	26	1014	49	108	6	198	34	8	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	44	552	11	29	1127	54	120	7	220	38	9	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol.	44	552	11	29	1127	54	120	7	220	38	9	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	44	552	11	29	1127	54	120	7	220	38	9	79
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.94	0.94	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.96	0.04	1.00	1.91	0.09	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat..	1805	3528	71	1805	3419	165	1805	1900	1615	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.16	0.02	0.33	0.33	0.07	0.00	0.14	0.02	0.00	0.05
Crit Moves:	****				****		****				****	
Green/Cycle:	0.06	0.46	0.46	0.13	0.53	0.53	0.11	0.24	0.24	0.07	0.20	0.20
Volume/Cap:	0.42	0.34	0.34	0.12	0.62	0.62	0.62	0.01	0.57	0.30	0.02	0.24
Delay/Veh:	57.3	21.0	21.0	46.0	20.1	20.1	57.0	35.0	42.4	54.4	38.6	40.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.3	21.0	21.0	46.0	20.1	20.1	57.0	35.0	42.4	54.4	38.6	40.8
HCM2kAvg:	2	7	7	1	15	15	5	0	8	2	0	3

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.779
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 28.2
Optimal Cycle: 66 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	20		7	7	20		0	0	0		0	20	0		20
Lanes:	0 0	2	0	1	1 0	1	0	0	0 0	0	0	0	1 0	0	0	1
Volume Module:																
Base Vol:	0	314		182	364	961		0	0	0		0	257	0		169
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	314		182	364	961		0	0	0		0	257	0		169
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.81	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.72
PHF Volume:	0	349		225	404	1068		0	0	0		0	286	0		235
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	349		225	404	1068		0	0	0		0	286	0		235
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	349		225	404	1068		0	0	0		0	286	0		235
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	0.95		0.85	0.95	1.00		1.00	1.00	1.00		1.00	0.95	1.00		0.85
Lanes:	0.00	2.00		1.00	1.00	1.00		0.00	0.00	0.00		0.00	1.00	0.00		1.00
Final Sat..	0	3610		1615	1805	1900		0	0	0		0	1805	0		1615
Capacity Analysis Module:																
Vol/Sat:	0.00	0.10		0.14	0.22	0.56		0.00	0.00	0.00		0.00	0.16	0.00		0.15
Crit Moves:	****					****							****			
Green/Cycle:	0.00	0.31		0.31	0.41	0.72		0.00	0.00	0.00		0.00	0.20	0.00		0.20
Volume/Cap:	0.00	0.31		0.45	0.54	0.78		0.00	0.00	0.00		0.00	0.78	0.00		0.72
Delay/Veh:	0.0	32.0		34.0	27.4	13.5		0.0	0.0	0.0		0.0	55.4	0.0		51.9
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	32.0		34.0	27.4	13.5		0.0	0.0	0.0		0.0	55.4	0.0		51.9
HCM2kAvg:	0	5		7	12	26		0	0	0		0	12	0		9

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.982
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 44.4
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Ovl			
Min. Green:	7	24		7	7	24		7	0	24		7	7	24		7
Lanes:	1 0	1	1	0	1 0	1	1	0	1 0	1	0	1	1 0	0	1	0
Volume Module: >> Count Date: 27 Nov 2001 << AM Peak																
Base Vol:	3	580		86	408	675		4	25	271		3	27	6		586
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	3	580		86	408	675		4	25	271		3	27	6		586
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		0.50	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	3	644		96	453	750		4	28	301		2	30	7		651
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	3	644		96	453	750		4	28	301		2	30	7		651
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	3	644		96	453	750		4	28	301		2	30	7		651
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.91		0.91	0.93	0.93		0.93	0.12	0.98		0.83	0.45	0.83		0.83
Lanes:	1.00	1.74		0.26	1.00	1.99		0.01	1.00	1.00		1.00	1.00	0.01		0.99
Final Sat..	1769	3022		448	1769	3513		21	222	1862		1583	855	16		1570
Capacity Analysis Module:																
Vol/Sat:	0.00	0.21		0.21	0.26	0.21		0.21	0.13	0.16		0.00	0.04	0.41		0.41
Crit Moves:		****			****									****		
Green/Cycle:	0.10	0.22		0.22	0.26	0.38		0.38	0.42	0.42		0.42	0.42	0.42		0.68
Volume/Cap:	0.02	0.98		0.98	0.98	0.57		0.57	0.30	0.38		0.00	0.08	0.98		0.61
Delay/Veh:	48.5	75.1		75.1	81.2	30.4		30.4	24.7	24.2		20.1	20.9	64.5		11.3
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	48.5	75.1		75.1	81.2	30.4		30.4	24.7	24.2		20.1	20.9	64.5		11.3
HCM2kAvg:	0	19		19	23	11		11	6	8		0	1	30		13

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.635
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 18.6
Optimal Cycle: 67 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	0 0	0 0		0	1 1	0 0		1	0 0	2 0		1	2 0	2 0		0
Volume Module: >> Count Date: 27 Nov 2001 << AM																
Base Vol:	0	0		0	85	22		17	0	603		646	248	1162		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	85	22		17	0	603		646	248	1162		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	94	24		19	0	670		718	276	1291		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	0		0	94	24		19	0	670		718	276	1291		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	0		0	94	24		19	0	670		718	276	1291		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00		1.00	0.83	0.83		0.83	1.00	0.93		0.83	0.90	0.93		1.00
Lanes:	0.00	0.00		0.00	1.59	0.41		1.00	0.00	2.00		1.00	2.00	2.00		0.00
Final Sat..	0	0		0	2515	651		1583	0	3538		1583	3432	3538		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00		0.00	0.04	0.04		0.01	0.00	0.19		0.45	0.08	0.36		0.00
Crit Moves:						****						****	****			
Green/Cycle:	0.00	0.00		0.00	0.20	0.20		0.20	0.00	0.59		0.59	0.11	0.70		0.00
Volume/Cap:	0.00	0.00		0.00	0.19	0.19		0.06	0.00	0.32		0.76	0.76	0.52		0.00
Delay/Veh:	0.0	0.0		0.0	40.0	40.0		38.9	0.0	12.2		21.8	61.5	8.7		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	0.0		0.0	40.0	40.0		38.9	0.0	12.2		21.8	61.5	8.7		0.0
HCM2kAvg:	0	0		0	2	2		1	0	6		21	7	11		0

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave [NS/ EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.551
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.7
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1 1	0 0		1	0 0	0 0		0	2 0	2 0		0	0 0	2 0		1
Volume Module: >> Count Date: 27 Nov 2001 << AM																
Base Vol:	570	9		169	0	0		0	105	634		0	0	823		296
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	570	9		169	0	0		0	105	634		0	0	823		296
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	633	10		188	0	0		0	117	704		0	0	914		329
Reduct Vol.	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	633	10		188	0	0		0	117	704		0	0	914		329
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	633	10		188	0	0		0	117	704		0	0	914		329
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.83	0.83		0.83	1.00	1.00		1.00	0.90	0.93		1.00	1.00	0.93		0.83
Lanes:	1.97	0.03		1.00	0.00	0.00		0.00	2.00	2.00		0.00	0.00	2.00		1.00
Final Sat..	3116	49		1583	0	0		0	3432	3538		0	0	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.20	0.20		0.12	0.00	0.00		0.00	0.03	0.20		0.00	0.00	0.26		0.21
Crit Moves:	****								****					****		
Green/Cycle:	0.37	0.37		0.37	0.00	0.00		0.00	0.06	0.53		0.00	0.00	0.47		0.47
Volume/Cap:	0.55	0.55		0.32	0.00	0.00		0.00	0.55	0.37		0.00	0.00	0.55		0.44
Delay/Veh:	30.6	30.6		27.4	0.0	0.0		0.0	57.8	16.6		0.0	0.0	23.2		21.8
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	30.6	30.6		27.4	0.0	0.0		0.0	57.8	16.6		0.0	0.0	23.2		21.8
HCM2kAvg:	11	11		5	0	0		0	3	7		0	0	12		8

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.854
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 27.6
Optimal Cycle: 84 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	1 0	2 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	703	178	174	962	0	0	0	0	546	0	377
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	703	178	174	962	0	0	0	0	546	0	377
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	781	198	193	1069	0	0	0	0	607	0	419
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	781	198	193	1069	0	0	0	0	607	0	419
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	781	198	193	1069	0	0	0	0	607	0	419
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.85
Lanes:	0.00	1.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat..	0	1900	1615	1805	3610	0	0	0	0	3502	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.41	0.12	0.11	0.30	0.00	0.00	0.00	0.00	0.17	0.00	0.26
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.48	0.48	0.13	0.61	0.00	0.00	0.00	0.00	0.30	0.00	0.30
Volume/Cap:	0.00	0.85	0.25	0.85	0.49	0.00	0.00	0.00	0.00	0.57	0.00	0.85
Delay/Veh:	0.0	30.8	15.5	68.6	11.2	0.0	0.0	0.0	0.0	30.1	0.0	46.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	30.8	15.5	68.6	11.2	0.0	0.0	0.0	0.0	30.1	0.0	46.4
HCM2kAvg:	0	24	4	9	9	0	0	0	0	9	0	15

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.824
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: 83 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	13	49	66	45	389	56	103	522	520	756	282	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	49	66	45	389	56	103	522	520	756	282	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	14	54	73	50	432	62	114	580	578	840	313	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	54	73	50	432	62	114	580	578	840	313	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	14	54	73	50	432	62	114	580	578	840	313	52
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat..	1805	3610	1615	1805	3610	1615	1805	3610	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.05	0.03	0.12	0.04	0.06	0.16	0.36	0.24	0.09	0.03
Crit Moves:	****				****				****	****		
Green/Cycle:	0.01	0.10	0.10	0.06	0.15	0.15	0.31	0.43	0.43	0.29	0.42	0.42
Volume/Cap:	0.82	0.16	0.47	0.47	0.82	0.27	0.21	0.37	0.82	0.82	0.21	0.08
Delay/Veh:	180.0	41.7	45.0	48.9	51.7	38.6	25.9	19.2	32.8	38.6	18.6	17.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	180.0	41.7	45.0	48.9	51.7	38.6	25.9	19.2	32.8	38.6	18.6	17.5
HCM2kAvg:	2	1	3	2	9	2	3	6	18	15	3	1

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.509
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.9
Optimal Cycle: 41 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	2	1 0	2 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	168	49	491	2	59	34	19	488	120	330	1035	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	49	491	2	59	34	19	488	120	330	1035	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	187	54	546	2	66	38	21	542	133	367	1150	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	187	54	546	2	66	38	21	542	133	367	1150	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	187	54	546	2	66	38	21	542	133	367	1150	54
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.75	0.95	0.95	0.85	0.92	0.95	0.85	0.92	0.91	0.85
Lanes:	1.00	2.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat..	1805	3610	2842	1805	3610	1615	3502	3610	1615	3502	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.10	0.02	0.19	0.00	0.02	0.02	0.01	0.15	0.08	0.10	0.22	0.03
Crit Moves:			****	****				****		****		
Green/Cycle:	0.31	0.38	0.38	0.00	0.07	0.07	0.01	0.29	0.29	0.21	0.49	0.49
Volume/Cap:	0.33	0.04	0.51	0.51	0.26	0.33	0.45	0.51	0.28	0.51	0.45	0.07
Delay/Veh:	27.0	19.7	24.4	124.8	44.6	46.0	55.9	29.7	27.4	35.8	17.0	13.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.0	19.7	24.4	124.8	44.6	46.0	55.9	29.7	27.4	35.8	17.0	13.6
HCM2kAvg:	5	1	7	0	1	1	1	7	3	6	8	1

Harmony Grove Village
Option C: Existing

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	33.2	0.785	C	33.2	0.785	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	E	74.9	1.215	E	74.9	1.215	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	E	78.4	1.087	E	78.4	1.087	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	356.7	0.000	F	356.7	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	7.8	0.131	A	7.8	0.131	+ 0.000 V/C
# 6 Country Club Drive/Entrance #	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 7 Country Club/ Village Road	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	B	13.0	0.000	B	13.0	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	B	11.3	0.000	B	11.3	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	B	11.8	0.000	B	11.8	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	C	34.5	0.538	C	34.5	0.538	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	A	9.9	0.327	A	9.9	0.327	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	B	14.2	0.000	B	14.2	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	C	16.6	0.000	C	16.6	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	33.5	0.720	C	33.5	0.720	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	B	14.8	0.000	B	14.8	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	D	27.6	0.000	D	27.6	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	A	8.8	0.000	A	8.8	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	A	9.1	0.000	A	9.1	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	E	55.8	1.115	E	55.8	1.115	+ 0.000 D/V

Harmony Grove Village
Option C: Existing

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	E	74.1	1.064	E	74.1	1.064	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	40.4	0.732	D	40.4	0.732	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	D	38.1	0.623	D	38.1	0.623	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	A	7.2	0.479	A	7.2	0.479	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	234.5	0.000	F	234.5	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	23.8	0.467	C	23.8	0.467	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	31.6	0.652	C	31.6	0.652	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	C	26.6	0.745	C	26.6	0.745	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	20.8	0.830	C	20.8	0.830	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	26.3	0.591	C	26.3	0.591	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	32.2	0.946	C	32.2	0.946	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	42.2	0.923	D	42.2	0.923	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	35.0	0.782	C	35.0	0.782	+ 0.000 D/V

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.785
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 33.2
Optimal Cycle: 68 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	0	0	0	7	24	7
Lanes:	2 0	2 0	0	0 0	2 0	1	0 0	0 0	0	1 0	1! 0	1
Volume Module: >> Count Date: 13 Dec 2001 << PM												
Base Vol:	620	819	0	0	649	211	0	0	0	332	6	267
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	620	819	0	0	649	211	0	0	0	332	6	267
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	689	910	0	0	721	234	0	0	0	369	7	297
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	689	910	0	0	721	234	0	0	0	369	7	297
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	689	910	0	0	721	234	0	0	0	369	7	297
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.71	0.73	1.00	1.00	0.93	0.83	1.00	1.00	1.00	0.67	0.67	0.67
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.54	0.02	1.44
Final Sat..	2693	2776	0	0	3538	1583	0	0	0	1967	25	1832
Capacity Analysis Module:												
Vol/Sat:	0.26	0.33	0.00	0.00	0.20	0.15	0.00	0.00	0.00	0.19	0.27	0.16
Crit Moves:	****				****						****	
Green/Cycle:	0.33	0.59	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.34	0.34	0.34
Volume/Cap:	0.78	0.56	0.00	0.00	0.78	0.57	0.00	0.00	0.00	0.55	0.78	0.48
Delay/Veh:	41.3	15.8	0.0	0.0	45.8	40.5	0.0	0.0	0.0	32.8	40.5	31.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.3	15.8	0.0	0.0	45.8	40.5	0.0	0.0	0.0	32.8	40.5	31.5
HCM2kAvg:	14	11	0	0	14	8	0	0	0	8	14	7

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp [NS / EW]

Cycle (sec): 100 Critical Vol./Cap. (X): 1.215
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 74.9
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24		7	7	24		0	7	24		7	0	0		0
Lanes:	0	0	2	0 1	2	0	2	0 0	0	1	0	1 0	0	0	0	0 0
Volume Module: >> Count Date: 13 Dec 2001 << PM																
Base Vol:	0	1068		719	372	601		0	263		2	357	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Initial Bse:	0	1068		719	372	601		0	263		2	357	0	0		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90		0.90
PHF Volume:	0	1187		799	413	668		0	292		2	397	0	0		0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0	0		0
Reduced Vol:	0	1187		799	413	668		0	292		2	397	0	0		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Final Vol..	0	1187		799	413	668		0	292		2	397	0	0		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900		1900	1900	1900	1900		1900
Adjustment:	1.00	0.73		0.65	0.90	0.93		1.00	0.61		0.61	0.61	1.00	1.00		1.00
Lanes:	0.00	2.00		1.00	2.00	2.00		0.00	0.99		0.01	1.00	0.00	0.00		0.00
Final Sat..	0	2776		1242	3432	3538		0	1151		9	1160	0	0		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.43		0.64	0.12	0.19		0.00	0.25		0.25	0.34	0.00	0.00		0.00
Crit Moves:				****	****							****				
Green/Cycle:	0.00	0.53		0.53	0.10	0.63		0.00	0.28		0.28	0.28	0.00	0.00		0.00
Volume/Cap:	0.00	0.81		1.22	1.22	0.30		0.00	0.90		0.90	1.22	0.00	0.00		0.00
Delay/Veh:	0.0	22.8		133.9	165.8	8.6		0.0	48.5		48.5	148.2	0.0	0.0		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	22.8		133.9	165.8	8.6		0.0	48.5		48.5	148.2	0.0	0.0		0.0
HCM2kAvg:	0	17		44	14	5		0	13		13	26	0	0		0

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.087
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 78.4
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	2	0 1	2	0	1	1 0	2	0	2	0 1	2	0	2	0 1
Volume Module: >> Count Date: 13 Dec 2001 << PM																
Base Vol:	252	982		73	236	383		238	311	643		260	57	533		552
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	252	982		73	236	383		238	311	643		260	57	533		552
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	280	1091		81	262	426		264	346	714		289	63	592		613
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	280	1091		81	262	426		264	346	714		289	63	592		613
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	280	1091		81	262	426		264	346	714		289	63	592		613
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.73	0.73		0.65	0.71	0.69		0.69	0.90	0.93		0.83	0.90	0.93		0.83
Lanes:	1.00	2.00		1.00	2.00	1.23		0.77	2.00	2.00		1.00	2.00	2.00		1.00
Final Sat.:	1388	2776		1242	2693	1615		1003	3432	3538		1583	3432	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.20	0.39		0.07	0.10	0.26		0.26	0.10	0.20		0.18	0.02	0.17		0.39
Crit Moves:		****			****				****							****
Green/Cycle:	0.20	0.36		0.36	0.09	0.26		0.26	0.09	0.35		0.35	0.10	0.36		0.36
Volume/Cap:	1.03	1.09		0.18	1.09	1.03		1.03	1.09	0.58		0.52	0.18	0.47		1.09
Delay/Veh:	111.3	93.5		26.4	137.8	87.9		87.9	130.3	32.6		32.1	49.7	30.1		102.4
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	111.3	93.5		26.4	137.8	87.9		87.9	130.3	32.6		32.1	49.7	30.1		102.4
HCM2kAvg:	16	30		2	10	19		19	12	11		9	1	8		33

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club (NS / EW)

Average Delay (sec/veh): 31.8 Worst Case Level Of Service: F[356.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	2 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module: >> Count Date: 11 Dec 2001 << PM												
Base Vol:	65	1104	5	39	646	95	127	1	60	1	0	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	1104	5	39	646	95	127	1	60	1	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	72	1227	6	43	718	106	141	1	67	1	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	72	1227	6	43	718	106	141	1	67	1	0	13
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	xxxx	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	823	xxxx	xxxxx	1232	xxxx	xxxxx	1562	2181	718	2262	xxxx	613
Potent Cap..	807	xxxx	xxxxx	565	xxxx	xxxxx	91	46	429	29	xxxx	492
Move Cap..	807	xxxx	xxxxx	565	xxxx	xxxxx	78	39	429	21	xxxx	492
Volume/Cap:	0.09	xxxx	xxxx	0.08	xxxx	xxxx	1.82	0.03	0.16	0.05	xxxx	0.03
Level Of Service Module:												
Queue:	0.3	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	0.5	xxxxx	xxxx	xxxxx
Stopped Del:	9.9	xxxx	xxxxx	11.9	xxxx	xxxxx	xxxxx	xxxx	14.9	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	B	*	*	*	*	B	-	*	-
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	77	xxxx	xxxxx	xxxx	181	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.4	xxxx	xxxxx	xxxxx	0.3	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	516.9	xxxx	xxxxx	xxxxx	26.7	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			356.7			26.7		
ApproachLOS:	*			*			F			D		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.131
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.8
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L -	T -	R		L -	T -	R		L -	T -	R		L -	T -	R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Ignore				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0 0	1 0	1		0 1	0 0	0		0 0	0 0	0		0 0	1! 0	0	
Volume Module:																
Base Vol:	0	90	7		43	39	0		0	0	0		9	0	43	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	90	7		43	39	0		0	0	0		9	0	43	
User Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.00		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	100	0		48	43	0		0	0	0		10	0	48	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	100	0		48	43	0		0	0	0		10	0	48	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	100	0		48	43	0		0	0	0		10	0	48	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	1.00	1.00		0.52	0.48	0.00		0.00	0.00	0.00		0.17	0.00	0.83	
Final Sat..	0	761	0		430	390	0		0	0	0		155	0	740	
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.13	xxxx	0.11	0.11	xxxx	xxxx	xxxx	xxxx	0.06	xxxx	0.06				
Crit Moves:		****			****					****						
Delay/Veh:	0.0	8.1	0.0	7.9	7.9	0.0	0.0	0.0	0.0	7.1	0.0	7.1				
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	0.0	8.1	0.0	7.9	7.9	0.0	0.0	0.0	0.0	7.1	0.0	7.1				
LOS by Move:	-	A	*	A	A	-	*	*	*	A	-	A				
ApproachDel:		8.1			7.9			xxxxxx			7.1					
Delay Adj:		1.00			1.00			xxxxx			1.00					
ApprAdjDel:		8.1			7.9			xxxxxx			7.1					
LOS by Appr:		A			A			*			A					

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club Drive/Entrance # 3

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1!	0	0
Volume Module:																		
Base Vol:	0	97		0	0	48		0	0	0		0	0	0		0	0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Initial Bse:	0	97		0	0	48		0	0	0		0	0	0		0	0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90
PHF Volume:	0	108		0	0	53		0	0	0		0	0	0		0	0	0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0	0	0
Final Vol..	0	108		0	0	53		0	0	0		0	0	0		0	0	0
Critical Gap Module:																		
Critical Gp:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx
Capacity Module:																		
Cnflict Vol:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																		
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*		*	*	*		*	*	*		*	*	*		*	*	*	*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx			0	xxxxx		
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*	*	*	*
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx						
ApproachLOS:	*				*				*				*						

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0	1	1	0	1	0	0	0	0	0	1	0	0	0	1
Volume Module:																		
Base Vol:	0	97		0	0	48		0	0	0		0	0	0		0	0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
Initial Bse:	0	97		0	0	48		0	0	0		0	0	0		0	0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90
PHF Volume:	0	108		0	0	53		0	0	0		0	0	0		0	0	0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0	0	0
Final Vol..	0	108		0	0	53		0	0	0		0	0	0		0	0	0
Critical Gap Module:																		
Critical Gp:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:																		
Cnflict Vol:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																		
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*		*	*	*		*	*	*		*	*	*		*	*	*	*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*	*	*	*
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx						
ApproachLOS:	*				*				*				*						

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1	0 1	0 0	0	0 1	0 1	1	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	433	0	0	105	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	433	0	0	105	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	481	0	0	117	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	481	0	0	117	0	0	0	0	0	0	0

Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx

Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Move Cap.. xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Volume/Cap: xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Level Of Service Module:
Queue: xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move: * * * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS: * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx xxxxxx xxxxxx
ApproachLOS: * * * *

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1	0 0	0 0	1	0 0	0 0	1!	0 0	0 0	0 0	0 0
Volume Module:												
Base Vol:	0	97	0	0	48	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	97	0	0	48	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	108	0	0	53	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	108	0	0	53	0	0	0	0	0	0	0

Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx

Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Move Cap.. xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Volume/Cap: xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Level Of Service Module:
Queue: xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move: * * * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.. xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx 0 xxxxx xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS: * * * * * * * * * * * *
ApproachDel. xxxxxx xxxxxx xxxxxx xxxxxx
ApproachLOS: * * * *

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Country Club/Harmony Grove

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: B[13.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	1	1	6	3	5	26	105	422	0	5	87	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	1	6	3	5	26	105	422	0	5	87	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	1	7	3	6	29	117	469	0	6	97	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	1	1	7	3	6	29	117	469	0	6	97	6
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	830	816	469	817	813	99	102	xxxx	xxxxx	469	xxxx	xxxxx
Potent Cap..	292	314	599	298	315	962	1502	xxxx	xxxxx	1103	xxxx	xxxxx
Move Cap..	260	286	599	274	287	962	1502	xxxx	xxxxx	1103	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.01	0.01	0.02	0.03	0.08	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	461	xxxxx	xxxx	614	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.2	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	13.0	xxxxx	xxxxx	11.2	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	*	*	*
ApproachDel:	13.0			11.2			xxxxxx			xxxxxx		
ApproachLOS:	B			B			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 0 1 0 0			0 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	527	0	0	114	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	527	0	0	114	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	0	0	0	0	586	0	0	127	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	0	0	0	0	586	0	0	127	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	1	0	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0		1	0		1	3	511		0	0	108		3
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0	0		1	0		1	3	511		0	0	108		3
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0	0		1	0		1	3	568		0	0	120		3
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Final Vol.:	0	0	0		1	0		1	3	568		0	0	120		3
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx		6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx		3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		696	xxxx		122	123	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx		411	xxxx		935	1476	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx		410	xxxx		935	1476	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx		0.00	xxxx		0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*			A	*	*	*	*	*		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT			LT -	LTR -	RT	LT -	LTR -	RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	570	xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	11.3	xxxxx			7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	*	B	*			A	*	*	*	*	*		
ApproachDel:	xxxxxx				11.3				xxxxxx			xxxxxx				
ApproachLOS:	*				B				*			*				

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	1	0 1	1	0	1	0 0
Volume Module:																
Base Vol:	0	0	0		0	0		0	0	892		0	0	764		0
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0	0		0	0		0	0	892		0	0	764		0
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0	0		0	0		0	0	991		0	0	849		0
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Final Vol.:	0	0	0		0	0		0	0	991		0	0	849		0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx						
ApproachLOS:	*			*			*			*						

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa [NS / EW]

Average Delay (sec/veh): 8.8 Worst Case Level Of Service: B[11.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	0	1 0	0 1	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << PM												
Base Vol:	8	0	425	0	0	0	0	56	7	98	74	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	425	0	0	0	0	56	7	98	74	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	9	0	472	0	0	0	0	62	8	109	82	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	9	0	472	0	0	0	0	62	8	109	82	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	366	xxxx	66	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	70	xxxx	xxxxx
Potent Cap..	634	xxxx	998	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1531	xxxx	xxxxx
Move Cap..	597	xxxx	998	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1531	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	0.47	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Stopped Del:	11.1	xxxx	11.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	B	*	B	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:	11.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.538
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.5
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	1	0 1	1 0	1	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module: >> Count Date: 11 Dec 2001 << AM												
Base Vol:	225	188	166	104	68	62	80	709	103	68	478	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	225	188	166	104	68	62	80	709	103	68	478	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	250	209	184	116	76	69	89	788	114	76	531	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol.	250	209	184	116	76	69	89	788	114	76	531	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	250	209	184	116	76	69	89	788	114	76	531	149
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.93	0.98	0.83	0.93	0.91	0.91	0.93	0.93	0.83
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.75	0.25	1.00	2.00	1.00
Final Sat..	1769	1862	1583	1769	1862	1583	1769	3030	440	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.14	0.11	0.12	0.07	0.04	0.04	0.05	0.26	0.26	0.04	0.15	0.09
Crit Moves:	****				****			****		****		
Green/Cycle:	0.22	0.32	0.32	0.10	0.20	0.20	0.11	0.41	0.41	0.07	0.37	0.37
Volume/Cap:	0.63	0.35	0.37	0.63	0.20	0.22	0.47	0.63	0.63	0.63	0.41	0.25
Delay/Veh:	45.6	31.7	32.0	58.2	40.3	40.5	52.1	29.2	29.2	65.2	28.3	26.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.6	31.7	32.0	58.2	40.3	40.5	52.1	29.2	29.2	65.2	28.3	26.6
HCM2kAvg:	10	6	5	5	2	2	4	14	14	4	7	4

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.327
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 9.9
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1
Volume Module: >> Count Date: 28 Nov 2001 << PM																
Base Vol:	3	27		27	170	17		6	7	21		4	5	7		212
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	3	27		27	170	17		6	7	21		4	5	7		212
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	3	30		30	189	19		7	8	23		4	6	8		236
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	3	30		30	189	19		7	8	23		4	6	8		236
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	3	30		30	189	19		7	8	23		4	6	8		236
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Sat..	537	580		654	582	629		717	529	571		642	577	627		720
Capacity Analysis Module:																
Vol/Sat:	0.01	0.05		0.05	0.32	0.03		0.01	0.01	0.04		0.01	0.01	0.01		0.33
Crit Moves:		****			****					****						****
Delay/Veh:	9.0	8.8		8.0	11.3	8.3		7.5	9.2	8.8		7.9	8.7	8.3		9.7
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	9.0	8.8		8.0	11.3	8.3		7.5	9.2	8.8		7.9	8.7	8.3		9.7
LOS by Move:	A	A		A	B	A		A	A	A		A	A	A		A
ApproachDel:		8.4				10.9				8.8				9.6		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		8.4				10.9				8.8				9.6		
LOS by Appr:		A				B				A				A		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. [NS / EW]

Average Delay (sec/veh): 7.4 Worst Case Level Of Service: B[14.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	0	1 0	0	1	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << PM																
Base Vol:	49	0		347	0	0		0	0	204		49	133	128		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	49	0		347	0	0		0	0	204		49	133	128		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	54	0		386	0	0		0	0	227		54	148	142		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	54	0		386	0	0		0	0	227		54	148	142		0
Critical Gap Module:																
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	4.1	xxxx		xxxxx
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	2.2	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	692	xxxx		254	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	281	xxxx		xxxxx
Potent Cap..	410	xxxx		785	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	1281	xxxx		xxxxx
Move Cap..	371	xxxx		785	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	1281	xxxx		xxxxx
Volume/Cap:	0.15	xxxx		0.49	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	0.12	xxxx		xxxx
Level Of Service Module:																
Queue:	0.5	xxxx		2.7	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	0.4	xxxx		xxxxx
Stopped Del:	16.4	xxxx		13.9	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	8.2	xxxx		xxxxx
LOS by Move:	C	*		B	*	*		*	*	*		*	A	*		*
Movement:	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	0.4	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	8.2	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	A	*		*
ApproachDel:		14.2				xxxxxx				xxxxxx				xxxxxx		
ApproachLOS:		B				*				*				*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: CI 16.6[1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0			1 0 0 0		1	0 1 0 0		0	0 0 0	1	0
Volume Module: >> Count Date: 12 Dec 2001 <<												
Base Vol:	0	0	0	39	0	35	87	472	0	0	242	51
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	39	0	35	87	472	0	0	242	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	43	0	39	97	524	0	0	269	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	43	0	39	97	524	0	0	269	57
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxx	6.4	xxxx	6.2	4.1	xxxx	xxxx	xxxx	xxxx	xxxx
FollowUpTim:	xxxx	xxxx	xxxx	3.5	xxxx	3.3	2.2	xxxx	xxxx	xxxx	xxxx	xxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxx	1015	xxxx	297	326	xxxx	xxxx	xxxx	xxxx	xxxx
Potent Cap.:	xxxx	xxxx	xxxx	266	xxxx	747	1245	xxxx	xxxx	xxxx	xxxx	xxxx
Move Cap..	xxxx	xxxx	xxxx	250	xxxx	747	1245	xxxx	xxxx	xxxx	xxxx	xxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.17	xxxx	0.05	0.08	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.6	xxxx	0.2	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	22.4	xxxx	10.1	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	B	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			16.6			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.720
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.5
Optimal Cycle: 65 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		7	0	7		7	24	0		0	24		7
Lanes:	0 1	0	1	0	1	0	0	1	0	1	0	1	0	1	0	2	0	1
Volume Module: >> Count Date: 12 Dec 2001 << PM																		
Base Vol:	28	12	28		386	9	176		209	1001	14		26	617	357	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	28	12	28		386	9	176		209	1001	14		26	617	357	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	31	13	31		429	10	196		232	1112	16		29	686	397	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	31	13	31		429	10	196		232	1112	16		29	686	397	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	31	13	31		429	10	196		232	1112	16		29	686	397	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.86	0.86	0.86		0.93	0.84	0.84		0.93	0.93	0.93		0.93	0.93	0.83	
Lanes:	0.83	0.35	0.82		1.00	0.05	0.95		1.00	1.97	0.03		1.00	2.00	1.00	
Final Sat..	1339	574	1339		1769	78	1518		1769	3482	49		1769	3538	1583	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.02	0.02		0.24	0.13	0.13		0.13	0.32	0.32		0.02	0.19	0.25	
Crit Moves:		****			****				****						****	
Green/Cycle:	0.03	0.03	0.03		0.34	0.34	0.34		0.18	0.50	0.50		0.03	0.35	0.35	
Volume/Cap:	0.72	0.72	0.72		0.72	0.38	0.38		0.72	0.63	0.63		0.63	0.56	0.72	
Delay/Veh:	78.9	78.9	78.9		39.1	30.7	30.7		53.8	22.4	22.4		83.3	32.2	38.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	78.9	78.9	78.9		39.1	30.7	30.7		53.8	22.4	22.4		83.3	32.2	38.6	
HCM2kAvg:	3	3	3		15	6	6		10	15	15		2	10	14	

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[14.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	1	0	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	0	376		46	5	235		0	0		0	0	55		0	12
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	376		46	5	235		0	0		0	0	55		0	12
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	0	418		51	6	261		0	0		0	0	61		0	13
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	0	418		51	6	261		0	0		0	0	61		0	13
Critical Gap Module:																
Critical Gp:	xxxx	xxxx		xxxxx	4.1	xxxx		xxxxx	xxxx		xxxx	xxxxx	6.4	xxxx		6.2
FollowUpTim:	xxxx	xxxx		xxxxx	2.2	xxxx		xxxxx	xxxx		xxxx	xxxxx	3.5	xxxx		3.3
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	469	xxxx		xxxxx	xxxx		xxxx	xxxxx	716	xxxx		443
Potent Cap.:	xxxx	xxxx		xxxxx	1103	xxxx		xxxxx	xxxx		xxxx	xxxxx	400	xxxx		619
Move Cap..	xxxx	xxxx		xxxxx	1103	xxxx		xxxxx	xxxx		xxxx	xxxxx	399	xxxx		619
Volume/Cap:	xxxx	xxxx		xxxx	0.01	xxxx		xxxx	xxxx		xxxx	xxxx	0.15	xxxx		0.02
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	0.0	xxxx		xxxxx	xxxxx		xxxx	xxxxx	0.5	xxxx		0.1
Stopped Del:	xxxxx	xxxx		xxxxx	8.3	xxxx		xxxxx	xxxxx		xxxx	xxxxx	15.7	xxxx		10.9
LOS by Move:	*	*		*	A	*		*	*		*	*	C	*		B
Movement:	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	0.0	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	8.3	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	A	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				14.8			
ApproachLOS:	*				*				*				B			

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 14.9 Worst Case Level Of Service: D[27.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	1	0	0	0 1	0	0	0	0 0
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol.	99	91		0	0	83		193	342		0	141	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	99	91		0	0	83		193	342		0	141	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	110	101		0	0	92		214	380		0	157	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	110	101		0	0	92		214	380		0	157	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx	6.4	xxxx		6.2	xxxxx	xxxx		xxxxx
FollowUpTim:	2.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx	3.5	xxxx		3.3	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	307	xxxx		xxxxx	xxxx	xxxx		xxxxx	521	xxxx		199	xxxx	xxxx		xxxxx
Potent Cap.:	1265	xxxx		xxxxx	xxxx	xxxx		xxxxx	520	xxxx		847	xxxx	xxxx		xxxxx
Move Cap..	1265	xxxx		xxxxx	xxxx	xxxx		xxxxx	483	xxxx		847	xxxx	xxxx		xxxxx
Volume/Cap:	0.09	xxxx		xxxx	xxxx	xxxx		xxxx	0.79	xxxx		0.19	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	0.3	xxxx		xxxxx	xxxxx	xxxx		xxxxx	7.1	xxxx		0.7	xxxxx	xxxx		xxxxx
Stopped Del:	8.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx	34.8	xxxx		10.2	xxxxx	xxxx		xxxxx
LOS by Move:	A	*		*	*	*		*	D	*		B	*	*		*
Movement:	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	0.3	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	8.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	A	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				27.6				xxxxxx			
ApproachLOS:	*				*				D				*			

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 6.7 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 0 1 0			1 0 1 0 0		
Volume Module:												
Base Vol:	6	0	73	0	0	0	0	14	4	103	16	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	0	73	0	0	0	0	14	4	103	16	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	7	0	81	0	0	0	0	16	4	114	18	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	7	0	81	0	0	0	0	16	4	114	18	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	264	xxxx	18	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	20	xxxx	xxxxx
Potent Cap..	729	xxxx	1067	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1609	xxxx	xxxxx
Move Cap..	689	xxxx	1067	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1609	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	0.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Stopped Del:	10.3	xxxx	8.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx
LOS by Move:	B	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	8.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 6.5 Worst Case Level Of Service: A[9.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 1 0 0 1			0 1 0 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	30	0	94	80	13	0	0	21	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	94	80	13	0	0	21	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	33	0	104	89	14	0	0	23	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	33	0	104	89	14	0	0	23	29
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	216	xxxx	23	52	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	777	xxxx	1059	1567	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	742	xxxx	1059	1567	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	0.10	0.06	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.3	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.8	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	742	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	10.1	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			9.1			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.115
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 55.8
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	0	0		0	7	24		7
Lanes:	0	1	0	0 1	0	0	0	0 0	2	0	3	0 0	0	0	3	0 1
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	133		0	414	0		0	0	806	1499		0	0	1388		683
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	133		0	414	0		0	0	806	1499		0	0	1388		683
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	148		0	460	0		0	0	896	1666		0	0	1542		759
Reduct Vol:	0		0	0	0		0	0	0	0		0	0	0		0
Reduced Vol:	148		0	460	0		0	0	896	1666		0	0	1542		759
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	148		0	460	0		0	0	896	1666		0	0	1542		759
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	1.00		0.83	1.00	1.00		1.00	0.90	0.89		1.00	1.00	0.89		0.83
Lanes:	1.00	0.00		1.00	0.00	0.00		0.00	2.00	3.00		0.00	0.00	3.00		1.00
Final Sat.:	1773		0	1583	0		0	0	3432	5083		0	0	5083		1583
Capacity Analysis Module:																
Vol/Sat:	0.08	0.00		0.29	0.00	0.00		0.00	0.26	0.33		0.00	0.00	0.30		0.48
Crit Moves:				****					****							****
Green/Cycle:	0.26	0.00		0.26	0.00	0.00		0.00	0.23	0.66		0.00	0.00	0.43		0.43
Volume/Cap:	0.32	0.00		1.11	0.00	0.00		0.00	1.11	0.49		0.00	0.00	0.71		1.11
Delay/Veh:	36.2	0.0		123.6	0.0	0.0		0.0	114.1	10.2		0.0	0.0	29.0		104.6
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	36.2	0.0		123.6	0.0	0.0		0.0	114.1	10.2		0.0	0.0	29.0		104.6
HCM2kAvg:	5		0	26	0		0	0	27	10		0	0	16		41

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.064
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 74.1
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	7	0		7	0	0		0
Lanes:	1	0	1	0 1	0	1	0	1 0	2	0	3	0 1	2	0	3	1 1
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	46	48		307	415	229		362	88	1548		43	276	743		462
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	46	48		307	415	229		362	88	1548		43	276	743		462
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	51	53		341	461	254		402	98	1720		48	307	826		513
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	51	53		341	461	254		402	98	1720		48	307	826		513
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	51	53		341	461	254		402	98	1720		48	307	826		513
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.98		0.83	0.86	0.86		0.86	0.90	0.89		0.83	0.90	0.84		0.84
Lanes:	1.00	1.00		1.00	0.82	0.46		0.72	2.00	3.00		1.00	2.00	3.08		1.92
Final Sat.:	1769	1862		1583	1353	747		1180	3432	5083		1583	3432	4926		3063
Capacity Analysis Module:																
Vol/Sat:	0.03	0.03		0.22	0.34	0.34		0.34	0.03	0.34		0.03	0.09	0.17		0.17
Crit Moves:				****				****		****			****			
Green/Cycle:	0.20	0.20		0.20	0.32	0.32		0.32	0.10	0.32		0.32	0.08	0.30		0.30
Volume/Cap:	0.14	0.14		1.06	1.06	1.06		1.06	0.27	1.06		0.09	1.06	0.56		0.56
Delay/Veh:	39.5	39.4		116.0	87.2	87.2		87.2	50.0	82.5		28.9	125.9	35.8		35.8
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	39.5	39.4		116.0	87.2	87.2		87.2	50.0	82.5		28.9	125.9	35.8		35.8
HCM2kAvg:	2	2		19	30	30		30	2	30		1	11	9		9

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.732
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 40.4
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Ovl					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	1	1	0	2	0	1	1	0
Volume Module: >> Count Date: 9 Dec 2000 << PM																				
Base Vol:	301	1024		45		140	823		303		568	705		213		194	437		167	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	301	1024		45		140	823		303		568	705		213		194	437		167	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	334	1138		50		156	914		337		631	783		237		216	486		186	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	334	1138		50		156	914		337		631	783		237		216	486		186	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	334	1138		50		156	914		337		631	783		237		216	486		186	
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	0.90	0.89		0.83		0.90	0.89		0.83		0.90	0.90		0.90		0.90	0.89		0.89	
Lanes:	2.00	3.00		1.00		2.00	3.00		1.00		2.00	1.54		0.46		2.00	1.45		0.55	
Final Sat..	3432	5083		1583		3432	5083		1583		3432	2622		792		3432	2455		938	
Capacity Analysis Module:																				
Vol/Sat:	0.10	0.22		0.03		0.05	0.18		0.21		0.18	0.30		0.30		0.06	0.20		0.20	
Crit Moves:	****						****				****						****			
Green/Cycle:	0.13	0.30		0.30		0.08	0.25		0.50		0.25	0.43		0.43		0.09	0.27		0.27	
Volume/Cap:	0.73	0.74		0.11		0.58	0.73		0.43		0.73	0.69		0.69		0.69	0.73		0.73	
Delay/Veh:	56.0	39.9		30.4		56.5	43.9		19.7		44.5	29.2		29.2		59.6	42.9		42.9	
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	56.0	39.9		30.4		56.5	43.9		19.7		44.5	29.2		29.2		59.6	42.9		42.9	
HCM2kAvg:	8	14		1		4	12		8		13	16		16		5	13		13	

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.623
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 38.1
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	1	0	3	0	1	1	0	2	1	0	1	0	1	1	0	1	0	1	1	0
Volume Module: >> Count Date: 12 Dec 2001 << PM																				
Base Vol:	21	1020		142		165	835		162		278	304		6		126	133		49	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	21	1020		142		165	835		162		278	304		6		126	133		49	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	23	1133		158		183	928		180		309	338		7		140	148		54	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	23	1133		158		183	928		180		309	338		7		140	148		54	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	23	1133		158		183	928		180		309	338		7		140	148		54	
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	0.93	0.89		0.83		0.93	0.87		0.87		0.93	0.93		0.93		0.93	0.89		0.89	
Lanes:	1.00	3.00		1.00		1.00	2.51		0.49		1.00	1.96		0.04		1.00	1.46		0.54	
Final Sat..	1769	5083		1583		1769	4155		806		1769	3459		68		1769	2482		914	
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.22		0.10		0.10	0.22		0.22		0.17	0.10		0.10		0.08	0.06		0.06	
Crit Moves:		****				****					****						****			
Green/Cycle:	0.09	0.31		0.31		0.14	0.36		0.36		0.24	0.32		0.32		0.13	0.20		0.20	
Volume/Cap:	0.14	0.72		0.32		0.72	0.62		0.62		0.72	0.31		0.31		0.63	0.30		0.30	
Delay/Veh:	50.2	38.2		32.0		58.3	32.1		32.1		47.2	31.1		31.1		55.4	41.1		41.1	
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	50.2	38.2		32.0		58.3	32.1		32.1		47.2	31.1		31.1		55.4	41.1		41.1	
HCM2kAvg:	1	13		4		8	12		12		12	5		5		6	3		3	

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.479
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.2
Optimal Cycle: 44 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	8	1202	8	97	712	48	20	13	1	29	16	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	1202	8	97	712	48	20	13	1	29	16	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	9	1336	9	108	791	53	22	14	1	32	18	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	1336	9	108	791	53	22	14	1	32	18	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	9	1336	9	108	791	53	22	14	1	32	18	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.99	0.99	0.95	0.90	0.90
Lanes:	1.00	1.99	0.01	1.00	2.00	1.00	1.00	0.93	0.07	1.00	0.31	0.69
Final Sat..	1805	3583	24	1805	3610	1615	1805	1745	134	1805	524	1179
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.37	0.06	0.22	0.03	0.01	0.01	0.01	0.02	0.03	0.03
Crit Moves:		****		****			****				****	
Green/Cycle:	0.02	0.78	0.78	0.12	0.88	0.88	0.03	0.03	0.03	0.07	0.07	0.07
Volume/Cap:	0.25	0.48	0.48	0.48	0.25	0.04	0.48	0.27	0.27	0.27	0.48	0.48
Delay/Veh:	51.9	4.0	4.0	42.3	0.9	0.7	55.6	49.9	49.9	45.6	47.7	47.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.9	4.0	4.0	42.3	0.9	0.7	55.6	49.9	49.9	45.6	47.7	47.7
HCM2kAvg:	1	7	7	4	2	0	1	1	1	1	2	2

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 5.5 Worst Case Level Of Service: F[234.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	1	0 1	1 0	1	0 1	0	1	0 0 1	0	1	0 0 1
Volume Module:												
Base Vol:	18	1182	132	11	674	65	19	5	13	9	4	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	1182	132	11	674	65	19	5	13	9	4	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	20	1313	147	12	749	72	21	6	14	10	4	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	20	1313	147	12	749	72	21	6	14	10	4	14
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	821	xxxx	xxxxx	1460	xxxx	xxxxx	2209	2273	749	2173	2199	1313
Potent Cap..	817	xxxx	xxxxx	469	xxxx	xxxxx	32	41	415	34	45	195
Move Cap..	817	xxxx	xxxxx	469	xxxx	xxxxx	26	39	415	28	43	195
Volume/Cap:	0.02	xxxx	xxxx	0.03	xxxx	xxxx	0.80	0.14	0.03	0.36	0.10	0.07
Level Of Service Module:												
Queue:	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	0.2
Stopped Del.	9.5	xxxx	xxxxx	12.9	xxxx	xxxxx	xxxxx	xxxx	14.0	xxxxx	xxxx	24.9
LOS by Move:	A	*	*	B	*	*	*	*	B	*	*	C
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	28	xxxx	xxxxx	32	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.1	xxxx	xxxxx	1.5	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	353.9	xxxx	xxxxx	193.3	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel.	xxxxxx			xxxxxx			234.5			109.1		
ApproachLOS:	*			*			F			F		

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Vallev Pkwv./Citracado Pkwv.

Cvcle (sec): 120 Critical Vol./Cap. (X): 0.467
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 23.8
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module: >> Count Date: 8 Jan 2002 << PM												
Base Vol:	79	1058	26	62	594	103	70	8	77	11	7	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	1058	26	62	594	103	70	8	77	11	7	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	88	1176	29	69	660	114	78	9	86	12	8	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	1176	29	69	660	114	78	9	86	12	8	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	88	1176	29	69	660	114	78	9	86	12	8	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.93	0.93	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.95	0.05	1.00	1.70	0.30	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat..	1805	3509	86	1805	3009	522	1805	1900	1615	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.33	0.04	0.22	0.22	0.04	0.00	0.05	0.01	0.00	0.03
Crit Moves:		****		****			****				****	
Green/Cycle:	0.13	0.56	0.56	0.06	0.50	0.50	0.07	0.21	0.21	0.06	0.20	0.20
Volume/Cap:	0.37	0.59	0.59	0.59	0.44	0.44	0.59	0.02	0.25	0.11	0.02	0.15
Delay/Veh:	48.5	17.7	17.7	62.7	19.7	19.7	61.2	37.6	39.8	53.6	38.6	39.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.5	17.7	17.7	62.7	19.7	19.7	61.2	37.6	39.8	53.6	38.6	39.8
HCM2kAvg:	3	15	15	4	9	9	4	0	3	1	0	1

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Vallev Pkwv./Via Rancho Pkwv.

Cvcle (sec): 120 Critical Vol./Cap. (X): 0.652
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 31.6
Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	20	7	7	20	0	0	0	0	20	0	20
Lanes:	0 0	2 0	1	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	742	276	218	333	0	0	0	0	214	0	349
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	742	276	218	333	0	0	0	0	214	0	349
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	824	307	242	370	0	0	0	0	238	0	388
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	824	307	242	370	0	0	0	0	238	0	388
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	824	307	242	370	0	0	0	0	238	0	388
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	2.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat..	0	3610	1615	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.19	0.13	0.19	0.00	0.00	0.00	0.00	0.13	0.00	0.24
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.35	0.35	0.21	0.56	0.00	0.00	0.00	0.00	0.37	0.00	0.37
Volume/Cap:	0.00	0.65	0.54	0.65	0.35	0.00	0.00	0.00	0.00	0.36	0.00	0.65
Delay/Veh:	0.0	34.0	32.3	47.8	14.9	0.0	0.0	0.0	0.0	27.9	0.0	34.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	34.0	32.3	47.8	14.9	0.0	0.0	0.0	0.0	27.9	0.0	34.1
HCM2kAvg:	0	13	9	9	7	0	0	0	0	7	0	12

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.745
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.6
Optimal Cycle: 69 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Ovl			
Min. Green:	7	24		7	7	24		7	0	24		7	7	24		7
Lanes:	1	0	1	1 0	1	0	1	1 0	1	0	1	0 1	1	0	0	1 0
Volume Module: >> Count Date: 27 Nov 2001 << PM Peak																
Base Vol:	3	825	494		14	734		22	19		26	634	155		49	33
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	3	825	494		14	734		22	19		26	634	155		49	33
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.50	1.00		1.00	1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	3	917	549		16	816		24	21		29	352	172		54	37
Reduct Vol:	0	0	0		0	0		0	0		0	0	0		0	0
Reduced Vol:	3	917	549		16	816		24	21		29	352	172		54	37
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol.:	3	917	549		16	816		24	21		29	352	172		54	37
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900		1900	1900	1900		1900	1900
Adjustment:	0.93	0.88	0.88		0.93	0.93		0.93	0.67		0.98	0.83	0.73		0.92	0.92
Lanes:	1.00	1.25	0.75		1.00	1.94		0.06	1.00		1.00	1.00	1.00		0.60	0.40
Final Sat.:	1769	2089	1251		1769	3421		103	1274		1862	1583	1385		1046	704
Capacity Analysis Module:																
Vol/Sat:	0.00	0.44	0.44		0.01	0.24		0.24	0.02		0.02	0.22	0.12		0.05	0.05
Crit Moves:		****			****							****				
Green/Cycle:	0.12	0.56	0.56		0.06	0.50		0.50	0.28		0.28	0.28	0.28		0.28	0.34
Volume/Cap:	0.02	0.79	0.79		0.15	0.48		0.48	0.06		0.05	0.79	0.44		0.18	0.15
Delay/Veh:	46.4	23.1	23.1		54.4	20.3		20.3	31.4		31.4	48.6	36.0		32.7	27.6
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	46.4	23.1	23.1		54.4	20.3		20.3	31.4		31.4	48.6	36.0		32.7	27.6
HCM2kAvg:	0	22	22		1	10		10	1		1	14	7		3	2

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.830
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 20.8
Optimal Cycle: 90 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	0	0	0	0 0	1	1	0	0 1	0	0	2	0 1	2	0	2	0 0
Volume Module: >> Count Date: 27 Nov 2001 << PM																
Base Vol:	0	0	0		323	0		146	0		939	830	191		1078	0
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	0	0		323	0		146	0		939	830	191		1078	0
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	0	0	0		359	0		162	0		1043	922	212		1198	0
Reduct Vol:	0	0	0		0	0		0	0		0	0	0		0	0
Reduced Vol:	0	0	0		359	0		162	0		1043	922	212		1198	0
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol.:	0	0	0		359	0		162	0		1043	922	212		1198	0
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900		1900	1900	1900		1900	1900
Adjustment:	1.00	1.00	1.00		0.93	1.00		0.83	1.00		0.93	0.83	0.90		0.93	1.00
Lanes:	0.00	0.00	0.00		2.00	0.00		1.00	0.00		2.00	1.00	2.00		2.00	0.00
Final Sat.:	0	0	0		3545	0		1583	0		3538	1583	3432		3538	0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.00		0.10	0.00		0.10	0.00		0.29	0.58	0.06		0.34	0.00
Crit Moves:								****				****	****			
Green/Cycle:	0.00	0.00	0.00		0.12	0.00		0.12	0.00		0.70	0.70	0.07		0.78	0.00
Volume/Cap:	0.00	0.00	0.00		0.82	0.00		0.83	0.00		0.42	0.83	0.83		0.44	0.00
Delay/Veh:	0.0	0.0	0.0		62.9	0.0		76.1	0.0		7.7	18.1	74.6		4.6	0.0
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0		62.9	0.0		76.1	0.0		7.7	18.1	74.6		4.6	0.0
HCM2kAvg:	0	0	0		9	0		8	0		8	26	6		8	0

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave [NS/ EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.591
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.3
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	1	0	0 1	0	0	0	0 0	2	0	2	0 0	0	0	2	0 1
Volume Module: >> Count Date: 27 Nov 2001 << PM																
Base Vol:	548	2	218		0	0		0	229	1033		0	0	721		377
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	548	2	218		0	0		0	229	1033		0	0	721		377
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	609	2	242		0	0		0	254	1148		0	0	801		419
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	609	2	242		0	0		0	254	1148		0	0	801		419
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	609	2	242		0	0		0	254	1148		0	0	801		419
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.83	0.83	0.83		1.00	1.00		1.00	0.90	0.93		1.00	1.00	0.93		0.83
Lanes:	1.99	0.01	1.00		0.00	0.00		0.00	2.00	2.00		0.00	0.00	2.00		1.00
Final Sat..	3154	12	1583		0	0		0	3432	3538		0	0	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.19	0.19	0.15		0.00	0.00		0.00	0.07	0.32		0.00	0.00	0.23		0.26
Crit Moves:		****							****							****
Green/Cycle:	0.33	0.33	0.33		0.00	0.00		0.00	0.13	0.57		0.00	0.00	0.45		0.45
Volume/Cap:	0.59	0.59	0.47		0.00	0.00		0.00	0.59	0.57		0.00	0.00	0.51		0.59
Delay/Veh:	34.6	34.6	32.8		0.0	0.0		0.0	51.7	16.5		0.0	0.0	23.9		26.2
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	34.6	34.6	32.8		0.0	0.0		0.0	51.7	16.5		0.0	0.0	23.9		26.2
HCM2kAvg:	11	11	7		0	0		0	6	13		0	0	11		12

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.946
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 32.2
Optimal Cycle: 134 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	0	0	1	0 1	1	0	2	0 0	0	0	0	0 0	2	0	0	0 1
Volume Module:																
Base Vol:	0	814	320		425	934		0	0	0		0	161	0		179
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	814	320		425	934		0	0	0		0	161	0		179
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	904	356		472	1038		0	0	0		0	179	0		199
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	0	904	356		472	1038		0	0	0		0	179	0		199
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	904	356		472	1038		0	0	0		0	179	0		199
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00	0.85		0.95	0.95		1.00	1.00	1.00		1.00	0.92	1.00		0.85
Lanes:	0.00	1.00	1.00		1.00	2.00		0.00	0.00	0.00		0.00	2.00	0.00		1.00
Final Sat..	0	1900	1615		1805	3610		0	0	0		0	3502	0		1615
Capacity Analysis Module:																
Vol/Sat:	0.00	0.48	0.22		0.26	0.29		0.00	0.00	0.00		0.00	0.05	0.00		0.12
Crit Moves:		****			****											****
Green/Cycle:	0.00	0.50	0.50		0.28	0.78		0.00	0.00	0.00		0.00	0.13	0.00		0.13
Volume/Cap:	0.00	0.95	0.44		0.95	0.37		0.00	0.00	0.00		0.00	0.39	0.00		0.95
Delay/Veh:	0.0	41.0	16.2		62.6	3.5		0.0	0.0	0.0		0.0	40.4	0.0		89.9
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	41.0	16.2		62.6	3.5		0.0	0.0	0.0		0.0	40.4	0.0		89.9
HCM2kAvg:	0	32	7		20	5		0	0	0		0	3	0		10

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.923
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 42.2
Optimal Cycle: 122 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	0 1	2	0	2	0 1
Volume Module:																
Base Vol:	68	261	661		49	137	64		58	216	151		705	504	93	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	68	261	661		49	137	64		58	216	151		705	504	93	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	76	290	734		54	152	71		64	240	168		783	560	103	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	76	290	734		54	152	71		64	240	168		783	560	103	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	76	290	734		54	152	71		64	240	168		783	560	103	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.85		0.95	0.95	0.85		0.95	0.95	0.85		0.92	0.95	0.85	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		2.00	2.00	1.00	
Final Sat..	1805	3610	1615		1805	3610	1615		1805	3610	1615		3502	3610	1615	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.08	0.45		0.03	0.04	0.04		0.04	0.07	0.10		0.22	0.16	0.06	
Crit Moves:			****		****						****		****			
Green/Cycle:	0.26	0.49	0.49		0.03	0.27	0.27		0.07	0.11	0.11		0.24	0.29	0.29	
Volume/Cap:	0.16	0.16	0.92		0.92	0.16	0.16		0.54	0.59	0.92		0.92	0.54	0.22	
Delay/Veh:	29.1	14.0	39.9		137.9	28.0	28.1		50.0	44.5	89.2		52.5	30.5	27.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	29.1	14.0	39.9		137.9	28.0	28.1		50.0	44.5	89.2		52.5	30.5	27.3	
HCM2kAvg:	2	2	25		4	2	2		3	4	8		17	8	2	

Harmony Grove Village
Option C: Existing

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.782
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.0
Optimal Cycle: 73 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	0 2	1	0	2	0 1	2	0	2	0 1	2	0	2	0 1
Volume Module:																
Base Vol:	401	181	865		43	232	43		248	679	197		360	711	21	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	401	181	865		43	232	43		248	679	197		360	711	21	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	446	201	961		48	258	48		276	754	219		400	790	23	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol.	446	201	961		48	258	48		276	754	219		400	790	23	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	446	201	961		48	258	48		276	754	219		400	790	23	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.75		0.95	0.95	0.85		0.92	0.95	0.85		0.92	0.91	0.85	
Lanes:	1.00	2.00	2.00		1.00	2.00	1.00		2.00	2.00	1.00		2.00	3.00	1.00	
Final Sat..	1805	3610	2842		1805	3610	1615		3502	3610	1615		3502	5187	1615	
Capacity Analysis Module:																
Vol/Sat:	0.25	0.06	0.34		0.03	0.07	0.03		0.08	0.21	0.14		0.11	0.15	0.01	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.36	0.43	0.43		0.03	0.10	0.10		0.14	0.27	0.27		0.15	0.27	0.27	
Volume/Cap:	0.68	0.13	0.78		0.78	0.68	0.28		0.56	0.78	0.51		0.78	0.56	0.05	
Delay/Veh:	30.0	17.1	27.6		94.7	48.2	42.2		41.5	38.1	32.0		48.8	31.7	26.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	30.0	17.1	27.6		94.7	48.2	42.2		41.5	38.1	32.0		48.8	31.7	26.9	
HCM2kAvg:	13	2	14		3	5	2		5	13	6		8	7	1	

APPENDIX D

FREEWAY ANALYSIS CALCULATIONS

Table 2.1-4
EXISTING FREEWAY SEGMENT OPERATIONS

Freeway and Segment	Direction, Number of Lanes & Capacity[1]			ADT[2]	Pk Hr % (K)[3]		Dir Split (D)[3]		Truck Factor[4]	Pk Hr Vol[5]		V/C[6]		LOS	
					AM	PM	AM	PM		AM	PM	AM	PM	AM	PM
SR 78															
West of Nordahl Rd.	EB	3M	6,900	152000	0.074	0.09	0.47	0.57	0.95	5565	8208	0.806	1.190	D	F(0)
	WB	3M	6,900	152000	0.074	0.09	0.53	0.43	0.95	6275	6192	0.909	0.897	D	D
I-15															
South of 9th Ave.	NB	5M	11500	189000	0.074	0.078	0.4	0.59	0.93	6015	9352	0.523	0.813	B	D
	SB	4M	9200	189000	0.074	0.078	0.6	0.41	0.93	9023	6499	0.981	0.706	E	C
South of Via Rancho Pkwy.	NB	4M+1A	8400	218000	0.074	0.078	0.4	0.59	0.93	6938	10787	0.667	1.037	~~D~~C	F(0)
	SB	4M	9200	218000	0.074	0.078	0.6	0.41	0.93	10408	7496	1.131	0.815~~1~~2	F(0)	D

[1]Capacity calculated at 2300 ADT per mainline lane and 1200 vehicles per hour per auxilary lane (M: Mainline, A: Aux. Ex. 4M+2A = 4 Mainline + 2 Aux)
[2]Existing ADT volumes from CALTRANS
[3]Peak Hour Percentage and Direction Split from CALTRANS
[4]Truck Factor from "2000 Annual Average Daily Truck Traffic on the California State Highway System", January 2002
[5]Peak Hour Volume = ((ADT)(K)(D)/Truck Factor)
[6]V/C = ((ADT)(K)(D)/Truck Factor/Capacity)
V/C - Volume over capacity ratio, LOS - Level of Service.
Source: Linscott Law & Greenspan, ~~August 26, 2005~~February 28, 2006

Table 13-1

Freeway Segment Operations
Year 2030

Freeway Segment	Direction	# of Lanes	Capacity	ADT	Pk Hr % (K)		Dir Split (D)		Truck Factor	Pk Hr Vol		V/C		LOS	
					AM	PM	AM	PM		AM	PM	AM	PM	AM	PM
SR-78															
West of Nordahl Rd.	EB	3M+1A	8,100	199,000	0.074	0.09	0.47	0.57	0.95	7,285	10,746	0.899	1.327	D	F(1)
	WB	3M+1A	8,100	199,000	0.074	0.09	0.53	0.43	0.95	8,216	8,107	1.014	1.001	F(0)	F(0)
I-15															
South of 9th Ave.	NB	5M+1A	12,700	300,000	0.074	0.078	0.4	0.59	0.93	9,548	14,845	0.752	1.169	C	F(0)
	SB	5M+3A	15,100	300,000	0.074	0.078	0.6	0.41	0.93	14,323	10,316	0.949	0.683	E	C
South of Via Rancho Pkwy.	NB	5M+2A	13,900	364,000	0.074	0.078	0.4	0.59	0.93	11,585	18,012	0.833	1.296	D	F(1)
	SB	6M+3A	17,400	364,000	0.074	0.078	0.6	0.41	0.93	17,378	12,517	0.999	0.719	E	C

Source: SANDAG Series 10 Year 2030 Model. Website -- see file for map.

Footnotes:

1. Capacity calculated at 2300 ADT per mainline lane, 1,200 Aux (M: Mainline, A: Aux. Ex. 4M+2A = 4 Mainline + 2 Aux)
2. Peak Hour Percentage and Direction Split from CALTRANS
3. Truck Factor from "2000 Annual Average Daily Truck Traffic on the California State Highway System", January 2002
4. Peak Hour Volume = ((ADT)(K)(D)/Truck Factor)
5. V/C = ((ADT)(K)(D)/Truck Factor/Capacity)

LOS	v/c
A	<0.41
C	0.8
D	0.92
E	1
F(0)	1.25
F(2)	1.45
F(3)	>1.46

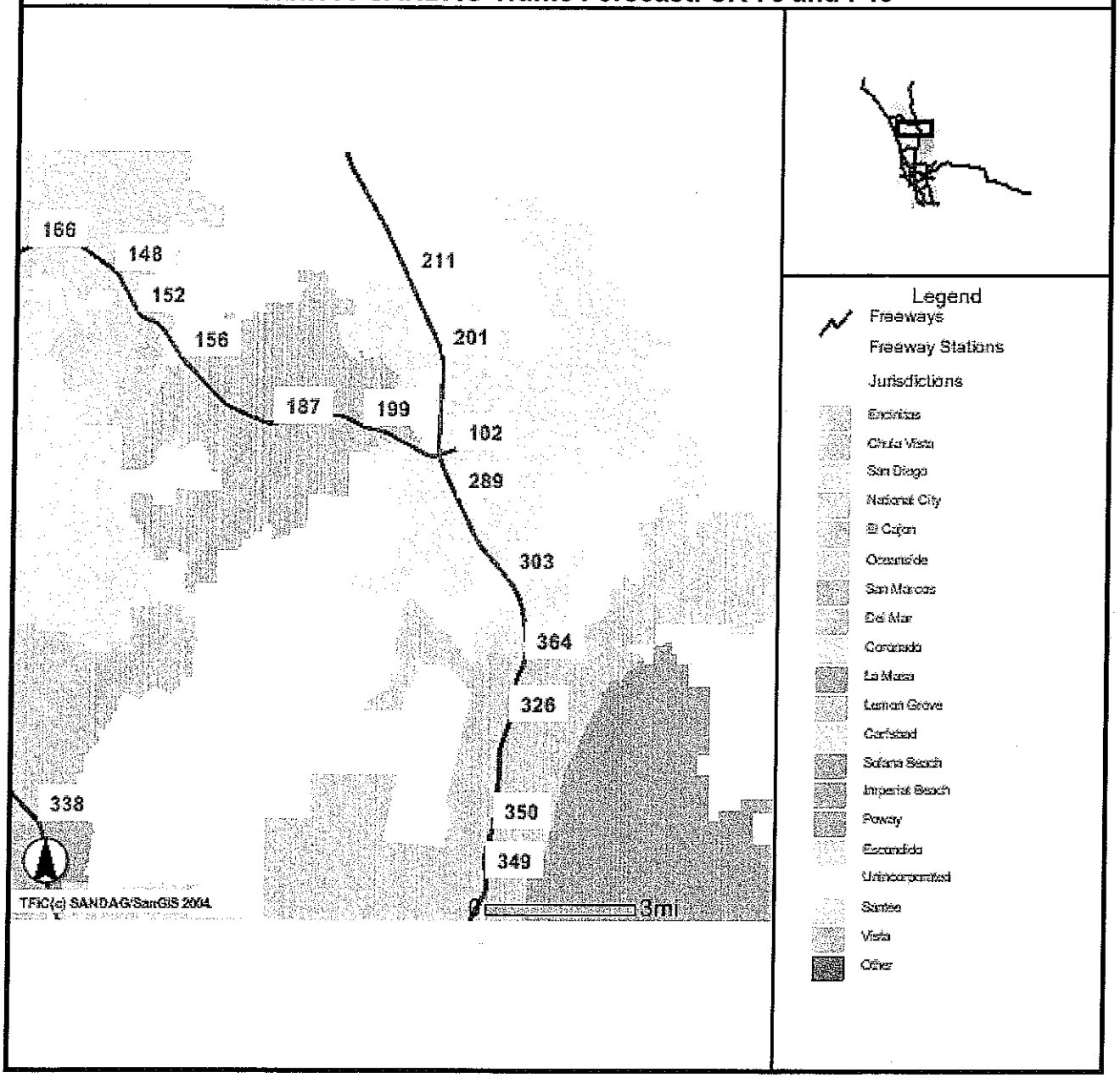
LATEST TRAFFIC YEAR SELECTED

PEAK HOUR VOLUME DATA

									AM PEAK							PM PEAK						
DI	RTE	CO	PRE	PM	CS	LEG	YR	Dir	1 WAY PHV	% K	% D	% KD	HR	DAY	MNTH	Dir	1 WAY PHV	% K	% D	% KD	HR	DAY	MNTH
07	072	LA		6.7	172	A	01	N	2032	8.08	70.29	5.68	8	THU	JAN	S	1663	7.76	59.95	4.65	19	WED	OCT
12	073	ORA		11.76	916	B	02	N	3428	10.4	75.01	7.8	8	THU	SEP	S	3037	10.68	64.77	6.91	18	FRI	OCT
12	073	ORA	R	26.58	918	A	02	N	5728	9.6	59.62	5.72	9	FRI	SEP	N	5620	10.01	56.11	5.61	18	WED	SEP
12	074	ORA		9.38	74	B	02	W	1135	13.25	90.44	11.98	7	THU	JUL	E	1019	13.25	81.2	10.76	17	WED	DEC
08	074	RIV		11.83	943	B	01	W	999	12.76	92.93	11.86	7	THU	JUN	E	884	12.1	86.75	10.49	17	WED	JUN
08	074	RIV		17.24	820	A	01	W	811	6.9	72.41	4.99	7	THU	SEP	E	980	9.85	61.29	6.03	18	FRI	DEC
08	074	RIV		27.53	946	B	01	E	725	8.1	51.13	4.14	12	SAT	MAR	E	883	8.72	57.86	5.05	16	FRI	MAR
08	074	RIV		27.54	819	A	01	W	1019	7.91	65.83	5.21	8	THU	MAR	E	1015	8.32	62.35	5.19	18	THU	MAR
08	074	RIV		36.93	947	A	01	E	1104	7.88	52.32	4.12	12	SAT	MAR	E	1390	8.73	59.48	5.19	16	MON	SEP
08	074	RIV		41.34	942	B	01	W	1323	8.24	54.81	4.52	11	SAT	DEC	E	1377	8.64	54.38	4.7	17	TUE	DEC
08	074	RIV		44.74	948	A	01	W	797	8.33	61.4	5.12	8	THU	SEP	E	800	8.42	60.98	5.14	18	FRI	JUN
08	074	RIV	R	96.01	951	B	02	E	865	8.33	57.86	4.82	12	SUN	FEB	W	966	8.92	60.38	5.38	18	THU	FEB
11	075	SD		9.003	822	A	02	S	2685	6.93	54.31	3.76	8	WED	NOV	S	3094	8.22	52.76	4.34	17	MON	JUL
11	075	SD		10.99	823	A	02	N	2219	11.98	93.63	11.22	7	THU	FEB	S	1857	12.04	77.96	9.39	17	THU	AUG
11	075	SD		17.46	717	B	02	N	3678	15.32	93.45	14.31	10	THU	NOV	S	2088	10.53	77.19	8.12	17	MON	JUN
11	075	SD		19.59	825	B	02	S	1518	6.98	71.64	5	8	TUE	AUG	S	1620	8.52	62.67	5.34	14	SUN	AUG
11	076	SD	R	0	700	A	02	W	2832	7.89	70.87	5.59	8	THU	APR	E	2744	8.06	67.17	5.42	18	WED	JAN
11	076	SD		6.66	827	B	02	W	1721	6.68	69.65	4.65	8	WED	DEC	W	1872	9.31	54.36	5.06	18	TUE	AUG
11	076	SD		6.66	828	A	02	W	1970	6.94	68.33	4.74	8	THU	NOV	E	1774	7.5	56.91	4.27	18	WED	OCT
11	076	SD		12	829	B	02	W	1317	6.35	69.06	4.39	7	TUE	MAR	W	1216	7.72	52.44	4.05	17	FRI	JAN
11	076	SD	R	17.30	101	A	02	E	523	5.84	72.84	4.26	11	SAT	JAN	E	609	8.34	59.42	4.96	14	SUN	JAN
11	076	SD	R	17.30	830	B	02	E	928	6.59	56.97	3.75	8	TUE	APR	W	1079	8.22	53.05	4.36	18	FRI	APR
11	076	SD		32.87	831	B	02	E	324	10.09	53.82	5.43	12	SUN	SEP	E	407	12.32	55.37	6.82	14	SAT	AUG
11	076	SD		52.32	832	B	02	W	299	17.47	87.17	15.23	10	SUN	NOV	W	333	28.43	59.68	16.96	14	SUN	NOV
04	077	ALA		.098	29	A	00	S	1195	8.31	58.78	4.89	8	THU	NOV	N	1229	9.46	53.16	5.03	18	WED	NOV
11	078	SD		1.498	983	B	01	W	5259	6.2	70.94	4.4	7	THU	MAY	E	5318	8.09	55.05	4.45	18	TUE	MAY
11	078	SD		10.61	985	B	02	E	5603	7.82	54.55	4.27	8	THU	SEP	W	5910	8.33	54.04	4.5	18	WED	SEP
11	078	SD	N	17.68	877	B	01	W	1852	7.42	52.76	3.92	8	TUE	JAN	E	2433	9	57.15	5.15	18	TUE	JUN
11	078	SD	R	22.56	837	A	02	E	832	10.55	73.37	7.74	11	MON	APR	W	1045	11.7	83.07	9.72	17	SUN	JAN
11	078	SD		35.52	838	B	02	W	483	7.43	58.9	4.38	8	THU	NOV	W	510	8.57	53.97	4.62	18	FRI	NOV
11	078	SD		35.52	839	A	02	E	1171	8.68	55.42	4.81	11	SAT	MAY	E	1327	9.39	58.05	5.45	13	SAT	NOV
11	078	SD		51.11	711	B	02	E	489	12.29	65.99	8.11	12	SAT	NOV	W	603	14.68	68.14	10	15	SUN	NOV
11	078	SD		51.11	968	A	02	E	364	15.54	51.56	8.01	11	SUN	NOV	E	535	20.56	57.28	11.77	14	SAT	OCT

									AM PEAK							PM PEAK						
DI	RTE	CO	PRE	PM	CS	LEG	YR	Dir	1 WAY PHV	% K	% D	% KD	HR	DAY	MNTH	Dir	1 WAY PHV	% K	% D	% KD	HR	DAY	MNTH
03	012	SAC		.571	98	A	02	E	787	8.57	61.82	5.3	12	SAT	JUN	E	1026	9.93	69.61	6.91	17	FRI	JUN
10	012	SJ		16.93	242	A	00	E	1070	7.83	50.47	3.95	12	SAT	OCT	E	1190	8.26	53.2	4.39	13	SAT	SEP
10	012	SJ		17.7	140	B	02	W	3314	20.56	61.78	12.7	9	FRI	MAR	E	3577	27.31	50.19	13.71	18	THU	MAR
10	012	SJ		17.7	141	A	02	E	966	7.7	54.39	4.19	12	FRI	MAY	E	1112	8.66	55.71	4.82	13	FRI	JUL
10	012	SJ	L	23.29	123	B	02	W	326	7.22	68.34	4.93	8	WED	SEP	E	630	13.27	71.84	9.53	15	FRI	AUG
04	013	ALA		4.262	27	A	00	S	2779	10.28	54.12	5.56	8	TUE	NOV	N	2786	10.03	55.62	5.58	18	TUE	NOV
04	013	ALA		8.3	124	A	00	N	3535	9.38	55.27	5.18	8	TUE	NOV	S	3625	9.4	56.54	5.31	18	MON	NOV
04	013	ALA		13.18	125	B	00	S	957	6.45	59.96	3.86	12	THU	MAY	S	1154	7.4	62.99	4.66	15	SUN	FEB
04	013	ALA		13.91	240	B	00	S	1960	8.04	70.15	5.64	9	WED	MAY	S	1567	7.81	57.67	4.51	15	FRI	MAY
07	014	LA	R	26	779	A	00	S	9086	8.24	80.51	6.64	7	TUE	FEB	N	8218	8.15	73.69	6	18	TUE	JUN
07	014	LA	R	32.24	403	B	02	S	6124	7.59	79.73	6.05	7	FRI	SEP	N	5472	7.87	68.66	5.41	17	THU	AUG
07	014	LA	R	73	63	O	02	N	1296	6.58	62.22	4.1	7	TUE	JUN	S	1737	9.11	60.29	5.49	15	SUN	NOV
06	014	KER	R	0	927	A	00	N	1244	7.2	67.94	4.89	7	MON	AUG	S	1472	9.96	58.11	5.79	17	FRI	NOV
06	014	KER	R	3.018	901	A	00	N	594	5.99	64.43	3.86	7	THU	MAY	S	914	9.03	65.71	5.93	16	SUN	FEB
06	014	KER		16.07	929	A	00	N	359	9.14	51.66	4.72	12	SAT	AUG	S	564	10.43	71.12	7.42	18	SUN	FEB
06	014	KER		21.29	962	A	00	N	281	7.83	55.75	4.37	10	SAT	JUL	S	564	11.7	74.9	8.76	17	SUN	APR
06	014	KER		36.56	931	A	00	S	397	9.1	71.92	6.55	12	FRI	OCT	S	494	10.52	77.43	8.15	18	SUN	APR
06	014	KER		36.56	958	B	00	S	450	9.35	66.18	6.19	12	FRI	APR	S	745	12.69	80.72	10.25	18	SUN	APR
06	014	KER		64.56	971	B	01	N	263	12.04	75.79	9.13	11	FRI	APR	S	459	18.88	84.38	15.93	17	SUN	MAR
11	015	SD		2.226	836	B	02	S	5680	8.38	58.65	4.92	7	TUE	JUL	S	6168	9.24	57.77	5.34	18	THU	AUG
11	015	SD	R	3.367	910	A	02	N	6880	8.24	57.4	4.73	8	FRI	SEP	S	6327	7.92	54.92	4.35	16	FRI	MAR
11	015	SD	R	6.132	813	B	01	N	7415	9.1	64.69	5.89	8	THU	MAY	S	7056	9.31	60.18	5.6	17	THU	JUL
11	015	SD	R	9.995	682	X	02	N	6951	7.69	58.17	4.47	7	TUE	MAR	S	6509	8.22	50.99	4.19	16	FRI	SEP
11	015	SD	M	15	999	X	02	S	10988	7.55	57.09	4.31	7	WED	JUL	S	9705	7.32	52.02	3.81	16	THU	DEC
11	015	SD	M	26.03	934	B	02	S	9074	6.73	66.99	4.51	7	FRI	JUL	N	8855	7.54	58.35	4.4	18	TUE	FEB
11	015	SD	M	26.03	935	A	02	S	9575	7.37	59.89	4.41	8	TUE	MAY	N	9940	7.82	58.56	4.58	18	THU	JUL
11	015	SD	R	30.63	918	B	02	S	6592	6.8	57	3.88	11	SAT	AUG	N	7813	7.75	59.32	4.6	16	TUE	FEB
11	015	SD	R	36.64	916	A	02	S	7206	7.79	72.83	5.67	10	WED	NOV	N	6614	8.06	64.61	5.21	18	FRI	AUG
11	015	SD	R	46.49	967	B	00	S	4145	6.84	70.72	4.84	7	MON	APR	N	4727	9.08	60.8	5.52	17	FRI	MAY
08	015	RIV		20.96	622	A	02	N	3805	6.63	56.46	3.75	8	TUE	SEP	S	4259	7.95	52.71	4.19	16	FRI	JUN
08	015	RIV		38.69	849	A	02	N	6263	6.79	64.04	4.35	7	WED	JUN	S	5976	6.97	59.54	4.15	18	MON	OCT
08	015	RIV		44.66	156	A	01	N	5918	6.99	62.66	4.38	8	TUE	MAY	S	7162	9.1	58.25	5.3	17	WED	MAR
08	015	RIV		51.47	159	X	01	N	5698	7.98	59.78	4.77	8	WED	MAY	S	5110	7.68	55.68	4.28	18	THU	JAN

Year2030 SANDAG Traffic Forecast: SR 78 and I-15



Source:

http://maximus.sandag.org/servlet/com.esri.esrimap.Esrimap?ServiceName=f2030tf30&ClientVer...

Accessed 8/19/2005

APPENDIX E

RAMP METER RATES

Harmony Grove Village

Stacey Rael

-----Original Message-----
From: Tony Blades [mailto:tony_blades@dot.ca.gov]
Sent: Friday, August 12, 2005 2:49 PM
To: Stacey Rael
Subject: Re: Ramp Meter Rate Request

Nordahl Rd to 78 EB
2 SOV lanes
1992 veh/hr max discharge (ramp total)
min cyc/min = 5.50 1320
max cyc/min = 8.30 1992
2 veh/green
M - F, 15:00 - 19:00

Nordahl Rd to 78 WB
2 SOV lanes
1140 veh/hr max discharge (ramp total)
min cyc/min = 5.16 619
max cyc/min = 9.50 1140
1 veh/green
M - F, 05:30 - 09:30

Valley Pkwy to 15 SB
1 SOV lane
570 veh/hr max discharge (ramp total)
min cyc/min = 5.72 343
max cyc/min = 9.50 570
1 veh/green
M - F, 05:30 - 09:30

Valley Pkwy to 15 NB
2 SOV lanes
1992 veh/hr max discharge (ramp total)
min cyc/min = 3.96 950
max cyc/min = 8.30 1992
2 veh/green
M - F, 14:00 - 19:00

Auto Park Way / 9th Ave to 15 SB
1 SOV lane
1 HOV lane Decrease demand to account for HOV
1992 veh/hr max discharge (ramp total)
min cyc/min = 4.52 1085
max cyc/min = 8.30 1992
2 veh/green
M - F, 05:30 - 09:30

Auto Park Way / 9th Ave to 15 NB
2 SOV lanes
1140 veh/hr max discharge (ramp total)
min cyc/min = 7.12 854
max cyc/min = 9.50 1140

1 veh/green
M - F, 14:00 - 19:00

Via Rancho Pkwy to 15 SB
2 SOV lanes
1 HOV lane
2268 veh/hr max discharge (ramp total)
min cyc/min = 2.52 907
max cyc/min = 6.30 2 2268
2 veh/green
M - F, 05:30 - 09:30

Via Rancho Pkwy to 15 NB
2 SOV lanes
1140 veh/hr max discharge (ramp total)
min cyc/min = 6.98 838
max cyc/min = 9.50 1140
1 veh/green
M - F, 14:00 - 19:00

These three were not on your list but I threw them in. Free of charge.

Citracado Pkwy to 15 SB
2 SOV lanes
1140 veh/hr max discharge (ramp total)
min cyc/min = 5.72
max cyc/min = 9.50
1 veh/green
M - F, 05:30 - 09:30

Citracado Pkwy to 15 NB
1 SOV lane
570 veh/hr max discharge (ramp total)
min cyc/min = 5.44
max cyc/min = 9.50
1 veh/green
M - F, 14:00 - 19:00

Centre City Pkwy to 15 SB
2 SOV lanes
1 HOV lane
1440 veh/hr max discharge (ramp total)
min cyc/min = 2.46
max cyc/min = 4.0
2 veh/green
M - F, 05:30 - 09:30

Stacey,
Let me know if you need anything else.

tb

APPENDIX F

EQUESTRIAN FACILITY PROJECT TRIP GENERATION

APPENDIX F
EQUESTRIAN RANCH WEEKDAY TRIP GENERATION
(SOUTH OF HARMONY GROVE ROAD)

Use	Size	Daily Trip Ends		AM Peak Hour				PM Peak Hour			
		Rate[a]	Volume (ADT[b])	% of ADT	In:Out Split	Volume In	Volume Out	% of ADT	In:Out Split	Volume In	Volume Out
Daily Operations											
Horse Owners[c]	30 Owners	2 / Owner	60	10%	70:30	4	2	12%	50:50	4	4
Ranch Employees	8 Employees	3 / Employee	20	10%	70:30	2	1	12%	50:50	1	1
Other[d]	12 Other	2 / Other	20	10%	70:30	2	1	12%	30:70	1	2
Daily Operations Sub-Total			**100**	—	—	**8**	**4**	—	—	**6**	**7**
Special Event Operations[e]											
Horse Owners	75 Owners	2 / Owner	150	10%	90:10	13	1	6%	30:70	2	8
Ranch Employees	20 Employees	2 / Employees	40	10%	90:10	4	0	10%	10:90	0	4
Horse Trucks	40 Trucks	2 / Trucks	80	10%	90:10	7	1	10%	30:70	2	6
Miscellaneous	30 Other	2 / Other	60	10%	90:10	5	1	10%	20:80	1	5
Special Event Operations Sub-Total			**330**	—	—	**29**	**3**	—	—	**5**	**23**
Equestrian-Related Retail											
Specialty Commercial	3,500 SF	20 / 1,000 SF[f]	70	3%	60:40	1	1	9%	50:50	3	3
Total			**500**	—	—	**38**	**8**	—	—	**14**	**33**

Footnotes:

a. Rate is measured per trip end.

b. Average Daily Traffic volumes (rounded to the nearest 10).

c. Horse owners typically visit their horses twice a week. Assuming 100 horses are stabled at the equestrian ranch, the total owner visits per week is 200. The result is approximately 30 trips per day (200 / 7 = 28 visits)

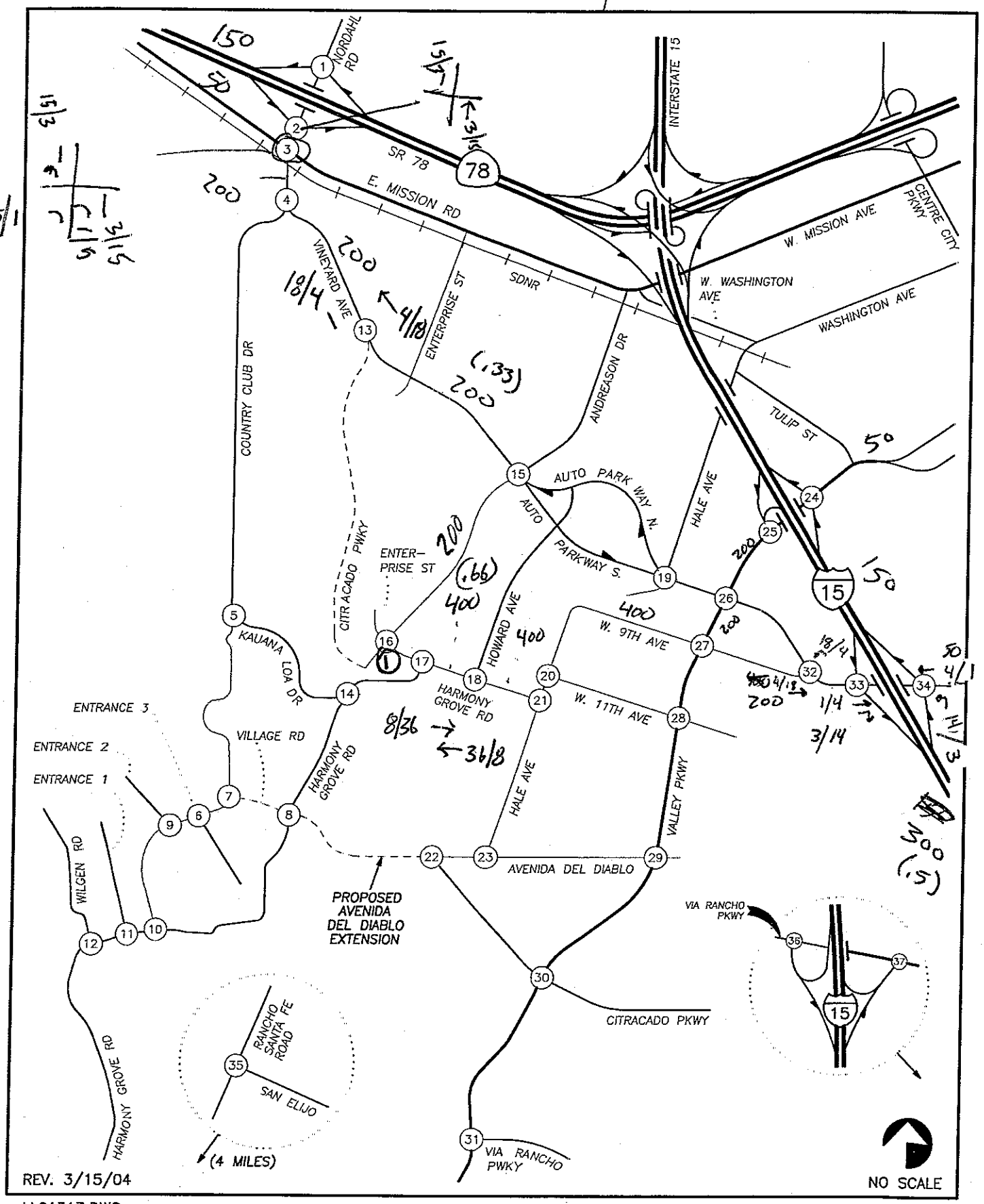
d. 'Other' includes deliveries, veterinarian visits, horse riding students and the like.

e. Special event days are generally horse show days on weekends. Shows take place up to eight times per annum and almost always occur on weekends (Saturday and Sunday); up to 120 horses take part in the shows. Traffic projections are for a weekday just before a horse show.

f. SF — square feet. Patrons on site will generate the majority of the retail trips.

APPENDIX G

INDIVIDUAL CUMULATIVE PROJECT ASSIGNMENTS



LLG1313.DWG

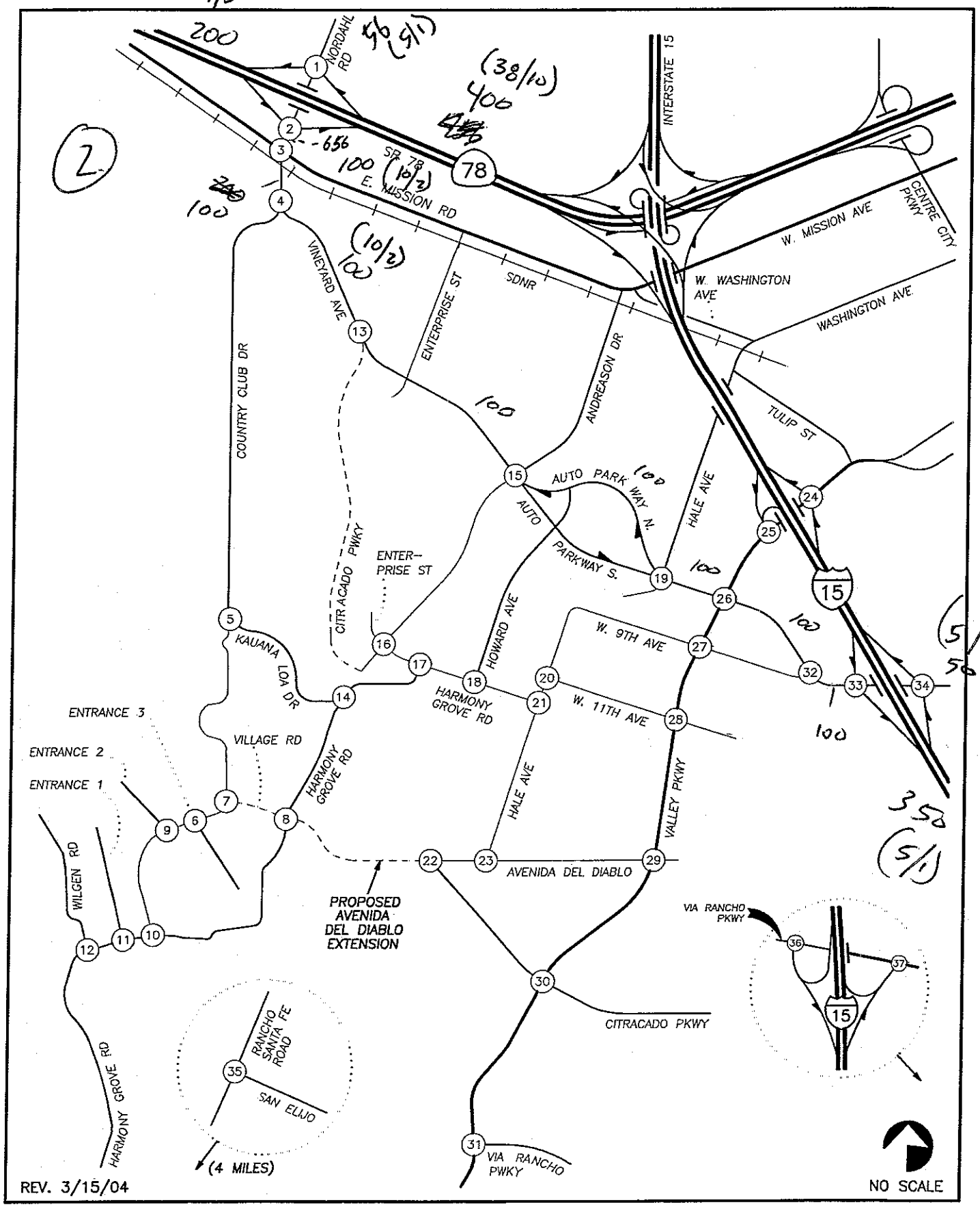
Cumulative Project # 1
Chablis Ct.

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

Cumulative Project #2

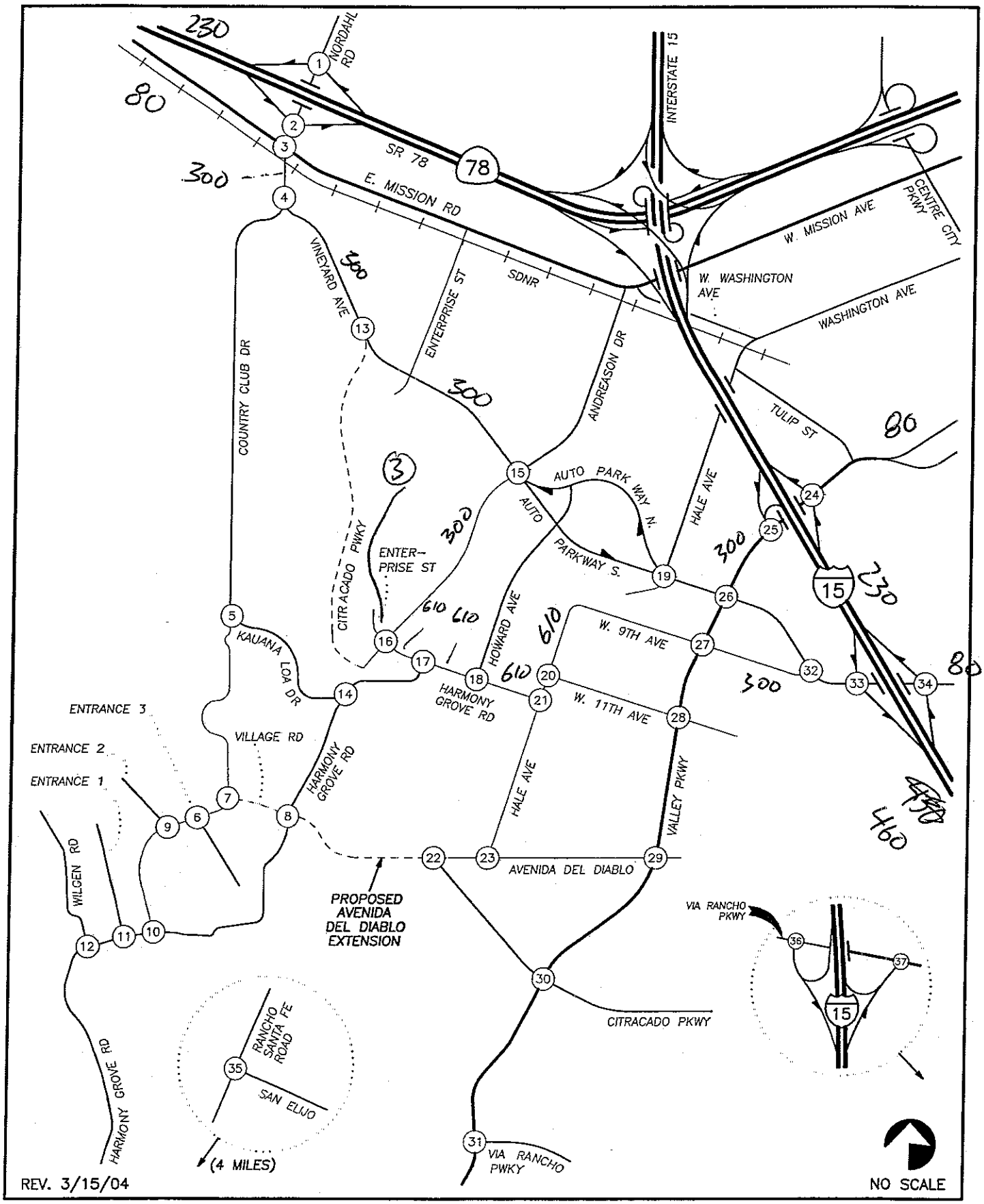
Executive Place

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

Cumulative Project #3

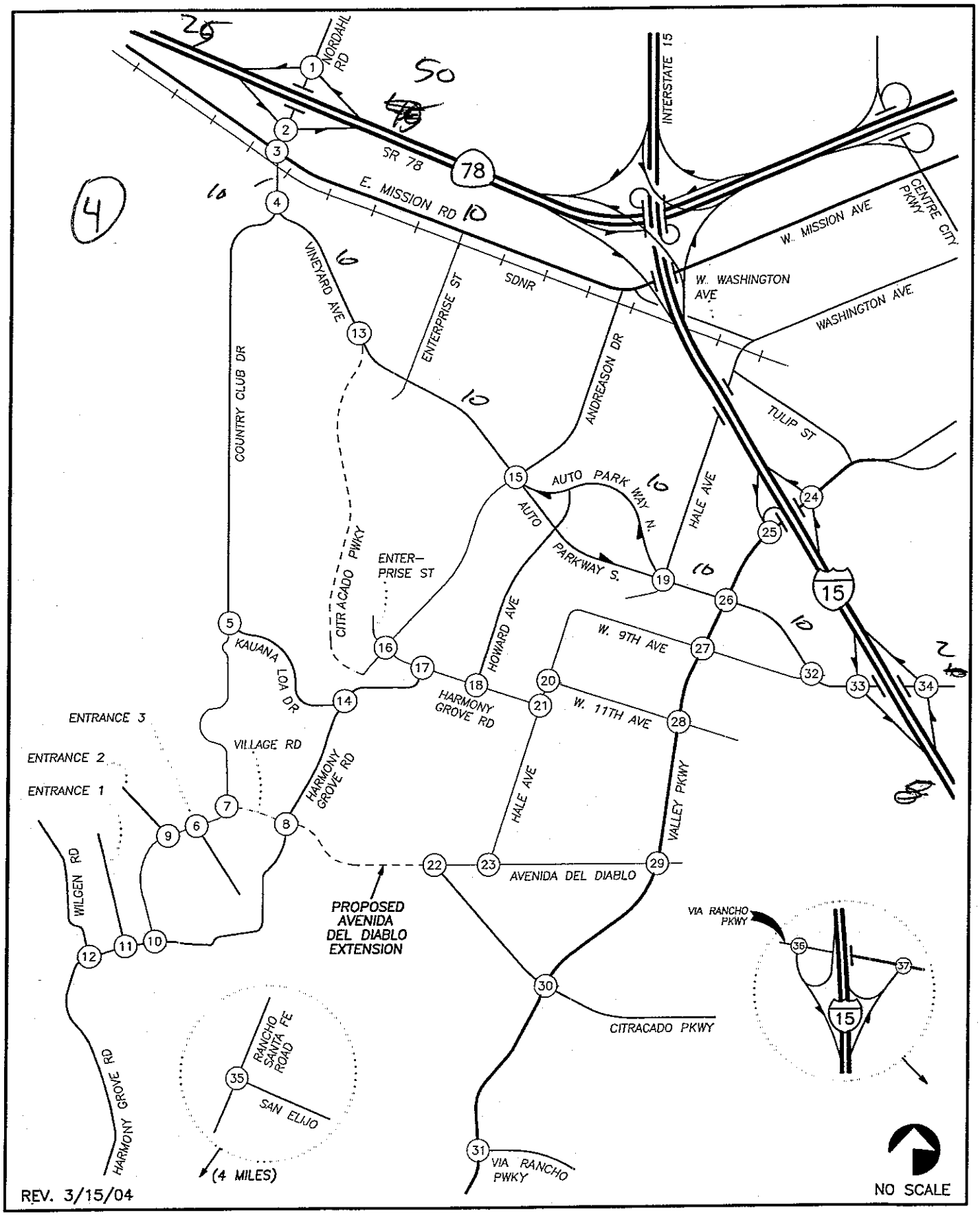
Andreason / Enterprise

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

Cumulative Project #4

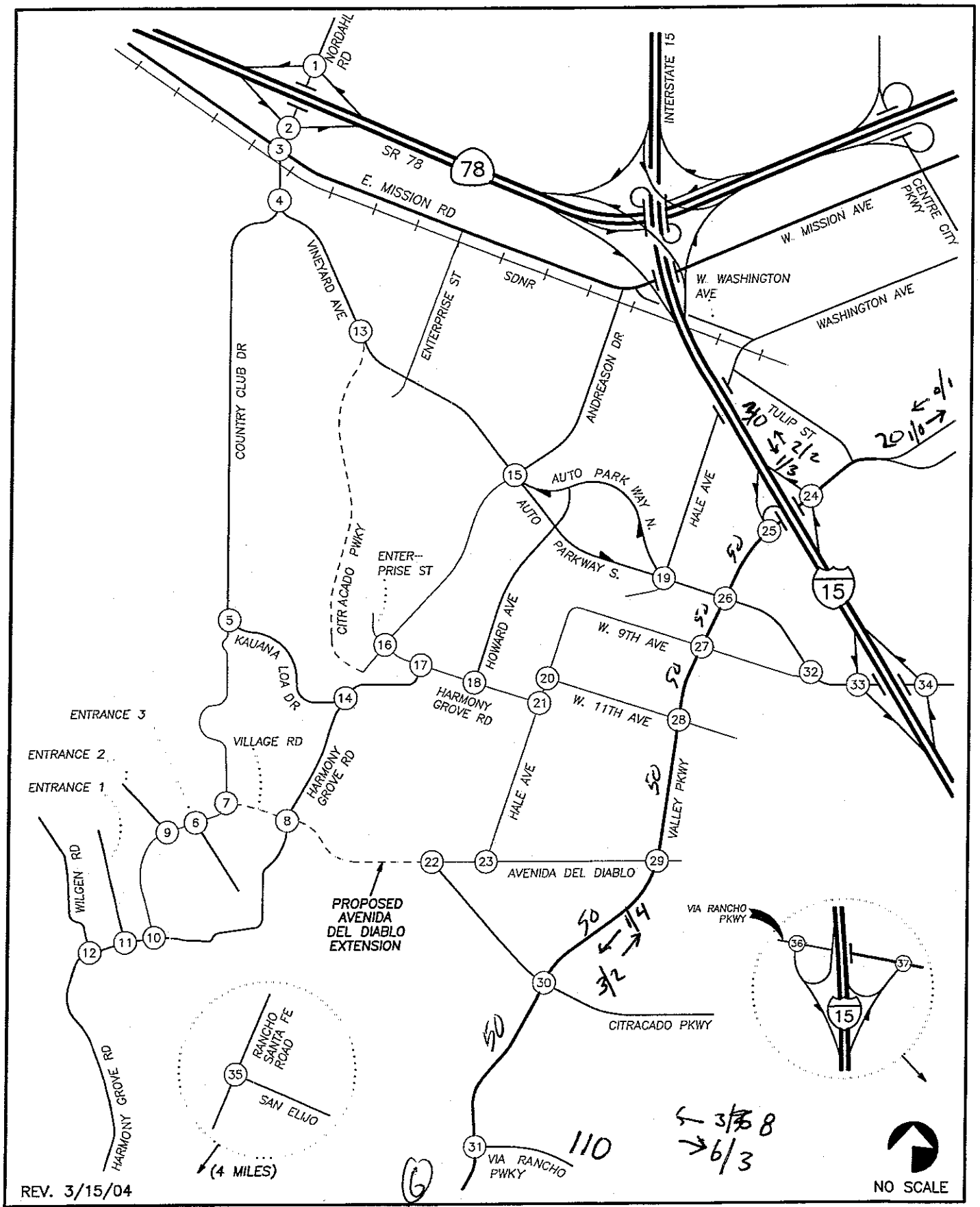
Equipment Wholesale

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

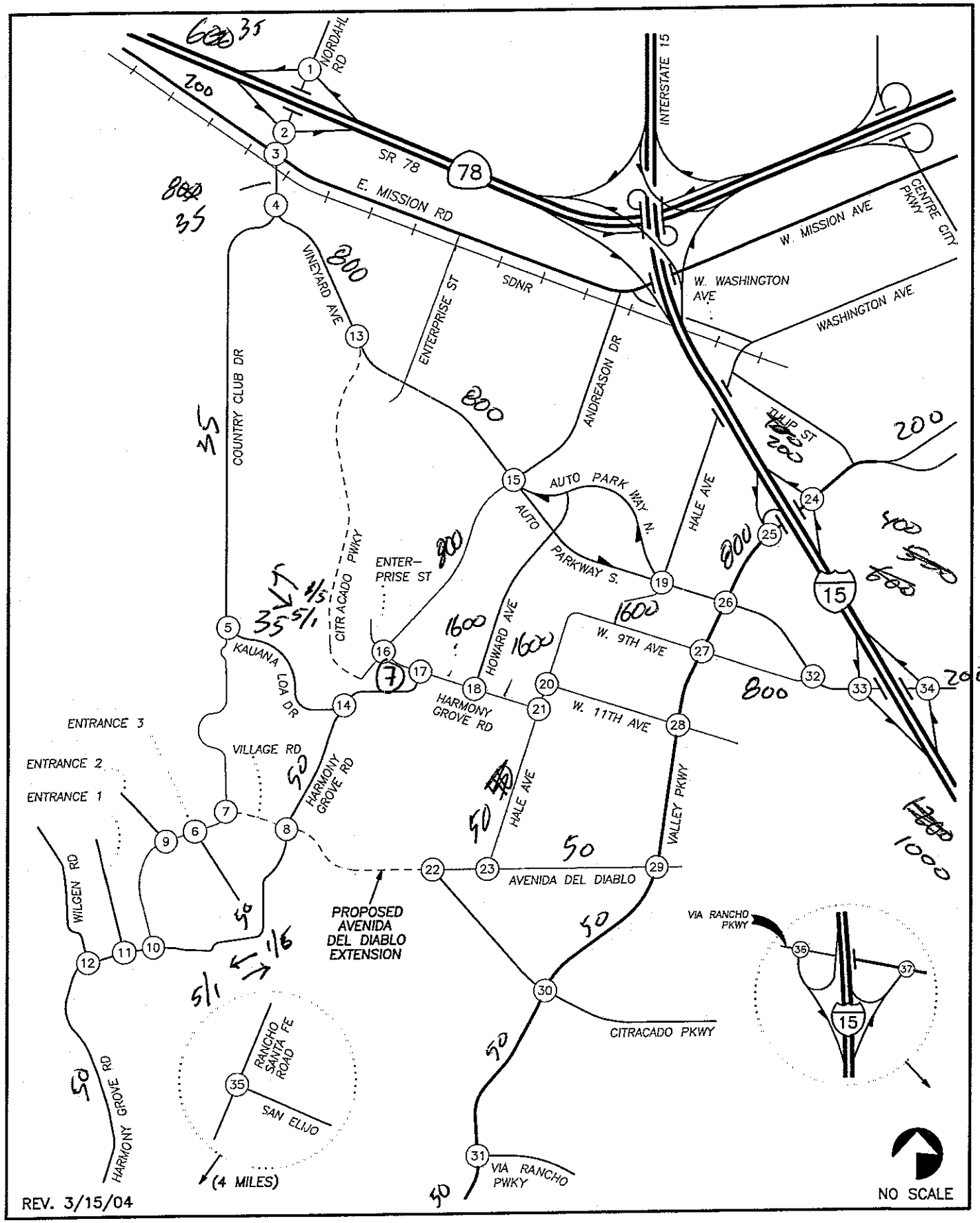
Cumulative Project #6
Dorn Subdivision

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

Cumulative Project # 7.

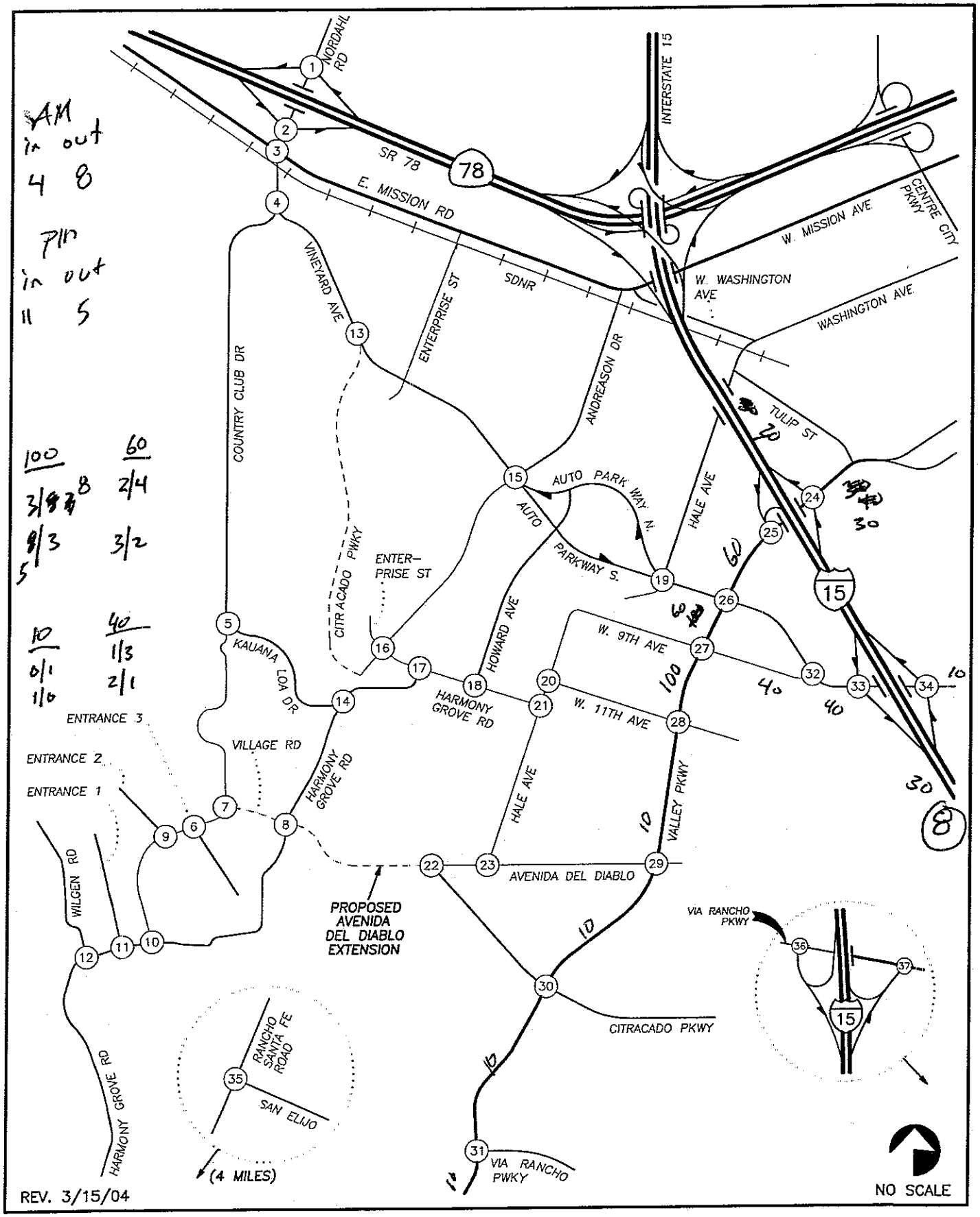
Harmony Grove Industrial Park.

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

Cumulative Project #8

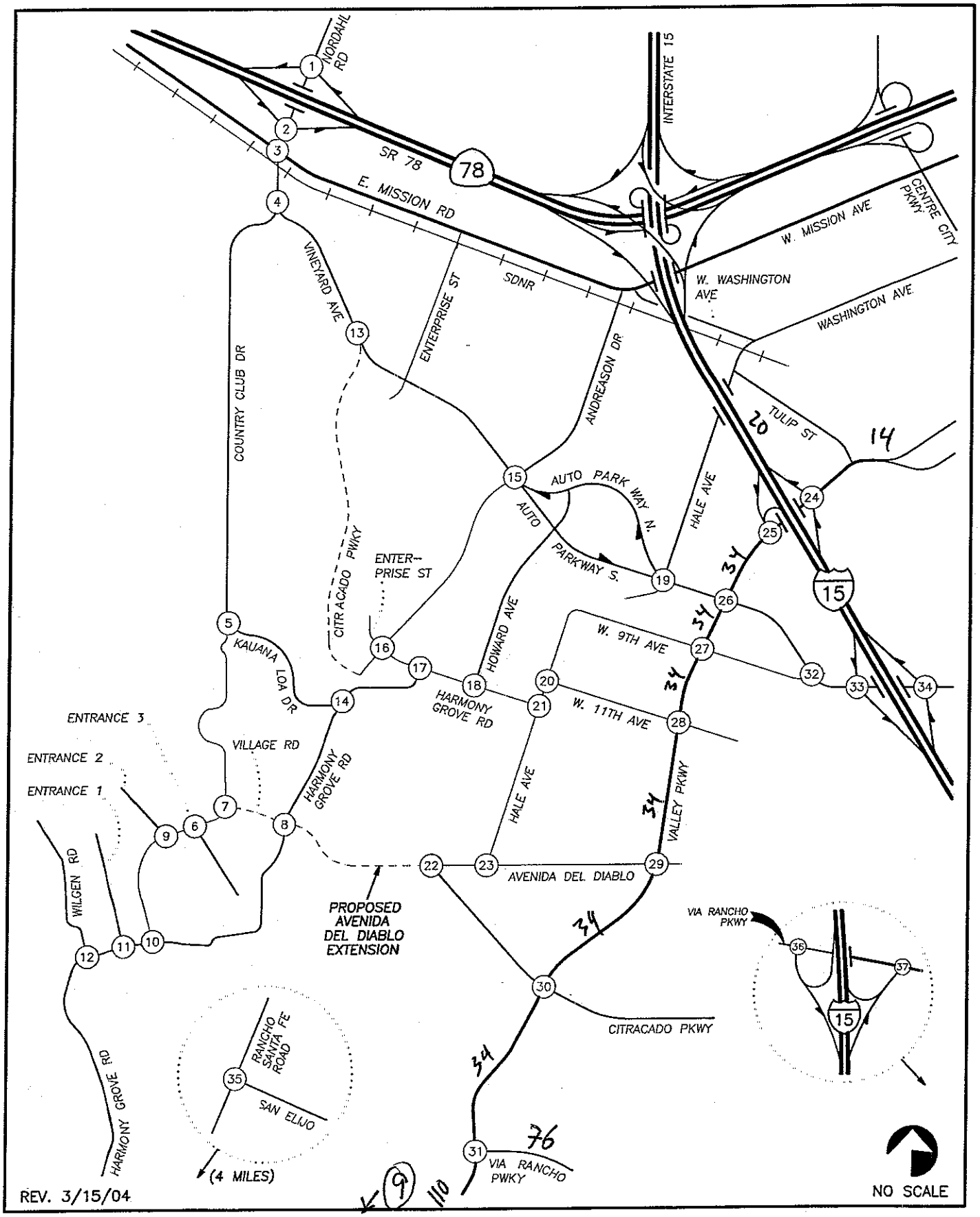
Bernardo Acres

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

Cumulative Project #9

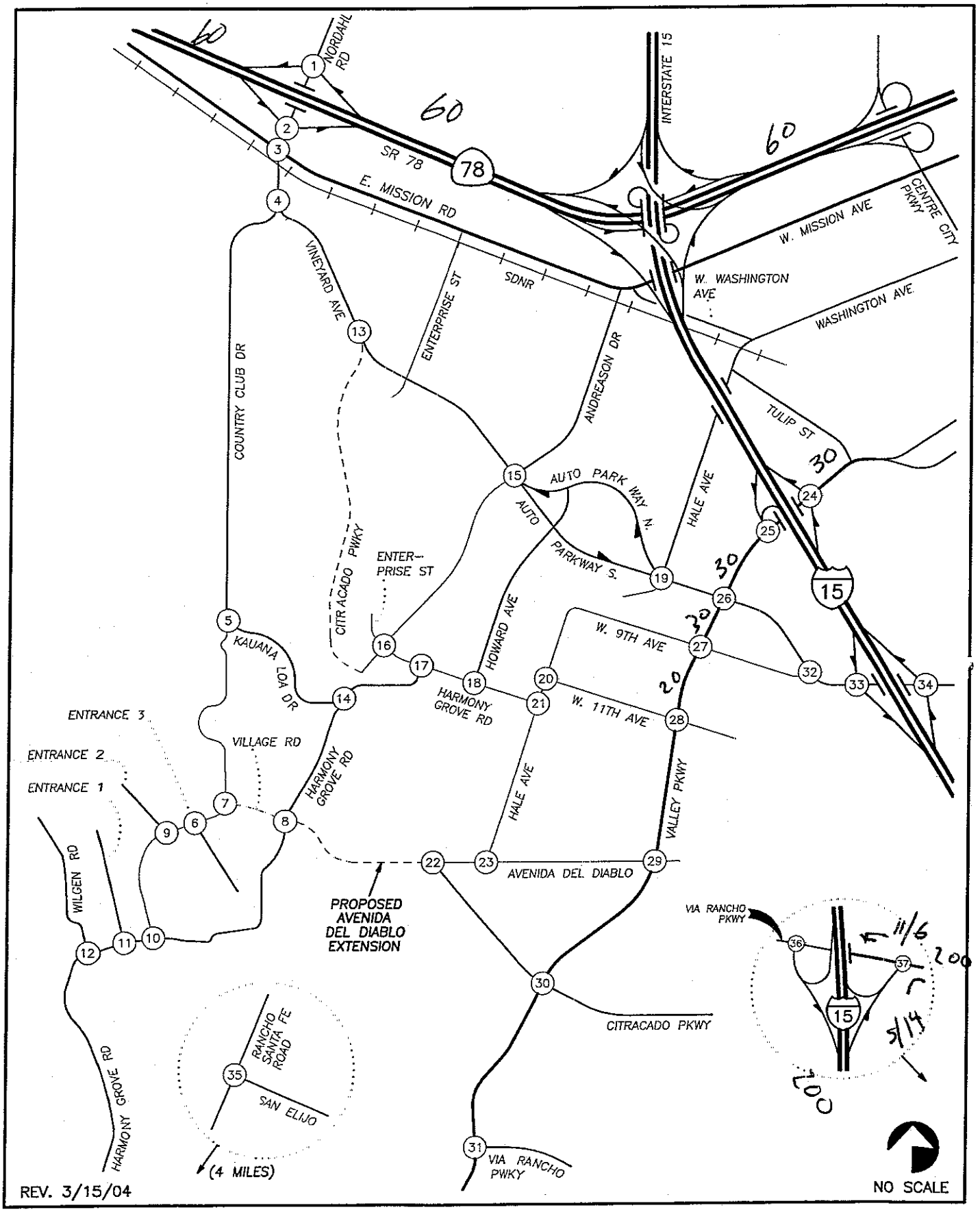
Tellarino

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

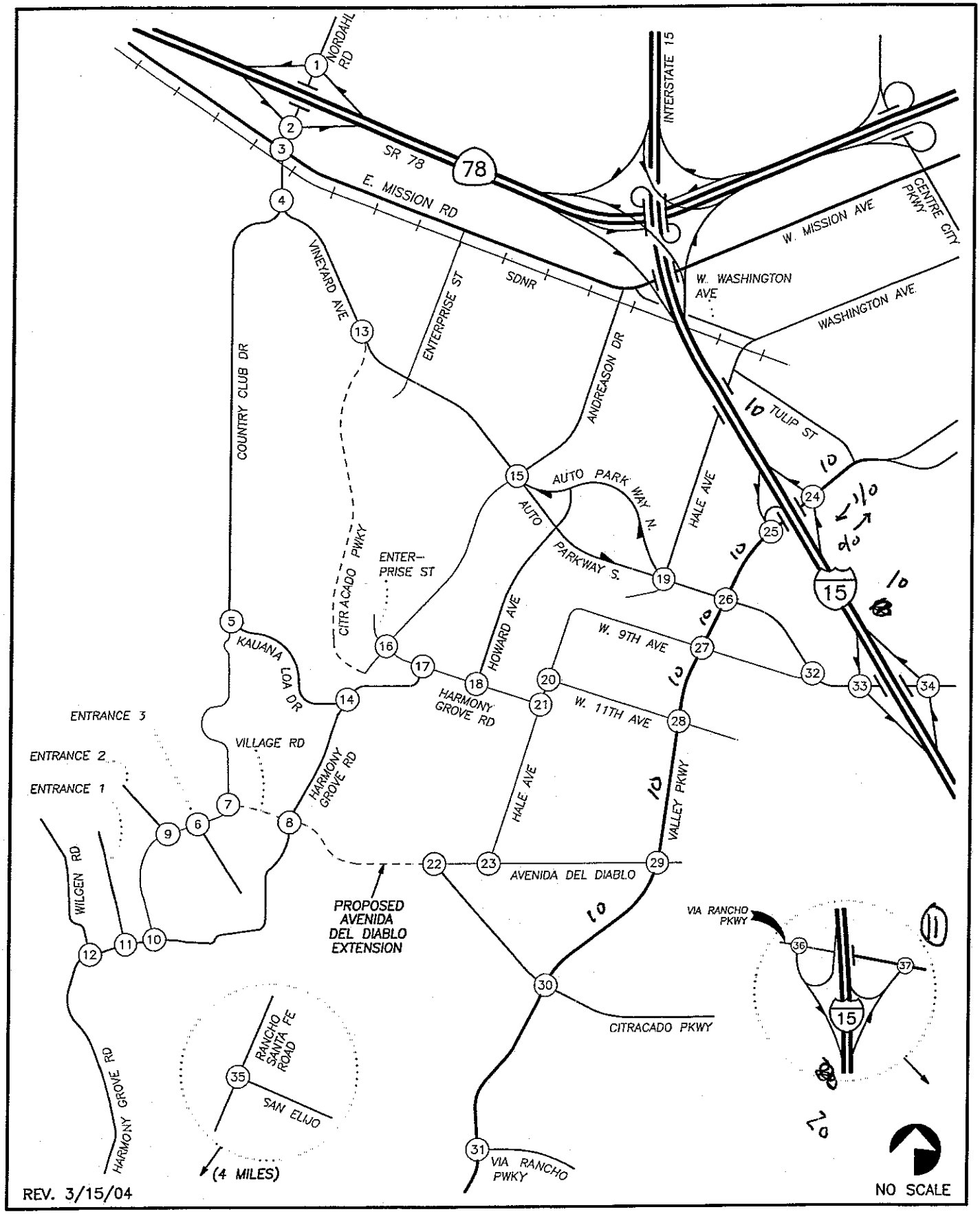
Cumulative Project # 10
Brook Forest

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

Cumulative Project # 11

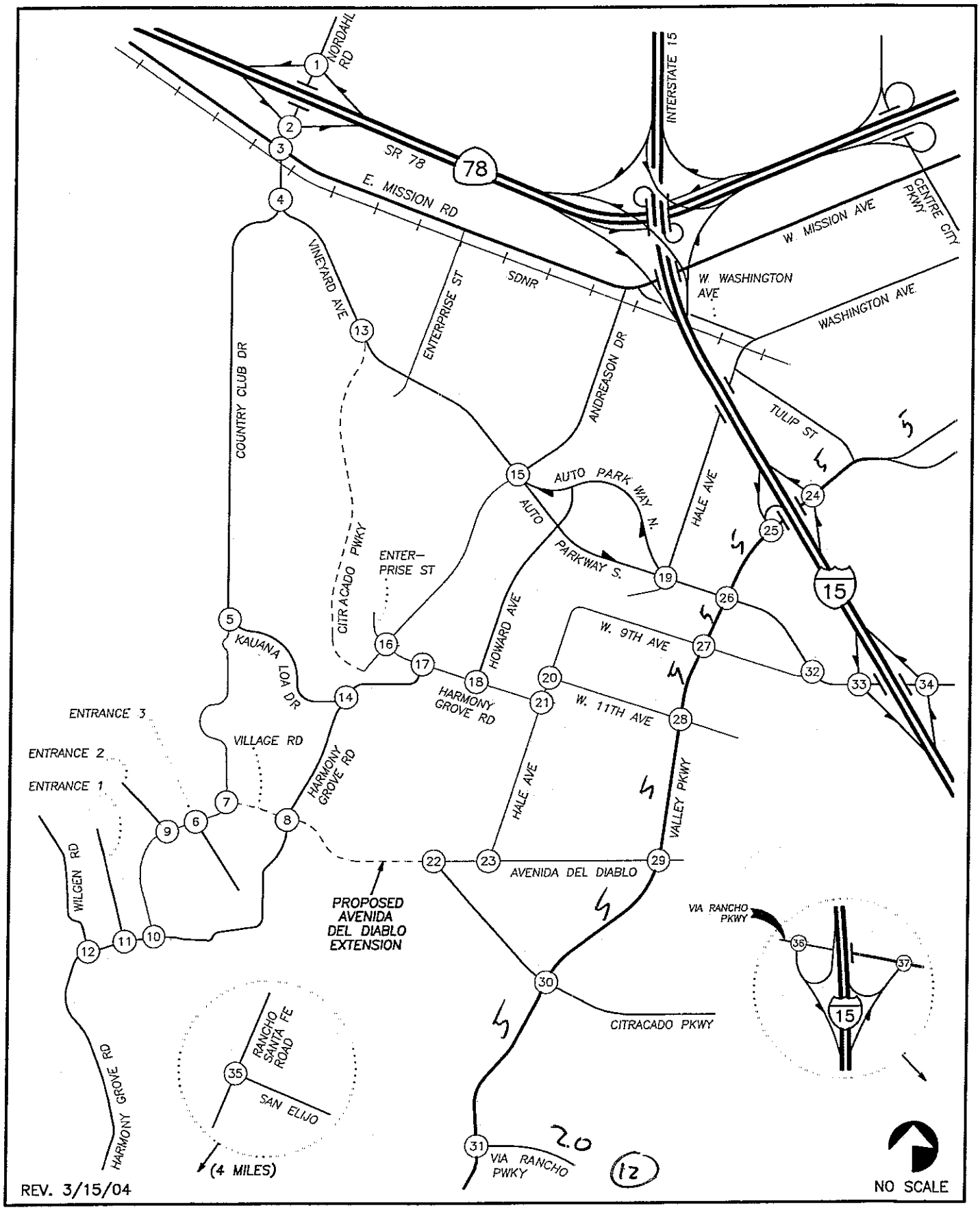
Gamble Place

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

Cumulative Project #12

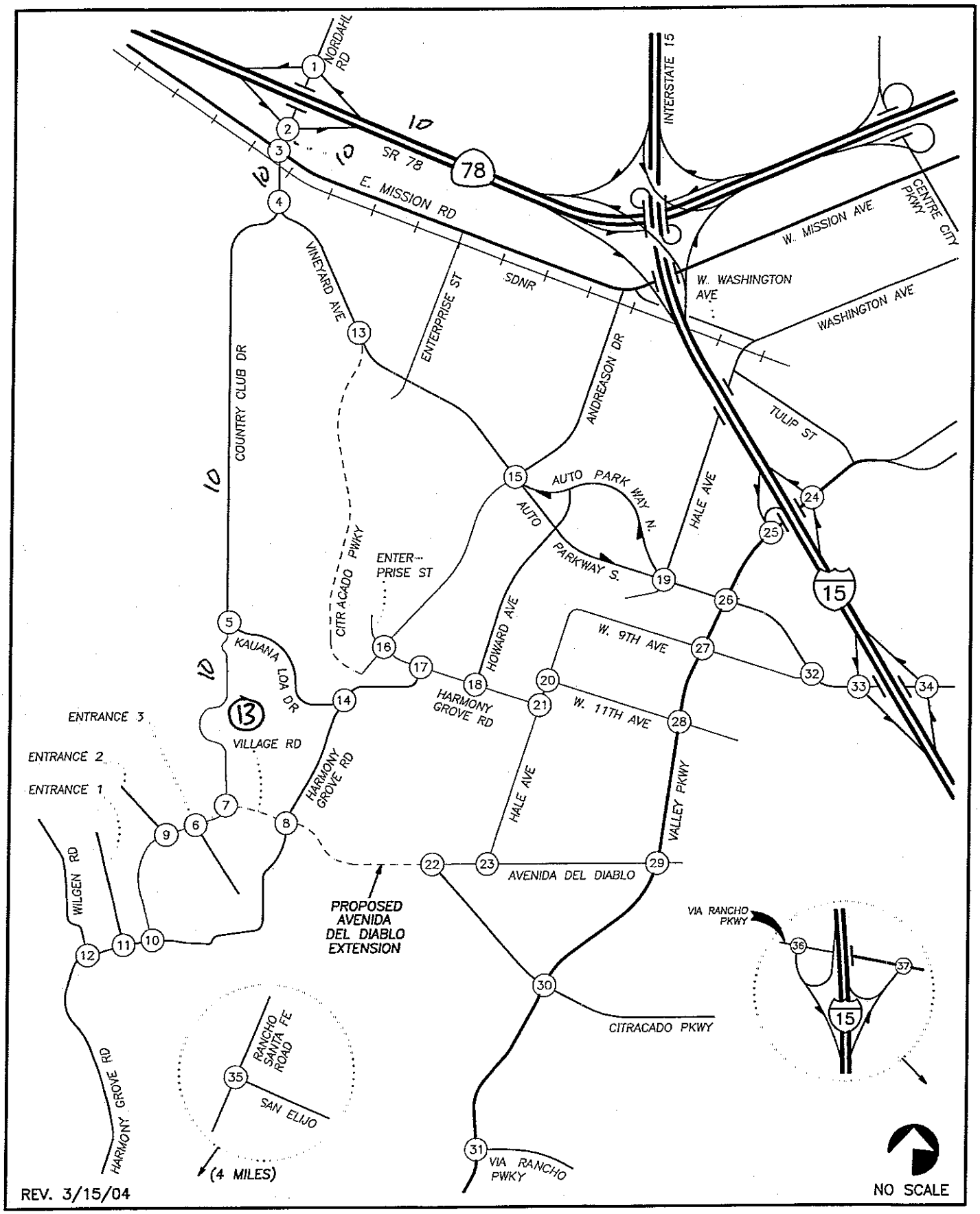
Via Rancho Parkway

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

Cumulative Project #13

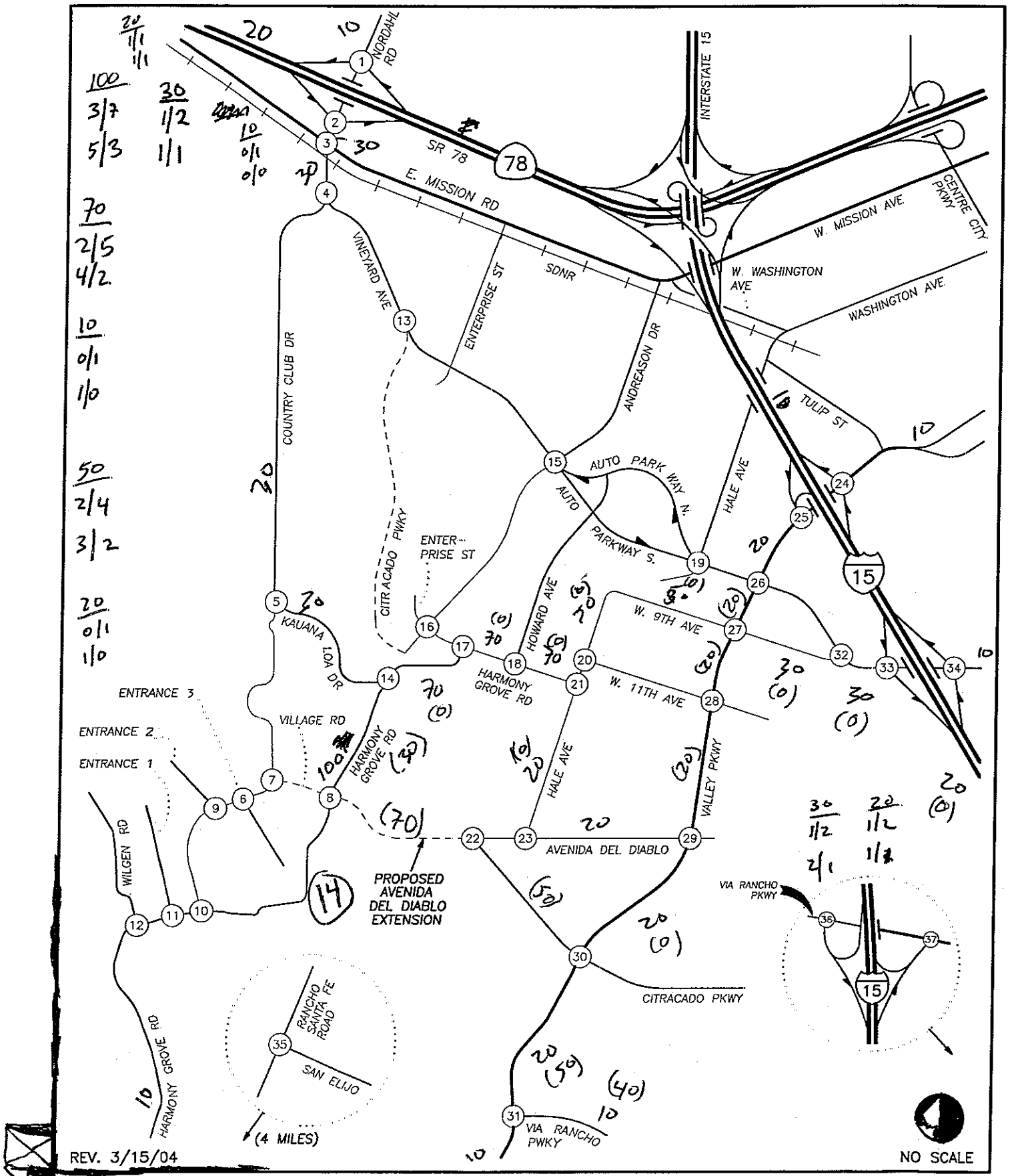
Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

Hunt Property

HARMONY GROVE



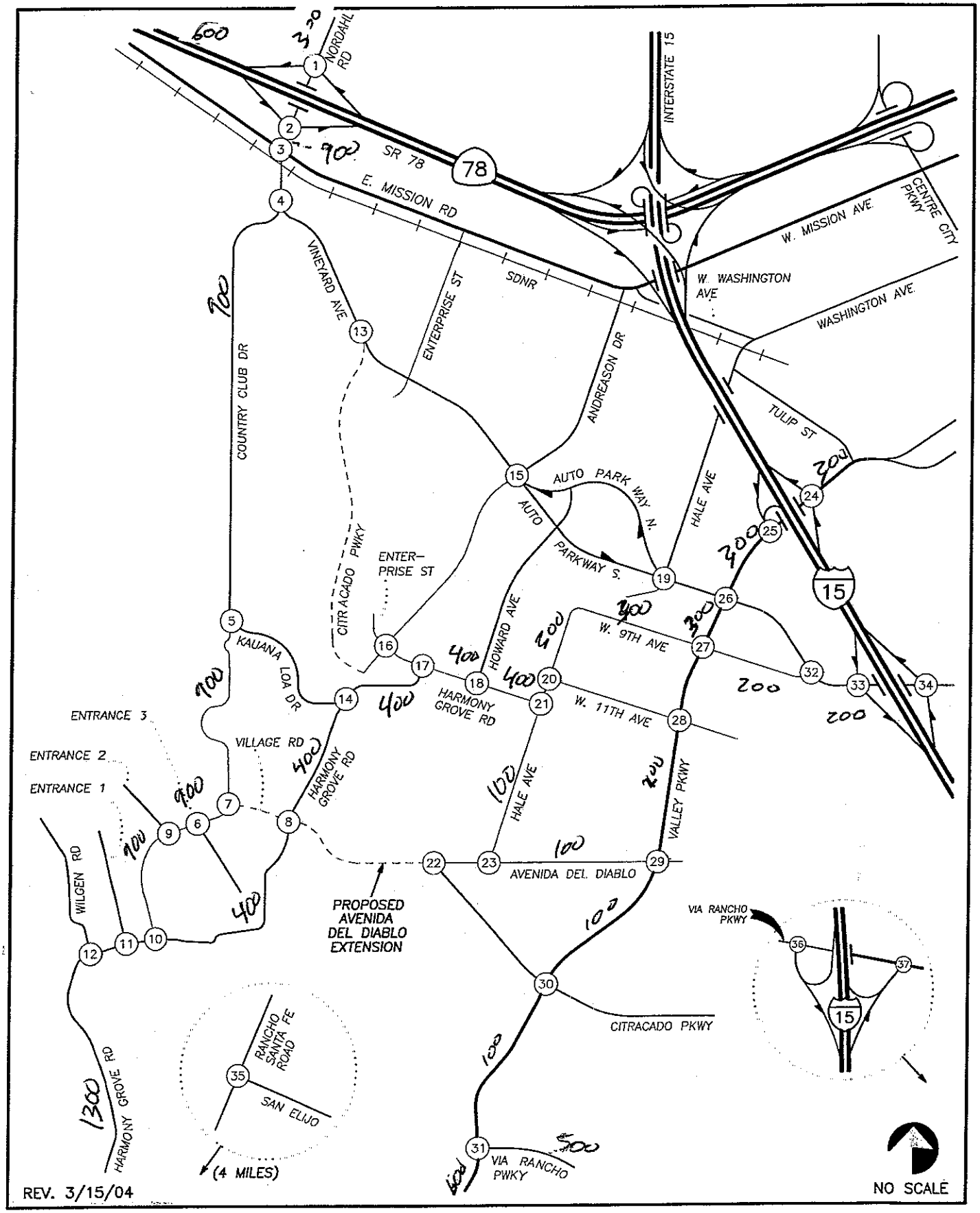
Cumulative Project # 14
City lights

Figure 4

STUDY AREA INTERSECTIONS

LINSCOTT LAW & GREENSPAN ENGINEERS

HARMONY GROVE



LLG1313.DWG

LINSCOTT LAW & GREENSPAN ENGINEERS

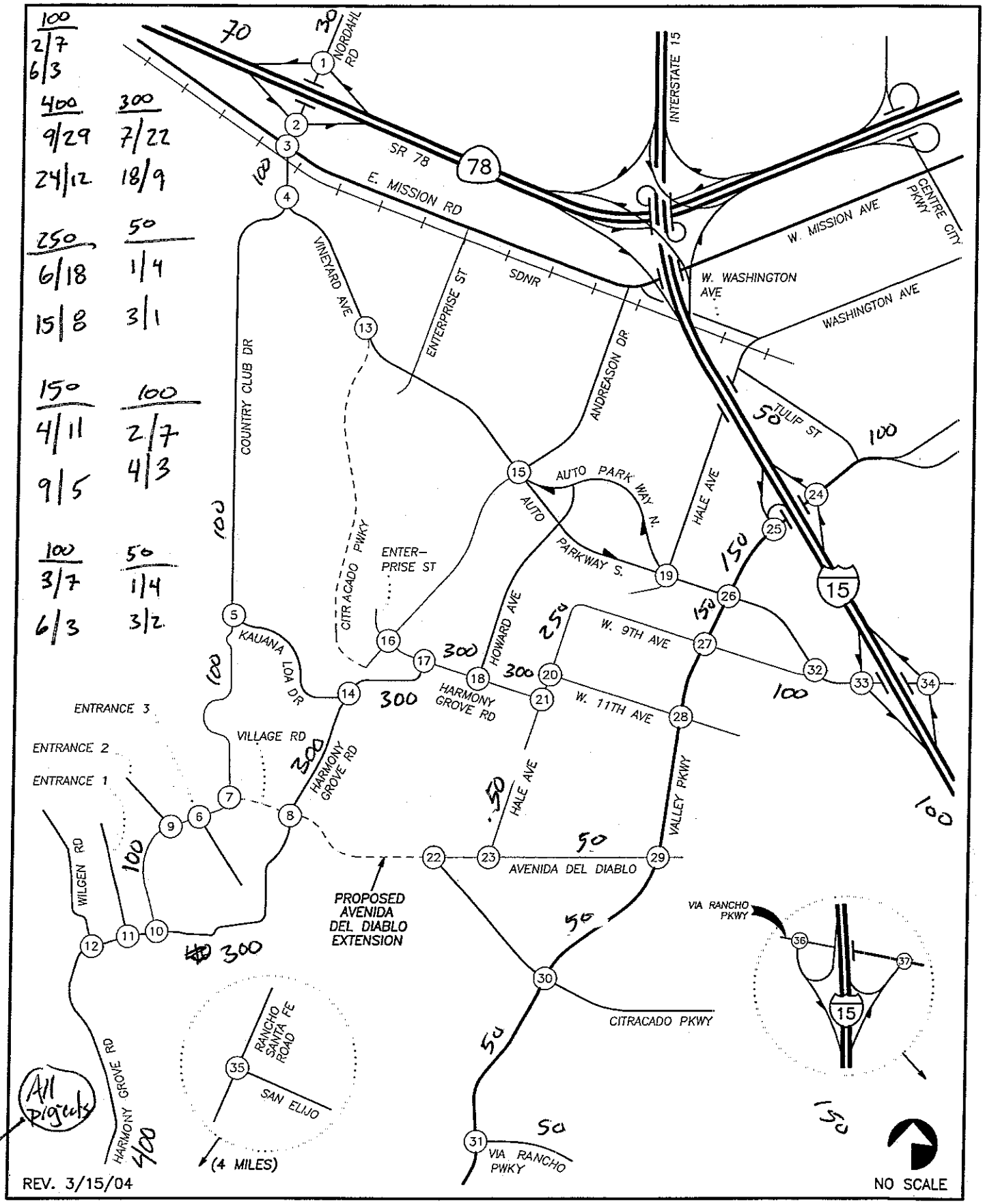
Cumulative Project 15

Cielo del Norte

Figure 4

STUDY AREA INTERSECTIONS

HARMONY GROVE



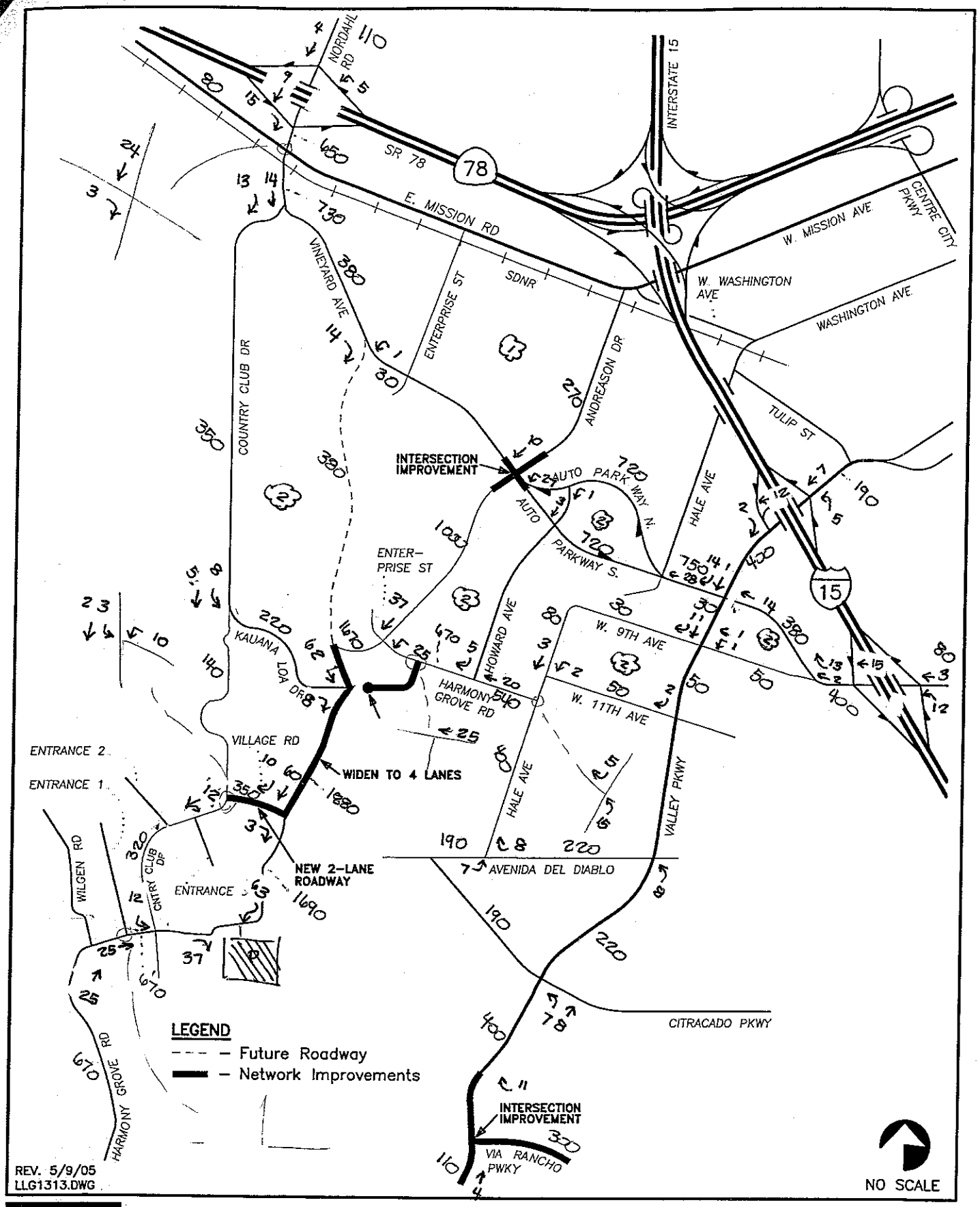
LLG1313.DWG

Cumulative Project # 16, 17, 18, 19, 20, 21

LINSCOTT LAW & GREENSPAN ENGINEERS

Victoria Shangrila
Anderson TM

Little Creek
McDonald Ressidense
Christward Ministry



LINSCOTT LAW & GREENSPAN engineers

HG Meadows DISTRIBUTION %
HG Meadows ADT (2690)

Figure 2-3

ROADWAY NETWORK
OPTION A (Harmony Grove Road Cul-de-sac)

HARMONY GROVE

APPENDIX H

OPTION A: INTERSECTION ANALYSIS WORKSHEETS

Harmony Grove Village

Harmony Grove Village
Option A: Baseline

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	31.7	0.566	C	31.7	0.566	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	D	53.1	0.998	D	53.1	0.998	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	D	46.2	0.880	D	46.2	0.880	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	195.5	0.000	F	195.5	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	7.9	0.198	A	7.9	0.198	+ 0.000 V/C
# 6 Country Club Drive/Entrance #	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 7 Country Club/ Village Rd	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	B	11.4	0.000	B	11.4	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	B	11.5	0.000	B	11.5	0.000	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	B	13.0	0.000	B	13.0	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	38.8	0.725	D	38.8	0.725	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	B	13.5	0.582	B	13.5	0.582	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	A	9.8	0.000	A	9.8	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	B	11.5	0.000	B	11.5	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	29.0	0.565	C	29.0	0.565	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	B	10.1	0.000	B	10.1	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	B	10.5	0.000	B	10.5	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	A	8.8	0.000	A	8.8	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	A	9.1	0.000	A	9.1	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	C	30.9	0.686	C	30.9	0.686	+ 0.000 D/V
# 25 I-15 SB/Valley Pkwy	D	48.4	0.721	D	48.4	0.721	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 26 Valley Park Way / Auto Park Wa	D	37.3	0.666	D	37.3	0.666	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	C	32.6	0.587	C	32.6	0.587	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	A	8.9	0.384	A	8.9	0.384	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	110.6	0.000	F	110.6	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	26.8	0.473	C	26.8	0.473	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	28.2	0.779	C	28.2	0.779	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	D	44.4	0.982	D	44.4	0.982	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	B	18.6	0.635	B	18.6	0.635	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	24.7	0.551	C	24.7	0.551	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	27.6	0.854	C	27.6	0.854	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	C	34.0	0.824	C	34.0	0.824	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	24.9	0.509	C	24.9	0.509	+ 0.000 D/V

Traffix 7.7.0715 (c) 2004 Dowling Assoc. Licensed to LLG, SAN DIEGO, CA

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.566
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 31.7
Optimal Cycle: 64 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	0	0		0	7	24		7
Lanes:	2	0	2	0 0	0	0	2	0 1	0	0	0	0 0	1	0	1!	0 1
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	391	255		0	0	366		135	0		0	0	441		8	147
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	391	255		0	0	366		135	0		0	0	441		8	147
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	434	283		0	0	407		150	0		0	0	490		9	163
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	434	283		0	0	407		150	0		0	0	490		9	163
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol.:	434	283		0	0	407		150	0		0	0	490		9	163
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900		1900	1900	1900		1900	1900
Adjustment:	0.71	0.73		1.00	1.00	0.93		0.83	1.00		1.00	1.00	0.71		0.71	0.71
Lanes:	2.00	2.00		0.00	0.00	2.00		1.00	0.00		0.00	0.00	1.73		0.03	1.24
Final Sat.:	2693	2776		0	0	3538		1583	0		0	0	2344		36	1685
Capacity Analysis Module:																
Vol/Sat:	0.16	0.10		0.00	0.00	0.11		0.09	0.00		0.00	0.00	0.21		0.25	0.10
Crit Moves:	****					****									****	
Green/Cycle:	0.28	0.49		0.00	0.00	0.20		0.20	0.00		0.00	0.00	0.44		0.44	0.44
Volume/Cap:	0.57	0.21		0.00	0.00	0.57		0.47	0.00		0.00	0.00	0.48		0.57	0.22
Delay/Veh:	37.6	17.6		0.0	0.0	44.1		43.2	0.0		0.0	0.0	24.3		25.9	21.1
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	37.6	17.6		0.0	0.0	44.1		43.2	0.0		0.0	0.0	24.3		25.9	21.1
HCM2kAvg:	8	3		0	0	7		5	0		0	0	8		10	3

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp [NS / EW]

Cycle (sec): 100 Critical Vol./Cap. (X): 0.998
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 53.1
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24		7	7	24		0	7	24		7	0	0		0
Lanes:	0	0	2	0 1	2	0	2	0 0	0	1	0	1 0	0	0	0	0 0
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	0	473		333	130	804		0	105		1	641	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	473		333	130	804		0	105		1	641	0		0	0
User Adj:	1.00	1.00		0.50	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	0	526		185	144	893		0	117		1	712	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	0	526		185	144	893		0	117		1	712	0		0	0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol.:	0	526		185	144	893		0	117		1	712	0		0	0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900		1900	1900	1900		1900	1900
Adjustment:	1.00	0.73		0.65	0.90	0.93		1.00	0.55		0.55	0.55	1.00		1.00	1.00
Lanes:	0.00	2.00		1.00	2.00	2.00		0.00	0.99		0.01	1.00	0.00		0.00	0.00
Final Sat.:	0	2776		1242	3432	3538		0	1043		10	1053	0		0	0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.19		0.15	0.04	0.25		0.00	0.11		0.11	0.68	0.00		0.00	0.00
Crit Moves:		****			****							****				
Green/Cycle:	0.00	0.24		0.24	0.07	0.31		0.00	0.60		0.60	0.60	0.00		0.00	0.00
Volume/Cap:	0.00	0.79		0.62	0.60	0.81		0.00	0.19		0.19	1.13	0.00		0.00	0.00
Delay/Veh:	0.0	41.9		37.9	49.4	36.6		0.0	9.0		9.0	94.0	0.0		0.0	0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	0.0	41.9		37.9	49.4	36.6		0.0	9.0		9.0	94.0	0.0		0.0	0.0
HCM2kAvg:	0	10		6	3	15		0	2		2	40	0		0	0

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #3 Nordahl Rd. / Mission Rd. (NS / EW)

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.880
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 46.2
Optimal Cycle: 110 Level Of Service: D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	2 0	1	2 0	1 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module: >> Count Date: 13 Dec 2001 << AM												
Base Vol:	143	420	40	438	881	142	200	363	328	90	316	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	420	40	438	881	142	200	363	328	90	316	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	159	467	44	487	979	158	222	403	364	100	351	206
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	467	44	487	979	158	222	403	364	100	351	206
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	159	467	44	487	979	158	222	403	364	100	351	206
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.73	0.73	0.65	0.71	0.72	0.72	0.90	0.93	0.83	0.90	0.93	0.83
Lanes:	1.00	2.00	1.00	2.00	1.72	0.28	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat..	1388	2776	1242	2693	2341	377	3432	3538	1583	3432	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	0.04	0.18	0.42	0.42	0.06	0.11	0.23	0.03	0.10	0.13
Crit Moves:	****				****				****	****		
Green/Cycle:	0.13	0.31	0.31	0.28	0.46	0.46	0.08	0.25	0.25	0.06	0.24	0.24
Volume/Cap:	0.91	0.54	0.12	0.65	0.91	0.91	0.85	0.45	0.91	0.50	0.42	0.55
Delay/Veh:	94.0	35.2	29.9	40.1	39.6	39.6	76.6	38.0	67.0	56.8	39.2	42.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	94.0	35.2	29.9	40.1	39.6	39.6	76.6	38.0	67.0	56.8	39.2	42.0
HCM2kAvg:	9	8	1	9	23	23	7	6	17	3	6	7

****

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club (NS / EW)

****

Average Delay (sec/veh): 17.1 Worst Case Level Of Service: F[195.5]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	2 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module: >> Count Date: 11 Dec 2001 << AM												
Base Vol:	46	433	0	35	1061	142	120	0	40	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	433	0	35	1061	142	120	0	40	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	51	481	0	39	1179	158	133	0	44	0	0	0
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	51	481	0	39	1179	158	133	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1337	xxxx	xxxxx	481	xxxx	xxxxx	1599	xxxx	1179	xxxx	xxxx	xxxxx
Potent Cap..	516	xxxx	xxxxx	1081	xxxx	xxxxx	117	xxxx	232	xxxx	xxxx	xxxxx
Move Cap..	516	xxxx	xxxxx	1081	xxxx	xxxxx	105	xxxx	232	xxxx	xxxx	xxxxx
Volume/Cap:	0.10	xxxx	xxxx	0.04	xxxx	xxxx	1.27	xxxx	0.19	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	0.7	xxxxx	xxxx	xxxxx
Stopped Del:	12.7	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	24.2	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	A	*	*	*	*	C	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	105	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	252.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			195.5			xxxxxx		
ApproachLOS:	*			*			F			*		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.198
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:		Ignore			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	0	1 0	0 0	0 0	0 0	0 0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	36	16	46	105	0	0	0	0	10	0	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	36	16	46	105	0	0	0	0	10	0	35
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.00	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	40	0	51	117	0	0	0	0	11	0	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	40	0	51	117	0	0	0	0	11	0	39
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	40	0	51	117	0	0	0	0	11	0	39
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.30	0.70	0.00	0.00	0.00	0.00	0.22	0.00	0.78
Final Sat..	0	755	0	258	590	0	0	0	0	195	0	683
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.05	xxxx	0.20	0.20	xxxx	xxxx	xxxx	xxxx	0.06	xxxx	0.06
Crit Moves:		****		****						****		
Delay/Veh:	0.0	7.7	0.0	8.2	8.2	0.0	0.0	0.0	0.0	7.1	0.0	7.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	7.7	0.0	8.2	8.2	0.0	0.0	0.0	0.0	7.1	0.0	7.1
LOS by Move:	*	A	*	A	A	*	-	*	*	A	*	A
ApproachDel:		7.7			8.2			xxxxx			7.1	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		7.7			8.2			xxxxx			7.1	
LOS by Appr:		A			A			-			A	

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club Drive/Entrance # 3

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L		T		R	L		T		R	L		T		R	L		T		R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:		Include					Include					Include					Include			
Lanes:	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	0	52		0		0	115		0		0	0		0		0	0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0	52		0		0	115		0		0	0		0		0	0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	0	58		0		0	128		0		0	0		0		0	0		0	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Final Vol..	0	58		0		0	128		0		0	0		0		0	0		0	
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
Move Cap..	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx	
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
LOS by Move:	*	-		*		-	*		*		*	*		*		*	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		0		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		-	*		*		*	*		*	
ApproachDel:		xxxxxx					xxxxxx					xxxxxx					xxxxxx			
ApproachLOS:		*					*					*					*			

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****
Intersection #7 Country Club/ Village Rd
****
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]
****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	1		1	0	1	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol.	0	52		0		0	0	115		0		0	0		0		0	0	0		0		0	0
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
Initial Bse:	0	52		0		0	0	115		0		0	0		0		0	0	0		0		0	0
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90	0.90		0.90		0.90	0.90	0.90		0.90		0.90	0.90	0.90		0.90		0.90
PHF Volume:	0	58		0		0	0	128		0		0	0		0		0	0	0		0		0	0
Reduct Vol:	0	0		0		0	0	0		0		0	0		0		0	0	0		0		0	0
Final Vol..	0	58		0		0	0	128		0		0	0		0		0	0	0		0		0	0
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
LOS by Move:	*	*		*		*	*	*		*		*	-	*		*		*	*	*		*		*
Movement:	LT - LTR - RT						LT - LTR - RT						LT - LTR - RT						LT - LTR - RT					
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Shared LOS:	*	*		*		*	*	*		*		*	*	*		*		*	*	*		*		*
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	*						*						*						*					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****
Intersection #8 Harmony Grove/Village Road
****
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]
****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	1	0	0		0	0	1	0	1		1	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	111		0		0	334		0		0	0		0		0		0	0		0		0	0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00		1.00	1.00
Initial Bse:	0	111		0		0	334		0		0	0		0		0		0	0		0		0	0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90	0.90		0.90		0.90	0.90
PHF Volume:	0	123		0		0	371		0		0	0		0		0		0	0		0		0	0
Reduct Vol:	0	0		0		0	0		0		0	0		0		0		0	0		0		0	0
Final Vol..	0	123		0		0	371		0		0	0		0		0		0	0		0		0	0
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
LOS by Move:	*	*		*		*	-	*		*		*	*	*		*		*	*	*		*		*
Movement:	LT - LTR - RT						LT - LTR - RT						LT - LTR - RT						LT - LTR - RT					
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Shared LOS:	*	*		*		*	-	*		*		*	*	*		*		*	*	*		*		*
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	*						*						*						*					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #9 Country Club/Entrance # 2

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	0		0	0	1	0	0		0	0	1!	0	0		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	52	0				0	115	0				0	0	0				0	0	0			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	52	0				0	115	0				0	0	0				0	0	0			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	0	52	0				0	115	0				0	0	0				0	0	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol..	0	52	0				0	115	0				0	0	0				0	0	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap..	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				*	*	*				*	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	0	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	*						*						*						*					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #10 COuntry Club/Harmony Grove

****

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: B[11.4]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	0	1!	0	0		0	1	0	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0	2	12				2	1	105				13	98	0				3	318	2			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	2	12				2	1	105				13	98	0				3	318	2			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90			
PHF Volume:	0	2	13				2	1	117				14	109	0				3	353	2			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol..	0	2	13				2	1	117				14	109	0				3	353	2			
Critical Gap Module:																								
Critical Gp:	xxxxx	6.5	6.2				7.1	6.5	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	500	109				507	499	354				356	xxxx	xxxxx				109	xxxx	xxxxx			
Potent Cap.:	xxxx	476	950				480	476	694				1214	xxxx	xxxxx				1494	xxxx	xxxxx			
Move Cap..	xxxx	469	950				466	470	694				1214	xxxx	xxxxx				1494	xxxx	xxxxx			
Volume/Cap:	xxxx	0.00	0.01				0.00	0.00	0.17				0.01	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.0	xxxx	xxxxx				7.4	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	829				xxxx	685	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	0.1				xxxxx	0.6	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	9.4				xxxxx	11.4	xxxxx				8.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	A				*	B	*				A	*	*				*	*	*			
ApproachDel:	9.4						11.4						xxxxxx						xxxxxx					
ApproachLOS:	A						B						*						*					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #11 Entrance # 1/Harmony Grove

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0 0	1!	0 0	0 0	1	0 0	0 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	111	0	0	423	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	111	0	0	423	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	0	0	0	0	123	0	0	470	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	0	123	0	0	470	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #12 Wilgen Road/Harmony Grove

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.5]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0 0	1!	0 0	0 0	1	0 0	0 0	1	0
Volume Module:												
Base Vol:	0	0	0	2	0	1	0	94	0	0	416	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	2	0	1	0	94	0	0	416	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	2	0	1	0	94	0	0	416	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	2	0	1	0	94	0	0	416	3
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	512	xxxx	418	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	526	xxxx	640	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	526	xxxx	640	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	559	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	11.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			11.5			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa [NS / EW]

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[13.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	0	0	0 0	0	1 0	0 0	1! 0	0	0 0	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << AM Peak												
Base Vol:	1 110		0	0 330		38	68	0	4	0	0	0
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	1 110		0	0 330		38	68	0	4	0	0	0
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	0.90 0.90		0.90	0.90 0.90		0.90	0.90 0.90		0.90	0.90 0.90		0.90
PHF Volume:	1 122		0	0 367		42	76	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
Final Vol.:	1 122		0	0 367		42	76	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx xxxxx			6.4 xxxx		6.2	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx xxxxx			3.5 xxxx		3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	409 xxxx	xxxxx	xxxx	xxxx xxxxx			512 xxxx		388	xxxx xxxx xxxxx		
Potent Cap..	1150 xxxx	xxxxx	xxxx	xxxx xxxxx			522 xxxx		660	xxxx xxxx xxxxx		
Move Cap..	1150 xxxx	xxxxx	xxxx	xxxx xxxxx			521 xxxx		660	xxxx xxxx xxxxx		
Volume/Cap:	0.00 xxxx	xxxx	xxxx	xxxx xxxx			0.14 xxxx		0.01	xxxx xxxx xxxx		
Level Of Service Module:												
Queue:	0.0 xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx xxxx xxxxx		
Stopped Del:	8.1 xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx xxxx xxxxx		
LOS by Move:	A *		*	* *	*	*	*	*	*	* *	*	
Movement:	LT - LTR	-	RT	LT - LTR	-	RT	LT - LTR	-	RT	LT - LTR	-	RT
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	528	xxxxx	xxxx xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx xxxx	xxxxx	
Shrd StpDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx	13.0	xxxxx	xxxxx xxxx	xxxxx	
Shared LOS:	* *		*	* *	*	*	*	B	*	* *	*	
ApproachDel:	xxxxxx			xxxxxx			13.0			xxxxxx		
ApproachLOS:	*			*			B			*		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.725
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 38.8
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	2 0 1	0	1	2 0 1	0	1	1 0 1	1	0	1 0	2	0 1
Volume Module: >> Count Date: 11 Dec 2001 << AM												
Base Vol.	226	89	80	71	237	50	41	538	196	315	482	82
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	226	89	80	71	237	50	41	538	196	315	482	82
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	0.90 0.90		0.90	0.90 0.90		0.90	0.90 0.90		0.90	0.90 0.90		0.90
PHF Volume:	251	99	89	79	263	56	46	598	218	350	536	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol.	251	99	89	79	263	56	46	598	218	350	536	91
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Final Vol..	251	99	89	79	263	56	46	598	218	350	536	91
Saturation Flow Module:												
Sat/Lane:	1900 1900		1900	1900 1900		1900	1900 1900		1900	1900 1900		1900
Adjustment:	0.90 0.98		0.83	0.90 0.98		0.83	0.93 0.89		0.89	0.93 0.93		0.83
Lanes:	2.00 1.00		1.00	2.00 1.00		1.00	1.00 1.47		0.53	1.00 2.00		1.00
Final Sat..	3432 1862		1583	3432 1862		1583	1769 2489		907	1769 3538		1583
Capacity Analysis Module:												
Vol/Sat:	0.07 0.05		0.06	0.02 0.14		0.04	0.03 0.24		0.24	0.20 0.15		0.06
Crit Moves:	****				****			****		****		
Green/Cycle:	0.10 0.23		0.23	0.07 0.20		0.20	0.14 0.33		0.33	0.27 0.46		0.46
Volume/Cap:	0.73 0.23		0.24	0.34 0.71		0.18	0.19 0.73		0.73	0.73 0.33		0.12
Delay/Veh:	60.2 37.6		37.8	54.2 50.9		40.1	46.4 38.1		38.1	45.4 20.4		18.3
User DelAdj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
AdjDel/Veh:	60.2 37.6		37.8	54.2 50.9		40.1	46.4 38.1		38.1	45.4 20.4		18.3
HCM2kAvg:	6	3	3	2	10	2	2	14	14	14	6	2

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

****
Intersection #16 Andreasen Dr./Enterprise St. [NS / EW]
****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.582
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 13.5
Optimal Cycle: 0 Level Of Service: B
****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1
Volume Module: >> Count Date: 28 Nov 2001 << AM																
Base Vol:	32	117		35	161	291		18	7		3	12	128		11	184
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	32	117		35	161	291		18	7		3	12	128		11	184
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	36	130		39	179	323		20	8		3	13	142		12	204
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	36	130		39	179	323		20	8		3	13	142		12	204
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol..	36	130		39	179	323		20	8		3	13	142		12	204
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Lanes:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Sat..	456	489		536	512	555		612	406		429	469	473		501	563
Capacity Analysis Module:																
Vol/Sat:	0.08	0.27	0.07	0.35	0.58	0.03	0.02	0.01	0.03	0.30	0.02	0.36				
Crit Moves:		****			****				****			****				
Delay/Veh:	10.8	12.0	9.4	13.0	17.0	8.5	10.9	10.3	9.8	12.9	9.7	12.0				
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	10.8	12.0	9.4	13.0	17.0	8.5	10.9	10.3	9.8	12.9	9.7	12.0				
LOS by Move:	B	B	A	B	C	A	B	B	A	B	A	B				
ApproachDel:		11.3			15.3			10.2			12.3					
Delay Adj:		1.00			1.00			1.00			1.00					
ApprAdjDel:		11.3			15.3			10.2			12.3					
LOS by Appr:		B			C			B			B					

****

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****
Intersection #17 Harmony Grove Rd./Enterprise St. [NS / EW]
****

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: A[9.8]
****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	0	1 0	0	1	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << AM																
Base Vol:	5	0		10	0	0		0	0	81		15	17	319		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	5	0		10	0	0		0	0	81		15	17	319		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	6	0		11	0	0		0	0	90		17	19	354		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	6	0		11	0	0		0	0	90		17	19	354		0
Critical Gap Module:																
Critical Gp:	6.4	xxxx		6.2	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	4.1	xxxx		xxxx
FollowUpTim:	3.5	xxxx		3.3	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	2.2	xxxx		xxxx
Capacity Module:																
Cnflict Vol:	491	xxxx		98	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	107	xxxx		xxxx
Potent Cap..	537	xxxx		958	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	1484	xxxx		xxxx
Move Cap..	532	xxxx		958	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	1484	xxxx		xxxx
Volume/Cap:	0.01	xxxx		0.01	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	0.01	xxxx		xxxx
Level Of Service Module:																
Queue:	0.0	xxxx		0.0	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	0.0	xxxx		xxxx
Stopped Del:	11.8	xxxx		8.8	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	7.5	xxxx		xxxx
LOS by Move:	B	*		A	*	*		*	*	*		*	A	*		*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	0.0	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	7.5	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	A	*		*
ApproachDel:		9.8			xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:		A			*				*				*			

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #18 Harmony Grove Rd./Howard Ave.

****

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: B[11.5]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		1	0	0	0	1		0	1	0	0	0		0	0	0	1	0	
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak																								
Base Vol:	0		0		0		28		0		49		33		126		0		0		294		41	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0		0		0		28		0		49		33		126		0		0		294		41	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0		0		0		31		0		54		37		140		0		0		327		46	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	0		0		0		31		0		54		37		140		0		0		327		46	
Critical Gap Module:																								
Critical Gp:	xxxxx		xxxx		xxxxx		6.4		xxxx		6.2		4.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
FollowUpTim:	xxxxx		xxxx		xxxxx		3.5		xxxx		3.3		2.2		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	xxxx		xxxx		xxxxx		563		xxxx		349		372		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Potent Cap.:	xxxx		xxxx		xxxxx		491		xxxx		698		1197		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Move Cap..	xxxx		xxxx		xxxxx		479		xxxx		698		1197		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	xxxx		xxxx		xxxx		0.06		xxxx		0.08		0.03		xxxx		xxxx		xxxx		xxxx		xxxx	
Level Of Service Module:																								
Queue:	xxxxx		xxxx		xxxxx		0.2		xxxx		0.3		0.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Stopped Del:	xxxxx		xxxx		xxxxx		13.0		xxxx		10.6		8.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
LOS by Move:	*		-		*		B		*		B		A		*		*		*		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		0.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd StpDel:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		8.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		*		*		*		*		*		A		*		*		*		*		*	
ApproachDel:	xxxxxx						11.5						xxxxxx						xxxxxx					
ApproachLOS:	*						B						-						*					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.565
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.0
Optimal Cycle: 50 Level Of Service: C

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0		0		0		7		0		7		7		24		0		0		24		7	
Lanes:	0	1	0	1	0		1	0	0	1	0		1	0	1	1	0		1	0	2	0	1	
Volume Module: >> Count Date: 12 Dec 2001 << AM																								
Base Vol:	6		4		5		356		13		174		100		718		14		28		690		293	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	6		4		5		356		13		174		100		718		14		28		690		293	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	7		4		6		396		14		193		111		798		16		31		767		326	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	7		4		6		396		14		193		111		798		16		31		767		326	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	7		4		6		396		14		193		111		798		16		31		767		326	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.87		0.87		0.87		0.93		0.84		0.84		0.93		0.93		0.93		0.93		0.93		0.83	
Lanes:	0.80		0.53		0.67		1.00		0.07		0.93		1.00		1.96		0.04		1.00		2.00		1.00	
Final Sat..	1317		878		1098		1769		111		1492		1769		3460		67		1769		3538		1583	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.01		0.01		0.22		0.13		0.13		0.06		0.23		0.23		0.02		0.22		0.21	
Crit Moves:			****				****						****								****			
Green/Cycle:	0.01		0.01		0.01		0.40		0.40		0.40		0.11		0.46		0.46		0.04		0.38		0.38	
Volume/Cap:	0.56		0.56		0.56		0.56		0.33		0.33		0.56		0.50		0.50		0.50		0.56		0.54	
Delay/Veh:	82.1		82.1		82.1		29.3		25.4		25.4		54.3		23.0		23.0		63.2		29.6		29.6	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	82.1		82.1		82.1		29.3		25.4		25.4		54.3		23.0		23.0		63.2		29.6		29.6	
HCM2kAvg:	1		1		1		12		5		5		5		11		11		2		11		10	

****

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[10.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module: >> Count Date: 12 Dec 2001 <<																								
Base Vol.	0	100		14			6	119		0			0		0		0		37		0		5	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0	100		14			6	119		0			0		0		0		37		0		5	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90			0.90	0.90		0.90			0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0	111		16			7	132		0			0		0		0		41		0		6	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
Final Vol..	0	111		16			7	132		0			0		0		0		41		0		6	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			4.1	xxxx		xxxxx			xxxxx		xxxx		xxxxx		6.4	xxxx		6.2		
FollowUpTim:	xxxxx	xxxx		xxxxx			2.2	xxxx		xxxxx			xxxxx		xxxx		xxxxx		3.5	xxxx		3.3		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			127	xxxx		xxxxx			xxxx		xxxx		xxxxx		264	xxxx		119		
Potent Cap.:	xxxx	xxxx		xxxxx			1472	xxxx		xxxxx			xxxx		xxxx		xxxxx		729	xxxx		938		
Move Cap..	xxxx	xxxx		xxxxx			1472	xxxx		xxxxx			xxxx		xxxx		xxxxx		726	xxxx		938		
Volume/Cap:	xxxx	xxxx		xxxx			0.00	xxxx		xxxx			xxxx		xxxx		xxxx		0.06	xxxx		0.01		
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx			0.0	xxxx		xxxxx			xxxxx		xxxx		xxxxx		0.2	xxxx		0.0		
Stopped Del:	xxxxx	xxxx		xxxxx			7.5	xxxx		xxxxx			xxxxx		xxxx		xxxxx		10.3	xxxx		8.9		
LOS by Move:	*	*		*			A	*		*			*		*		*		B	*		A		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx	xxxx		xxxxx			0.0	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd StpDel:	xxxxx	xxxx		xxxxx			7.5	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*			A	*		*			*	*		*			*	*		*		
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						10.1					
ApproachLOS:	*						*						*						B					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 4.3 Worst Case Level Of Service: B[10.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0		1	0	0	0	1		0	0	0	0	0	
Volume Module: >> Count Date: 12 Dec 2001 <<																								
Base Vol:	141	120		0			0	57		144			30		0		110		0		0		0	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	141	120		0			0	57		144			30		0		110		0		0		0	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90			0.90	0.90		0.90			0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	157	133		0			0	63		160			33		0		122		0		0		0	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
Final Vol..	157	133		0			0	63		160			33		0		122		0		0		0	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx		xxxxx			xxxxx	xxxx		xxxxx			6.4	xxxx		6.2			xxxxx	xxxx		xxxxx		
FollowUpTim:	2.2	xxxx		xxxxx			xxxxx	xxxx		xxxxx			3.5	xxxx		3.3			xxxxx	xxxx		xxxxx		
Capacity Module:																								
Cnflict Vol:	223	xxxx		xxxxx			xxxx	xxxx		xxxxx			590	xxxx		143			xxxx	xxxx		xxxxx		
Potent Cap..	1357	xxxx		xxxxx			xxxx	xxxx		xxxxx			474	xxxx		909			xxxx	xxxx		xxxxx		
Move Cap..	1357	xxxx		xxxxx			xxxx	xxxx		xxxxx			428	xxxx		909			xxxx	xxxx		xxxxx		
Volume/Cap:	0.12	xxxx		xxxx			xxxx	xxxx		xxxx			0.08	xxxx		0.13			xxxx	xxxx		xxxx		
Level Of Service Module:																								
Queue:	0.4	xxxx		xxxxx			xxxxx	xxxx		xxxxx			0.3	xxxx		0.5			xxxxx	xxxx		xxxxx		
Stopped Del.	8.0	xxxx		xxxxx			xxxxx	xxxx		xxxxx			14.1	xxxx		9.6			xxxxx	xxxx		xxxxx		
LOS by Move:	A	*		*			*	*		*			B	*		A			-	*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	0.4	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd StpDel:	8.0	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	A	*		*			*	*		*			-	*		*			*	-		*		
ApproachDel:	xxxxxx						xxxxxx						10.5						xxxxxx					
ApproachLOS:	*						*						B						*					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #22 Avenida Diablo/Citracado Parkway

****

Average Delay (sec/veh): 7.1 Worst Case Level Of Service: A[8.8]

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Yield Sign				Yield Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	0	1 0	1	0	1	0 0
Volume Module:																
Base Vol:	2	0		95	0	0		0	0	13		9	129		9	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	2	0		95	0	0		0	0	13		9	129		9	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90
PHF Volume:	2	0		106	0	0		0	0	14		10	143		10	0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0		0	0
Final Vol..	2	0		106	0	0		0	0	14		10	143		10	0
Critical Gap Module:																
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	4.1	xxxx		xxxxx
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	2.2	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	316	xxxx		19	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	24	xxxx		xxxxx
Potent Cap.:	681	xxxx		1064	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	1603	xxxx		xxxxx
Move Cap..	634	xxxx		1064	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	1603	xxxx		xxxxx
Volume/Cap:	0.00	xxxx		0.10	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	0.09	xxxx		xxxx
Level Of Service Module:																
Queue:	0.0	xxxx		0.3	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	0.3	xxxx		xxxxx
Stopped Del:	10.7	xxxx		8.8	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	7.5	xxxx		xxxxx
LOS by Move:	B	*		A	*	*		*	*	*		*	A	*		*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:		8.8			xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:		A				*				*				*		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #23 Avenida Diablo/Hale Avenue

****

Average Delay (sec/veh): 6.3 Worst Case Level Of Service: A[9.1]

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	1	0	0 1	0	1	0	0 0	0	0	1	0 1
Volume Module:																
Base Vol:	0	0		0	22	0		112	103	3		0	0	17		57
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	22	0		112	103	3		0	0	17		57
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	24	0		124	114	3		0	0	19		63
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	0	0		0	24	0		124	114	3		0	0	19		63
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	6.4	xxxx		6.2	4.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	3.5	xxxx		3.3	2.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	251	xxxx		19	82	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	742	xxxx		1065	1528	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	696	xxxx		1065	1528	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	0.04	xxxx		0.12	0.07	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		0.4	0.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		8.8	7.5	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		A	A	*		*	*	*		*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx		xxxxx	696	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	0.1	xxxx		xxxxx	0.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	10.4	xxxx		xxxxx	7.5	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	B	*		*	A	*		*	*	*		*
ApproachDel:		xxxxxx				9.1				xxxxxx				xxxxxx		
ApproachLOS:		*				A				*				*		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.686
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 30.9
Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	0	0	0	7	24	7
Lanes:	0 1	0 0	1	0 0	0 0	0	2 0	3 0	0	0 0	3 0	1
Volume Module: >> Count Date: 12 Dec 2001 << AM												
Base Vol:	205	1	395	0	0	0	438	1006	0	0	986	206
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	1	395	0	0	0	438	1006	0	0	986	206
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	228	1	439	0	0	0	487	1118	0	0	1096	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	228	1	439	0	0	0	487	1118	0	0	1096	229
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	228	1	439	0	0	0	487	1118	0	0	1096	229
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.83	0.83	1.00	1.00	1.00	0.90	0.89	1.00	1.00	0.89	0.83
Lanes:	0.99	0.01	1.00	0.00	0.00	0.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat..	1575	8	1583	0	0	0	3432	5083	0	0	5083	1583
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.28	0.00	0.00	0.00	0.14	0.22	0.00	0.00	0.22	0.14
Crit Moves:			****				****				****	
Green/Cycle:	0.40	0.40	0.40	0.00	0.00	0.00	0.21	0.52	0.00	0.00	0.31	0.31
Volume/Cap:	0.36	0.36	0.69	0.00	0.00	0.00	0.69	0.42	0.00	0.00	0.69	0.46
Delay/Veh:	25.2	25.2	32.6	0.0	0.0	0.0	46.8	17.8	0.0	0.0	37.2	33.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.2	25.2	32.6	0.0	0.0	0.0	46.8	17.8	0.0	0.0	37.2	33.7
HCM2kAvg:	7	7	14	0	0	0	10	8	0	0	13	7

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.721
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 48.4
Optimal Cycle: 64 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	7	0	7	0	0	0
Lanes:	1 0	1 0	1	0 1	0 1	0	2 0	3 0	1	2 0	3 1	1
Volume Module: >> Count Date: 12 Dec 2001 << AM												
Base Vol:	12	18	83	458	102	636	75	869	46	74	877	199
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	18	83	458	102	636	75	869	46	74	877	199
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	13	20	92	509	113	707	83	966	51	82	974	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	20	92	509	113	707	83	966	51	82	974	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	13	20	92	509	113	707	83	966	51	82	974	221
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.84	0.84	0.84	0.90	0.89	0.83	0.90	0.87	0.87
Lanes:	1.00	1.00	1.00	0.82	0.18	1.00	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat..	1769	1862	1583	1306	291	1596	3432	5083	1583	3432	6588	1647
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.06	0.39	0.39	0.44	0.02	0.19	0.03	0.02	0.15	0.13
Crit Moves:		****				****		****		****		
Green/Cycle:	0.20	0.20	0.20	0.49	0.49	0.49	0.07	0.21	0.21	0.03	0.17	0.17
Volume/Cap:	0.04	0.05	0.29	0.80	0.80	0.91	0.36	0.91	0.15	0.91	0.87	0.79
Delay/Veh:	38.7	38.9	41.3	28.5	28.5	36.5	54.5	57.2	38.9	122.5	55.1	50.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.7	38.9	41.3	28.5	28.5	36.5	54.5	57.2	38.9	122.5	55.1	50.8
HCM2kAvg:	0	1	3	21	21	28	2	15	2	3	12	10

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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Intersection #26 Valley Park Way / Auto Park Way [NS / EW]

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.666
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 37.3
Optimal Cycle: 74 Level Of Service: D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	2 0	3 0	1	2 0	3 0	1	2 0	1 1	0	2 0	1 1	0
Volume Module: >> Count Date: 9 Dec 2000 << AM												
Base Vol:	253	761	96	157	850	438	334	486	297	177	529	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	253	761	96	157	850	438	334	486	297	177	529	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	281	846	107	174	944	487	371	540	330	197	588	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	281	846	107	174	944	487	371	540	330	197	588	51
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	281	846	107	174	944	487	371	540	330	197	588	51
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.89	0.83	0.90	0.89	0.83	0.90	0.88	0.88	0.90	0.92	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	1.24	0.76	2.00	1.84	0.16
Final Sat..	3432	5083	1583	3432	5083	1583	3432	2071	1265	3432	3216	280
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.07	0.05	0.19	0.31	0.11	0.26	0.26	0.06	0.18	0.18
Crit Moves:	****					****		****		****		
Green/Cycle:	0.12	0.33	0.33	0.10	0.30	0.47	0.17	0.39	0.39	0.09	0.31	0.31
Volume/Cap:	0.67	0.51	0.21	0.53	0.62	0.66	0.65	0.67	0.67	0.67	0.59	0.59
Delay/Veh:	54.3	32.9	29.3	53.4	37.0	26.8	49.1	31.4	31.4	58.8	35.8	35.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.3	32.9	29.3	53.4	37.0	26.8	49.1	31.4	31.4	58.8	35.8	35.8
HCM2kAvg:	6	9	3	4	11	14	8	14	14	5	10	10

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Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #27 Valley Park Way / West 9th Ave [NS / EW]

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.587
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.6
Optimal Cycle: 74 Level Of Service: C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 12 Dec 2001 << AM												
Base Vol:	9	662	83	121	1040	121	96	110	12	85	112	290
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	662	83	121	1040	121	96	110	12	85	112	290
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	10	736	92	134	1156	134	107	122	13	94	124	322
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	736	92	134	1156	134	107	122	13	94	124	322
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	10	736	92	134	1156	134	107	122	13	94	124	322
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.83	0.93	0.88	0.88	0.93	0.92	0.92	0.93	0.83	0.83
Lanes:	1.00	3.00	1.00	1.00	2.69	0.31	1.00	1.80	0.20	1.00	1.00	1.00
Final Sat..	1769	5083	1583	1769	4481	521	1769	3142	343	1769	1578	1578
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.06	0.08	0.26	0.26	0.06	0.04	0.04	0.05	0.08	0.20
Crit Moves:	****				****		****					****
Green/Cycle:	0.06	0.34	0.34	0.13	0.42	0.42	0.10	0.33	0.33	0.10	0.33	0.33
Volume/Cap:	0.10	0.42	0.17	0.58	0.62	0.62	0.62	0.12	0.12	0.55	0.24	0.62
Delay/Veh:	53.9	30.4	27.6	52.8	28.2	28.2	58.9	28.1	28.1	55.7	29.4	35.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	30.4	27.6	52.8	28.2	28.2	58.9	28.1	28.1	55.7	29.4	35.6
HCM2kAvg:	0	7	2	6	13	13	5	2	2	4	3	11

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Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.384
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.9
Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	1	1	0	1	0	2	0	1	1	0	0	1	0	1	0	0	1	0
Volume Module:																				
Base Vol:	2	658	14		31	953	28		27	19	5		27	22	87	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	2	658	14		31	953	28		27	19	5		27	22	87	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	2	731	16		34	1059	31		30	21	6		30	24	97	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	2	731	16		34	1059	31		30	21	6		30	24	97	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	2	731	16		34	1059	31		30	21	6		30	24	97	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.95		0.95	0.95	0.85		0.95	0.97	0.97		0.95	0.88	0.88	
Lanes:	1.00	1.96	0.04		1.00	2.00	1.00		1.00	0.79	0.21		1.00	0.20	0.80	
Final Sat..	1805	3524	75		1805	3610	1615		1805	1458	384		1805	337	1335	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.21	0.21		0.02	0.29	0.02		0.02	0.01	0.01		0.02	0.07	0.07	
Crit Moves:	****					****			****					****		
Green/Cycle:	0.00	0.70	0.70		0.06	0.76	0.76		0.04	0.11	0.11		0.12	0.19	0.19	
Volume/Cap:	0.38	0.30	0.30		0.30	0.38	0.03		0.38	0.13	0.13		0.13	0.38	0.38	
Delay/Veh:	87.2	5.6	5.6		46.0	4.0	2.8		49.7	40.7	40.7		39.3	36.2	36.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	87.2	5.6	5.6		46.0	4.0	2.8		49.7	40.7	40.7		39.3	36.2	36.2	
HCM2kAvg:	0	4	4		1	6	0		1	1	1		1	4	4	

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: F[110.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	1	0	1	1	0	1	0	1	0	0	1	0	1	0	0	1
Volume Module:																		
Base Vol:	14	657	62		33	897	24		23	9	16		20	2	11	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	14	657	62		33	897	24		23	9	16		20	2	11	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	16	730	69		37	997	27		26	10	18		22	2	12	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	16	730	69		37	997	27		26	10	18		22	2	12	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx		7.1	6.5	6.2		7.1	6.5	6.2	
FollowUpTim:	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5	4.0	3.3		3.5	4.0	3.3	
Capacity Module:																
Cnflict Vol:	1023	xxxx	xxxxx		799	xxxx	xxxxx		1873	1900	997		1858	1858	730	
Potent Cap..	686	xxxx	xxxxx		833	xxxx	xxxxx		56	70	299		57	74	426	
Move Cap..	686	xxxx	xxxxx		833	xxxx	xxxxx		50	65	299		45	69	426	
Volume/Cap:	0.02	xxxx	xxxx		0.04	xxxx	xxxx		0.51	0.15	0.06		0.49	0.03	0.03	
Level Of Service Module:																
Queue:	0.1	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx	0.2		xxxxx	xxxx	0.1	
Stopped Del:	10.4	xxxx	xxxxx		9.5	xxxx	xxxxx		xxxxx	xxxx	17.8		xxxxx	xxxx	13.7	
LOS by Move:	B	*	*		A	*	*		*	*	C		*	*	B	
Movement:	LT	- LTR	- RT		LT	- LTR	- RT		LT	- LTR	- RT		LT	- LTR	- RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		54	xxxx	xxxxx		46	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		2.7	xxxx	xxxxx		2.0	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		157.1	xxxx	xxxxx		148.4	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		F	*	*		F	*	*	
ApproachDel:	xxxxxx				xxxxxx				110.6				103.5			
ApproachLOS:	*				*				F				F			

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.473
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.8
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	1 0	1	0	1	1 0	1	0	1	0 1	1	0	1	0 1
Volume Module: >> Count Date: 8 Jan 2002 << AM																
Base Vol:	40	497		10	26	1014		49	108		6	198	34		8	71
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	40	497		10	26	1014		49	108		6	198	34		8	71
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	44	552		11	29	1127		54	120		7	220	38		9	79
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	44	552		11	29	1127		54	120		7	220	38		9	79
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol..	44	552		11	29	1127		54	120		7	220	38		9	79
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900		1900	1900	1900		1900	1900
Adjustment:	0.95	0.95		0.95	0.95	0.94		0.94	0.95		1.00	0.85	0.95		1.00	0.85
Lanes:	1.00	1.96		0.04	1.00	1.91		0.09	1.00		1.00	1.00	1.00		1.00	1.00
Final Sat..	1805	3528		71	1805	3419		165	1805		1900	1615	1805		1900	1615
Capacity Analysis Module:																
Vol/Sat:	0.02	0.16		0.16	0.02	0.33		0.33	0.07		0.00	0.14	0.02		0.00	0.05
Crit Moves:	****					****			****						****	
Green/Cycle:	0.06	0.46		0.46	0.13	0.53		0.53	0.11		0.24	0.24	0.07		0.20	0.20
Volume/Cap:	0.42	0.34		0.34	0.12	0.62		0.62	0.62		0.01	0.57	0.30		0.02	0.24
Delay/Veh:	57.3	21.0		21.0	46.0	20.1		20.1	57.0		35.0	42.4	54.4		38.6	40.8
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	57.3	21.0		21.0	46.0	20.1		20.1	57.0		35.0	42.4	54.4		38.6	40.8
HCM2kAvg:	2	7		7	1	15		15	5		0	8	2		0	3

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.779
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 28.2
Optimal Cycle: 66 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	20		7	7	20		0	0	0		0	20	0		20
Lanes:	0	0	2	0 1	1	0	1	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0	314		182	364	961		0	0		0	0	257		0	169
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	314		182	364	961		0	0		0	0	257		0	169
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.81	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.72
PHF Volume:	0	349		225	404	1068		0	0		0	0	286		0	235
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol.	0	349		225	404	1068		0	0		0	0	286		0	235
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol..	0	349		225	404	1068		0	0		0	0	286		0	235
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900		1900	1900	1900		1900	1900
Adjustment:	1.00	0.95		0.85	0.95	1.00		1.00	1.00		1.00	1.00	0.95		1.00	0.85
Lanes:	0.00	2.00		1.00	1.00	1.00		0.00	0.00		0.00	0.00	1.00		0.00	1.00
Final Sat..	0	3610		1615	1805	1900		0	0		0	0	1805		0	1615
Capacity Analysis Module:																
Vol/Sat:	0.00	0.10		0.14	0.22	0.56		0.00	0.00		0.00	0.00	0.16		0.00	0.15
Crit Moves:	****					****							****			
Green/Cycle:	0.00	0.31		0.31	0.41	0.72		0.00	0.00		0.00	0.00	0.20		0.00	0.20
Volume/Cap:	0.00	0.31		0.45	0.54	0.78		0.00	0.00		0.00	0.00	0.78		0.00	0.72
Delay/Veh:	0.0	32.0		34.0	27.4	13.5		0.0	0.0		0.0	0.0	55.4		0.0	51.9
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	0.0	32.0		34.0	27.4	13.5		0.0	0.0		0.0	0.0	55.4		0.0	51.9
HCM2kAvg:	0	5		7	12	26		0	0		0	0	12		0	9

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.982
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 44.4
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Ovl			
Min. Green:	7	24		7	7	24		7	0	24		7	7	24		7
Lanes:	1	0	1	1 0	1	0	1	1 0	1	0	1	0 1	1	0	0	1 0
Volume Module: >> Count Date: 27 Nov 2001 << AM																
Base Vol:	3	580		86	408	675		4	25	271		3	27		6	586
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	3	580		86	408	675		4	25	271		3	27		6	586
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		0.50	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90
PHF Volume:	3	644		96	453	750		4	28	301		2	30		7	651
Reduct Vol:	0	0		0	0	0		0	0	0		0	0		0	0
Reduced Vol:	3	644		96	453	750		4	28	301		2	30		7	651
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Final Vol..	3	644		96	453	750		4	28	301		2	30		7	651
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900		1900	1900
Adjustment:	0.93	0.91		0.91	0.93	0.93		0.93	0.12	0.98		0.83	0.45		0.83	0.83
Lanes:	1.00	1.74		0.26	1.00	1.99		0.01	1.00	1.00		1.00	1.00		0.01	0.99
Final Sat..	1769	3022		448	1769	3513		21	222	1862		1583	855		16	1570
Capacity Analysis Module:																
Vol/Sat:	0.00	0.21		0.21	0.26	0.21		0.21	0.13	0.16		0.00	0.04		0.41	0.41
Crit Moves:		****			****										****	
Green/Cycle:	0.10	0.22		0.22	0.26	0.38		0.38	0.42	0.42		0.42	0.42		0.42	0.68
Volume/Cap:	0.02	0.98		0.98	0.98	0.57		0.57	0.30	0.38		0.00	0.08		0.98	0.61
Delay/Veh:	48.5	75.1		75.1	81.2	30.4		30.4	24.7	24.2		20.1	20.9		64.5	11.3
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	48.5	75.1		75.1	81.2	30.4		30.4	24.7	24.2		20.1	20.9		64.5	11.3
HCM2kAvg:	0	19		19	23	11		11	6	8		0	1		30	13

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.635
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 18.6
Optimal Cycle: 67 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	0	0	0	0 0	1	1	0	0 1	0	0	2	0 1	2	0	2	0 0
Volume Module: >> Count Date: 27 Nov 2001 << AM																
Base Vol.	0	0		0	85	22		17	0	603		646	248	1162		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	85	22		17	0	603		646	248	1162		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	94	24		19	0	670		718	276	1291		0
Reduct Vol.	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	0		0	94	24		19	0	670		718	276	1291		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	0		0	94	24		19	0	670		718	276	1291		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00		1.00	0.83	0.83		0.83	1.00	0.93		0.83	0.90	0.93		1.00
Lanes:	0.00	0.00		0.00	1.59	0.41		1.00	0.00	2.00		1.00	2.00	2.00		0.00
Final Sat..	0	0		0	2515	651		1583	0	3538		1583	3432	3538		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00		0.00	0.04	0.04		0.01	0.00	0.19		0.45	0.08	0.36		0.00
Crit Moves:						****						****	****			
Green/Cycle:	0.00	0.00		0.00	0.20	0.20		0.20	0.00	0.59		0.59	0.11	0.70		0.00
Volume/Cap:	0.00	0.00		0.00	0.19	0.19		0.06	0.00	0.32		0.76	0.76	0.52		0.00
Delay/Veh:	0.0	0.0		0.0	40.0	40.0		38.9	0.0	12.2		21.8	61.5	8.7		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	0.0		0.0	40.0	40.0		38.9	0.0	12.2		21.8	61.5	8.7		0.0
HCM2kAvg:	0	0		0	2	2		1	0	6		21	7	11		0

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave (NS/ EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.551
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.7
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	1 0	0	1	0	0 0	0	0	2	0 2	0	0	0	0 2	0	1
Volume Module: >> Count Date: 27 Nov 2001 << AM																
Base Vol:	570	9	169		0	0		0	105	634		0	0	823		296
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	570	9	169		0	0		0	105	634		0	0	823		296
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	633	10	188		0	0		0	117	704		0	0	914		329
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	633	10	188		0	0		0	117	704		0	0	914		329
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	633	10	188		0	0		0	117	704		0	0	914		329
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.83	0.83	0.83		1.00	1.00		1.00	0.90	0.93		1.00	1.00	0.93		0.83
Lanes:	1.97	0.03	1.00		0.00	0.00		0.00	2.00	2.00		0.00	0.00	2.00		1.00
Final Sat..	3116	49	1583		0	0		0	3432	3538		0	0	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.20	0.20	0.12		0.00	0.00		0.00	0.03	0.20		0.00	0.00	0.26		0.21
Crit Moves:	****								****					****		
Green/Cycle:	0.37	0.37	0.37		0.00	0.00		0.00	0.06	0.53		0.00	0.00	0.47		0.47
Volume/Cap:	0.55	0.55	0.32		0.00	0.00		0.00	0.55	0.37		0.00	0.00	0.55		0.44
Delay/Veh:	30.6	30.6	27.4		0.0	0.0		0.0	57.8	16.6		0.0	0.0	23.2		21.8
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	30.6	30.6	27.4		0.0	0.0		0.0	57.8	16.6		0.0	0.0	23.2		21.8
HCM2kAvg:	11	11	5		0	0		0	3	7		0	0	12		8

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.854
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 27.6
Optimal Cycle: 84 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	0	0 1	0	1	1	0 2	0	0	0	0 0	0	0	2	0 0	0	1
Volume Module:																
Base Vol:	0	703	178		174	962		0	0	0		0	546		0	377
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	703	178		174	962		0	0	0		0	546		0	377
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	781	198		193	1069		0	0	0		0	607		0	419
Reduct Vol.	0	0	0		0	0		0	0	0		0	0		0	0
Reduced Vol:	0	781	198		193	1069		0	0	0		0	607		0	419
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	781	198		193	1069		0	0	0		0	607		0	419
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00	0.85		0.95	0.95		1.00	1.00	1.00		1.00	0.92	1.00		0.85
Lanes:	0.00	1.00	1.00		1.00	2.00		0.00	0.00	0.00		0.00	2.00	0.00		1.00
Final Sat..	0	1900	1615		1805	3610		0	0	0		0	3502		0	1615
Capacity Analysis Module:																
Vol/Sat:	0.00	0.41	0.12		0.11	0.30		0.00	0.00	0.00		0.00	0.17	0.00		0.26
Crit Moves:		****			****											****
Green/Cycle:	0.00	0.48	0.48		0.13	0.61		0.00	0.00	0.00		0.00	0.30	0.00		0.30
Volume/Cap:	0.00	0.85	0.25		0.85	0.49		0.00	0.00	0.00		0.00	0.57	0.00		0.85
Delay/Veh:	0.0	30.8	15.5		68.6	11.2		0.0	0.0	0.0		0.0	30.1	0.0		46.4
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	30.8	15.5		68.6	11.2		0.0	0.0	0.0		0.0	30.1	0.0		46.4
HCM2kAvg:	0	24	4		9	9		0	0	0		0	9	0		15

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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Intersection #36 Via Rancho Parkway/I-15 SB Ramps

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.824
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: 83 Level Of Service: C

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0		0			0	0		0			0	0		0			0	0		0		
Lanes:	1	0	2	0	1		1	0	2	0	1		1	0	2	0	1		2	0	2	0	1	
Volume Module:																								
Base Vol:	13		49		66		45		389		56		103		522		520		756		282		47	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	13		49		66		45		389		56		103		522		520		756		282		47	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	14		54		73		50		432		62		114		580		578		840		313		52	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	14		54		73		50		432		62		114		580		578		840		313		52	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	14		54		73		50		432		62		114		580		578		840		313		52	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.95		0.95		0.85		0.95		0.95		0.85		0.95		0.95		0.85		0.92		0.95		0.85	
Lanes:	1.00		2.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00		2.00		2.00		1.00	
Final Sat..	1805		3610		1615		1805		3610		1615		1805		3610		1615		3502		3610		1615	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.02		0.05		0.03		0.12		0.04		0.06		0.16		0.36		0.24		0.09		0.03	
Crit Moves:	****								****								****		****					
Green/Cycle:	0.01		0.10		0.10		0.06		0.15		0.15		0.31		0.43		0.43		0.29		0.42		0.42	
Volume/Cap:	0.82		0.16		0.47		0.47		0.82		0.27		0.21		0.37		0.82		0.82		0.21		0.08	
Delay/Veh:	180.0		41.7		45.0		48.9		51.7		38.6		25.9		19.2		32.8		38.6		18.6		17.5	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	180.0		41.7		45.0		48.9		51.7		38.6		25.9		19.2		32.8		38.6		18.6		17.5	
HCM2kAvg:	2		1		3		2		9		2		3		6		18		15		3		1	

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Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.509
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.9
Optimal Cycle: 41 Level Of Service: C

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Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0		0			0	0		0			0	0		0			0	0		0		
Lanes:	1	0	2	0	2		1	0	2	0	1		2	0	2	0	1		2	0	3	0	1	
Volume Module:																								
Base Vol:	168		49		491		2		59		34		19		488		120		330		1035		49	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	168		49		491		2		59		34		19		488		120		330		1035		49	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	187		54		546		2		66		38		21		542		133		367		1150		54	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	187		54		546		2		66		38		21		542		133		367		1150		54	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	187		54		546		2		66		38		21		542		133		367		1150		54	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.95		0.95		0.75		0.95		0.95		0.85		0.92		0.95		0.85		0.92		0.91		0.85	
Lanes:	1.00		2.00		2.00		1.00		2.00		1.00		2.00		2.00		1.00		2.00		3.00		1.00	
Final Sat..	1805		3610		2842		1805		3610		1615		3502		3610		1615		3502		5187		1615	
Capacity Analysis Module:																								
Vol/Sat:	0.10		0.02		0.19		0.00		0.02		0.02		0.01		0.15		0.08		0.10		0.22		0.03	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.31		0.38		0.38		0.00		0.07		0.07		0.01		0.29		0.29		0.21		0.49		0.49	
Volume/Cap:	0.33		0.04		0.51		0.51		0.26		0.33		0.45		0.51		0.28		0.51		0.45		0.07	
Delay/Veh:	27.0		19.7		24.4		124.8		44.6		46.0		55.9		29.7		27.4		35.8		17.0		13.6	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	27.0		19.7		24.4		124.8		44.6		46.0		55.9		29.7		27.4		35.8		17.0		13.6	
HCM2kAvg:	5		1		7		0		1		1		1		7		3		6		8		1	

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Harmony Grove Village
Option A: Baseline

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	33.2	0.785	C	33.2	0.785	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	E	74.9	1.215	E	74.9	1.215	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	E	78.4	1.087	E	78.4	1.087	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	356.7	0.000	F	356.7	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	7.8	0.131	A	7.8	0.131	+ 0.000 V/C
# 6 Country Club Drive/Entrance #	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 7 Country Club/ Village Rd	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	B	13.0	0.000	B	13.0	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	B	11.3	0.000	B	11.3	0.000	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	B	14.1	0.000	B	14.1	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	35.6	0.558	D	35.6	0.558	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	B	11.3	0.455	B	11.3	0.455	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	B	10.2	0.000	B	10.2	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	B	12.9	0.000	B	12.9	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	34.3	0.742	C	34.3	0.742	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	B	11.4	0.000	B	11.4	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	B	12.6	0.000	B	12.6	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	A	8.8	0.000	A	8.8	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	A	9.1	0.000	A	9.1	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	E	55.8	1.115	E	55.8	1.115	+ 0.000 D/V
# 25 I-15 SB/Valley Pkwy	E	74.1	1.064	E	74.1	1.064	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 26 Valley Park Way / Auto Park Wa	D	40.7	0.767	D	40.7	0.767	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	C	34.7	0.546	C	34.7	0.546	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	A	7.2	0.479	A	7.2	0.479	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	234.5	0.000	F	234.5	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	23.8	0.467	C	23.8	0.467	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	31.6	0.652	C	31.6	0.652	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	C	26.6	0.745	C	26.6	0.745	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	20.8	0.830	C	20.8	0.830	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	26.3	0.591	C	26.3	0.591	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	32.2	0.946	C	32.2	0.946	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	42.2	0.923	D	42.2	0.923	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	35.0	0.782	C	35.0	0.782	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.785
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 33.2
Optimal Cycle: 68 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24		0			0	24		7			0	0		0			7	24		7		
Lanes:	2	0	2	0	0		0	0	2	0	1		0	0	0	0	0		1	0	1.1	0	1	
Volume Module: >> Count Date: 13 Dec 2001 << PM																								
Base Vol:	620	819		0			0	649		211			0	0		0			332		6		267	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00	
Initial Bse:	620	819		0			0	649		211			0	0		0			332		6		267	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90			0.90	0.90		0.90			0.90	0.90		0.90			0.90		0.90		0.90	
PHF Volume:	689	910		0			0	721		234			0	0		0			369		7		297	
Reduct Vol:	0	0		0			0	0		0			0	0		0			0		0		0	
Reduced Vol:	689	910		0			0	721		234			0	0		0			369		7		297	
PCE Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00	
MLF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00	
Final Vol..	689	910		0			0	721		234			0	0		0			369		7		297	
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900			1900	1900		1900			1900	1900		1900			1900		1900		1900	
Adjustment:	0.71	0.73		1.00			1.00	0.93		0.83			1.00	1.00		1.00			0.67		0.67		0.67	
Lanes:	2.00	2.00		0.00			0.00	2.00		1.00			0.00	0.00		0.00			1.54		0.02		1.44	
Final Sat..	2693	2776		0			0	3538		1583			0	0		0			1967		25		1832	
Capacity Analysis Module:																								
Vol/Sat:	0.26	0.33		0.00			0.00	0.20		0.15			0.00	0.00		0.00			0.19		0.27		0.16	
Crit Moves:	****							****													****			
Green/Cycle:	0.33	0.59		0.00			0.00	0.26		0.26			0.00	0.00		0.00			0.34		0.34		0.34	
Volume/Cap:	0.78	0.56		0.00			0.00	0.78		0.57			0.00	0.00		0.00			0.55		0.78		0.48	
Delay/Veh:	41.3	15.8		0.0			0.0	45.8		40.5			0.0	0.0		0.0			32.8		40.5		31.5	
User DelAdj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00	
AdjDel/Veh:	41.3	15.8		0.0			0.0	45.8		40.5			0.0	0.0		0.0			32.8		40.5		31.5	
HCM2kAvg:	14	11		0			0	14		8			0	0		0			8		14		7	

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp [NS / EW]

Cycle (sec): 100 Critical Vol./Cap. (X): 1.215
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 74.9
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Permitted						Permitted					
Rights:	Include						Include						Include						Include					
Min. Green:	0	24		7			7	24		0			7	24		7			0	0		0		
Lanes:	0	0	2	0	1		2	0	2	0	0		0	1	0	1	0		0	0	0	0	0	
Volume Module: >> Count Date: 13 Dec 2001 << PM																								
Base Vol:	0	1068		719			372	601		0			263		2		357		0		0		0	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Initial Bse:	0	1068		719			372	601		0			263		2		357		0		0		0	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	0.90	0.90		0.90			0.90	0.90		0.90			0.90	0.90		0.90			0.90	0.90		0.90		
PHF Volume:	0	1187		799			413	668		0			292		2		397		0		0		0	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
Reduced Vol:	0	1187		799			413	668		0			292		2		397		0		0		0	
PCE Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
MLF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Final Vol..	0	1187		799			413	668		0			292		2		397		0		0		0	
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900			1900	1900		1900			1900	1900		1900			1900	1900		1900		
Adjustment:	1.00	0.73		0.65			0.90	0.93		1.00			0.61	0.61		0.61			1.00	1.00		1.00		
Lanes:	0.00	2.00		1.00			2.00	2.00		0.00			0.99	0.01		1.00			0.00	0.00		0.00		
Final Sat..	0	2776		1242			3432	3538		0			1151		9		1160		0		0		0	
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.43		0.64			0.12	0.19		0.00			0.25	0.25		0.34			0.00	0.00		0.00		
Crit Moves:				****			****									****								
Green/Cycle:	0.00	0.53		0.53			0.10	0.63		0.00			0.28	0.28		0.28			0.00	0.00		0.00		
Volume/Cap:	0.00	0.81		1.22			1.22	0.30		0.00			0.90	0.90		1.22			0.00	0.00		0.00		
Delay/Veh:	0.0	22.8		133.9			165.8	8.6		0.0			48.5	48.5		148.2			0.0	0.0		0.0		
User DelAdj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
AdjDel/Veh:	0.0	22.8		133.9			165.8	8.6		0.0			48.5	48.5		148.2			0.0	0.0		0.0		
HCM2kAvg:	0	17		44			14	5		0			13	13		26			0	0		0		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.087
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 78.4
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0 2	0	1	2	0 1	1	0	2	0 2	0	1	2	0 2	0	1
Volume Module: >> Count Date: 13 Dec 2001 << PM																
Base Vol:	252	982		73	236	383		238	311	643		260	57	533		552
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	252	982		73	236	383		238	311	643		260	57	533		552
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	280	1091		81	262	426		264	346	714		289	63	592		613
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	280	1091		81	262	426		264	346	714		289	63	592		613
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	280	1091		81	262	426		264	346	714		289	63	592		613
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.73	0.73		0.65	0.71	0.69		0.69	0.90	0.93		0.83	0.90	0.93		0.83
Lanes:	1.00	2.00		1.00	2.00	1.23		0.77	2.00	2.00		1.00	2.00	2.00		1.00
Final Sat..	1388	2776		1242	2693	1615		1003	3432	3538		1583	3432	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.20	0.39		0.07	0.10	0.26		0.26	0.10	0.20		0.18	0.02	0.17		0.39
Crit Moves:		****			****				****							****
Green/Cycle:	0.20	0.36		0.36	0.09	0.26		0.26	0.09	0.35		0.35	0.10	0.36		0.36
Volume/Cap:	1.03	1.09		0.18	1.09	1.03		1.03	1.09	0.58		0.52	0.18	0.47		1.09
Delay/Veh:	111.3	93.5		26.4	137.8	87.9		87.9	130.3	32.6		32.1	49.7	30.1		102.4
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	111.3	93.5		26.4	137.8	87.9		87.9	130.3	32.6		32.1	49.7	30.1		102.4
HCM2kAvg:	16	30		2	10	19		19	12	11		9	1	8		33

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club (NS / EW)

Average Delay (sec/veh): 31.8 Worst Case Level Of Service: F[356.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0 2	0	1	1	0 1	0	1	0	1 0	0	1	0	0 1!	0	0
Volume Module: >> Count Date: 11 Dec 2001 << PM																
Base Vol:	65	1104		5	39	646		95	127	1		60	1	0		12
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	65	1104		5	39	646		95	127	1		60	1	0		12
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	72	1227		6	43	718		106	141	1		67	1	0		13
Reduct Vol.	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	72	1227		6	43	718		106	141	1		67	1	0		13
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx		7.1	6.5		6.2	7.1	xxxx		6.2
FollowUpTim:	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5	4.0		3.3	3.5	xxxx		3.3
Capacity Module:																
Cnflict Vol:	823	xxxx	xxxxx		1232	xxxx	xxxxx		1562	2181		718	2262	xxxx		613
Potent Cap..	807	xxxx	xxxxx		565	xxxx	xxxxx		91	46		429	29	xxxx		492
Move Cap..	807	xxxx	xxxxx		565	xxxx	xxxxx		78	39		429	21	xxxx		492
Volume/Cap:	0.09	xxxx	xxxx		0.08	xxxx	xxxx		1.82	0.03		0.16	0.05	xxxx		0.03
Level Of Service Module:																
Queue:	0.3	xxxx	xxxxx		0.2	xxxx	xxxxx		xxxxx	xxxx		0.5	xxxxx	xxxx		xxxxx
Stopped Del:	9.9	xxxx	xxxxx		11.9	xxxx	xxxxx		xxxxx	xxxx		14.9	xxxxx	xxxx		xxxxx
LOS by Move:	A	*	*		B	*	*		*	*		B	*	*		*
Movement:	LT	- LTR	-	RT	LT	- LTR	-	RT	LT	- LTR	-	RT	LT	- LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		77	xxxx	xxxxx		xxxx	181		xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		12.4	xxxx	xxxxx		xxxxx	0.3		xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		516.9	xxxx	xxxxx		xxxxx	26.7		xxxxx
Shared LOS:	*	*	*		*	*	*		F	*	*		*	D		*
ApproachDel:	xxxxxx				xxxxxx				356.7					26.7		
ApproachLOS:	*				*				F					D		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.131
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.8
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Ignore				Include				Include				Include			
Min. Green:	0		0	0	0		0	0	0		0	0	0		0	0
Lanes:	0	0	1	0 1	0	1	0	0 0	0	0	0	0 0	0	0	1!	0 0
Volume Module:																
Base Vol.	0	90		7	43	39		0	0	0		0	9		0	43
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	0	90		7	43	39		0	0	0		0	9		0	43
User Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.00	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90
PHF Volume:	0	100		0	48	43		0	0	0		0	10		0	48
Reduct Vol:	0	0		0	0	0		0	0	0		0	0		0	0
Reduced Vol:	0	100		0	48	43		0	0	0		0	10		0	48
PCE Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Final Vol..	0	100		0	48	43		0	0	0		0	10		0	48
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Lanes:	0.00	1.00		1.00	0.52	0.48		0.00	0.00	0.00		0.00	0.17		0.00	0.83
Final Sat..	0	761		0	430	390		0	0	0		0	155		0	740
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.13		xxxx	0.11	0.11		xxxx	xxxx	xxxx		xxxx	0.06		xxxx	0.06
Crit Moves:		****				****							****			
Delay/Veh:	0.0	8.1		0.0	7.9	7.9		0.0	0.0	0.0		0.0	7.1		0.0	7.1
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	0.0	8.1		0.0	7.9	7.9		0.0	0.0	0.0		0.0	7.1		0.0	7.1
LOS by Move:	*	A		-	A	A		*	*	*		*	A		*	A
ApproachDel:		8.1				7.9			xxxxxx						7.1	
Delay Adj:		1.00				1.00			xxxxx						1.00	
ApprAdjDel:		8.1				7.9			xxxxxx						7.1	
LOS by Appr:		A				A			*						A	

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club Drive/Entrance # 3

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 0	0	0	1	0 0	0	0	0	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	0	97		0	0	48		0	0	0		0	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	0	97		0	0	48		0	0	0		0	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90
PHF Volume:	0	108		0	0	53		0	0	0		0	0		0	0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0		0	0
Final Vol..	0	108		0	0	53		0	0	0		0	0		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		*	-	*		*	*	*		*
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx		0	xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:		xxxxxx				xxxxxx				xxxxxx				xxxxxx		
ApproachLOS:		*				*				*				*		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Rd

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	1		1	0	1	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0	97		0		0	0	48		0		0	0		0		0	0		0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00
Initial Bse:	0	97		0		0	0	48		0		0	0		0		0	0		0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90
PHF Volume:	0	108		0		0	0	53		0		0	0		0		0	0		0		0		0
Reduct Vol:	0	0		0		0	0	0		0		0	0		0		0	0		0		0		0
Final Vol..	0	108		0		0	0	53		0		0	0		0		0	0		0		0		0
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
Move Cap..	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
LOS by Move:	*	*		*		*	*	*		*		*	*	*		*		*	*	*		*		*
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Shared LOS:	*	*		*		*	*	*		*		*	*	*		*		*	*	*		*		*
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	*						*						*						*					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	1	0	0		0	0	1	0	1		1	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	433		0		0	105		0		0	0		0		0		0	0		0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00		1.00	
Initial Bse:	0	433		0		0	105		0		0	0		0		0		0	0		0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90	0.90		0.90		0.90	
PHF Volume:	0	481		0		0	117		0		0	0		0		0		0	0		0		0	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0		0	0		0		0	
Final Vol..	0	481		0		0	117		0		0	0		0		0		0	0		0		0	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
Move Cap..	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
LOS by Move:	*	*		*		*	*	*		*		*	*	*		*		*	*	*		*		*
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Shared LOS:	*	*		*		*	*	*		*		*	*	*		*		*	*	*		*		*
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	*						*						*						*					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 0	0	0	1	0 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	97		0	0	48		0	0	0		0	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	97		0	0	48		0	0	0		0	0	0		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	108		0	0	53		0	0	0		0	0	0		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	0	108		0	0	53		0	0	0		0	0	0		0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		*	*	*		*	*	*		*
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	0		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Country Club/Harmony Grove

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: B[13.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	1	0	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	1	1	6		3	5	26		105	422	0		5	87	5	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1	1	6		3	5	26		105	422	0		5	87	5	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	1	1	7		3	6	29		117	469	0		6	97	6	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	1	1	7		3	6	29		117	469	0		6	97	6	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	830	816	469		817	813	99		102	xxxx	xxxxx		469	xxxx	xxxxx	
Potent Cap..	292	314	599		298	315	962		1502	xxxx	xxxxx		1103	xxxx	xxxxx	
Move Cap..	260	286	599		274	287	962		1502	xxxx	xxxxx		1103	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.01		0.01	0.02	0.03		0.08	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.3	xxxx	xxxxx		0.0	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		7.6	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	461	xxxxx		xxxx	614	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.1	xxxxx		xxxxx	0.2	xxxxx		0.3	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	13.0	xxxxx		xxxxx	11.2	xxxxx		7.6	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*		*	B	*		A	*	*		*	*	*	
ApproachDel:	13.0				11.2				xxxxxx				xxxxxx			
ApproachLOS:	B				B				*				*			

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #11 Entrance # 1/Harmony Grove

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	0	1	0	0		0	0	1	0	0	
Volume Module:																								
Base Vol:	0	0	0	0	0	0	0	527	0	0	114	0												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	0	0	0	0	0	0	0	527	0	0	114	0												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90												
PHF Volume:	0	0	0	0	0	0	0	586	0	0	127	0												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
Final Vol..	0	0	0	0	0	0	0	586	0	0	127	0												
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx												
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*												
Movement:	LT - LTR - RT						LT - LTR - RT						LT - LTR - RT						LT - LTR - RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*												
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx														
ApproachLOS:	*			*			*			*														

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #12 Wilgen Road/Harmony Grove

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.3]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0	0	0	1	0	1	3	511	0	0	108	3												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Initial Bse:	0	0	0	1	0	1	3	511	0	0	108	3												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90												
PHF Volume:	0	0	0	1	0	1	3	568	0	0	120	3												
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0												
Final Vol..	0	0	0	1	0	1	3	568	0	0	120	3												
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx	696	xxxx	122	123	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Potent Cap.:	xxxx	xxxx	xxxxx	411	xxxx	935	1476	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Move Cap..	xxxx	xxxx	xxxxx	410	xxxx	935	1476	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx												
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*												
Movement:	LT - LTR - RT						LT - LTR - RT						LT - LTR - RT						LT - LTR - RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	570	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	11.3	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*												
ApproachDel:	xxxxxx			11.3			xxxxxx			xxxxxx														
ApproachLOS:	*			B			*			*														

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa (NS / EW)

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B(14.1)

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	1 0	0	0 0	0	1 0	0 0	1! 0	0	0 0	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << PM Peak												
Base Vol.	8	425	0	0	98	74	56	0	7	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	425	0	0	98	74	56	0	7	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	9	472	0	0	109	82	62	0	8	0	0	0
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	9	472	0	0	109	82	62	0	8	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	191	xxxx	xxxxx	xxxx	xxxx	xxxxx	640	xxxx	150	xxxx	xxxx	xxxxx
Potent Cap.:	1383	xxxx	xxxxx	xxxx	xxxx	xxxxx	440	xxxx	896	xxxx	xxxx	xxxxx
Move Cap.:	1383	xxxx	xxxxx	xxxx	xxxx	xxxxx	437	xxxx	896	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.14	xxxx	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	464	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel.	xxxxxx			xxxxxx			14.1			xxxxxx		
ApproachLOS:	*			*			B			*		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.558
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.6
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	7		7	24	7		7	24	7		7	24	7	
Lanes:	2 0	1 0	1		2 0	1 0	1		1 0	1	1 0		1 0	2	0	1
Volume Module: >> Count Date: 11 Dec 2001 << AM																
Base Vol.	375	218	199		104	78	62		80	709	103		118	478	134	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	375	218	199		104	78	62		80	709	103		118	478	134	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	417	242	221		116	87	69		89	788	114		131	531	149	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	417	242	221		116	87	69		89	788	114		131	531	149	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	417	242	221		116	87	69		89	788	114		131	531	149	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.90	0.98	0.83		0.90	0.98	0.83		0.93	0.91	0.91		0.93	0.93	0.83	
Lanes:	2.00	1.00	1.00		2.00	1.00	1.00		1.00	1.75	0.25		1.00	2.00	1.00	
Final Sat.:	3432	1862	1583		3432	1862	1583		1769	3030	440		1769	3538	1583	
Capacity Analysis Module:																
Vol/Sat:	0.12	0.13	0.14	0.03	0.05	0.04	0.05	0.26	0.26	0.07	0.15	0.09				
Crit Moves:	****				****			****			****					
Green/Cycle:	0.19	0.30	0.30	0.09	0.20	0.20	0.12	0.40	0.40	0.11	0.40	0.40				
Volume/Cap:	0.65	0.43	0.47	0.39	0.23	0.22	0.43	0.65	0.65	0.65	0.38	0.24				
Delay/Veh:	47.6	34.4	35.0	52.6	40.6	40.5	50.8	30.3	30.3	58.2	25.8	24.2				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	47.6	34.4	35.0	52.6	40.6	40.5	50.8	30.3	30.3	58.2	25.8	24.2				
HCM2kAvg:	8	7	7	3	3	2	4	14	14	6	7	4				

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.455
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 11.3
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
Volume Module: >> Count Date: 28 Nov 2001 << PM																
Base Vol:	63	237	87		100	117	6		7	21	9		45	7	152	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	63	237	87		100	117	6		7	21	9		45	7	152	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	70	263	97		111	130	7		8	23	10		50	8	169	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	70	263	97		111	130	7		8	23	10		50	8	169	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	70	263	97		111	130	7		8	23	10		50	8	169	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Sat..	531	578	646		501	540	598		437	466	513		477	510	572	
Capacity Analysis Module:																
Vol/Sat:	0.13	0.46	0.15	0.22	0.24	0.01	0.02	0.05	0.02	0.10	0.02	0.30				
Crit Moves:		****			****			****				****				
Delay/Veh:	10.2	13.4	8.9	11.4	10.9	8.4	10.4	10.1	9.1	10.6	9.4	10.9				
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	10.2	13.4	8.9	11.4	10.9	8.4	10.4	10.1	9.1	10.6	9.4	10.9				
LOS by Move:	B	B	A	B	B	A	B	B	A	B	A	B				
ApproachDel:		11.9			11.1			9.9			10.7					
Delay Adj:		1.00			1.00			1.00			1.00					
ApprAdjDel:		11.9			11.1			9.9			10.7					
LOS by Appr:		B			B			A			B					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. (NS / EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B(10.2)

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0
Volume Module: >> Count Date: 28 Nov 2001 << PM																
Base Vol:	5	0	10		0	0	0		0	204	9		23	168	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	5	0	10		0	0	0		0	204	9		23	168	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	6	0	11		0	0	0		0	227	10		26	187	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	6	0	11		0	0	0		0	227	10		26	187	0	
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx			
Capacity Module:																
Cnflict Vol:	469	xxxx	232	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		237	xxxx	xxxxx			
Potent Cap..	552	xxxx	807	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1330	xxxx	xxxxx			
Move Cap..	544	xxxx	807	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1330	xxxx	xxxxx			
Volume/Cap:	0.01	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.02	xxxx	xxxx			
Level Of Service Module:																
Queue:	0.0	xxxx	0.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx			
Stopped Del:	11.7	xxxx	9.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.8	xxxx	xxxxx			
LOS by Move:	B	*	A	*	*	*	*	*	*		A	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.8	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	*		A	*	*			
ApproachDel:		10.2			xxxxxx			xxxxxx			xxxxxx					
ApproachLOS:		B			*			*			*					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: B[12.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	1	0	0	1	0	1	0	0	0	0	1	0
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak																
Base Vol:	0	0	0		39	0	35		77	272	0		0	192	51	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		39	0	35		77	272	0		0	192	51	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		43	0	39		86	302	0		0	213	57	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		43	0	39		86	302	0		0	213	57	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		715	xxxx	242		270	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		400	xxxx	802		1305	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap..	xxxx	xxxx	xxxxx		379	xxxx	802		1305	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.11	xxxx	0.05		0.07	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		0.4	xxxx	0.2		0.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		15.7	xxxx	9.7		8.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		C	*	A		A	*	*		*	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		A	*	*		*	*	*	
ApproachDel:	xxxxxx				12.9				xxxxxx				xxxxxx			
ApproachLOS:	*				B				*				*			

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.742
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.3
Optimal Cycle: 69 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			7	0	7			7	24	0			0	24	7		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0	1	1	0	1	0	2	0	1
Volume Module: >> Count Date: 12 Dec 2001 << PM																				
Base Vol:	28	12	28			386	9	176			209	1211	14			26	767	357		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	28	12	28			386	9	176			209	1211	14			26	767	357		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90		
PHF Volume:	31	13	31			429	10	196			232	1346	16			29	852	397		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	31	13	31			429	10	196			232	1346	16			29	852	397		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Final Vol..	31	13	31			429	10	196			232	1346	16			29	852	397		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.86	0.86	0.86			0.93	0.84	0.84			0.93	0.93	0.93			0.93	0.93	0.83		
Lanes:	0.83	0.35	0.82			1.00	0.05	0.95			1.00	1.98	0.02			1.00	2.00	1.00		
Final Sat..	1339	574	1339			1769	78	1518			1769	3490	40			1769	3538	1583		
Capacity Analysis Module:																				
Vol/Sat:	0.02	0.02	0.02			0.24	0.13	0.13			0.13	0.39	0.39			0.02	0.24	0.25		
Crit Moves:		****				****						****				****				
Green/Cycle:	0.03	0.03	0.03			0.33	0.33	0.33			0.19	0.52	0.52			0.02	0.36	0.36		
Volume/Cap:	0.74	0.74	0.74			0.74	0.39	0.39			0.70	0.74	0.74			0.74	0.68	0.70		
Delay/Veh:	82.6	82.6	82.6			41.0	31.7	31.7			52.5	24.2	24.2			112.5	34.3	37.3		
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	82.6	82.6	82.6			41.0	31.7	31.7			52.5	24.2	24.2			112.5	34.3	37.3		
HCM2kAvg:	3	3	3			16	6	6			10	20	20			2	14	14		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[11.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module: >> Count Date: 12 Dec 2001 <<												
Base Vol:	0	176	46	5	175	0	0	0	0	55	0	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	176	46	5	175	0	0	0	0	55	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	196	51	6	194	0	0	0	0	61	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	196	51	6	194	0	0	0	0	61	0	13
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	247	xxxx	xxxxx	xxxx	xxxx	xxxxx	427	xxxx	221
Potent Cap.:	xxxx	xxxx	xxxxx	1331	xxxx	xxxxx	xxxx	xxxx	xxxxx	589	xxxx	824
Move Cap..	xxxx	xxxx	xxxxx	1331	xxxx	xxxxx	xxxx	xxxx	xxxxx	587	xxxx	824
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	xxxx	0.02
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	0.0
Stopped Del:	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.8	xxxx	9.4
LOS by Move:	*	*	*	A	*	*	*	*	*	B	*	A
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.4		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 6.3 Worst Case Level Of Service: B[12.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0 0 0			0 0 0 1 0			1 0 0 0 1			0 0 0 0 0		
Volume Module: >> Count Date: 12 Dec 2001 <<												
Base Vol:	99	91	0	0	83	133	142	0	141	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	91	0	0	83	133	142	0	141	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	110	101	0	0	92	148	158	0	157	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	110	101	0	0	92	148	158	0	157	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	240	xxxx	xxxxx	xxxx	xxxx	xxxxx	487	xxxx	166	xxxx	xxxx	xxxxx
Potent Cap..	1339	xxxx	xxxxx	xxxx	xxxx	xxxxx	543	xxxx	883	xxxx	xxxx	xxxxx
Move Cap..	1339	xxxx	xxxxx	xxxx	xxxx	xxxxx	507	xxxx	883	xxxx	xxxx	xxxxx
Volume/Cap:	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	0.31	xxxx	0.18	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.3	xxxx	0.6	xxxxx	xxxx	xxxxx
Stopped Del:	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.3	xxxx	10.0	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	C	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			12.6			xxxxxx		
ApproachLOS:	*			*			B			*		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 6.7 Worst Case Level Of Service: A[8.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Yield Sign						Yield Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	0	1		0	0	0	0	0		0	0	0	1	0		1	0	1	0	0	
Volume Module:																								
Base Vol:	6		0		73		0		0		0		0		14		4		103		16		0	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	6		0		73		0		0		0		0		14		4		103		16		0	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	7		0		81		0		0		0		0		16		4		114		18		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	7		0		81		0		0		0		0		16		4		114		18		0	
Critical Gap Module:																								
Critical Gp:	6.4	xxxx		6.2		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					4.1	xxxx	xxxxx						
FollowUpTim:	3.5	xxxx		3.3		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					2.2	xxxx	xxxxx						
Capacity Module:																								
Cnflict Vol:	264	xxxx		18		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					20	xxxx	xxxxx						
Potent Cap..	729	xxxx		1067		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					1609	xxxx	xxxxx						
Move Cap..	689	xxxx		1067		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					1609	xxxx	xxxxx						
Volume/Cap:	0.01	xxxx		0.08		xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					0.07	xxxx	xxxx						
Level Of Service Module:																								
Queue:	0.0	xxxx		0.2		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					0.2	xxxx	xxxxx						
Stopped Del:	10.3	xxxx		8.7		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					7.4	xxxx	xxxxx						
LOS by Move:	B	*		A		*	*	*	*	*	*					A	*	*						
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:		8.8					xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:		A					*						*						*					

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 6.5 Worst Case Level Of Service: A[9.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	1	0	0	1		0	1	0	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	0		0		0		30		0		94		80		13		0		0		21		26	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0		0		0		30		0		94		80		13		0		0		21		26	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0		0		0		33		0		104		89		14		0		0		23		29	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	0		0		0		33		0		104		89		14		0		0		23		29	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx		6.2			4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx		3.3			2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				216	xxxx		23			52	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Potent Cap..	xxxx	xxxx	xxxxx				777	xxxx		1059			1567	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Move Cap..	xxxx	xxxx	xxxxx				742	xxxx		1059			1567	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	xxxx	xxxx	xxxx				0.04	xxxx		0.10			0.06	xxxx	xxxx	xxxx	xxxx	xxxx						
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.3						0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		8.8						7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*		A						A	*	*	*	*	*						
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				742	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	xxxxx				10.1	xxxx	xxxxx				7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*				B	*	*				A	*	*	*	*	*						
ApproachDel:		xxxxxx						9.1						xxxxxx						xxxxxx				
ApproachLOS:		*						A						*						*				

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Vallev Pkwv [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.115
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 55.8
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	0	0	0	7	24	7
Lanes:	0 1	0 0	1	0 0	0 0	0	2 0	3 0	0	0 0	3 0	1
Volume Module: >> Count Date: 12 Dec 2001 << PM												
Base Vol:	133	0	414	0	0	0	806	1499	0	0	1388	683
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	0	414	0	0	0	806	1499	0	0	1388	683
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	148	0	460	0	0	0	896	1666	0	0	1542	759
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	0	460	0	0	0	896	1666	0	0	1542	759
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	148	0	460	0	0	0	896	1666	0	0	1542	759
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	0.90	0.89	1.00	1.00	0.89	0.83
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat..	1773	0	1583	0	0	0	3432	5083	0	0	5083	1583
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.29	0.00	0.00	0.00	0.26	0.33	0.00	0.00	0.30	0.48
Crit Moves:			****				****					****
Green/Cycle:	0.26	0.00	0.26	0.00	0.00	0.00	0.23	0.66	0.00	0.00	0.43	0.43
Volume/Cap:	0.32	0.00	1.11	0.00	0.00	0.00	1.11	0.49	0.00	0.00	0.71	1.11
Delay/Veh:	36.2	0.0	123.6	0.0	0.0	0.0	114.1	10.2	0.0	0.0	29.0	104.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.2	0.0	123.6	0.0	0.0	0.0	114.1	10.2	0.0	0.0	29.0	104.6
HCM2kAvg:	5	0	26	0	0	0	27	10	0	0	16	41

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Vallev Pkwv [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.064
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 74.1
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	7	0	7	0	0	0
Lanes:	1 0	1 0	1	0 1	0 1	0	2 0	3 0	1	2 0	3 1	1
Volume Module: >> Count Date: 12 Dec 2001 << PM												
Base Vol:	46	48	307	415	229	362	88	1548	43	276	743	462
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	48	307	415	229	362	88	1548	43	276	743	462
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	51	53	341	461	254	402	98	1720	48	307	826	513
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol.	51	53	341	461	254	402	98	1720	48	307	826	513
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	51	53	341	461	254	402	98	1720	48	307	826	513
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.86	0.86	0.86	0.90	0.89	0.83	0.90	0.84	0.84
Lanes:	1.00	1.00	1.00	0.82	0.46	0.72	2.00	3.00	1.00	2.00	3.08	1.92
Final Sat..	1769	1862	1583	1353	747	1180	3432	5083	1583	3432	4926	3063
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.22	0.34	0.34	0.34	0.03	0.34	0.03	0.09	0.17	0.17
Crit Moves:			****			****		****		****		
Green/Cycle:	0.20	0.20	0.20	0.32	0.32	0.32	0.10	0.32	0.32	0.08	0.30	0.30
Volume/Cap:	0.14	0.14	1.06	1.06	1.06	1.06	0.27	1.06	0.09	1.06	0.56	0.56
Delay/Veh:	39.5	39.4	116.0	87.2	87.2	87.2	50.0	82.5	28.9	125.9	35.8	35.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.5	39.4	116.0	87.2	87.2	87.2	50.0	82.5	28.9	125.9	35.8	35.8
HCM2kAvg:	2	2	19	30	30	30	2	30	1	11	9	9

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.767
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 40.7
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	2 0	3 0	1	2 0	3 0	1	2 0	1 1	0	2 0	1 1	0
Volume Module: >> Count Date: 9 Dec 2000 << PM												
Base Vol:	321	924	45	140	783	353	672	810	213	176	437	167
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	321	924	45	140	783	353	672	810	213	176	437	167
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	357	1027	50	156	870	392	747	900	237	196	486	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	357	1027	50	156	870	392	747	900	237	196	486	186
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	357	1027	50	156	870	392	747	900	237	196	486	186
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.89	0.83	0.90	0.89	0.83	0.90	0.90	0.90	0.90	0.89	0.89
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	1.58	0.42	2.00	1.45	0.55
Final Sat..	3432	5083	1583	3432	5083	1583	3432	2714	714	3432	2455	938
Capacity Analysis Module:												
Vol/Sat:	0.10	0.20	0.03	0.05	0.17	0.25	0.22	0.33	0.33	0.06	0.20	0.20
Crit Moves:	****				****		****				****	
Green/Cycle:	0.14	0.28	0.28	0.08	0.22	0.51	0.28	0.46	0.46	0.08	0.26	0.26
Volume/Cap:	0.77	0.73	0.11	0.56	0.77	0.49	0.77	0.72	0.72	0.70	0.77	0.77
Delay/Veh:	57.6	41.1	32.4	55.8	46.9	19.9	43.1	27.8	27.8	61.6	45.3	45.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.6	41.1	32.4	55.8	46.9	19.9	43.1	27.8	27.8	61.6	45.3	45.3
HCM2kAvg:	8	13	1	4	12	10	15	18	18	5	13	13

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.546
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.7
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 12 Dec 2001 << PM												
Base Vol:	21	1020	142	165	835	122	178	204	6	126	113	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	1020	142	165	835	122	178	204	6	126	113	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	23	1133	158	183	928	136	198	227	7	140	126	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	1133	158	183	928	136	198	227	7	140	126	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	23	1133	158	183	928	136	198	227	7	140	126	54
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.83	0.93	0.87	0.87	0.93	0.93	0.93	0.93	0.89	0.89
Lanes:	1.00	3.00	1.00	1.00	2.62	0.38	1.00	1.94	0.06	1.00	1.40	0.60
Final Sat..	1769	5083	1583	1769	4351	636	1769	3423	101	1769	2357	1022
Capacity Analysis Module:												
Vol/Sat:	0.01	0.22	0.10	0.10	0.21	0.21	0.11	0.07	0.07	0.08	0.05	0.05
Crit Moves:		****		****			****				****	
Green/Cycle:	0.11	0.36	0.36	0.17	0.41	0.41	0.18	0.27	0.27	0.11	0.20	0.20
Volume/Cap:	0.12	0.63	0.28	0.63	0.52	0.52	0.63	0.24	0.24	0.74	0.27	0.27
Delay/Veh:	48.2	32.7	27.9	50.9	26.8	26.8	49.5	34.3	34.3	66.0	40.8	40.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.2	32.7	27.9	50.9	26.8	26.8	49.5	34.3	34.3	66.0	40.8	40.8
HCM2kAvg:	1	12	4	8	10	10	8	3	3	7	3	3

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #28 Valley Pkwy/11th Street

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.479
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.2
Optimal Cycle: 44 Level Of Service: A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	8	1202	8	97	712	48	20	13	1	29	16	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	1202	8	97	712	48	20	13	1	29	16	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	9	1336	9	108	791	53	22	14	1	32	18	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol.	9	1336	9	108	791	53	22	14	1	32	18	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	1336	9	108	791	53	22	14	1	32	18	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.99	0.99	0.95	0.90	0.90
Lanes:	1.00	1.99	0.01	1.00	2.00	1.00	1.00	0.93	0.07	1.00	0.31	0.69
Final Sat..	1805	3583	24	1805	3610	1615	1805	1745	134	1805	524	1179
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.37	0.06	0.22	0.03	0.01	0.01	0.01	0.02	0.03	0.03
Crit Moves:		****		****			****				****	
Green/Cycle:	0.02	0.78	0.78	0.12	0.88	0.88	0.03	0.03	0.03	0.07	0.07	0.07
Volume/Cap:	0.25	0.48	0.48	0.48	0.25	0.04	0.48	0.27	0.27	0.27	0.48	0.48
Delay/Veh:	51.9	4.0	4.0	42.3	0.9	0.7	55.6	49.9	49.9	45.6	47.7	47.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.9	4.0	4.0	42.3	0.9	0.7	55.6	49.9	49.9	45.6	47.7	47.7
HCM2kAvg:	1	7	7	4	2	0	1	1	1	1	2	2

****

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #29 Valley Parkway/Avenida Diablo

****

Average Delay (sec/veh): 5.5 Worst Case Level Of Service: F[234.5]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	18	1182	132	11	674	65	19	5	13	9	4	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	1182	132	11	674	65	19	5	13	9	4	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	20	1313	147	12	749	72	21	6	14	10	4	14
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	20	1313	147	12	749	72	21	6	14	10	4	14
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	821	xxxx	xxxxx	1460	xxxx	xxxxx	2209	2273	749	2173	2199	1313
Potent Cap..	817	xxxx	xxxxx	469	xxxx	xxxxx	32	41	415	34	45	195
Move Cap..	817	xxxx	xxxxx	469	xxxx	xxxxx	26	39	415	28	43	195
Volume/Cap:	0.02	xxxx	xxxx	0.03	xxxx	xxxx	0.80	0.14	0.03	0.36	0.10	0.07
Level Of Service Module:												
Queue:	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	0.2
Stopped Del:	9.5	xxxx	xxxxx	12.9	xxxx	xxxxx	xxxxx	xxxx	14.0	xxxxx	xxxx	24.9
LOS by Move:	A	*	*	B	*	*	*	*	B	*	*	C
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	28	xxxx	xxxxx	32	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.1	xxxx	xxxxx	1.5	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	353.9	xxxx	xxxxx	193.3	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			234.5			109.1		
ApproachLOS:	*			*			F			F		

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.467
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 23.8
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	1	0	1	1	0		1	0	1	1	0		1	0	1	0	1		1	0	1	0	1	
Volume Module: >> Count Date: 8 Jan 2002 << PM																								
Base Vol:	79	1058		26		62	594		103		70	8		77		11		7		43				
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00				
Initial Bse:	79	1058		26		62	594		103		70	8		77		11		7		43				
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00				
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90				
PHF Volume:	88	1176		29		69	660		114		78	9		86		12		8		48				
Reduct Vol:	0	0		0		0	0		0		0	0		0		0		0		0				
Reduced Vol:	88	1176		29		69	660		114		78	9		86		12		8		48				
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00				
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00				
Final Vol..	88	1176		29		69	660		114		78	9		86		12		8		48				
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900		1900		1900				
Adjustment:	0.95	0.95		0.95		0.95	0.93		0.93		0.95	1.00		0.85		0.95		1.00		0.85				
Lanes:	1.00	1.95		0.05		1.00	1.70		0.30		1.00	1.00		1.00		1.00		1.00		1.00				
Final Sat..	1805	3509		86		1805	3009		522		1805	1900		1615		1805		1900		1615				
Capacity Analysis Module:																								
Vol/Sat:	0.05	0.33		0.33		0.04	0.22		0.22		0.04	0.00		0.05		0.01		0.00		0.03				
Crit Moves:		****				****					****							****						
Green/Cycle:	0.13	0.56		0.56		0.06	0.50		0.50		0.07	0.21		0.21		0.06		0.20		0.20				
Volume/Cap:	0.37	0.59		0.59		0.59	0.44		0.44		0.59	0.02		0.25		0.11		0.02		0.15				
Delay/Veh:	48.5	17.7		17.7		62.7	19.7		19.7		61.2	37.6		39.8		53.6		38.6		39.8				
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00				
AdjDel/Veh:	48.5	17.7		17.7		62.7	19.7		19.7		61.2	37.6		39.8		53.6		38.6		39.8				
HCM2kAvg:	3	15		15		4	9		9		4	0		3		1		0		1				

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.652
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 31.6
Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	20			7		7	20			0		0	0			0		20	0			20	
Lanes:	0	0	2	0	1		1	0	1	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0	742		276		218	333		0		0	0		0		214		0		349				
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00				
Initial Bse:	0	742		276		218	333		0		0	0		0		214		0		349				
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00				
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90				
PHF Volume:	0	824		307		242	370		0		0	0		0		238		0		388				
Reduct Vol:	0	0		0		0	0		0		0	0		0		0		0		0				
Reduced Vol:	0	824		307		242	370		0		0	0		0		238		0		388				
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00				
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00				
Final Vol..	0	824		307		242	370		0		0	0		0		238		0		388				
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900		1900		1900				
Adjustment:	1.00	0.95		0.85		0.95	1.00		1.00		1.00	1.00		1.00		0.95		1.00		0.85				
Lanes:	0.00	2.00		1.00		1.00	1.00		0.00		0.00	0.00		0.00		1.00		0.00		1.00				
Final Sat..	0	3610		1615		1805	1900		0		0	0		0		1805		0		1615				
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.23		0.19		0.13	0.19		0.00		0.00	0.00		0.00		0.13		0.00		0.24				
Crit Moves:		****				****														****				
Green/Cycle:	0.00	0.35		0.35		0.21	0.56		0.00		0.00	0.00		0.00		0.37		0.00		0.37				
Volume/Cap:	0.00	0.65		0.54		0.65	0.35		0.00		0.00	0.00		0.00		0.36		0.00		0.65				
Delay/Veh:	0.0	34.0		32.3		47.8	14.9		0.0		0.0	0.0		0.0		27.9		0.0		34.1				
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00				
AdjDel/Veh:	0.0	34.0		32.3		47.8	14.9		0.0		0.0	0.0		0.0		27.9		0.0		34.1				
HCM2kAvg:	0	13		9		9	7		0		0	0		0		7		0		12				

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.745
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.6
Optimal Cycle: 69 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Permitted						Permitted					
Rights:	Include						Include						Include						Ovl					
Min. Green:	7	24			7		7	24			7		0	24			7		7	24			7	
Lanes:	1	0	1	1	0		1	0	1	1	0		1	0	1	0	1		1	0	0	1	0	
Volume Module: >> Count Date: 27 Nov 2001 << PM																								
Base Vol:	3	825	494				14	734			22		19	26			634		155	49			33	
Growth Adj:	1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	3	825	494				14	734			22		19	26			634		155	49			33	
User Adj:	1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			0.50		1.00	1.00			1.00	
PHF Adj:	0.90	0.90	0.90				0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	3	917	549				16	816			24		21	29			352		172	54			37	
Reduct Vol:	0	0	0				0	0			0		0	0			0		0	0			0	
Reduced Vol:	3	917	549				16	816			24		21	29			352		172	54			37	
PCE Adj:	1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol..	3	917	549				16	816			24		21	29			352		172	54			37	
Saturation Flow Module:																								
Sat/Lane:	1900	1900	1900				1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	0.93	0.88	0.88				0.93	0.93			0.93		0.67	0.98			0.83		0.73	0.92			0.92	
Lanes:	1.00	1.25	0.75				1.00	1.94			0.06		1.00	1.00			1.00		1.00	0.60			0.40	
Final Sat..	1769	2089	1251				1769	3421			103		1274	1862			1583		1385	1046			704	
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.44	0.44				0.01	0.24			0.24		0.02	0.02			0.22		0.12	0.05			0.05	
Crit Moves:		****					****										****							
Green/Cycle:	0.12	0.56	0.56				0.06	0.50			0.50		0.28	0.28			0.28		0.28	0.28			0.34	
Volume/Cap:	0.02	0.79	0.79				0.15	0.48			0.48		0.06	0.05			0.79		0.44	0.18			0.15	
Delay/Veh:	46.4	23.1	23.1				54.4	20.3			20.3		31.4	31.4			48.6		36.0	32.7			27.6	
User DelAdj:	1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	46.4	23.1	23.1				54.4	20.3			20.3		31.4	31.4			48.6		36.0	32.7			27.6	
HCM2kAvg:	0	22	22				1	10			10		1	1			14		7	3			2	

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.830
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 20.8
Optimal Cycle: 90 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	0	0	0	0	0		1	1	0	0	1		0	0	2	0	1		2	0	2	0	0	
Volume Module: >> Count Date: 27 Nov 2001 << PM																								
Base Vol:	0	0	0				323	0			146		0	939			830		191	1078			0	
Growth Adj:	1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	0	0	0				323	0			146		0	939			830		191	1078			0	
User Adj:	1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.90	0.90	0.90				0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	0	0	0				359	0			162		0	1043			922		212	1198			0	
Reduct Vol:	0	0	0				0	0			0		0	0			0		0	0			0	
Reduced Vol:	0	0	0				359	0			162		0	1043			922		212	1198			0	
PCE Adj:	1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol..	0	0	0				359	0			162		0	1043			922		212	1198			0	
Saturation Flow Module:																								
Sat/Lane:	1900	1900	1900				1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	1.00	1.00	1.00				0.93	1.00			0.83		1.00	0.93			0.83		0.90	0.93			1.00	
Lanes:	0.00	0.00	0.00				2.00	0.00			1.00		0.00	2.00			1.00		2.00	2.00			0.00	
Final Sat..	0	0	0				3545	0			1583		0	3538			1583		3432	3538			0	
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.00	0.00				0.10	0.00			0.10		0.00	0.29			0.58		0.06	0.34			0.00	
Crit Moves:											****						****		****					
Green/Cycle:	0.00	0.00	0.00				0.12	0.00			0.12		0.00	0.70			0.70		0.07	0.78			0.00	
Volume/Cap:	0.00	0.00	0.00				0.82	0.00			0.83		0.00	0.42			0.83		0.83	0.44			0.00	
Delay/Veh:	0.0	0.0	0.0				62.9	0.0			76.1		0.0	7.7			18.1		74.6	4.6			0.0	
User DelAdj:	1.00	1.00	1.00				1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	0.0	0.0	0.0				62.9	0.0			76.1		0.0	7.7			18.1		74.6	4.6			0.0	
HCM2kAvg:	0	0	0				9	0			8		0	8			26		6	8			0	

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave [NS/ EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.591
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.3
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	1	1	0	0	1		0	0	0	0	0		2	0	2	0	0		0	0	2	0	1	
Volume Module: >> Count Date: 27 Nov 2001 << PM																								
Base Vol:	548		2		218		0		0		0		229		1033		0		0		721		377	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	548		2		218		0		0		0		229		1033		0		0		721		377	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	609		2		242		0		0		0		254		1148		0		0		801		419	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol.	609		2		242		0		0		0		254		1148		0		0		801		419	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	609		2		242		0		0		0		254		1148		0		0		801		419	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.83		0.83		0.83		1.00		1.00		1.00		0.90		0.93		1.00		1.00		0.93		0.83	
Lanes:	1.99		0.01		1.00		0.00		0.00		0.00		2.00		2.00		0.00		0.00		2.00		1.00	
Final Sat.:	3154		12		1583		0		0		0		3432		3538		0		0		3538		1583	
Capacity Analysis Module:																								
Vol/Sat:	0.19		0.19		0.15		0.00		0.00		0.00		0.07		0.32		0.00		0.00		0.23		0.26	
Crit Moves:			****										****										****	
Green/Cycle:	0.33		0.33		0.33		0.00		0.00		0.00		0.13		0.57		0.00		0.00		0.45		0.45	
Volume/Cap:	0.59		0.59		0.47		0.00		0.00		0.00		0.59		0.57		0.00		0.00		0.51		0.59	
Delay/Veh:	34.6		34.6		32.8		0.0		0.0		0.0		51.7		16.5		0.0		0.0		23.9		26.2	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	34.6		34.6		32.8		0.0		0.0		0.0		51.7		16.5		0.0		0.0		23.9		26.2	
HCM2kAvg:	11		11		7		0		0		0		6		13		0		0		11		12	

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.946
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 32.2
Optimal Cycle: 134 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Split Phase						Split Phase					
Rights:	Include						Include						Include						Include					
Min. Green:	0		0		0		0		0		0		0		0		0		0		0		0	
Lanes:	0	0	1	0	1		1	0	2	0	0		0	0	0	0	0		2	0	0	0	1	
Volume Module:																								
Base Vol:	0		814		320		425		934		0		0		0		0		161		0		179	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0		814		320		425		934		0		0		0		0		161		0		179	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0		904		356		472		1038		0		0		0		0		179		0		199	
Reduct Vol.	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	0		904		356		472		1038		0		0		0		0		179		0		199	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	0		904		356		472		1038		0		0		0		0		179		0		199	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	1.00		1.00		0.85		0.95		0.95		1.00		1.00		1.00		1.00		0.92		1.00		0.85	
Lanes:	0.00		1.00		1.00		1.00		2.00		0.00		0.00		0.00		0.00		2.00		0.00		1.00	
Final Sat..	0		1900		1615		1805		3610		0		0		0		0		3502		0		1615	
Capacity Analysis Module:																								
Vol/Sat:	0.00		0.48		0.22		0.26		0.29		0.00		0.00		0.00		0.00		0.05		0.00		0.12	
Crit Moves:			****				****																****	
Green/Cycle:	0.00		0.50		0.50		0.28		0.78		0.00		0.00		0.00		0.00		0.13		0.00		0.13	
Volume/Cap:	0.00		0.95		0.44		0.95		0.37		0.00		0.00		0.00		0.00		0.39		0.00		0.95	
Delay/Veh:	0.0		41.0		16.2		62.6		3.5		0.0		0.0		0.0		0.0		40.4		0.0		89.9	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	0.0		41.0		16.2		62.6		3.5		0.0		0.0		0.0		0.0		40.4		0.0		89.9	
HCM2kAvg:	0		32		7		20		5		0		0		0		0		3		0		10	

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.923
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 42.2
Optimal Cycle: 122 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol.	68	261	661	49	137	64	58	216	151	705	504	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	261	661	49	137	64	58	216	151	705	504	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	76	290	734	54	152	71	64	240	168	783	560	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	290	734	54	152	71	64	240	168	783	560	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	76	290	734	54	152	71	64	240	168	783	560	103
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	3610	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.45	0.03	0.04	0.04	0.04	0.07	0.10	0.22	0.16	0.06
Crit Moves:			****	****					****	****		
Green/Cycle:	0.26	0.49	0.49	0.03	0.27	0.27	0.07	0.11	0.11	0.24	0.29	0.29
Volume/Cap:	0.16	0.16	0.92	0.92	0.16	0.16	0.54	0.59	0.92	0.92	0.54	0.22
Delay/Veh:	29.1	14.0	39.9	137.9	28.0	28.1	50.0	44.5	89.2	52.5	30.5	27.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.1	14.0	39.9	137.9	28.0	28.1	50.0	44.5	89.2	52.5	30.5	27.3
HCM2kAvg:	2	2	25	4	2	2	3	4	8	17	8	2

Harmony Grove Village
Option A: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.782
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.0
Optimal Cycle: 73 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	2	1 0	2 0	1	2 0	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	401	181	865	43	232	43	248	679	197	360	711	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	401	181	865	43	232	43	248	679	197	360	711	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	446	201	961	48	258	48	276	754	219	400	790	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	446	201	961	48	258	48	276	754	219	400	790	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	446	201	961	48	258	48	276	754	219	400	790	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.75	0.95	0.95	0.85	0.92	0.95	0.85	0.92	0.91	0.85
Lanes:	1.00	2.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	1805	3610	2842	1805	3610	1615	3502	3610	1615	3502	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.25	0.06	0.34	0.03	0.07	0.03	0.08	0.21	0.14	0.11	0.15	0.01
Crit Moves:			****	****				****		****		
Green/Cycle:	0.36	0.43	0.43	0.03	0.10	0.10	0.14	0.27	0.27	0.15	0.27	0.27
Volume/Cap:	0.68	0.13	0.78	0.78	0.68	0.28	0.56	0.78	0.51	0.78	0.56	0.05
Delay/Veh:	30.0	17.1	27.6	94.7	48.2	42.2	41.5	38.1	32.0	48.8	31.7	26.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.0	17.1	27.6	94.7	48.2	42.2	41.5	38.1	32.0	48.8	31.7	26.9
HCM2kAvg:	13	2	14	3	5	2	5	13	6	8	7	1

Harmony Grove Village
Option A: Baseline + Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	32.2	0.606	C	32.2	0.606	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	E	65.8	1.085	E	65.8	1.085	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	D	50.4	0.927	D	50.4	0.927	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	664.5	0.000	F	664.5	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	8.8	0.301	A	8.8	0.301	+ 0.000 V/C
# 6 Country Club/Entrance # 3	B	10.6	0.000	B	10.6	0.000	+ 0.000 D/V
# 7 Country Club/ Village Road	B	12.3	0.000	B	12.3	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	C	24.0	0.000	C	24.0	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	B	13.3	0.000	B	13.3	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	B	14.0	0.000	B	14.0	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	C	17.2	0.000	C	17.2	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	B	14.5	0.000	B	14.5	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	A	1.7	0.504	A	1.7	0.504	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	D	26.2	0.000	D	26.2	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	42.2	0.797	D	42.2	0.797	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	D	28.4	0.935	D	28.4	0.935	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	B	11.0	0.000	B	11.0	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	B	13.6	0.000	B	13.6	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	29.1	0.620	C	29.1	0.620	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	B	10.4	0.000	B	10.4	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	B	11.6	0.000	B	11.6	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	A	8.9	0.000	A	8.9	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	A	9.6	0.000	A	9.6	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	C	31.1	0.702	C	31.1	0.702	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline + Project

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	D	49.6	0.737	D	49.6	0.737	+ 0.000 D/V
# 26 Valley Park Wav / Auto Park Wa	D	37.9	0.696	D	37.9	0.696	+ 0.000 D/V
# 27 Valley Park Wav / West 9th Ave	C	32.8	0.591	C	32.8	0.591	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	A	9.3	0.389	A	9.3	0.389	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	162.9	0.000	F	162.9	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	28.0	0.499	C	28.0	0.499	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	30.2	0.777	C	30.2	0.777	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	D	44.5	0.984	D	44.5	0.984	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	B	19.6	0.676	B	19.6	0.676	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	27.9	0.709	C	27.9	0.709	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	28.3	0.865	C	28.3	0.865	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	35.2	0.856	D	35.2	0.856	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	24.9	0.512	C	24.9	0.512	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.606
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 32.2
Optimal Cycle: 64 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	0		0	24		7	0		0	0	7	24		7
Lanes:	2 0	2 0	0		0 0	2 0		1	0 0	0	0	0	1 0	1! 0		1
Volume Module: >> Count Date: 13 Dec 2001 << AM Peak																
Base Vol:	458	273	0		0	377	135		0	0	0		455	8	147	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	458	273	0		0	377	135		0	0	0		455	8	147	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	509	303	0		0	419	150		0	0	0		506	9	163	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	509	303	0		0	419	150		0	0	0		506	9	163	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	509	303	0		0	419	150		0	0	0		506	9	163	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.71	0.73	1.00		1.00	0.93	0.83		1.00	1.00	1.00		0.71	0.71	0.71	
Lanes:	2.00	2.00	0.00		0.00	2.00	1.00		0.00	0.00	0.00		1.74	0.02	1.24	
Final Sat.:	2693	2776	0		0	3538	1583		0	0	0		2357	35	1681	
Capacity Analysis Module:																
Vol/Sat:	0.19	0.11	0.00		0.00	0.12	0.09		0.00	0.00	0.00		0.21	0.25	0.10	
Crit Moves:	****					****								****		
Green/Cycle:	0.31	0.51	0.00		0.00	0.20	0.20		0.00	0.00	0.00		0.41	0.41	0.41	
Volume/Cap:	0.61	0.21	0.00		0.00	0.59	0.47		0.00	0.00	0.00		0.52	0.61	0.23	
Delay/Veh:	36.5	16.2	0.0		0.0	44.9	43.5		0.0	0.0	0.0		26.5	28.5	22.8	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	36.5	16.2	0.0		0.0	44.9	43.5		0.0	0.0	0.0		26.5	28.5	22.8	
HCM2kAvg:	9	3	0		0	8	5		0	0	0		9	11	3	

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp (NS / EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.085
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 65.8
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24		7	7	24		0	7	24		7	0	0		0
Lanes:	0 0	2 0	1		2 0	2 0	0		0 1	0	1	0	0 0	0 0	0	
Volume Module: >> Count Date: 13 Dec 2001 << AM Peak																
Base Vol.	0	558	356		130	846	0		105	1	683		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	558	356		130	846	0		105	1	683		0	0	0	
User Adj:	1.00	1.00	0.50		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	620	198		144	940	0		117	1	759		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	620	198		144	940	0		117	1	759		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	0	620	198		144	940	0		117	1	759		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.73	0.65		0.90	0.93	1.00		0.55	0.55	0.55		1.00	1.00	1.00	
Lanes:	0.00	2.00	1.00		2.00	2.00	0.00		0.99	0.01	1.00		0.00	0.00	0.00	
Final Sat.:	0	2776	1242		3432	3538	0		1041	10	1051		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.22	0.16		0.04	0.27	0.00		0.11	0.11	0.72		0.00	0.00	0.00	
Crit Moves:		****			****						****					
Green/Cycle:	0.00	0.24	0.24		0.07	0.31	0.00		0.60	0.60	0.60		0.00	0.00	0.00	
Volume/Cap:	0.00	0.93	0.66		0.60	0.86	0.00		0.19	0.19	1.20		0.00	0.00	0.00	
Delay/Veh:	0.0	56.9	39.9		49.4	39.3	0.0		9.0	9.0	124.6		0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	56.9	39.9		49.4	39.3	0.0		9.0	9.0	124.6		0.0	0.0	0.0	
HCM2kAvg:	0	13	7		3	16	0		2	2	47		0	0	0	

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.927
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 50.4
Optimal Cycle: 138 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0 2	0	1	2 0	1	1 0	2 0	2	0 1	2 0	2	0 1

Volume Module: >> Count Date: 13 Dec 2001 << AM Peak

Base Vol:	156	528	40	438	948	142	200	363	336	90	316	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	528	40	438	948	142	200	363	336	90	316	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	173	587	44	487	1053	158	222	403	373	100	351	206
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	587	44	487	1053	158	222	403	373	100	351	206
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	173	587	44	487	1053	158	222	403	373	100	351	206

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.73	0.73	0.65	0.71	0.72	0.72	0.90	0.93	0.83	0.90	0.93	0.83
Lanes:	1.00	2.00	1.00	2.00	1.74	0.26	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat..	1388	2776	1242	2693	2369	355	3432	3538	1583	3432	3538	1583

Capacity Analysis Module:

Vol/Sat:	0.12	0.21	0.04	0.18	0.44	0.44	0.06	0.11	0.24	0.03	0.10	0.13
Crit Moves:	****				****				****	****		
Green/Cycle:	0.13	0.32	0.32	0.27	0.46	0.46	0.07	0.25	0.25	0.06	0.23	0.23
Volume/Cap:	0.96	0.66	0.11	0.66	0.96	0.96	0.87	0.46	0.96	0.50	0.43	0.56
Delay/Veh:	106.0	36.9	28.8	40.8	47.1	47.1	80.6	38.8	79.0	56.8	39.8	42.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	106.0	36.9	28.8	40.8	47.1	47.1	80.6	38.8	79.0	56.8	39.8	42.9
HCM2kAvg:	10	10	1	9	27	27	7	7	18	3	6	7

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club [NS / EW]

Average Delay (sec/veh): 87.5 Worst Case Level Of Service: F[664.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	1	1 0	1	0 1	0 1	0	0 1	0 0	1!	0 0

Volume Module: >> Count Date: 11 Dec 2001 << AM Peak

Base Vol.	46	442	0	35	1067	213	232	0	40	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	442	0	35	1067	213	232	0	40	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	51	491	0	39	1186	237	258	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	51	491	0	39	1186	237	258	0	44	0	0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	1422	xxxx	xxxxx	491	xxxx	xxxxx	1611	xxxx	1186	xxxx	xxxx	xxxxx
Potent Cap..	479	xxxx	xxxxx	1072	xxxx	xxxxx	115	xxxx	230	xxxx	xxxx	xxxxx
Move Cap..	479	xxxx	xxxxx	1072	xxxx	xxxxx	103	xxxx	230	xxxx	xxxx	xxxxx
Volume/Cap:	0.11	xxxx	xxxx	0.04	xxxx	xxxx	2.51	xxxx	0.19	xxxx	xxxx	xxxx

Level Of Service Module:

Queue:	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	0.7	xxxxx	xxxx	xxxxx
Stopped Del:	13.4	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	24.4	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	A	*	*	*	*	C	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	103	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	23.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	774.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			664.5			xxxxxx		
ApproachLOS:	*			*			F			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.301
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.8
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Ignore				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1!	0
Volume Module: AM Peak																
Base Vol:	0	135		16	55	166		0	0	0		0	10	0		48
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	135		16	55	166		0	0	0		0	10	0		48
User Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.00	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	150		0	61	184		0	0	0		0	11	0		53
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	150		0	61	184		0	0	0		0	11	0		53
PCE Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	150		0	61	184		0	0	0		0	11	0		53
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	0.00	1.00		1.00	0.25	0.75		0.00	0.00	0.00		0.00	0.17	0.00		0.83
Final Sat..	0	738		0	203	613		0	0	0		0	134	0		644
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.20		xxxx	0.30	0.30		xxxx	xxxx	xxxx		xxxx	0.08	xxxx		0.08
Crit Moves:		****				****							****			
Delay/Veh:	0.0	8.7		0.0	9.2	9.2		0.0	0.0	0.0		0.0	7.6	0.0		7.6
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	8.7		0.0	9.2	9.2		0.0	0.0	0.0		0.0	7.6	0.0		7.6
LOS by Move:	*	A		*	A	A		*	*	*		*	A	*		A
ApproachDel:		8.7				9.2			xxxxx					7.6		
Delay Adj:		1.00				1.00			xxxxx					1.00		
ApprAdjDel:		8.7				9.2			xxxxx					7.6		
LOS by Appr:		A				A			*					A		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club/Entrance # 3

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.6]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	T	T	R		L	T	T	R		L	T	T	R		L	T	T	R	
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module: AM Peak																				
Base Vol:	0	321		0		25	283		0		0	0		0		0	0		40	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0	321		0		25	283		0		0	0		0		0	0		40	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	0	357		0		28	314		0		0	0		0		0	0		44	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Final Vol..	0	357		0		28	314		0		0	0		0		0	0		44	
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		6.2	
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		3.3	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		357	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		357	
Potent Cap.:	xxxx	xxxx		xxxxx		1213	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		692	
Move Cap..	xxxx	xxxx		xxxxx		1213	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		692	
Volume/Cap:	xxxx	xxxx		xxxx		0.02	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		0.06	
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		0.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		0.2	
Stopped Del:	xxxxx	xxxx		xxxxx		8.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		10.6	
LOS by Move:	*	*		*		A	*		*		*	*		*		*	*		B	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		0.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx		8.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		A	*		*		*	*		*		*	*		*	
ApproachDel:		xxxxxx					xxxxxx					xxxxxx					10.6			
ApproachLOS:		*					*					*					B			

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: B[12.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1 0 1			1 0 1 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module: AM Peak												
Base Vol:	0	151	211	0	176	0	0	0	0	132	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	151	211	0	176	0	0	0	0	132	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	168	234	0	196	0	0	0	0	147	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	168	234	0	196	0	0	0	0	147	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	363	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	640	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	640	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.23	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.9	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.3		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 5.3 Worst Case Level Of Service: C[24.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1 0 0			0 0 1 0 1			1 0 0 0 1			0 0 0 0 0		
Volume Module: AM Peak												
Base Vol.	0	214	0	0	399	132	211	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	214	0	0	399	132	211	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	238	0	0	443	147	234	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	238	0	0	443	147	234	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	681	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	419	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	419	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.56	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	24.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	C	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			24.0			xxxxxx		
ApproachLOS:	*			*			C			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 5.3 Worst Case Level Of Service: B[13.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 0	0	0	0	1 0	1	0	0	0 0	0	0	0	0 0
Volume Module: AM Peak																
Base Vol:	0	96		0	0	143		140	255		0	0	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	96		0	0	143		140	255		0	0	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Volume:	0	96		0	0	143		140	255		0	0	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	0	96		0	0	143		140	255		0	0	0		0	0
Critical Gap Module:																
Critical Gp:	xxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	6.4		xxxx	xxxxx	xxxxx		xxxx	xxxxx
FollowUpTim:	xxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	3.5		xxxx	xxxxx	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	309		xxxx	xxxxx	xxxx		xxxx	xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	687		xxxx	xxxxx	xxxx		xxxx	xxxxx
Move Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	687		xxxx	xxxxx	xxxx		xxxx	xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	0.37		xxxx	xxxx	xxxx		xxxx	xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	1.7		xxxx	xxxxx	xxxxx		xxxx	xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	13.3		xxxx	xxxxx	xxxxx		xxxx	xxxxx
LOS by Move:	*	*		*	*	*		*	B		*	*	*		*	*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -		LTR -	RT	LT -		LTR -	RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx		xxxx	xxxxx	xxxx		xxxx	xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx
Shared LOS:	*	*		*	*	*		*	*		*	*	*		*	*
ApproachDel:	xxxxxx				xxxxxx				13.3				xxxxxx			
ApproachLOS:	*				*				B				*			

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 COuntry Club/Harmony Grove

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: B[14.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module: AM Peak																
Base Vol:	5	11		21	2	7		127	49	192		3	9	377		2
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	5	11		21	2	7		127	49	192		3	9	377		2
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	6	12		23	2	8		141	54	213		3	10	419		2
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	6	12		23	2	8		141	54	213		3	10	419		2
Critical Gap Module:																
Critical Gp:	7.1	6.5		6.2	7.1	6.5		6.2	4.1	xxxx		xxxxx	4.1	xxxx		xxxxx
FollowUpTim:	3.5	4.0		3.3	3.5	4.0		3.3	2.2	xxxx		xxxxx	2.2	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	838	765		215	782	766		420	421	xxxx		xxxxx	217	xxxx		xxxxx
Potent Cap..	288	336		830	314	335		638	1149	xxxx		xxxxx	1365	xxxx		xxxxx
Move Cap..	211	317		830	284	317		638	1149	xxxx		xxxxx	1365	xxxx		xxxxx
Volume/Cap:	0.03	0.04		0.03	0.01	0.02		0.22	0.05	xxxx		xxxx	0.01	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	0.1	xxxx		xxxxx	0.0	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	8.3	xxxx		xxxxx	7.7	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		*	A	*		*	A	*		*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -		LTR -	RT	LT -		LTR -	RT
Shared Cap.:	xxxx	442		xxxxx	xxxx	596		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	0.3		xxxxx	xxxxx	1.0		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	14.0		xxxxx	xxxxx	13.1		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	B		*	*	B		*	*	*		*	*	*		*
ApproachDel:	14.0				13.1				xxxxxx				xxxxxx			
ApproachLOS:	B				B				*				*			

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: C[17.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	1	0	0 0	0	0	0	1 0
Volume Module: AM Peak																
Base Vol:	0	0		0	76		0	22	14	168		0	0	461		48
Growth Adj:	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	76		0	22	14	168		0	0	461		48
User Adj:	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	84		0	24	16	187		0	0	512		53
Reduct Vol.	0	0		0	0		0	0	0	0		0	0	0		0
Final Vol..	0	0		0	84		0	24	16	187		0	0	512		53
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	6.4		xxxx	6.2	4.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	3.5		xxxx	3.3	2.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	757		xxxx	539	566	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	378		xxxx	546	1016	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	374		xxxx	546	1016	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	0.23		xxxx	0.04	0.02	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*			A	*	*	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	403	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx		1.1	xxxxx		0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx		17.2	xxxxx		8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	*		C	*		A	*	*	*	*	*		
ApproachDel:	xxxxxx					17.2			xxxxxx				xxxxxx			
ApproachLOS:	*					C			*				*			

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[14.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	1	0	0 0	0	0	0	1 0
Volume Module: AM Peak																
Base Vol.	0	0		0	56		0	10	6	111		0	0	443		36
Growth Adj:	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	56		0	10	6	111		0	0	443		36
User Adj:	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	62		0	11	7	123		0	0	492		40
Reduct Vol:	0	0		0	0		0	0	0	0		0	0	0		0
Final Vol..	0	0		0	62		0	11	7	123		0	0	492		40
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	6.4		xxxx	6.2	4.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	3.5		xxxx	3.3	2.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	649		xxxx	512	532	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	438		xxxx	566	1046	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	435		xxxx	566	1046	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	0.14		xxxx	0.02	0.01	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*			A	*	*	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	451	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx		0.6	xxxxx		0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx		14.5	xxxxx		8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	*		B	*		A	*	*	*	*	*		
ApproachDel:	xxxxxx					14.5			xxxxxx				xxxxxx			
ApproachLOS:	*					B			*				*			

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.504
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 1.7
Optimal Cycle: 34 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	1	0 1	1	0	1	0 0
Volume Module: AM Peak																
Base Vol:	9	0	4		0	0	0		0	775	6		3	758	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	9	0	4		0	0	0		0	775	6		3	758	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	10	0	4		0	0	0		0	861	7		3	842	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	10	0	4		0	0	0		0	861	7		3	842	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	10	0	4		0	0	0		0	861	7		3	842	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	0.85		1.00	1.00	1.00		1.00	1.00	0.85		0.32	1.00	1.00	
Lanes:	1.00	0.00	1.00		0.00	0.00	0.00		0.00	1.00	1.00		1.00	1.00	0.00	
Final Sat.:	1805	0	1615		0	0	0		0	1900	1615		606	1900	0	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.00	0.00		0.00	0.00	0.00		0.00	0.45	0.00		0.01	0.44	0.00	
Crit Moves:	****									****						
Green/Cycle:	0.01	0.00	0.01		0.00	0.00	0.00		0.00	0.90	0.90		0.90	0.90	0.00	
Volume/Cap:	0.50	0.00	0.25		0.00	0.00	0.00		0.00	0.50	0.00		0.01	0.49	0.00	
Delay/Veh:	68.4	0.0	56.3		0.0	0.0	0.0		0.0	1.2	0.5		0.5	1.1	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	68.4	0.0	56.3		0.0	0.0	0.0		0.0	1.2	0.5		0.5	1.1	0.0	
HCM2kAvg:	1	0	0		0	0	0		0	5	0		0	5	0	

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa (NS / EW)

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: D[26.2]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	1	0	0	0	0	0	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module: >> Count Date: 28 Nov 2001 << AM Peak																				
Base Vol:	15	410		0		0	518		38		68		0		13		0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	15	410		0		0	518		38		68		0		13		0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	17	456		0		0	576		42		76		0		14		0		0	
Reduct Vol.:	0	0		0		0	0		0		0		0		0		0		0	
Final Vol.:	17	456		0		0	576		42		76		0		14		0		0	
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4	xxxx			6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	xxxx			3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	618	xxxx	xxxxx	xxxx	xxxx	xxxxx					1086	xxxx			597	xxxx	xxxx	xxxxx		
Potent Cap.:	962	xxxx	xxxxx	xxxx	xxxx	xxxxx					240	xxxx			503	xxxx	xxxx	xxxxx		
Move Cap.:	962	xxxx	xxxxx	xxxx	xxxx	xxxxx					236	xxxx			503	xxxx	xxxx	xxxxx		
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx					0.32	xxxx			0.03	xxxx	xxxx	xxxx		
Level Of Service Module:																				
Queue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Stopped Del:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	A	*		*		*	*		*		*		*		*		*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	258	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.5	xxxxx	xxxxx	xxxx	xxxxx								
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	26.2	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*		*	*		*	D		*	*		*							
ApproachDel:	xxxxxx			xxxxxx			26.2			xxxxxx										
ApproachLOS:	*			*			D			*										

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.797
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 42.2
Optimal Cycle: 81 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	2	0	1	0 1	2	0	1	0 1	1	0	1	1 0	1	0	2	0 1
Volume Module: >> Count Date: 11 Dec 2001 << AM Peak																
Base Vol:	226	134		201	71	265		50	41	538		196	391	482		82
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	226	134		201	71	265		50	41	538		196	391	482		82
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	251	149		223	79	294		56	46	598		218	434	536		91
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	251	149		223	79	294		56	46	598		218	434	536		91
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	251	149		223	79	294		56	46	598		218	434	536		91
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.90	0.98		0.83	0.90	0.98		0.83	0.93	0.89		0.89	0.93	0.93		0.83
Lanes:	2.00	1.00		1.00	2.00	1.00		1.00	1.00	1.47		0.53	1.00	2.00		1.00
Final Sat..	3432	1862		1583	3432	1862		1583	1769	2489		907	1769	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.07	0.08		0.14	0.02	0.16		0.04	0.03	0.24		0.24	0.25	0.15		0.06
Crit Moves:	****					****				****			****			
Green/Cycle:	0.09	0.23		0.23	0.07	0.20		0.20	0.14	0.30		0.30	0.31	0.47		0.47
Volume/Cap:	0.80	0.35		0.62	0.35	0.79		0.18	0.19	0.80		0.80	0.80	0.32		0.12
Delay/Veh:	66.8	39.6		45.3	54.5	56.5		40.1	46.2	43.1		43.1	46.3	19.9		17.9
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	66.8	39.6		45.3	54.5	56.5		40.1	46.2	43.1		43.1	46.3	19.9		17.9
HCM2kAvg:	7	5		8	2	12		2	2	16		16	17	6		2

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.935
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.4
Optimal Cycle: 0 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1
Volume Module: >> Count Date: 28 Nov 2001 << AM Peak																
Base Vol:	32	283		147	161	395		18	7	3		12	198	11		184
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	32	283		147	161	395		18	7	3		12	198	11		184
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	36	314		163	179	439		20	8	3		13	220	12		204
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	36	314		163	179	439		20	8	3		13	220	12		204
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	36	314		163	179	439		20	8	3		13	220	12		204
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Sat..	411	445		481	432	469		491	330	346		371	403	420		464
Capacity Analysis Module:																
Vol/Sat:	0.09	0.71		0.34	0.41	0.93		0.04	0.02	0.01		0.04	0.55	0.03		0.44
Crit Moves:		****				****						****	****			
Delay/Veh:	11.9	26.6		13.4	16.2	53.4		9.9	12.9	12.3		11.8	20.8	11.1		15.6
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	11.9	26.6		13.4	16.2	53.4		9.9	12.9	12.3		11.8	20.8	11.1		15.6
LOS by Move:	B	D		B	C	F		A	B	B		B	C	B		C
ApproachDel:		21.4				41.6				12.2				18.1		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		21.4				41.6				12.2				18.1		
LOS by Appr:		C				E				B				C		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. [NS / EW]

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 0 1 0			0 1 0 0 0		
Volume Module: >> Count Date: 28 Nov 2001 << AM Peak												
Base Vol:	5	0	10	0	0	0	0	193	15	17	389	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	0	10	0	0	0	0	193	15	17	389	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	0	11	0	0	0	0	214	17	19	432	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	6	0	11	0	0	0	0	214	17	19	432	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	693	xxxx	223	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	231	xxxx	xxxxx
Potent Cap..	409	xxxx	817	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1337	xxxx	xxxxx
Move Cap..	405	xxxx	817	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1337	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	0.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	14.0	xxxx	9.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	B	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:	11.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: B[13.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			1 0 0 0 1			0 1 0 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak												
Base Vol:	0	0	0	28	0	63	56	215	0	0	350	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	28	0	63	56	215	0	0	350	41
User Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	34	0	77	68	263	0	0	428	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	34	0	77	68	263	0	0	428	50
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	853	xxxx	453	478	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	332	xxxx	611	1095	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	316	xxxx	611	1095	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.11	xxxx	0.13	0.06	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.4	xxxx	0.4	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	17.8	xxxx	11.7	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	B	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			13.6			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.620
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.1
Optimal Cycle: 52 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	0	7	7	24	0	0	24	7
Lanes:	0 1	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak												
Base Vol:	6	4	5	356	13	174	100	843	14	28	769	293
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	4	5	356	13	174	100	843	14	28	769	293
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	7	5	6	414	15	202	116	980	16	33	894	341
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	5	6	414	15	202	116	980	16	33	894	341
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	7	5	6	414	15	202	116	980	16	33	894	341
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.93	0.84	0.84	0.93	0.93	0.93	0.93	0.93	0.83
Lanes:	0.80	0.53	0.67	1.00	0.07	0.93	1.00	1.97	0.03	1.00	2.00	1.00
Final Sat..	1317	878	1098	1769	111	1492	1769	3473	58	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.23	0.14	0.14	0.07	0.28	0.28	0.02	0.25	0.22
Crit Moves:		****		****			****				****	
Green/Cycle:	0.01	0.01	0.01	0.38	0.38	0.38	0.11	0.48	0.48	0.03	0.41	0.41
Volume/Cap:	0.62	0.62	0.62	0.62	0.36	0.36	0.62	0.59	0.59	0.59	0.62	0.53
Delay/Veh:	94.8	94.8	94.8	32.1	27.3	27.3	57.5	22.9	22.9	72.4	29.0	27.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	94.8	94.8	94.8	32.1	27.3	27.3	57.5	22.9	22.9	72.4	29.0	27.6
HCM2kAvg:	1	1	1	13	6	6	5	13	13	2	13	10

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[10.4]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak																				
Base Vol:	0	113		22		6	127		0		0		0		0	43		0		5
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	113		22		6	127		0		0		0		0	43		0		5
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	126		24		7	141		0		0		0		0	48		0		6
Reduct Vol.	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol..	0	126		24		7	141		0		0		0		0	48		0		6
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4	xxxx			6.2
FollowUpTim:	xxxxx	xxxx	xxxxx			2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	xxxx			3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			150	xxxx	xxxxx	xxxx	xxxx	xxxxx					292	xxxx			138
Potent Cap.:	xxxx	xxxx	xxxxx			1444	xxxx	xxxxx	xxxx	xxxx	xxxxx					703	xxxx			916
Move Cap..	xxxx	xxxx	xxxxx			1444	xxxx	xxxxx	xxxx	xxxx	xxxxx					700	xxxx			916
Volume/Cap:	xxxx	xxxx	xxxx			0.00	xxxx	xxxx	xxxx	xxxx	xxxx					0.07	xxxx			0.01
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx					0.2	xxxx			0.0
Stopped Del:	xxxxx	xxxx	xxxxx			7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx					10.5	xxxx			9.0
LOS by Move:	*	*	*			A	*	*	*	*	*					B	*			A
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx			xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx			7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx			xxxxx
Shared LOS:	*	*	*			A	*	*	*	*	*					*	*			*
ApproachDel:	xxxxxx					xxxxxx			xxxxxx							10.4				
ApproachLOS:	*					*			*							B				

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 5.6 Worst Case Level Of Service: B[11.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0 0	0	0 0	0 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak												
Base Vol:	183	120	0	0	57	158	51	0	178	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	120	0	0	57	158	51	0	178	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	203	133	0	0	63	176	57	0	198	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	203	133	0	0	63	176	57	0	198	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	239	xxxx	xxxxx	xxxx	xxxx	xxxxx	691	xxxx	151	xxxx	xxxx	xxxxx
Potent Cap..	1340	xxxx	xxxxx	xxxx	xxxx	xxxxx	413	xxxx	901	xxxx	xxxx	xxxxx
Move Cap..	1340	xxxx	xxxxx	xxxx	xxxx	xxxxx	359	xxxx	901	xxxx	xxxx	xxxxx
Volume/Cap:	0.15	xxxx	xxxx	xxxx	xxxx	xxxx	0.16	xxxx	0.22	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.6	xxxx	0.8	xxxxx	xxxx	xxxxx
Stopped Del:	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	16.9	xxxx	10.1	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	-	*	-	*	C	-	B	*	*	-
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.6			xxxxxx		
ApproachLOS:	*			*			B			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 7.3 Worst Case Level Of Service: A[8.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Yield Sign			Yield Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	0 1	0	1 0	1 0	0
Volume Module: AM Peak												
Base Vol:	2	0	115	0	0	0	0	13	9	161	9	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	115	0	0	0	0	13	9	161	9	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	2	0	128	0	0	0	0	14	10	179	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	2	0	128	0	0	0	0	14	10	179	10	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	387	xxxx	19	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	24	xxxx	xxxxx
Potent Cap..	620	xxxx	1064	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1603	xxxx	xxxxx
Move Cap..	567	xxxx	1064	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1603	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.12	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	0.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx
Stopped Del:	11.4	xxxx	8.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	B	*	A	-	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	-	*	*	*	*
ApproachDel:	8.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			-			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 6.8 Worst Case Level Of Service: A(9.6)

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	1	0	0 1	0	1	0	0 0	0	0	1	0 1
Volume Module: AM Peak																
Base Vol:	0	0		0	58	0		144	123	3		0	0	17		79
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	58	0		144	123	3		0	0	17		79
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	64	0		160	137	3		0	0	19		88
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	0	0		0	64	0		160	137	3		0	0	19		88
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	6.4	xxxx		6.2	4.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	3.5	xxxx		3.3	2.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	296	xxxx		19	107	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	700	xxxx		1065	1497	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	647	xxxx		1065	1497	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	0.10	xxxx		0.15	0.09	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		0.5	0.3	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		9.0	7.6	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		A	A	*		*	*	*		*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		xxxxx	647	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	0.3	xxxx		xxxxx	0.3	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	11.2	xxxx		xxxxx	7.6	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	B	*		*	A	*		*	*	*		*
ApproachDel:	xxxxxx				9.6				xxxxxx				xxxxxx			
ApproachLOS:	*				A				*				*			

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.702
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 31.1
Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			0	0	24			7	0	0			0	7	24			7
Lanes:	0	1	0	0	1	0	0	0	0	0	2	0	3	0	0	0	0	3	0	1
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak																				
Base Vol:	219		1		395		0		0	0	447	1042			0	0	1006			206
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	219		1		395		0		0	0	447	1042			0	0	1006			206
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	0.89	0.89			0.89	0.89	0.89			0.89	0.89	0.89			0.89	0.89	0.89			0.89
PHF Volume:	246		1		444		0		0	0	502	1171			0	0	1130			231
Reduct Vol:	0		0		0		0		0	0	0	0			0	0	0			0
Reduced Vol:	246		1		444		0		0	0	502	1171			0	0	1130			231
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Final Vol..	246		1		444		0		0	0	502	1171			0	0	1130			231
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900			1900
Adjustment:	0.83	0.83			0.83	1.00	1.00			1.00	0.90	0.89			1.00	1.00	0.89			0.83
Lanes:	0.99	0.01			1.00	0.00	0.00			0.00	2.00	3.00			0.00	0.00	3.00			1.00
Final Sat..	1576		7		1583		0		0	0	3432	5083			0	0	5083			1583
Capacity Analysis Module:																				
Vol/Sat:	0.16	0.16			0.28	0.00	0.00			0.00	0.15	0.23			0.00	0.00	0.22			0.15
Crit Moves:					****						****						****			
Green/Cycle:	0.40	0.40			0.40	0.00	0.00			0.00	0.21	0.53			0.00	0.00	0.32			0.32
Volume/Cap:	0.39	0.39			0.70	0.00	0.00			0.00	0.70	0.44			0.00	0.00	0.70			0.46
Delay/Veh:	26.0	26.0			33.6	0.0	0.0			0.0	47.2	17.7			0.0	0.0	37.4			33.5
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
AdjDel/Veh:	26.0	26.0			33.6	0.0	0.0			0.0	47.2	17.7			0.0	0.0	37.4			33.5
HCM2kAvg:	8	8			15	0	0			0	10	9			0	0	13			7

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.737
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 49.6
Optimal Cycle: 64 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			0	0	24			7	7	0			7	0	0			0
Lanes:	1	0	1	0	1	0	1	0	1	0	2	0	3	0	1	2	0	3	1	1
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak																				
Base Vol:	12		18		83	458		102		642	97		914		46	74		911		199
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	12		18		83	458		102		642	97		914		46	74		911		199
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	13		20		92	509		113		713	108		1016		51	82		1012		221
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	13		20		92	509		113		713	108		1016		51	82		1012		221
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	13		20		92	509		113		713	108		1016		51	82		1012		221
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	0.93	0.98		0.83		0.84	0.84		0.84		0.90	0.89		0.83		0.90	0.87		0.87	
Lanes:	1.00	1.00		1.00		0.82	0.18		1.00		2.00	3.00		1.00		2.00	4.00		1.00	
Final Sat..	1769	1862		1583		1306	291		1596		3432	5083		1583		3432	6595		1649	
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.01		0.06		0.39	0.39		0.45		0.03	0.20		0.03		0.02	0.15		0.13	
Crit Moves:		****							****			****				****				
Green/Cycle:	0.20	0.20		0.20		0.48	0.48		0.48		0.07	0.22		0.22		0.03	0.18		0.18	
Volume/Cap:	0.04	0.05		0.29		0.81	0.81		0.92		0.47	0.92		0.15		0.92	0.88		0.77	
Delay/Veh:	38.7	38.9		41.3		29.3	29.3		39.3		55.5	59.0		38.3		129.2	54.7		49.4	
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	38.7	38.9		41.3		29.3	29.3		39.3		55.5	59.0		38.3		129.2	54.7		49.4	
HCM2kAvg:	0		1		3	21	21		29		3	16		2		4	12		10	

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.696
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 37.9
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Ovl					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	1	1	0	2	0	1	1	0
Volume Module: >> Count Date: 9 Dec 2000 << AM Peak																				
Base Vol:	253		765		96	157		853		477	397		549		297	177		569		46
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	253		765		96	157		853		477	397		549		297	177		569		46
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	281		850		107	174		948		530	441		610		330	197		632		51
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol.	281		850		107	174		948		530	441		610		330	197		632		51
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	281		850		107	174		948		530	441		610		330	197		632		51
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	0.90	0.89		0.83		0.90	0.89		0.83		0.90	0.88		0.88		0.90	0.92		0.92	
Lanes:	2.00	3.00		1.00		2.00	3.00		1.00		2.00	1.30		0.70		2.00	1.85		0.15	
Final Sat..	3432	5083		1583		3432	5083		1583		3432	2174		1176		3432	3237		262	
Capacity Analysis Module:																				
Vol/Sat:	0.08	0.17		0.07		0.05	0.19		0.33		0.13	0.28		0.28		0.06	0.20		0.20	
Crit Moves:	****								****			****				****				
Green/Cycle:	0.12	0.32		0.32		0.09	0.30		0.49		0.19	0.40		0.40		0.08	0.30		0.30	
Volume/Cap:	0.70	0.52		0.21		0.54	0.63		0.69		0.68	0.70		0.70		0.70	0.66		0.66	
Delay/Veh:	56.1	33.5		29.9		53.9	37.3		26.4		48.0	31.3		31.3		61.0	38.6		38.6	
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	56.1	33.5		29.9		53.9	37.3		26.4		48.0	31.3		31.3		61.0	38.6		38.6	
HCM2kAvg:	7		9		3	4		11		16	9		15		15	5		12		12

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.591
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.8
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak												
Base Vol:	9	666	87	121	1043	124	100	114	12	88	115	290
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	666	87	121	1043	124	100	114	12	88	115	290
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	10	740	97	134	1159	138	111	127	13	98	128	322
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol.	10	740	97	134	1159	138	111	127	13	98	128	322
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	10	740	97	134	1159	138	111	127	13	98	128	322
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.83	0.93	0.88	0.88	0.93	0.92	0.92	0.93	0.83	0.83
Lanes:	1.00	3.00	1.00	1.00	2.68	0.32	1.00	1.81	0.19	1.00	1.00	1.00
Final Sat..	1769	5083	1583	1769	4470	531	1769	3156	332	1769	1580	1580
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.06	0.08	0.26	0.26	0.06	0.04	0.04	0.06	0.08	0.20
Crit Moves:	****				****		****					****
Green/Cycle:	0.06	0.34	0.34	0.13	0.41	0.41	0.10	0.33	0.33	0.10	0.33	0.33
Volume/Cap:	0.10	0.42	0.18	0.58	0.62	0.62	0.62	0.12	0.12	0.57	0.25	0.62
Delay/Veh:	53.9	30.5	27.8	52.9	28.3	28.3	58.6	28.1	28.1	56.5	29.7	35.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	30.5	27.8	52.9	28.3	28.3	58.6	28.1	28.1	56.5	29.7	35.9
HCM2kAvg:	0	7	2	6	13	13	5	2	2	4	3	11

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.389
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.3
Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module: AM Peak												
Base Vol:	2	658	14	31	953	34	35	19	5	27	22	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	658	14	31	953	34	35	19	5	27	22	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	2	731	16	34	1059	38	39	21	6	30	24	97
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	731	16	34	1059	38	39	21	6	30	24	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	2	731	16	34	1059	38	39	21	6	30	24	97
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.97	0.97	0.95	0.88	0.88
Lanes:	1.00	1.96	0.04	1.00	2.00	1.00	1.00	0.79	0.21	1.00	0.20	0.80
Final Sat..	1805	3524	75	1805	3610	1615	1805	1458	384	1805	337	1335
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.02	0.29	0.02	0.02	0.01	0.01	0.02	0.07	0.07
Crit Moves:	****				****		****				****	
Green/Cycle:	0.00	0.69	0.69	0.06	0.75	0.75	0.06	0.11	0.11	0.13	0.19	0.19
Volume/Cap:	0.39	0.30	0.30	0.30	0.39	0.03	0.39	0.13	0.13	0.13	0.39	0.39
Delay/Veh:	88.3	6.0	6.0	46.1	4.3	3.1	48.1	40.2	40.2	38.8	36.5	36.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	88.3	6.0	6.0	46.1	4.3	3.1	48.1	40.2	40.2	38.8	36.5	36.5
HCM2kAvg:	0	4	4	1	6	0	2	1	1	1	4	4

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 7.2 Worst Case Level Of Service: F[162.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	0 1		1 0 1	0 1		0 1 0	0 1		0 1 0	0 1	
Volume Module: AM Peak												
Base Vol:	36	657	62	33	897	24	23	9	52	20	2	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	657	62	33	897	24	23	9	52	20	2	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	40	730	69	37	997	27	26	10	58	22	2	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	40	730	69	37	997	27	26	10	58	22	2	12
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1023	xxxx	xxxxx	799	xxxx	xxxxx	1922	1949	997	1927	1907	730
Potent Cap..	686	xxxx	xxxxx	833	xxxx	xxxxx	51	65	299	51	69	426
Move Cap..	686	xxxx	xxxxx	833	xxxx	xxxxx	45	59	299	33	62	426
Volume/Cap:	0.06	xxxx	xxxx	0.04	xxxx	xxxx	0.57	0.17	0.19	0.67	0.04	0.03
Level Of Service Module:												
Queue:	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	0.7	xxxxx	xxxx	0.1
Stopped Del:	10.6	xxxx	xxxxx	9.5	xxxx	xxxxx	xxxxx	xxxx	19.9	xxxxx	xxxx	13.7
LOS by Move:	B	*	*	A	*	*	*	*	C	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	48	xxxx	xxxxx	35	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.0	xxxx	xxxxx	2.5	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	190.0	xxxx	xxxxx	237.4	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			84.7			162.9		
ApproachLOS:	*			*			F			F		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.499
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.0
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1 0	1	1	0	1 0	1	1	0	1 0	1	0	1	1 0	1	0	1
Volume Module: >> Count Date: 8 Jan 2002 << AM Peak																
Base Vol:	60	519		10	26	1050		49	108	6		230	34	8		71
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	60	519		10	26	1050		49	108	6		230	34	8		71
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	67	577		11	29	1167		54	120	7		256	38	9		79
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	67	577		11	29	1167		54	120	7		256	38	9		79
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	67	577		11	29	1167		54	120	7		256	38	9		79
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.94	0.94	0.95	1.00	0.85	0.95	1.00	0.85			
Lanes:	1.00	1.96	0.04	1.00	1.00	1.91	0.09	1.00	1.00	1.00	1.00	1.00	1.00			
Final Sat..	1805	3531	68	1805	1805	3425	160	1805	1900	1615	1805	1900	1615			
Capacity Analysis Module:																
Vol/Sat:	0.04	0.16	0.16	0.02	0.34	0.34	0.07	0.00	0.16	0.02	0.00	0.05				
Crit Moves:	****				****		****				****					
Green/Cycle:	0.06	0.46	0.46	0.13	0.54	0.54	0.10	0.24	0.24	0.07	0.20	0.20				
Volume/Cap:	0.63	0.35	0.35	0.12	0.63	0.63	0.63	0.01	0.67	0.30	0.02	0.24				
Delay/Veh:	67.2	21.0	21.0	45.9	20.2	20.2	58.4	35.2	46.2	54.5	38.6	40.8				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	67.2	21.0	21.0	45.9	20.2	20.2	58.4	35.2	46.2	54.5	38.6	40.8				
HCM2kAvg:	4	7	7	1	16	16	6	0	10	2	0	3				

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.777
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 30.2
Optimal Cycle: 66 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	20	7		7	20	0		0	0	0		20	0	20	
Lanes:	0	0	2	0	1	1	0	1	0	0	0	0	0	1	0	0	0	1
Volume Module: AM Peak																
Base Vol:	0	325	182		414	959	0		0	0	0		257	0	200	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	325	182		414	959	0		0	0	0		257	0	200	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.81		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.72	
PHF Volume:	0	361	225		460	1066	0		0	0	0		286	0	278	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	361	225		460	1066	0		0	0	0		286	0	278	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	361	225		460	1066	0		0	0	0		286	0	278	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.95	0.85		0.95	1.00	1.00		1.00	1.00	1.00		0.95	1.00	0.85	
Lanes:	0.00	2.00	1.00		1.00	1.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat..	0	3610	1615		1805	1900	0		0	0	0		1805	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.10	0.14		0.25	0.56	0.00		0.00	0.00	0.00		0.16	0.00	0.17	
Crit Moves:	****					****							****			
Green/Cycle:	0.00	0.29	0.29		0.44	0.72	0.00		0.00	0.00	0.00		0.20	0.00	0.20	
Volume/Cap:	0.00	0.35	0.49		0.58	0.78	0.00		0.00	0.00	0.00		0.78	0.00	0.85	
Delay/Veh:	0.0	34.3	36.4		26.7	13.5	0.0		0.0	0.0	0.0		55.3	0.0	63.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	34.3	36.4		26.7	13.5	0.0		0.0	0.0	0.0		55.3	0.0	63.9	
HCM2kAvg:	0	5	7		14	26	0		0	0	0		12	0	12	

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave INS / EWI

Cycle (sec): 120 Critical Vol./Cap. (X): 0.984
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 44.5
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Ovl			
Min. Green:	7	24	7		7	24	7		0	24	7		7	24	7	
Lanes:	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0	0	1	0
Volume Module: >> Count Date: 27 Nov 2001 << AM Peak																
Base Vol:	9	616	86		408	733	4		25	271	11		27	6	586	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	9	616	86		408	733	4		25	271	11		27	6	586	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.91	0.91	0.91		0.91	0.91	0.91		0.91	0.91	0.91		0.91	0.91	0.91	
PHF Volume:	10	677	95		448	805	4		27	298	12		30	7	644	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	10	677	95		448	805	4		27	298	12		30	7	644	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	10	677	95		448	805	4		27	298	12		30	7	644	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.93	0.91	0.91		0.93	0.93	0.93		0.12	0.98	0.83		0.45	0.83	0.83	
Lanes:	1.00	1.75	0.25		1.00	1.99	0.01		1.00	1.00	1.00		1.00	0.01	0.99	
Final Sat..	1769	3049	426		1769	3515	19		220	1862	1583		855	16	1570	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.22	0.22		0.25	0.23	0.23		0.13	0.16	0.01		0.03	0.41	0.41	
Crit Moves:		****			****									****		
Green/Cycle:	0.10	0.23	0.23		0.26	0.39	0.39		0.42	0.42	0.42		0.42	0.42	0.67	
Volume/Cap:	0.06	0.98	0.98		0.98	0.59	0.59		0.30	0.38	0.02		0.08	0.98	0.61	
Delay/Veh:	49.2	74.3	74.3		82.1	30.1	30.1		25.2	24.6	20.6		21.2	65.5	11.8	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	49.2	74.3	74.3		82.1	30.1	30.1		25.2	24.6	20.6		21.2	65.5	11.8	
HCM2kAvg:	0	19	19		23	12	12		6	8	0		1	30	13	

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.676
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 19.6
Optimal Cycle: 67 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	0 0	0	0	0	1	1	0	0 1	0	0	2	0 1	2	0	2	0 0
Volume Module: >> Count Date: 27 Nov 2001 << AM Peak																
Base Vol:	0	0		0	85	22		17	0	616		699	248	1204		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	85	22		17	0	616		699	248	1204		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	94	24		19	0	684		777	276	1338		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	0		0	94	24		19	0	684		777	276	1338		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	0		0	94	24		19	0	684		777	276	1338		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00		1.00	0.83	0.83		0.83	1.00	0.93		0.83	0.90	0.93		1.00
Lanes:	0.00	0.00		0.00	1.59	0.41		1.00	0.00	2.00		1.00	2.00	2.00		0.00
Final Sat..	0	0		0	2515	651		1583	0	3538		1583	3432	3538		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00		0.00	0.04	0.04		0.01	0.00	0.19		0.49	0.08	0.38		0.00
Crit Moves:						****						****	****			
Green/Cycle:	0.00	0.00		0.00	0.20	0.20		0.20	0.00	0.60		0.60	0.10	0.70		0.00
Volume/Cap:	0.00	0.00		0.00	0.19	0.19		0.06	0.00	0.32		0.82	0.82	0.54		0.00
Delay/Veh:	0.0	0.0		0.0	40.0	40.0		38.9	0.0	11.9		24.2	67.2	8.9		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	0.0		0.0	40.0	40.0		38.9	0.0	11.9		24.2	67.2	8.9		0.0
HCM2kAvg:	0	0		0	2	2		1	0	6		24	7	12		0

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave [NS/ EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.709
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.9
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1 1	0	0	1	0 0	0	0	0	2 0	2	0	0	0 0	2	0	1
Volume Module: >> Count Date: 27 Nov 2001 << AM Peak																
Base Vol:	604	9		169	0	0		0	105	647		0	0	831		296
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	604	9		169	0	0		0	105	647		0	0	831		296
User Adj:	1.25	1.25		1.25	1.25	1.25		1.25	1.25	1.25		1.25	1.25	1.25		1.25
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	839	13		235	0	0		0	146	899		0	0	1154		411
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	839	13		235	0	0		0	146	899		0	0	1154		411
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	839	13		235	0	0		0	146	899		0	0	1154		411
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.83	0.83		0.83	1.00	1.00		1.00	0.90	0.93		1.00	1.00	0.93		0.83
Lanes:	1.97	0.03		1.00	0.00	0.00		0.00	2.00	2.00		0.00	0.00	2.00		1.00
Final Sat..	3119	46		1583	0	0		0	3432	3538		0	0	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.27	0.27		0.15	0.00	0.00		0.00	0.04	0.25		0.00	0.00	0.33		0.26
Crit Moves:		****							****					****		
Green/Cycle:	0.38	0.38		0.38	0.00	0.00		0.00	0.06	0.52		0.00	0.00	0.46		0.46
Volume/Cap:	0.71	0.71		0.39	0.00	0.00		0.00	0.71	0.49		0.00	0.00	0.71		0.56
Delay/Veh:	33.6	33.6		27.5	0.0	0.0		0.0	66.2	18.7		0.0	0.0	27.4		24.6
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	33.6	33.6		27.5	0.0	0.0		0.0	66.2	18.7		0.0	0.0	27.4		24.6
HCM2kAvg:	16	16		6	0	0		0	4	11		0	0	18		11

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.865
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 28.3
Optimal Cycle: 88 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0		0	0	0		0	0	0		0	0	0		0	0
Lanes:	0	0	1	0 1	1	0	2	0 0	0	0	0	0 0	2	0	0	0 1
Volume Module: AM Peak																
Base Vol:	0		703	183	180		962	0	0		0	0	555		0	386
Growth Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0		703	183	180		962	0	0		0	0	555		0	386
User Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	0		781	203	200		1069	0	0		0	0	617		0	429
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Reduced Vol:	0		781	203	200		1069	0	0		0	0	617		0	429
PCE Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol.:	0		781	203	200		1069	0	0		0	0	617		0	429
Saturation Flow Module:																
Sat/Lane:	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900
Adjustment:	1.00		1.00	0.85	0.95		0.95	1.00	1.00		1.00	1.00	0.92		1.00	0.85
Lanes:	0.00		1.00	1.00	1.00		2.00	0.00	0.00		0.00	0.00	2.00		0.00	1.00
Final Sat.:	0		1900	1615	1805		3610	0	0		0	0	3502		0	1615
Capacity Analysis Module:																
Vol/Sat:	0.00		0.41	0.13	0.11		0.30	0.00	0.00		0.00	0.00	0.18		0.00	0.27
Crit Moves:			****		****											****
Green/Cycle:	0.00		0.48	0.48	0.13		0.60	0.00	0.00		0.00	0.00	0.31		0.00	0.31
Volume/Cap:	0.00		0.87	0.27	0.87		0.49	0.00	0.00		0.00	0.00	0.57		0.00	0.87
Delay/Veh:	0.0		32.2	15.9	69.9		11.4	0.0	0.0		0.0	0.0	29.9		0.0	47.4
User DelAdj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	0.0		32.2	15.9	69.9		11.4	0.0	0.0		0.0	0.0	29.9		0.0	47.4
HCM2kAvg:	0		24	4	9		9	0	0		0	0	9		0	15

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.856
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.2
Optimal Cycle: 93 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0		0	0	0		0	0	0		0	0	0		0	0
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	0 1	2	0	2	0 1
Volume Module:																
Base Vol:	13		49	66	45		389	56	103		531	561	756		313	47
Growth Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	13		49	66	45		389	56	103		531	561	756		313	47
User Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	14		54	73	50		432	62	114		590	623	840		348	52
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Reduced Vol:	14		54	73	50		432	62	114		590	623	840		348	52
PCE Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol.:	14		54	73	50		432	62	114		590	623	840		348	52
Saturation Flow Module:																
Sat/Lane:	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900
Adjustment:	0.95		0.95	0.85	0.95		0.95	0.85	0.95		0.95	0.85	0.92		0.95	0.85
Lanes:	1.00		2.00	1.00	1.00		2.00	1.00	1.00		2.00	1.00	2.00		2.00	1.00
Final Sat.:	1805		3610	1615	1805		3610	1615	1805		3610	1615	3502		3610	1615
Capacity Analysis Module:																
Vol/Sat:	0.01		0.02	0.05	0.03		0.12	0.04	0.06		0.16	0.39	0.24		0.10	0.03
Crit Moves:	****						****					****	****			
Green/Cycle:	0.01		0.09	0.09	0.06		0.14	0.14	0.29		0.45	0.45	0.28		0.44	0.44
Volume/Cap:	0.86		0.16	0.49	0.49		0.86	0.28	0.22		0.36	0.86	0.86		0.22	0.07
Delay/Veh:	198.0		42.0	45.6	49.4		55.6	39.1	27.1		18.2	34.4	41.6		17.4	16.2
User DelAdj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	198.0		42.0	45.6	49.4		55.6	39.1	27.1		18.2	34.4	41.6		17.4	16.2
HCM2kAvg:	2		1	3	2		9	2	3		6	20	16		3	1

Harmony Grove Village
Option A: Baseline + Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	34.5	0.827	C	34.5	0.827	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	F	98.5	1.333	F	98.5	1.333	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	F	91.3	1.130	F	91.3	1.130	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	853.1	0.000	F	853.1	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	9.0	0.313	A	9.0	0.313	+ 0.000 V/C
# 6 Country Club/Entrance # 3	B	10.3	0.000	B	10.3	0.000	+ 0.000 D/V
# 7 Country Club/ Village Road	C	16.2	0.000	C	16.2	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	D	25.9	0.000	D	25.9	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	B	13.8	0.000	B	13.8	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	C	21.1	0.000	C	21.1	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	C	19.5	0.000	C	19.5	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	C	16.2	0.000	C	16.2	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	A	2.0	0.592	A	2.0	0.592	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	D	35.0	0.000	D	35.0	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	41.6	0.707	D	41.6	0.707	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	C	20.0	0.785	C	20.0	0.785	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	B	11.6	0.000	B	11.6	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	C	16.3	0.000	C	16.3	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	34.6	0.774	C	34.6	0.774	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	B	12.0	0.000	B	12.0	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	C	17.1	0.000	C	17.1	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	A	8.9	0.000	A	8.9	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	A	9.7	0.000	A	9.7	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	E	55.9	1.117	E	55.9	1.117	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline + Project

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	E	76.4	1.076	E	76.4	1.076	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	42.2	0.814	D	42.2	0.814	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	C	34.9	0.551	C	34.9	0.551	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	A	7.4	0.483	A	7.4	0.483	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	201.5	0.000	F	201.5	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	25.0	0.483	C	25.0	0.483	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	34.5	0.732	C	34.5	0.732	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	C	27.2	0.774	C	27.2	0.774	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	21.6	0.861	C	21.6	0.861	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	27.5	0.618	C	27.5	0.618	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	33.9	0.959	C	33.9	0.959	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	44.6	0.947	D	44.6	0.947	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	D	35.5	0.784	D	35.5	0.784	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline + Project

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	E	76.4	1.076	E	76.4	1.076	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	42.2	0.814	D	42.2	0.814	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	C	34.9	0.551	C	34.9	0.551	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	A	7.4	0.483	A	7.4	0.483	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	201.5	0.000	F	201.5	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	25.0	0.483	C	25.0	0.483	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	34.5	0.732	C	34.5	0.732	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	C	28.0	0.804	C	28.0	0.804	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	21.6	0.861	C	21.6	0.861	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	27.5	0.618	C	27.5	0.618	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	33.9	0.959	C	33.9	0.959	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	44.6	0.947	D	44.6	0.947	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	D	35.5	0.784	D	35.5	0.784	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.827
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 34.5
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	0	0	0	7	24	7
Lanes:	2 0 2	0 0		0 0 2	0 1		0 0 0	0 0		1 0 1!	0 1	
Volume Module: >> Count Date: 13 Dec 2001 << PM Peak												
Base Vol:	670	832	0	0	672	211	0	0	0	361	6	267
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	670	832	0	0	672	211	0	0	0	361	6	267
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	744	924	0	0	747	234	0	0	0	401	7	297
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	744	924	0	0	747	234	0	0	0	401	7	297
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	744	924	0	0	747	234	0	0	0	401	7	297
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.71	0.73	1.00	1.00	0.93	0.83	1.00	1.00	1.00	0.68	0.68	0.68
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.56	0.02	1.42
Final Sat..	2693	2776	0	0	3538	1583	0	0	0	2006	24	1818
Capacity Analysis Module:												
Vol/Sat:	0.28	0.33	0.00	0.00	0.21	0.15	0.00	0.00	0.00	0.20	0.28	0.16
Crit Moves:	****				****						****	
Green/Cycle:	0.33	0.59	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.34	0.34	0.34
Volume/Cap:	0.83	0.56	0.00	0.00	0.83	0.58	0.00	0.00	0.00	0.60	0.83	0.49
Delay/Veh:	43.1	15.6	0.0	0.0	48.5	41.2	0.0	0.0	0.0	34.0	43.4	31.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.1	15.6	0.0	0.0	48.5	41.2	0.0	0.0	0.0	34.0	43.4	31.9
HCM2kAvg:	16	11	0	0	15	8	0	0	0	9	15	7

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp (NS / EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.333
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 98.5
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24		7	7	24		0	7	24		7	0	0		0
Lanes:	0 0	2	0	1	2 0	2	0	0	0 1	0	1	0	0 0	0	0	0
Volume Module: >> Count Date: 13 Dec 2001 << PM Peak																
Base Vol:	0	1131	736		372	689		0	263	2	445		0	0		0
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	0	1131	736		372	689		0	263	2	445		0	0		0
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90		0.90
PHF Volume:	0	1257	818		413	766		0	292	2	494		0	0		0
Reduct Vol:	0	0	0		0	0		0	0	0	0		0	0		0
Reduced Vol:	0	1257	818		413	766		0	292	2	494		0	0		0
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
Final Vol..	0	1257	818		413	766		0	292	2	494		0	0		0
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900	1900		1900	1900		1900
Adjustment:	1.00	0.73	0.65		0.90	0.93		1.00	0.60	0.60	0.60		1.00	1.00		1.00
Lanes:	0.00	2.00	1.00		2.00	2.00		0.00	0.99	0.01	1.00		0.00	0.00		0.00
Final Sat..	0	2776	1242		3432	3538		0	1131	9	1139		0	0		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.45	0.66		0.12	0.22		0.00	0.26	0.26	0.43		0.00	0.00		0.00
Crit Moves:			****		****						****					
Green/Cycle:	0.00	0.49	0.49		0.09	0.58		0.00	0.33	0.33	0.33		0.00	0.00		0.00
Volume/Cap:	0.00	0.92	1.33		1.33	0.37		0.00	0.79	0.79	1.33		0.00	0.00		0.00
Delay/Veh:	0.0	33.2	186.0		215.7	11.1		0.0	35.1	35.1	194.8		0.0	0.0		0.0
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
AdjDel/Veh:	0.0	33.2	186.0		215.7	11.1		0.0	35.1	35.1	194.8		0.0	0.0		0.0
HCM2kAvg:	0	22	52		16	6		0	11	11	36		0	0		0

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.130
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 91.3
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1 0	2	0	1	2 0	1	1	0	2 0	2	0	1	2 0	2	0	1
Volume Module: >> Count Date: 13 Dec 2001 << PM Peak																
Base Vol:	261	1062	73		236	523		238	311	643	278		57	533		552
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	261	1062	73		236	523		238	311	643	278		57	533		552
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90		0.90
PHF Volume:	290	1180	81		262	581		264	346	714	309		63	592		613
Reduct Vol:	0	0	0		0	0		0	0	0	0		0	0		0
Reduced Vol.	290	1180	81		262	581		264	346	714	309		63	592		613
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
Final Vol..	290	1180	81		262	581		264	346	714	309		63	592		613
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900	1900		1900	1900		1900
Adjustment:	0.73	0.73	0.65		0.71	0.70		0.70	0.90	0.93	0.83		0.90	0.93		0.83
Lanes:	1.00	2.00	1.00		2.00	1.37		0.63	2.00	2.00	1.00		2.00	2.00		1.00
Final Sat..	1388	2776	1242		2693	1818		827	3432	3538	1583		3432	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.21	0.43	0.07		0.10	0.32		0.32	0.10	0.20	0.20		0.02	0.17		0.39
Crit Moves:	****					****			****							****
Green/Cycle:	0.18	0.38	0.38		0.09	0.28		0.28	0.09	0.34	0.34		0.10	0.34		0.34
Volume/Cap:	1.13	1.12	0.17		1.12	1.13		1.13	1.13	0.60	0.58		0.19	0.49		1.13
Delay/Veh:	144.6	103	24.8		148.4	118		117.8	145.8	34.1	34.6		50.1	31.4		119.0
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
AdjDel/Veh:	144.6	103	24.8		148.4	118		117.8	145.8	34.1	34.6		50.1	31.4		119.0
HCM2kAvg:	19	33	2		10	25		25	12	11	10		1	9		35

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club (NS / EW)

Average Delay (sec/veh): 96.9 Worst Case Level Of Service: F[853.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	1	1 0	1	0	1 0	0	1	0 0	1!	0 0
Volume Module: >> Count Date: 11 Dec 2001 << PM Peak												
Base Vol:	65	1110	5	39	658	241	210	1	60	1	0	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	1110	5	39	658	241	210	1	60	1	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	72	1233	6	43	731	268	233	1	67	1	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	72	1233	6	43	731	268	233	1	67	1	0	13
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	xxxx	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	999	xxxx	xxxxx	1239	xxxx	xxxxx	1579	2201	731	2363	xxxx	617
Potent Cap..	693	xxxx	xxxxx	562	xxxx	xxxxx	88	45	422	24	xxxx	490
Move Cap..	693	xxxx	xxxxx	562	xxxx	xxxxx	75	37	422	17	xxxx	490
Volume/Cap:	0.10	xxxx	xxxx	0.08	xxxx	xxxx	3.13	0.03	0.16	0.06	xxxx	0.03
Level Of Service Module:												
Queue:	0.3	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	0.6	xxxxx	xxxx	xxxxx
Stopped Del:	10.8	xxxx	xxxxx	11.9	xxxx	xxxxx	xxxxx	xxxx	15.1	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	B	*	*	*	*	C	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	74	xxxx	xxxxx	xxxx	159	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	23.7	xxxx	xxxxx	xxxxx	0.3	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1091	xxxx	xxxxx	xxxxx	29.9	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			853.1			29.9		
ApproachLOS:	*			*			F			D		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.313
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.0
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Ignore				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0 0	1	0	1	0	1	0	0	0	0 0	0	0	0	0	1!	0 0
Volume Module: PM Peak																
Base Vol:	0	163		7	60	167		0	0		0		9		0	53
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00	1.00
Initial Bse:	0	163		7	60	167		0	0		0		9		0	53
User Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.00	0.90	0.90		0.90	0.90		0.90		0.90		0.90	0.90
PHF Volume:	0	181		0	67	186		0	0		0		10		0	59
Reduct Vol:	0	0		0	0	0		0	0		0		0		0	0
Reduced Vol:	0	181		0	67	186		0	0		0		10		0	59
PCE Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00	1.00
MLF Adj:	1.00	1.00		0.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00	1.00
Final Vol..	0	181		0	67	186		0	0		0		10		0	59
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00	1.00
Lanes:	0.00	1.00		1.00	0.26	0.74		0.00	0.00		0.00		0.15		0.00	0.85
Final Sat..	0	736		0	213	593		0	0		0		111		0	652
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.25	xxxx	0.31	0.31	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	0.09				
Crit Moves:		****			****					****						
Delay/Veh:	0.0	9.1	0.0	9.4	9.4	0.0	0.0	0.0	0.0	7.8	0.0	7.8				
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	0.0	9.1	0.0	9.4	9.4	0.0	0.0	0.0	0.0	7.8	0.0	7.8				
LOS by Move:	*	A	*	A	A	-	*	*	*	A	*	A				
ApproachDel:		9.1			9.4			xxxxxx			7.8					
Delay Adj:		1.00			1.00			xxxxx			1.00					
ApprAdjDel:		9.1			9.4			xxxxxx			7.8					
LOS by Appr:		A			A			*			A					

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club/Entrance # 3

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1 0	0	0 1	0 0	0	0 0	0 0	0	0 0	0 0	1
Volume Module: PM Peak												
Base Vol:	0	296	0	52	398	0	0	0	0	0	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	296	0	52	398	0	0	0	0	0	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	329	0	58	442	0	0	0	0	0	0	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	329	0	58	442	0	0	0	0	0	0	33
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	329	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	329
Potent Cap.:	xxxx	xxxx	xxxxx	1242	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	717
Move Cap..	xxxx	xxxx	xxxxx	1242	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	717
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1
Stopped Del:	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.3
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.3		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Average Delay (sec/veh): 5.7 Worst Case Level Of Service: C[16.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1 0	1	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module: PM Peak												
Base Vol.	0	170	156	0	176	0	0	0	0	274	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	170	156	0	176	0	0	0	0	274	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	189	173	0	196	0	0	0	0	304	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	189	173	0	196	0	0	0	0	304	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	384	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	622	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	622	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.49	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	16.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	C	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			16.2		
ApproachLOS:	*			*			*			C		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: D[25.91

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	1	0	0	0	1	0	1	1	0	0	0	1	0	0	0
Volume Module: PM Peak																	
Base Vol:	0	510		0	0	239	274		156	0		0	0		0	0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Initial Bse:	0	510		0	0	239	274		156	0		0	0		0	0	0
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90		0.90	0.90		0.90	0.90	0.90
PHF Volume:	0	567		0	0	266	304		173	0		0	0		0	0	0
Reduct Vol:	0	0		0	0	0	0		0	0		0	0		0	0	0
Final Vol..	0	567		0	0	266	304		173	0		0	0		0	0	0
Critical Gap Module:																	
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Capacity Module:																	
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			832	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			342	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			342	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx			0.51	xxxx	xxxx	xxxx	xxxx	xxxx			
Level Of Service Module:																	
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			2.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			25.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*		*	*	*			D	*		*	*	*			
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*		*	*	*			*	*		*	*	*			
ApproachDel:	xxxxxx				xxxxxx				25.9				xxxxxx				
ApproachLOS:	*				*				D				*				

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: B[13.81

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0
Volume Module: PM Peak																	
Base Vol:	0	130		0	0	106	292		166	0		0	0		0	0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Initial Bse:	0	130		0	0	106	292		166	0		0	0		0	0	0
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90		0.90	0.90		0.90	0.90	0.90
PHF Volume:	0	144		0	0	118	324		184	0		0	0		0	0	0
Reduct Vol:	0	0		0	0	0	0		0	0		0	0		0	0	0
Final Vol..	0	144		0	0	118	324		184	0		0	0		0	0	0
Critical Gap Module:																	
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Capacity Module:																	
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			424	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			590	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			590	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx			0.31	xxxx	xxxx	xxxx	xxxx	xxxx			
Level Of Service Module:																	
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			1.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			13.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*		*	*	*	*		B	*	*	*	*	*			
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*		*	*	*			*	*		*	*	*			
ApproachDel:	xxxxxx				xxxxxx				13.8				xxxxxx				
ApproachLOS:	*				*				B				*				

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Country Club/Harmony Grove

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: C[21.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: PM Peak												
Base Vol:	4	8	13	3	17	72	132	492	6	17	209	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	8	13	3	17	72	132	492	6	17	209	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	4	9	14	3	19	80	147	547	7	19	232	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	4	9	14	3	19	80	147	547	7	19	232	6
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1166	1119	550	1128	1119	235	238	xxxx	xxxxx	553	xxxx	xxxxx
Potent Cap..	173	209	539	183	208	809	1341	xxxx	xxxxx	1027	xxxx	xxxxx
Move Cap..	128	180	539	154	180	809	1341	xxxx	xxxxx	1027	xxxx	xxxxx
Volume/Cap:	0.03	0.05	0.03	0.02	0.10	0.10	0.11	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	8.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	251	xxxxx	xxxx	454	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	21.1	xxxxx	xxxxx	15.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:		21.1			15.2			xxxxxx			xxxxxx	
ApproachLOS:		C			C			*			*	

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: C[19.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module: PM Peak												
Base Vol:	0	0	0	56	0	17	29	573	0	0	187	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	56	0	17	29	573	0	0	187	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	62	0	19	32	637	0	0	208	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	62	0	19	32	637	0	0	208	109
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	963	xxxx	262	317	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	286	xxxx	781	1255	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	280	xxxx	781	1255	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.22	xxxx	0.02	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	329	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.0	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	19.5	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:		xxxxxx			19.5			xxxxxx			xxxxxx	
ApproachLOS:		*			C			*			*	

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[16.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0 0	1! 0	0	0 1	0	0 0	0 0	0	1 0
Volume Module: PM Peak												
Base Vol.	0	0	0	41	0	7	15	546	0	0	128	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	41	0	7	15	546	0	0	128	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	46	0	8	17	607	0	0	142	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	46	0	8	17	607	0	0	142	81
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	823	xxxx	183	223	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	346	xxxx	865	1357	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	343	xxxx	865	1357	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.13	xxxx	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	376	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	16.2	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxx				16.2		xxxxxx			xxxxxx		
ApproachLOS:	*				C		*			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.592
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 2.0
Optimal Cycle: 40 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	1	0 1	1 0	1	0 0
Volume Module: PM Peak												
Base Vol:	6	0	3	0	0	0	0	892	12	6	915	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	0	3	0	0	0	0	892	12	6	915	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	7	0	3	0	0	0	0	991	13	7	1017	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	0	3	0	0	0	0	991	13	7	1017	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	7	0	3	0	0	0	0	991	13	7	1017	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.28	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat..	1805	0	1615	0	0	0	0	1900	1615	530	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.01	0.01	0.54	0.00
Crit Moves:	****										****	
Green/Cycle:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.90	0.90	0.90	0.90	0.00
Volume/Cap:	0.59	0.00	0.33	0.00	0.00	0.00	0.00	0.58	0.01	0.01	0.59	0.00
Delay/Veh:	112.9	0.0	67.8	0.0	0.0	0.0	0.0	1.5	0.5	0.5	1.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	112.9	0.0	67.8	0.0	0.0	0.0	0.0	1.5	0.5	0.5	1.6	0.0
HCM2kAvg:	1	0	0	0	0	0	0	7	0	0	7	0

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa [NS / EW]

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: D[35.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	1	0 0	0 0	0	1 0	0 0	1!	0 0	0 0	0	0 0
Volume Module: PM Peak												
Base Vol:	18	648	0	0	489	74	56	0	24	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	648	0	0	489	74	56	0	24	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	20	720	0	0	543	82	62	0	27	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	20	720	0	0	543	82	62	0	27	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	626	xxxx	xxxxx	xxxx	xxxx	xxxxx	1344	xxxx	584	xxxx	xxxx	xxxxx
Potent Cap.:	956	xxxx	xxxxx	xxxx	xxxx	xxxxx	167	xxxx	511	xxxx	xxxx	xxxxx
Move Cap.:	956	xxxx	xxxxx	xxxx	xxxx	xxxxx	165	xxxx	511	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.38	xxxx	0.05	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	207	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	35.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			35.0			xxxxxx		
ApproachLOS:	*			*			D			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.707
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 41.6
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	2 0	1	0 1	2 0	1	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module: >> Count Date: 11 Dec 2001 << PM Peak												
Base Vol:	375	251	289	104	136	62	80	709	103	276	478	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	375	251	289	104	136	62	80	709	103	276	478	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	417	279	321	116	151	69	89	788	114	307	531	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol.:	417	279	321	116	151	69	89	788	114	307	531	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	417	279	321	116	151	69	89	788	114	307	531	149
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.98	0.83	0.90	0.98	0.83	0.93	0.91	0.91	0.93	0.93	0.83
Lanes:	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.75	0.25	1.00	2.00	1.00
Final Sat.:	3432	1862	1583	3432	1862	1583	1769	3030	440	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.12	0.15	0.20	0.03	0.08	0.04	0.05	0.26	0.26	0.17	0.15	0.09
Crit Moves:	****				****			****		****		
Green/Cycle:	0.15	0.27	0.27	0.08	0.20	0.20	0.12	0.33	0.33	0.22	0.42	0.42
Volume/Cap:	0.79	0.55	0.74	0.43	0.41	0.22	0.41	0.79	0.79	0.79	0.35	0.22
Delay/Veh:	57.0	38.4	46.3	53.8	42.5	40.5	49.8	40.5	40.5	55.0	23.6	22.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.0	38.4	46.3	53.8	42.5	40.5	49.8	40.5	40.5	55.0	23.6	22.2
HCM2kAvg:	10	9	12	3	5	2	4	17	17	13	7	3

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.785
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 20.0
Optimal Cycle: 0 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1
Volume Module: >> Count Date: 28 Nov 2001 << PM Peak																
Base Vol:	63	260		170	100	333		6	7	21		9	191		7	152
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	63	260		170	100	333		6	7	21		9	191		7	152
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90
PHF Volume:	70	289		189	111	370		7	8	23		10	212		8	169
Reduct Vol:	0	0		0	0	0		0	0	0		0	0		0	0
Reduced Vol:	70	289		189	111	370		7	8	23		10	212		8	169
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Final Vol..	70	289		189	111	370		7	8	23		10	212		8	169
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Lanes:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Final Sat..	433	470		512	433	471		499	341	359		385	414		428	476
Capacity Analysis Module:																
Vol/Sat:	0.16	0.61	0.37	0.26	0.78		0.01	0.02	0.06		0.03	0.51		0.02		0.35
Crit Moves:		****			****				****			****				
Delay/Veh:	12.1	20.8	13.2	13.3	31.3		9.6	12.3	12.2		11.1	19.0		10.7		13.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	12.1	20.8	13.2	13.3	31.3		9.6	12.3	12.2		11.1	19.0		10.7		13.5
LOS by Move:	B	C	B	B	D		A	B	B		B	C		B		B
ApproachDel:		17.1			26.9				12.0					16.5		
Delay Adj:		1.00			1.00				1.00					1.00		
ApprAdjDel:		17.1			26.9				12.0					16.5		
LOS by Appr:		C			D				B					C		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. [NS / EW]

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[11.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	0	1 0	0	1	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << PM Peak																
Base Vol:	5	0		10	0	0		0	0	287		9	23	314		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	5	0		10	0	0		0	0	287		9	23	314		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	6	0		11	0	0		0	0	319		10	26	349		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	6	0		11	0	0		0	0	319		10	26	349		0
Critical Gap Module:																
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	724	xxxx		324	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		329	xxxx	xxxxx		
Potent Cap..	393	xxxx		717	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1231	xxxx	xxxxx		
Move Cap..	386	xxxx		717	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1231	xxxx	xxxxx		
Volume/Cap:	0.01	xxxx		0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.02	xxxx	xxxx		
Level Of Service Module:																
Queue:	0.0	xxxx		0.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		
Stopped Del.	14.5	xxxx		10.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx		
LOS by Move:	B	*		B	*	*	*	*	*	*		A	*	*		
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		A	*	*	
ApproachDel:		11.6			xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:		B			*				*				*			

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: C[16.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	1 0	0	0 1	0 1	0	0 0	0 0	0	1 0
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak												
Base Vol:	0	0	0	39	0	64	94	338	0	0	309	51
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	39	0	64	94	338	0	0	309	51
User Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	48	0	78	115	413	0	0	378	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	48	0	78	115	413	0	0	378	62
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1052	xxxx	409	440	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	253	xxxx	647	1131	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	232	xxxx	647	1131	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.21	xxxx	0.12	0.10	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.8	xxxx	0.4	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	24.5	xxxx	11.3	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	-	B	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			16.3			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.774
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.6
Optimal Cycle: 75 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	0	7	7	24	0	0	24	7
Lanes:	0 1	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak												
Base Vol.	28	12	28	386	9	176	209	1304	14	26	930	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	12	28	386	9	176	209	1304	14	26	930	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	31	13	31	429	10	196	232	1449	16	29	1033	397
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol.	31	13	31	429	10	196	232	1449	16	29	1033	397
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	31	13	31	429	10	196	232	1449	16	29	1033	397
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	0.93	0.84	0.84	0.93	0.93	0.93	0.93	0.93	0.83
Lanes:	0.83	0.35	0.82	1.00	0.05	0.95	1.00	1.98	0.02	1.00	2.00	1.00
Final Sat..	1339	574	1339	1769	78	1518	1769	3493	38	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.24	0.13	0.13	0.13	0.41	0.41	0.02	0.29	0.25
Crit Moves:		****		****				****		****		
Green/Cycle:	0.03	0.03	0.03	0.31	0.31	0.31	0.17	0.54	0.54	0.02	0.38	0.38
Volume/Cap:	0.77	0.77	0.77	0.77	0.41	0.41	0.76	0.77	0.77	0.77	0.76	0.65
Delay/Veh:	89.0	89.0	89.0	44.1	33.0	33.0	57.9	24.2	24.2	123.4	34.7	32.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	89.0	89.0	89.0	44.1	33.0	33.0	57.9	24.2	24.2	123.4	34.7	32.9
HCM2kAvg:	3	3	3	17	6	6	10	22	22	2	18	13

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: B[12.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak												
Base Vol:	0	186	53	5	192	0	0	0	0	67	0	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	186	53	5	192	0	0	0	0	67	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	207	59	6	213	0	0	0	0	74	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	207	59	6	213	0	0	0	0	74	0	13
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxx	4.1	xxxx	xxxx	xxxx	xxxx	xxxx	6.4	xxxx	6.2
FollowUpTim:	xxxx	xxxx	xxxx	2.2	xxxx	xxxx	xxxx	xxxx	xxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxx	266	xxxx	xxxx	xxxx	xxxx	xxxx	461	xxxx	236
Potent Cap.:	xxxx	xxxx	xxxx	1310	xxxx	xxxx	xxxx	xxxx	xxxx	563	xxxx	808
Move Cap.:	xxxx	xxxx	xxxx	1310	xxxx	xxxx	xxxx	xxxx	xxxx	561	xxxx	808
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	xxxx	0.02
Level Of Service Module:												
Queue:	xxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxx	xxxx	xxxx	0.5	xxxx	0.1
Stopped Del:	xxxx	xxxx	xxxx	7.8	xxxx	xxxx	xxxx	xxxx	xxxx	12.4	xxxx	9.5
LOS by Move:	*	*	*	A	*	*	*	*	*	B	*	A
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
SharedQueue:	xxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shrd StpDel:	xxxx	xxxx	xxxx	7.8	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.0		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 8.6 Worst Case Level Of Service: C[17.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0 0 0			0 0 0 1 0			1 0 0 0 1			0 0 0 0 0		
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak												
Base Vol:	187	91	0	0	83	162	159	0	190	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	187	91	0	0	83	162	159	0	190	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	208	101	0	0	92	180	177	0	211	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	208	101	0	0	92	180	177	0	211	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxx	xxxx	xxxx	xxxx	6.4	xxxx	6.2	xxxx	xxxx	xxxx
FollowUpTim:	2.2	xxxx	xxxx	xxxx	xxxx	xxxx	3.5	xxxx	3.3	xxxx	xxxx	xxxx
Capacity Module:												
Cnflict Vol:	272	xxxx	xxxx	xxxx	xxxx	xxxx	699	xxxx	182	xxxx	xxxx	xxxx
Potent Cap.:	1303	xxxx	xxxx	xxxx	xxxx	xxxx	409	xxxx	865	xxxx	xxxx	xxxx
Move Cap.:	1303	xxxx	xxxx	xxxx	xxxx	xxxx	352	xxxx	865	xxxx	xxxx	xxxx
Volume/Cap:	0.16	xxxx	xxxx	xxxx	xxxx	xxxx	0.50	xxxx	0.24	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.6	xxxx	xxxx	xxxx	xxxx	xxxx	2.7	xxxx	1.0	xxxx	xxxx	xxxx
Stopped Del:	8.3	xxxx	xxxx	xxxx	xxxx	xxxx	25.1	xxxx	10.5	xxxx	xxxx	xxxx
LOS by Move:	A	*	*	*	*	*	D	*	B	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
SharedQueue:	0.6	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shrd StpDel:	8.3	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.1			xxxxxx		
ApproachLOS:	*			*			C			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 7.2 Worst Case Level Of Service: A[8.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 0 1 0			1 0 1 0 0		
Volume Module: PM Peak												
Base Vol:	6	0	115	0	0	0	0	14	4	125	16	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	0	115	0	0	0	0	14	4	125	16	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	7	0	128	0	0	0	0	16	4	139	18	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	7	0	128	0	0	0	0	16	4	139	18	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	313	xxxx	18	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	20	xxxx	xxxxx
Potent Cap..	684	xxxx	1067	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1609	xxxx	xxxxx
Move Cap..	638	xxxx	1067	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1609	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	0.12	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	0.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx
Stopped Del:	10.7	xxxx	8.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx
LOS by Move:	B	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	8.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 6.5 Worst Case Level Of Service: A[9.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 1 0 0 1			0 1 0 0 0			0 0 1 0 1		
Volume Module: PM Peak												
Base Vol:	0	0	0	57	0	116	121	13	0	0	21	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	57	0	116	121	13	0	0	21	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	63	0	129	134	14	0	0	23	81
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	63	0	129	134	14	0	0	23	81
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	307	xxxx	23	104	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	690	xxxx	1059	1500	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	638	xxxx	1059	1500	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.10	xxxx	0.12	0.09	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.4	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.9	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	638	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	11.3	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			9.7			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.117
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 55.9
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	0	0	0	7	24	7
Lanes:	0 1	0 0	1	0 0	0 0	0	2 0	3 0	0	0 0	3 0	1
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak												
Base Vol:	162	0	414	0	0	0	812	1526	0	0	1429	683
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	0	414	0	0	0	812	1526	0	0	1429	683
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	180	0	460	0	0	0	902	1696	0	0	1588	759
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	0	460	0	0	0	902	1696	0	0	1588	759
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	180	0	460	0	0	0	902	1696	0	0	1588	759
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	0.90	0.89	1.00	1.00	0.89	0.83
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	1773	0	1583	0	0	0	3432	5083	0	0	5083	1583
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.29	0.00	0.00	0.00	0.26	0.33	0.00	0.00	0.31	0.48
Crit Moves:			****				****					****
Green/Cycle:	0.26	0.00	0.26	0.00	0.00	0.00	0.24	0.66	0.00	0.00	0.43	0.43
Volume/Cap:	0.39	0.00	1.12	0.00	0.00	0.00	1.12	0.50	0.00	0.00	0.73	1.12
Delay/Veh:	37.1	0.0	124.4	0.0	0.0	0.0	114.7	10.2	0.0	0.0	29.7	105.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.1	0.0	124.4	0.0	0.0	0.0	114.7	10.2	0.0	0.0	29.7	105.5
HCM2kAvg:	6	0	26	0	0	0	27	10	0	0	17	41

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.076
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 76.4
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	7	0	7	0	0	0
Lanes:	1 0	1 0	1	0 1	0 1	0	2 0	3 0	1	2 0	3 1	1
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak												
Base Vol:	46	48	307	415	229	374	105	1581	43	276	813	462
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	48	307	415	229	374	105	1581	43	276	813	462
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	51	53	341	461	254	416	117	1757	48	307	903	513
Reduct Vol.:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	53	341	461	254	416	117	1757	48	307	903	513
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	51	53	341	461	254	416	117	1757	48	307	903	513
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.86	0.86	0.86	0.90	0.89	0.83	0.90	0.84	0.84
Lanes:	1.00	1.00	1.00	0.82	0.45	0.73	2.00	3.00	1.00	2.00	3.19	1.81
Final Sat.:	1769	1862	1583	1336	737	1204	3432	5083	1583	3432	5110	2904
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.22	0.35	0.35	0.35	0.03	0.35	0.03	0.09	0.18	0.18
Crit Moves:			****	****				****		****		
Green/Cycle:	0.20	0.20	0.20	0.32	0.32	0.32	0.10	0.32	0.32	0.08	0.30	0.30
Volume/Cap:	0.14	0.14	1.08	1.08	1.08	1.08	0.34	1.08	0.09	1.08	0.58	0.58
Delay/Veh:	39.7	39.7	120.4	91.5	91.5	91.5	50.9	86.7	28.6	130.1	35.7	35.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.7	39.7	120.4	91.5	91.5	91.5	50.9	86.7	28.6	130.1	35.7	35.7
HCM2kAvg:	2	2	20	31	31	31	2	31	1	11	9	9

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.814
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 42.2
Optimal Cycle: 85 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:		Include					Ovl					Include					Include			
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	1	1	0	2	0	1	1	0
Volume Module: >> Count Date: 9 Dec 2000 << PM Peak																				
Base Vol:	321	927			45	140	789			435	718	856			213	194	518			167
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	321	927			45	140	789			435	718	856			213	194	518			167
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	357	1030			50	156	877			483	798	951			237	216	576			186
Reduct Vol.	0	0			0	0	0			0	0	0			0	0	0			0
Reduced Vol:	357	1030			50	156	877			483	798	951			237	216	576			186
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Final Vol..	357	1030			50	156	877			483	798	951			237	216	576			186
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900			1900
Adjustment:	0.90	0.89			0.83	0.90	0.89			0.83	0.90	0.90			0.90	0.90	0.90			0.90
Lanes:	2.00	3.00			1.00	2.00	3.00			1.00	2.00	1.60			0.40	2.00	1.51			0.49
Final Sat..	3432	5083			1583	3432	5083			1583	3432	2748			684	3432	2576			831
Capacity Analysis Module:																				
Vol/Sat:	0.10	0.20			0.03	0.05	0.17			0.31	0.23	0.35			0.35	0.06	0.22			0.22
Crit Moves:	****						****				****						****			
Green/Cycle:	0.13	0.26			0.26	0.08	0.21			0.50	0.29	0.47			0.47	0.09	0.27			0.27
Volume/Cap:	0.81	0.77			0.12	0.60	0.81			0.61	0.81	0.73			0.73	0.73	0.81			0.81
Delay/Veh:	62.1	43.5			33.7	57.4	49.9			23.2	45.2	27.1			27.1	62.4	46.2			46.2
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
AdjDel/Veh:	62.1	43.5			33.7	57.4	49.9			23.2	45.2	27.1			27.1	62.4	46.2			46.2
HCM2kAvg:	9	13			1	4	12			13	16	18			18	6	15			15

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.551
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.9
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:		Include					Include					Include					Include			
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	1	0	3	0	1	1	0	2	1	0	1	0	1	1	0	1	0	1	1	0
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak																				
Base Vol:	21	1023			146	165	841			128	181	207			6	132	119			49
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	21	1023			146	165	841			128	181	207			6	132	119			49
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	23	1137			162	183	934			142	201	230			7	147	132			54
Reduct Vol:	0	0			0	0	0			0	0	0			0	0	0			0
Reduced Vol:	23	1137			162	183	934			142	201	230			7	147	132			54
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Final Vol..	23	1137			162	183	934			142	201	230			7	147	132			54
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900			1900
Adjustment:	0.93	0.89			0.83	0.93	0.87			0.87	0.93	0.93			0.93	0.93	0.89			0.89
Lanes:	1.00	3.00			1.00	1.00	2.60			0.40	1.00	1.94			0.06	1.00	1.42			0.58
Final Sat..	1769	5083			1583	1769	4324			658	1769	3424			99	1769	2396			986
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.22			0.10	0.10	0.22			0.22	0.11	0.07			0.07	0.08	0.06			0.06
Crit Moves:		****				****					****						****			
Green/Cycle:	0.11	0.35			0.35	0.16	0.41			0.41	0.18	0.27			0.27	0.11	0.20			0.20
Volume/Cap:	0.12	0.63			0.29	0.63	0.53			0.53	0.63	0.25			0.25	0.74	0.28			0.28
Delay/Veh:	48.4	32.9			28.1	51.1	27.0			27.0	49.5	34.5			34.5	65.8	40.9			40.9
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
AdjDel/Veh:	48.4	32.9			28.1	51.1	27.0			27.0	49.5	34.5			34.5	65.8	40.9			40.9
HCM2kAvg:	1	12			4	8	10			10	8	3			3	7	3			3

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.483
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.4
Optimal Cycle: 44 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0		0	0	0		0	0	0		0	0	0		0	0
Lanes:	1	0	1	1 0	1	0	2	0 1	1	0	0	1 0	1	0	0	1 0
Volume Module: PM Peak																
Base Vol:	8	1202		8	97	712		60	27		13	1	29		16	36
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	8	1202		8	97	712		60	27		13	1	29		16	36
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	9	1336		9	108	791		67	30		14	1	32		18	40
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	9	1336		9	108	791		67	30		14	1	32		18	40
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol..	9	1336		9	108	791		67	30		14	1	32		18	40
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85		0.95	0.99		0.99	0.95	0.90		0.90	0.90
Lanes:	1.00	1.99	0.01	1.00	2.00	1.00		1.00	0.93		0.07	1.00	0.31		0.69	
Final Sat..	1805	3583	24	1805	3610	1615		1805	1745		134	1805	524		1179	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.37	0.37	0.06	0.22	0.04		0.02	0.01		0.01	0.02	0.03		0.03	
Crit Moves:		****		****				****					****			
Green/Cycle:	0.02	0.77	0.77	0.12	0.88	0.88		0.03	0.03		0.03	0.07	0.07		0.07	
Volume/Cap:	0.25	0.48	0.48	0.48	0.25	0.05		0.48	0.25		0.25	0.25	0.48		0.48	
Delay/Veh:	52.0	4.3	4.3	42.5	1.0	0.8		53.2	49.2		49.2	44.9	47.8		47.8	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	
AdjDel/Veh:	52.0	4.3	4.3	42.5	1.0	0.8		53.2	49.2		49.2	44.9	47.8		47.8	
HCM2kAvg:	1	8	8	4	2	0		2	1		1	1	2		2	

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 8.1 Worst Case Level Of Service: F[201.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	1	0 1	1	0	1	0 1	0	1	0	0 1	0	1	0	0 1
Volume Module: PM Peak																
Base Vol:	65	1182		132	11	674		65	19		5	40	9		4	13
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	65	1182		132	11	674		65	19		5	40	9		4	13
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	72	1313		147	12	749		72	21		6	44	10		4	14
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	72	1313		147	12	749		72	21		6	44	10		4	14
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx		7.1		6.5	6.2	7.1		6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5		4.0	3.3	3.5		4.0	3.3
Capacity Module:																
Cnflict Vol.	821	xxxx	xxxxx		1460	xxxx	xxxxx		2314		2378	749	2292		2303	1313
Potent Cap..	817	xxxx	xxxxx		469	xxxx	xxxxx		27		35	415	28		39	195
Move Cap..	817	xxxx	xxxxx		469	xxxx	xxxxx		21		31	415	20		35	195
Volume/Cap:	0.09	xxxx	xxxx		0.03	xxxx	xxxx		1.02		0.18	0.11	0.51		0.13	0.07
Level Of Service Module:																
Queue:	0.3	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxxx		xxxx	0.4	xxxxx		xxxx	0.2
Stopped Del:	9.8	xxxx	xxxxx		12.9	xxxx	xxxxx		xxxxx		xxxx	14.7	xxxxx		xxxx	24.9
LOS by Move:	A	*	*		B	*	*		*		*	B	*		*	C
Movement:	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		22	xxxx		xxxxx	23	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		3.5	xxxx		xxxxx	1.9	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		512.8	xxxx		xxxxx	309.2	xxxx		xxxxx
Shared LOS:	*	*	*		*	*	*		F	*		*	F	*		*
ApproachDel:	xxxxxx				xxxxxx				201.5				167.0			
ApproachLOS:	*				*				F				F			

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.483
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 25.0
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	1	0	1	1	0	1	0	1	1	0	1	0	1	0	1	1	0	1	0	1
Volume Module: >> Count Date: 8 Jan 2002 << PM Peak																				
Base Vol:	120	1105		26		62	621		103		70		8		99	11		7		43
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	120	1105		26		62	621		103		70		8		99	11		7		43
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	133	1228		29		69	690		114		78		9		110	12		8		48
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Reduced Vol:	133	1228		29		69	690		114		78		9		110	12		8		48
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	133	1228		29		69	690		114		78		9		110	12		8		48
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900		1900		1900	1900		1900		1900
Adjustment:	0.95	0.95		0.95		0.95	0.93		0.93		0.95		1.00		0.85	0.95		1.00		0.85
Lanes:	1.00	1.95		0.05		1.00	1.72		0.28		1.00		1.00		1.00	1.00		1.00		1.00
Final Sat..	1805	3516		83		1805	3031		503		1805		1900		1615	1805		1900		1615
Capacity Analysis Module:																				
Vol/Sat:	0.07	0.35		0.35		0.04	0.23		0.23		0.04		0.00		0.07	0.01		0.00		0.03
Crit Moves:		****				****					****							****		
Green/Cycle:	0.15	0.57		0.57		0.06	0.48		0.48		0.07		0.21		0.21	0.06		0.20		0.20
Volume/Cap:	0.48	0.61		0.61		0.61	0.48		0.48		0.61		0.02		0.33	0.11		0.02		0.15
Delay/Veh:	47.6	17.8		17.8		64.7	21.6		21.6		63.0		37.7		40.8	53.7		38.6		39.8
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	47.6	17.8		17.8		64.7	21.6		21.6		63.0		37.7		40.8	53.7		38.6		39.8
HCM2kAvg:	5	15		15		4	10		10		4		0		4	1		0		1

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.732
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 34.5
Optimal Cycle: 58 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	20			7	7	20			0	0	0			0	20		0		20
Lanes:	0	0	2	0	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module: PM Peak																				
Base Vol:	0	765		276		254	346		0		0		0		0	214		0		414
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	765		276		254	346		0		0		0		0	214		0		414
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	850		307		282	384		0		0		0		0	238		0		460
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Reduced Vol:	0	850		307		282	384		0		0		0		0	238		0		460
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	0	850		307		282	384		0		0		0		0	238		0		460
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900		1900		1900	1900		1900		1900
Adjustment:	1.00	0.95		0.85		0.95	1.00		1.00		1.00		1.00		1.00	0.95		1.00		0.85
Lanes:	0.00	2.00		1.00		1.00	1.00		0.00		0.00		0.00		0.00	1.00		0.00		1.00
Final Sat..	0	3610		1615		1805	1900		0		0		0		0	1805		0		1615
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.24		0.19		0.16	0.20		0.00		0.00		0.00		0.00	0.13		0.00		0.28
Crit Moves:		****				****														****
Green/Cycle:	0.00	0.32		0.32		0.21	0.54		0.00		0.00		0.00		0.00	0.39		0.00		0.39
Volume/Cap:	0.00	0.73		0.59		0.73	0.38		0.00		0.00		0.00		0.00	0.34		0.00		0.73
Delay/Veh:	0.0	38.5		35.9		51.0	16.5		0.0		0.0		0.0		0.0	26.1		0.0		35.7
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	0.0	38.5		35.9		51.0	16.5		0.0		0.0		0.0		0.0	26.1		0.0		35.7
HCM2kAvg:	0	15		10		12	8		0		0		0		0	6		0		16

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.774
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.2
Optimal Cycle: 75 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Ovl			
Min. Green:	7	24		7	7	24		7	0	24		7	7	24		7
Lanes:	1	0	1	1 0	1	0	1	1 0	1	0	1	0 1	1	0	0	1 0
Volume Module: >> Count Date: 27 Nov 2001 << PM Peak																
Base Vol:	15	901		494	14	777		22	19	26		641	155	49		33
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	15	901		494	14	777		22	19	26		641	155	49		33
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		0.50	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	17	1001		549	16	863		24	21	29		356	172	54		37
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	17	1001		549	16	863		24	21	29		356	172	54		37
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	17	1001		549	16	863		24	21	29		356	172	54		37
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.88		0.88	0.93	0.93		0.93	0.67	0.98		0.83	0.73	0.92		0.92
Lanes:	1.00	1.29		0.71	1.00	1.94		0.06	1.00	1.00		1.00	1.00	0.60		0.40
Final Sat..	1769	2164		1186	1769	3427		97	1272	1862		1583	1385	1046		704
Capacity Analysis Module:																
Vol/Sat:	0.01	0.46		0.46	0.01	0.25		0.25	0.02	0.02		0.23	0.12	0.05		0.05
Crit Moves:		****			****							****				
Green/Cycle:	0.12	0.57		0.57	0.06	0.51		0.51	0.28	0.28		0.28	0.28	0.28		0.33
Volume/Cap:	0.08	0.82		0.82	0.15	0.50		0.50	0.06	0.06		0.82	0.45	0.19		0.16
Delay/Veh:	47.3	23.9		23.9	54.4	19.7		19.7	32.1	32.0		52.1	36.8	33.4		28.2
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	47.3	23.9		23.9	54.4	19.7		19.7	32.1	32.0		52.1	36.8	33.4		28.2
HCM2kAvg:	1	25		25	1	11		11	1	1		14	7	3		2

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.861
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 21.6
Optimal Cycle: 101 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	0	0	0	0 0	1	1	0	0 1	0	0	2	0 1	2	0	2	0 0
Volume Module: >> Count Date: 27 Nov 2001 << PM Peak																
Base Vol:	0		0	0	323		0	146	0	949		870	191	1166		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0		0	0	323		0	146	0	949		870	191	1166		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0		0	0	359		0	162	0	1054		967	212	1296		0
Reduct Vol:	0		0	0	0		0	0	0	0		0	0	0		0
Reduced Vol:	0		0	0	359		0	162	0	1054		967	212	1296		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0		0	0	359		0	162	0	1054		967	212	1296		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00		1.00	0.93	1.00		0.83	1.00	0.93		0.83	0.90	0.93		1.00
Lanes:	0.00	0.00		0.00	2.00	0.00		1.00	0.00	2.00		1.00	2.00	2.00		0.00
Final Sat..	0		0	0	3545		0	1583	0	3538		1583	3432	3538		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00		0.00	0.10	0.00		0.10	0.00	0.30		0.61	0.06	0.37		0.00
Crit Moves:								****				****	****			
Green/Cycle:	0.00	0.00		0.00	0.12	0.00		0.12	0.00	0.71		0.71	0.07	0.78		0.00
Volume/Cap:	0.00	0.00		0.00	0.85	0.00		0.86	0.00	0.42		0.86	0.86	0.47		0.00
Delay/Veh:	0.0	0.0		0.0	66.9	0.0		82.8	0.0	7.3		20.0	80.2	4.7		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	0.0		0.0	66.9	0.0		82.8	0.0	7.3		20.0	80.2	4.7		0.0
HCM2kAvg:	0		0	0	9	0		8	0	8		29	6	8		0

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave [NS/ EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.618
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.5
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	1	0	0 1	0	0	0	0 0	2	0	2	0 0	0	0	2	0 1
Volume Module: >> Count Date: 27 Nov 2001 << PM Peak																
Base Vol.	618	2	218		0	0		0	229	1043		0	0	739		377
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	618	2	218		0	0		0	229	1043		0	0	739		377
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	687	2	242		0	0		0	254	1159		0	0	821		419
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	687	2	242		0	0		0	254	1159		0	0	821		419
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	687	2	242		0	0		0	254	1159		0	0	821		419
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.83	0.83	0.83		1.00	1.00		1.00	0.90	0.93		1.00	1.00	0.93		0.83
Lanes:	1.99	0.01	1.00		0.00	0.00		0.00	2.00	2.00		0.00	0.00	2.00		1.00
Final Sat..	3155	10	1583		0	0		0	3432	3538		0	0	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.22	0.22	0.15		0.00	0.00		0.00	0.07	0.33		0.00	0.00	0.23		0.26
Crit Moves:	****								****							****
Green/Cycle:	0.35	0.35	0.35		0.00	0.00		0.00	0.12	0.55		0.00	0.00	0.43		0.43
Volume/Cap:	0.62	0.62	0.43		0.00	0.00		0.00	0.62	0.60		0.00	0.00	0.54		0.62
Delay/Veh:	33.3	33.3	30.3		0.0	0.0		0.0	53.0	18.7		0.0	0.0	26.0		28.4
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	33.3	33.3	30.3		0.0	0.0		0.0	53.0	18.7		0.0	0.0	26.0		28.4
HCM2kAvg:	13	13	7		0	0		0	6	14		0	0	11		12

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.959
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 33.9
Optimal Cycle: 146 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	0	0	1	0 1	1	0	2	0 0	0	0	0	0 0	2	0	0	0 1
Volume Module: PM Peak																
Base Vol.	0	814	331		437	934		0	0	0		0	168	0		185
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	814	331		437	934		0	0	0		0	168	0		185
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	904	368		486	1038		0	0	0		0	187	0		206
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	0	904	368		486	1038		0	0	0		0	187	0		206
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	904	368		486	1038		0	0	0		0	187	0		206
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00	0.85		0.95	0.95		1.00	1.00	1.00		1.00	0.92	1.00		0.85
Lanes:	0.00	1.00	1.00		1.00	2.00		0.00	0.00	0.00		0.00	2.00	0.00		1.00
Final Sat..	0	1900	1615		1805	3610		0	0	0		0	3502	0		1615
Capacity Analysis Module:																
Vol/Sat:	0.00	0.48	0.23		0.27	0.29		0.00	0.00	0.00		0.00	0.05	0.00		0.13
Crit Moves:		****			****											****
Green/Cycle:	0.00	0.50	0.50		0.28	0.78		0.00	0.00	0.00		0.00	0.13	0.00		0.13
Volume/Cap:	0.00	0.96	0.46		0.96	0.37		0.00	0.00	0.00		0.00	0.40	0.00		0.96
Delay/Veh:	0.0	44.1	16.8		65.0	3.6		0.0	0.0	0.0		0.0	40.3	0.0		92.7
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	44.1	16.8		65.0	3.6		0.0	0.0	0.0		0.0	40.3	0.0		92.7
HCM2kAvg:	0	33	7		21	5		0	0	0		0	3	0		10

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.947
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 44.6
Optimal Cycle: 137 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	0 1	2	0	2	0 1
Volume Module: PM Peak																
Base Vol:	68	261	661		49	137	64		58	222	181		705	569	93	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	68	261	661		49	137	64		58	222	181		705	569	93	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	76	290	734		54	152	71		64	247	201		783	632	103	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	76	290	734		54	152	71		64	247	201		783	632	103	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	76	290	734		54	152	71		64	247	201		783	632	103	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.85		0.95	0.95	0.85		0.95	0.95	0.85		0.92	0.95	0.85	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		2.00	2.00	1.00	
Final Sat..	1805	3610	1615		1805	3610	1615		1805	3610	1615		3502	3610	1615	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.08	0.45		0.03	0.04	0.04		0.04	0.07	0.12		0.22	0.18	0.06	
Crit Moves:			****		****						****		****			
Green/Cycle:	0.25	0.48	0.48		0.03	0.26	0.26		0.06	0.13	0.13		0.24	0.31	0.31	
Volume/Cap:	0.17	0.17	0.95		0.95	0.16	0.17		0.57	0.52	0.95		0.95	0.57	0.21	
Delay/Veh:	29.6	14.7	45.2		147.4	28.5	28.6		52.6	41.5	89.8		57.1	30.0	26.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	29.6	14.7	45.2		147.4	28.5	28.6		52.6	41.5	89.8		57.1	30.0	26.0	
HCM2kAvg:	2	2	27		4	2	2		3	4	10		17	9	2	

Harmony Grove Village
Option A: Baseline + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.784
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.5
Optimal Cycle: 73 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	0 2	1	0	2	0 1	2	0	2	0 1	2	0	3	0 1
Volume Module:																
Base Vol:	454	181	865		43	232	43		248	685	197		360	723	21	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	454	181	865		43	232	43		248	685	197		360	723	21	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	504	201	961		48	258	48		276	761	219		400	803	23	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol.	504	201	961		48	258	48		276	761	219		400	803	23	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	504	201	961		48	258	48		276	761	219		400	803	23	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.75		0.95	0.95	0.85		0.92	0.95	0.85		0.92	0.91	0.85	
Lanes:	1.00	2.00	2.00		1.00	2.00	1.00		2.00	2.00	1.00		2.00	3.00	1.00	
Final Sat..	1805	3610	2842		1805	3610	1615		3502	3610	1615		3502	5187	1615	
Capacity Analysis Module:																
Vol/Sat:	0.28	0.06	0.34		0.03	0.07	0.03		0.08	0.21	0.14		0.11	0.15	0.01	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.37	0.43	0.43		0.03	0.09	0.09		0.14	0.27	0.27		0.15	0.28	0.28	
Volume/Cap:	0.75	0.13	0.78		0.78	0.75	0.31		0.56	0.78	0.50		0.78	0.56	0.05	
Delay/Veh:	32.4	17.2	27.8		95.3	53.3	43.4		41.7	38.1	31.9		49.0	31.6	26.7	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	32.4	17.2	27.8		95.3	53.3	43.4		41.7	38.1	31.9		49.0	31.6	26.7	
HCM2kAvg:	16	2	15		3	6	2		5	13	6		8	8	1	

Harmony Grove Village
Option A: Baseline + P + CP

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	D	37.2	0.805	D	37.2	0.805	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	F	308.3	1.806	F	308.3	1.806	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	F	240.3	1.707	F	240.3	1.707	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	9.7	0.383	A	9.7	0.383	+ 0.000 V/C
# 6 Country Club/Entrance # 3	B	11.1	0.000	B	11.1	0.000	+ 0.000 D/V
# 7 Country Club/ Village Road	B	13.1	0.000	B	13.1	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	D	32.7	0.000	D	32.7	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	C	17.1	0.000	C	17.1	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	C	19.4	0.000	C	19.4	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	C	23.4	0.000	C	23.4	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	C	22.1	0.000	C	22.1	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	D	48.9	1.384	D	48.9	1.384	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	F	92.4	0.000	F	92.4	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	53.9	0.957	D	53.9	0.957	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	F	180.6	1.815	F	180.6	1.815	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	E	42.6	0.000	E	42.6	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	F	65.5	0.000	F	65.5	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	30.6	0.814	C	30.6	0.814	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	E	36.4	0.000	E	36.4	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	F	462.6	0.000	F	462.6	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	A	9.4	0.000	A	9.4	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	B	10.7	0.000	B	10.7	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	D	36.5	0.837	D	36.5	0.837	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline + P + CP

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	E	60.0	0.806	E	60.0	0.806	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	43.0	0.885	D	43.0	0.885	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	D	37.5	0.749	D	37.5	0.749	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	B	13.0	0.444	B	13.0	0.444	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	319.5	0.000	F	319.5	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	33.3	0.582	C	33.3	0.582	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	34.7	0.868	C	34.7	0.868	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	E	74.8	1.166	E	74.8	1.166	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	22.1	0.738	C	22.1	0.738	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	27.9	0.676	C	27.9	0.676	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	32.0	0.913	C	32.0	0.913	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	53.9	0.995	D	53.9	0.995	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	25.8	0.535	C	25.8	0.535	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.805
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 37.2
Optimal Cycle: 73 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	0		0	24	7		0	0	0		7	24	7	
Lanes:	2	0	2	0 0	0	0	2	0 1	0	0	0	0 0	1	0	1!	0 1
Volume Module: >> Count Date: 13 Dec 2001 << AM Peak																
Base Vol:	586	332	0		0	563	135		0	0	0		649	8	147	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	586	332	0		0	563	135		0	0	0		649	8	147	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	651	369	0		0	626	150		0	0	0		721	9	163	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	651	369	0		0	626	150		0	0	0		721	9	163	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	651	369	0		0	626	150		0	0	0		721	9	163	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.71	0.73	1.00		1.00	0.93	0.83		1.00	1.00	1.00		0.73	0.73	0.73	
Lanes:	2.00	2.00	0.00		0.00	2.00	1.00		0.00	0.00	0.00		1.80	0.02	1.18	
Final Sat..	2693	2776	0		0	3538	1583		0	0	0		2489	27	1634	
Capacity Analysis Module:																
Vol/Sat:	0.24	0.13	0.00		0.00	0.18	0.09		0.00	0.00	0.00		0.29	0.33	0.10	
Crit Moves:	****					****								****		
Green/Cycle:	0.30	0.52	0.00		0.00	0.22	0.22		0.00	0.00	0.00		0.41	0.41	0.41	
Volume/Cap:	0.81	0.26	0.00		0.00	0.81	0.43		0.00	0.00	0.00		0.72	0.81	0.25	
Delay/Veh:	44.7	16.0	0.0		0.0	50.5	41.2		0.0	0.0	0.0		31.9	35.9	23.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	44.7	16.0	0.0		0.0	50.5	41.2		0.0	0.0	0.0		31.9	35.9	23.6	
HCM2kAvg:	14	4	0		0	13	5		0	0	0		14	17	3	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp [NS / EW]

Cycle (sec): 100 Critical Vol./Cap. (X): 1.806
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 308.3
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24	7		7	24	0		7	24	7		0	0	0	
Lanes:	0	0	2	0 1	2	0	2	0 0	0	1	0	1 0	0	0	0	0 0
Volume Module: >> Count Date: 13 Dec 2001 << AM Peak																
Base Vol:	0	715	393		130	1226	0		105	1	1168		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	715	393		130	1226	0		105	1	1168		0	0	0	
User Adj:	1.00	1.00	0.50		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	794	218		144	1362	0		117	1	1298		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	794	218		144	1362	0		117	1	1298		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	794	218		144	1362	0		117	1	1298		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.73	0.65		0.90	0.93	1.00		0.54	0.54	0.54		1.00	1.00	1.00	
Lanes:	0.00	2.00	1.00		2.00	2.00	0.00		0.99	0.01	1.00		0.00	0.00	0.00	
Final Sat..	0	2776	1242		3432	3538	0		1022	10	1031		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.29	0.18		0.04	0.39	0.00		0.11	0.11	1.26		0.00	0.00	0.00	
Crit Moves:	****					****					****					
Green/Cycle:	0.00	0.19	0.19		0.05	0.24	0.00		0.67	0.67	0.67		0.00	0.00	0.00	
Volume/Cap:	0.00	1.48	0.91		0.89	1.60	0.00		0.17	0.17	1.88		0.00	0.00	0.00	
Delay/Veh:	0.0	268	74.8		88.6	315	0.0		6.2	6.2	416.7		0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	268	74.8		88.6	315	0.0		6.2	6.2	416.7		0.0	0.0	0.0	
HCM2kAvg:	0	30	10		5	53	0		2	2	132		0	0	0	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.707
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 240.3
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	7		7	24	7		7	24	7		7	24	7	
Lanes:	1 0	2 0	1		2 0	1 1	0		2 0	2 0	1		2 0	2 0	1	
Volume Module: >> Count Date: 13 Dec 2001 << AM Peak																
Base Vol:	239	737	40		438	1737	218		220	375	741		90	328	185	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	239	737	40		438	1737	218		220	375	741		90	328	185	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	266	819	44		487	1930	242		244	417	823		100	364	206	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	266	819	44		487	1930	242		244	417	823		100	364	206	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	266	819	44		487	1930	242		244	417	823		100	364	206	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.73	0.73	0.65		0.71	0.72	0.72		0.90	0.93	0.83		0.90	0.93	0.83	
Lanes:	1.00	2.00	1.00		2.00	1.78	0.22		2.00	2.00	1.00		2.00	2.00	1.00	
Final Sat..	1388	2776	1242		2693	2425	304		3432	3538	1583		3432	3538	1583	
Capacity Analysis Module:																
Vol/Sat:	0.19	0.29	0.04		0.18	0.80	0.80		0.07	0.12	0.52		0.03	0.10	0.13	
Crit Moves:	****					****					****		****			
Green/Cycle:	0.11	0.34	0.34		0.21	0.44	0.44		0.09	0.29	0.29		0.06	0.26	0.26	
Volume/Cap:	1.79	0.86	0.10		0.86	1.79	1.79		0.78	0.41	1.79		0.50	0.40	0.51	
Delay/Veh:	435.2	45.1	27.1		58.7	393	392.7		65.0	34.5	407.2		56.8	37.2	39.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	435.2	45.1	27.1		58.7	393	392.7		65.0	34.5	407.2		56.8	37.2	39.1	
HCM2kAvg:	27	17	1		12	98	98		7	6	75		3	6	7	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club [NS / EW]

Average Delay (sec/veh): 2087.5 Worst Case Level Of Service: F[22057.1

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1 0	2 0	1		1 0	2 0	1		0 1	0 0	1		0 0	1! 0	0	
Volume Module: >> Count Date: 11 Dec 2001 << AM Peak																
Base Vol:	46	683	0		35	2276	252		304	0	40		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	46	683	0		35	2276	252		304	0	40		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	51	759	0		39	2529	280		338	0	44		0	0	0	
Reduct Vol.	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	51	759	0		39	2529	280		338	0	44		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx		6.8	xxxx	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5	xxxx	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	2809	xxxx	xxxxx		759	xxxx	xxxxx		3088	xxxx	1264		xxxx	xxxx	xxxxx	
Potent Cap..	135	xxxx	xxxxx		848	xxxx	xxxxx		9	xxxx	160		xxxx	xxxx	xxxxx	
Move Cap..	135	xxxx	xxxxx		848	xxxx	xxxxx		6	xxxx	160		xxxx	xxxx	xxxxx	
Volume/Cap:	0.38	xxxx	xxxx		0.05	xxxx	xxxx		53.90	xxxx	0.28		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	1.6	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx	1.1		xxxxx	xxxx	xxxxx	
Stopped Del:	47.1	xxxx	xxxxx		9.4	xxxx	xxxxx		xxxxx	xxxx	35.8		xxxxx	xxxx	xxxxx	
LOS by Move:	E	*	*		A	*	*		*	*	E		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		6	xxxx	xxxxx		xxxx	0	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		44.3	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		24955	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		F	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				F				*			

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

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Intersection #5 Country Club/Kauana Loa

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Cycle (sec): 100 Critical Vol./Cap. (X): 0.383
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.7
Optimal Cycle: 0 Level Of Service: A

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	0 1	0	1 0	0 0	0 0	0	0 0	0 0	1!	0 0
Volume Module: AM Peak												
Base Vol:	0	187	27	81	190	0	0	0	0	12	0	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	187	27	81	190	0	0	0	0	12	0	70
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.00	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	208	0	90	211	0	0	0	0	13	0	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	208	0	90	211	0	0	0	0	13	0	78
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	208	0	90	211	0	0	0	0	13	0	78
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.30	0.70	0.00	0.00	0.00	0.00	0.15	0.00	0.85
Final Sat..	0	718	0	235	552	0	0	0	0	107	0	622
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.29	xxxx	0.38	0.38	xxxx	xxxx	xxxx	xxxx	0.13	xxxx	0.13
Crit Moves:		****		****								****
Delay/Veh:	0.0	9.6	0.0	10.2	10.2	0.0	0.0	0.0	0.0	8.1	0.0	8.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	9.6	0.0	10.2	10.2	0.0	0.0	0.0	0.0	8.1	0.0	8.1
LOS by Move:	*	A	*	B	B	*	*	*	*	A	*	A
ApproachDel:		9.6			10.2			xxxxxx			8.1	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		9.6			10.2			xxxxxx			8.1	
LOS by Appr:		A			B			*			A	

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Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #6 Country Club/Entrance # 3

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Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[11.1]

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1	0 0	0	1 0	0 0	0 0	0	0 0	0 0	0	1
Volume Module: AM Peak												
Base Vol:	0	383	0	25	309	0	0	0	0	0	0	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	383	0	25	309	0	0	0	0	0	0	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	426	0	28	343	0	0	0	0	0	0	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	426	0	28	343	0	0	0	0	0	0	44
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	426	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	426
Potent Cap.:	xxxx	xxxx	xxxxx	1145	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	633
Move Cap..	xxxx	xxxx	xxxxx	1145	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	633
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.07
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.2
Stopped Del:	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.1
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.1		
ApproachLOS:	*			*			*			B		

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Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: B[13.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0 1		1 0 1	0 0		0 0 0	0 0		1 0 0	0 1	
Volume Module: AM Peak												
Base Vol:	0	180	211	0	200	0	0	0	0	132	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	180	211	0	200	0	0	0	0	132	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	200	234	0	222	0	0	0	0	147	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	200	234	0	222	0	0	0	0	147	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	422	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	592	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	592	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.25	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			13.1		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 6.5 Worst Case Level Of Service: D[32.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	0 0		0 0 1	0 1		1 0 0	0 1		0 0 0	0 0	
Volume Module: AM Peak												
Base Vol:	0	289	0	0	433	132	211	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	289	0	0	433	132	211	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	321	0	0	481	147	234	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	321	0	0	481	147	234	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	802	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	356	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	356	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.66	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	32.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	D	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			32.7			xxxxxx		
ApproachLOS:	*			*			D			*		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 6.0 Worst Case Level Of Service: C[17.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 0	0	0	0	1 0	1	0	0	0 0	0	0	0	0 0
Volume Module: AM Peak																
Base Vol:	0	158		0	0	169		140	255		0	0	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	158		0	0	169		140	255		0	0	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	176		0	0	188		156	283		0	0	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	0	176		0	0	188		156	283		0	0	0		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	6.4	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	3.5	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	441	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	577	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	577	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	0.49	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	2.7	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	17.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		*	C	*		*	*	*		*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				17.1				xxxxxx			
ApproachLOS:	*				*				C				*			

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Country Club/Harmony Grove

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: C[19.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module: AM Peak																
Base Vol:	5	11		21	2	7		153	111	245		3	11	450		2
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	5	11		21	2	7		153	111	245		3	11	450		2
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	6	12		23	2	8		170	123	272		3	12	500		2
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	6	12		23	2	8		170	123	272		3	12	500		2
Critical Gap Module:																
Critical Gp:	7.1	6.5		6.2	7.1	6.5		6.2	4.1	xxxx		xxxxx	4.1	xxxx		xxxxx
FollowUpTim:	3.5	4.0		3.3	3.5	4.0		3.3	2.2	xxxx		xxxxx	2.2	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	1135	1047		274	1064	1048		501	502	xxxx		xxxxx	276	xxxx		xxxxx
Potent Cap..	181	230		770	202	230		574	1073	xxxx		xxxxx	1299	xxxx		xxxxx
Move Cap..	111	200		770	168	199		574	1073	xxxx		xxxxx	1299	xxxx		xxxxx
Volume/Cap:	0.05	0.06		0.03	0.01	0.04		0.30	0.11	xxxx		xxxx	0.01	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	0.4	xxxx		xxxxx	0.0	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	8.8	xxxx		xxxxx	7.8	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		*	A	*		*	A	*		*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	291		xxxxx	xxxx	517		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	0.5		xxxxx	xxxxx	1.5		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	19.4		xxxxx	xxxxx	15.6		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	C		*	*	C		*	*	*		*	*	*		*
ApproachDel:	19.4				15.6				xxxxxx				xxxxxx			
ApproachLOS:	C				C				*				*			

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: C[23.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module: AM Peak																								
Base Vol.	0		0		0		76		0		22		14		286		0		0		548		48	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0		0		0		76		0		22		14		286		0		0		548		48	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0		0		0		84		0		24		16		318		0		0		609		53	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	0		0		0		84		0		24		16		318		0		0		609		53	
Critical Gap Module:																								
Critical Gp:	xxxxx		xxxx		xxxxx		6.4		xxxx		6.2		4.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
FollowUpTim:	xxxxx		xxxx		xxxxx		3.5		xxxx		3.3		2.2		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	xxxx		xxxx		xxxxx		984		xxxx		636		662		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Potent Cap.:	xxxx		xxxx		xxxxx		278		xxxx		482		936		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Move Cap..	xxxx		xxxx		xxxxx		274		xxxx		482		936		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	xxxx		xxxx		xxxx		0.31		xxxx		0.05		0.02		xxxx		xxxx		xxxx		xxxx		xxxx	
Level Of Service Module:																								
Queue:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		0.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Stopped Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		8.9		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
LOS by Move:	*		*		-		*		*		*		A		*		*		*		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		xxxx		xxxxx		xxxx		303		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		xxxx		xxxxx		xxxxx		1.6		xxxxx		0.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd StpDel:	xxxxx		xxxx		xxxxx		xxxxx		23.4		xxxxx		8.9		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		*		*		*		C		*		A		*		*		*		*		*	
ApproachDel:	xxxxxx						23.4						xxxxxx						xxxxxx					
ApproachLOS:	*						C						*						*					

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: C[22.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module: AM Peak																								
Base Vol:	0		11		0		58		0		10		6		216		0		0		526		40	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0		11		0		58		0		10		6		216		0		0		526		40	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0		12		0		64		0		11		7		240		0		0		584		44	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	0		12		0		64		0		11		7		240		0		0		584		44	
Critical Gap Module:																								
Critical Gp:	xxxxx		6.5		xxxxx		7.1		xxxx		6.2		4.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
FollowUpTim:	xxxxx		4.0		xxxxx		3.5		xxxx		3.3		2.2		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	xxxx		882		xxxxx		866		xxxx		607		629		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Potent Cap..	xxxx		287		xxxxx		276		xxxx		500		963		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Move Cap..	xxxx		285		xxxxx		265		xxxx		500		963		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	xxxx		0.04		xxxx		0.24		xxxx		0.02		0.01		xxxx		xxxx		xxxx		xxxx		xxxx	
Level Of Service Module:																								
Queue:	xxxxx		0.1		xxxxx		xxxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Stopped Del:	xxxxx		18.2		xxxxx		xxxxx		xxxx		xxxxx		8.8		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
LOS by Move:	-		C		*		*		*		*		A		*		-		*		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		xxxx		xxxxx		xxxx		285		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		xxxx		xxxxx		xxxxx		1.0		xxxxx		0.0		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd StpDel:	xxxxx		xxxx		xxxxx		xxxxx		22.1		xxxxx		8.8		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		*		*		-		C		*		A		*		*		*		*		*	
ApproachDel:	18.2						22.1						xxxxxx						xxxxxx					
ApproachLOS:	C						C						*						*					

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Cycle (sec): 100 Critical Vol./Cap. (X): 1.384
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 48.9
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:		Include			Include			Ovl			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 0	1	0 0	0 0	0	0 0	1 0	2	2 0	1 0	0
Volume Module: AM Peak												
Base Vol:	214	0	90	0	0	0	0	920	1093	494	799	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	214	0	90	0	0	0	0	920	1093	494	799	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	238	0	100	0	0	0	0	1022	1214	549	888	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	238	0	100	0	0	0	0	1022	1214	549	888	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	238	0	100	0	0	0	0	1022	1214	549	888	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.75	0.12	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	2.00	2.00	1.00	0.00
Final Sat..	3502	0	1615	0	0	0	0	1900	2842	461	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.06	0.00	0.00	0.00	0.00	0.54	0.43	1.19	0.47	0.00
Crit Moves:	****									****		
Green/Cycle:	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.86	0.91	0.86	0.86	0.00
Volume/Cap:	1.38	0.00	1.26	0.00	0.00	0.00	0.00	0.62	0.47	1.38	0.54	0.00
Delay/Veh:	252.1	0.0	234.4	0.0	0.0	0.0	0.0	2.9	0.8	194.7	2.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	252.1	0.0	234.4	0.0	0.0	0.0	0.0	2.9	0.8	194.7	2.2	0.0
HCM2kAvg:	10	0	8	0	0	0	0	10	4	141	8	0

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa [NS / EW]

Average Delay (sec/veh): 7.7 Worst Case Level Of Service: F[92.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:		Include			Include			Include			Include	
Lanes:	1 0	1 0	0	0 0	0 0	1 0	0 0	1! 0	0	0 0	0 0	0
Volume Module: AM Peak												
Base Vol:	29	634	0	0	607	44	97	0	20	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	634	0	0	607	44	97	0	20	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	32	704	0	0	674	49	108	0	22	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	32	704	0	0	674	49	108	0	22	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	723	xxxx	xxxxx	xxxx	xxxx	xxxxx	1468	xxxx	699	xxxx	xxxx	xxxxx
Potent Cap..	879	xxxx	xxxxx	xxxx	xxxx	xxxxx	141	xxxx	440	xxxx	xxxx	xxxxx
Move Cap..	879	xxxx	xxxxx	xxxx	xxxx	xxxxx	137	xxxx	440	xxxx	xxxx	xxxxx
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.79	xxxx	0.05	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	155	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	5.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	92.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			92.4			xxxxxx		
ApproachLOS:	*			*			F			*		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.957
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 53.9
Optimal Cycle: 164 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	2 0 1	0 1		2 0 1	0 1		1 0 1	1 0		1 0 2	0 1	
Volume Module: >> Count Date: 11 Dec 2001 << AM Peak												
Base Vol:	255	146	218	71	335	50	41	586	339	483	749	82
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	255	146	218	71	335	50	41	586	339	483	749	82
User Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	273	156	233	76	359	54	44	628	363	517	802	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	273	156	233	76	359	54	44	628	363	517	802	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	273	156	233	76	359	54	44	628	363	517	802	88
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.98	0.83	0.90	0.98	0.83	0.93	0.88	0.88	0.93	0.93	0.83
Lanes:	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.27	0.73	1.00	2.00	1.00
Final Sat..	3432	1862	1583	3432	1862	1583	1769	2118	1225	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.15	0.02	0.19	0.03	0.02	0.30	0.30	0.29	0.23	0.06
Crit Moves:	****				****			****		****		
Green/Cycle:	0.08	0.22	0.22	0.06	0.20	0.20	0.13	0.31	0.31	0.31	0.49	0.49
Volume/Cap:	0.96	0.38	0.67	0.34	0.96	0.17	0.20	0.96	0.96	0.96	0.46	0.11
Delay/Veh:	96.3	40.4	47.8	54.7	82.6	39.9	47.4	59.0	59.0	68.9	20.4	16.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	96.3	40.4	47.8	54.7	82.6	39.9	47.4	59.0	59.0	68.9	20.4	16.6
HCM2kAvg:	9	5	9	2	18	2	2	23	23	25	10	2

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.815
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 180.6
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0 1	0 1		1 0 1	0 1		1 0 1	0 1		1 0 1	0 1	
Volume Module: >> Count Date: 28 Nov 2001 << AM Peak												
Base Vol.	500	294	169	249	450	18	7	39	93	309	221	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	500	294	169	249	450	18	7	39	93	309	221	202
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	556	327	188	277	500	20	8	43	103	343	246	224
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	556	327	188	277	500	20	8	43	103	343	246	224
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	556	327	188	277	500	20	8	43	103	343	246	224
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat..	306	320	332	292	305	319	272	283	300	303	314	333
Capacity Analysis Module:												
Vol/Sat:	1.82	1.02	0.57	0.95	1.64	0.06	0.03	0.15	0.34	1.13	0.78	0.67
Crit Moves:	****				****				****	****		
Delay/Veh:	405.9	91.1	25.5	76.3	330	14.5	16.3	17.6	20.8	128.3	44.5	32.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	405.9	91.1	25.5	76.3	330	14.5	16.3	17.6	20.8	128.3	44.5	32.4
LOS by Move:	F	F	D	F	F	B	C	C	C	F	E	D
ApproachDel:	243.0			234.1			19.7			76.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	243.0			234.1			19.7			76.5		
LOS by Appr:	F			F			C			F		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. [NS / EW]

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: E[42.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	0	1		0	0	0	0	0		0	0	0	1	0		0	1	0	0	0	
Volume Module: >> Count Date: 28 Nov 2001 << AM Peak																								
Base Vol:	24		0		123		0		0		0		0		296		103		295		968		0	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	24		0		123		0		0		0		0		296		103		295		968		0	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	27		0		137		0		0		0		0		329		114		328		1076		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	27		0		137		0		0		0		0		329		114		328		1076		0	
Critical Gap Module:																								
Critical Gp:	6.4	xxxx			6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						4.1	xxxx	xxxxx					
FollowUpTim:	3.5	xxxx			3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						2.2	xxxx	xxxxx					
Capacity Module:																								
Cnflict Vol:	2117	xxxx			386	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						443	xxxx	xxxxx					
Potent Cap..	56	xxxx			662	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						1117	xxxx	xxxxx					
Move Cap..	40	xxxx			662	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						1117	xxxx	xxxxx					
Volume/Cap:	0.67	xxxx			0.21	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx						0.29	xxxx	xxxx					
Level Of Service Module:																								
Queue:	2.4	xxxx			0.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						1.2	xxxx	xxxxx					
Stopped Del:	200.2	xxxx			11.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						9.6	xxxx	xxxxx					
LOS by Move:	F	*			B	*	*	*	*	*	*						A	*	*					
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.2	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.6	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	A	*	*						
ApproachDel:	42.6			xxxxxx			xxxxxx			xxxxxx														
ApproachLOS:	E			*			*			*														

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 7.4 Worst Case Level Of Service: F[65.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		1	0	0	0	1		0	1	0	0	0		0	0	0	1	0	
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak																								
Base Vol:	0		0		0		28		0		160		81		417		0		0		1063		41	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0		0		0		28		0		160		81		417		0		0		1063		41	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0		0		0		31		0		178		90		463		0		0		1181		46	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	0		0		0		31		0		178		90		463		0		0		1181		46	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx			6.2		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx			3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				1847	xxxx			1204		1227	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Potent Cap.:	xxxx	xxxx	xxxxx				83	xxxx			227		575	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Move Cap..	xxxx	xxxx	xxxxx				73	xxxx			227		575	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	xxxx	xxxx	xxxx				0.43	xxxx			0.78		0.16	xxxx	xxxx	xxxx	xxxx	xxxx						
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				1.7	xxxx			5.7		0.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx				87.7	xxxx			61.7		12.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*				F	*			F		B	*	*	*	*	*						
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.6	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.4	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	B	*	*						
ApproachDel:	xxxxxx						65.5						xxxxxx						xxxxxx					
ApproachLOS:	*						F						*						*					

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.814
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.6
Optimal Cycle: 85 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0		0		0		7		0		7		7		24		0		0		24		7	
Lanes:	0	1	0	1	0		1	0	0	1	0		1	0	1	1	0		1	0	2	0	1	
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak																								
Base Vol:	6		4		5		356		13		221		108		908		14		28		1129		293	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	6		4		5		356		13		221		108		908		14		28		1129		293	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.80		0.80		0.80		0.80		0.80		0.80		0.80		0.80		0.80		0.80		0.80		0.80	
PHF Volume:	8		5		6		445		16		276		135		1135		18		35		1411		366	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	8		5		6		445		16		276		135		1135		18		35		1411		366	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	8		5		6		445		16		276		135		1135		18		35		1411		366	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.87		0.87		0.87		0.93		0.84		0.84		0.93		0.93		0.93		0.93		0.93		0.83	
Lanes:	0.80		0.53		0.67		1.00		0.06		0.94		1.00		1.97		0.03		1.00		2.00		1.00	
Final Sat..	1317		878		1098		1769		89		1509		1769		3477		54		1769		3538		1583	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.01		0.01		0.25		0.18		0.18		0.08		0.33		0.33		0.02		0.40		0.23	
Crit Moves:			****				****						****								****			
Green/Cycle:	0.01		0.01		0.01		0.31		0.31		0.31		0.09		0.55		0.55		0.03		0.49		0.49	
Volume/Cap:	0.81		0.81		0.81		0.81		0.59		0.59		0.81		0.59		0.59		0.59		0.81		0.47	
Delay/Veh:	165.4		165		165.4		47.4		37.0		37.0		78.9		18.5		18.5		72.3		29.0		20.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	165.4		165		165.4		47.4		37.0		37.0		78.9		18.5		18.5		72.3		29.0		20.7	
HCM2kAvg:	1		1		1		18		10		10		7		14		14		2		24		9	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: E[36.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak																								
Base Vol:	0		328		34		6		645		0		0		0		0		113		0		5	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0		328		34		6		645		0		0		0		0		113		0		5	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0		364		38		7		717		0		0		0		0		126		0		6	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	0		364		38		7		717		0		0		0		0		126		0		6	
Critical Gap Module:																								
Critical Gp:	xxxxx		xxxx		xxxxx		4.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx		6.4		xxxx		6.2	
FollowUpTim:	xxxxx		xxxx		xxxxx		2.2		xxxx		xxxxx		xxxxx		xxxx		xxxxx		3.5		xxxx		3.3	
Capacity Module:																								
Cnflict Vol:	xxxx		xxxx		xxxxx		402		xxxx		xxxxx		xxxx		xxxx		xxxxx		1113		xxxx		383	
Potent Cap.:	xxxx		xxxx		xxxxx		1167		xxxx		xxxxx		xxxx		xxxx		xxxxx		233		xxxx		669	
Move Cap..	xxxx		xxxx		xxxxx		1167		xxxx		xxxxx		xxxx		xxxx		xxxxx		232		xxxx		669	
Volume/Cap:	xxxx		xxxx		xxxx		0.01		xxxx		xxxx		xxxx		xxxx		xxxx		0.54		xxxx		0.01	
Level Of Service Module:																								
Queue:	xxxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		xxxxx		xxxx		xxxxx		2.9		xxxx		0.0	
Stopped Del:	xxxxx		xxxx		xxxxx		8.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx		37.5		xxxx		10.4	
LOS by Move:	*		*		*		A		*		*		*		*		*		E		*		B	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd StpDel:	xxxxx		xxxx		xxxxx		8.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		*		*		A		*		*		*		*		*		*		*		*	
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						36.4					
ApproachLOS:	*						*						*						E					

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #21 Harmony Grove Rd./Hale Ave.

****

Average Delay (sec/veh): 128.6 Worst Case Level Of Service: F[462.6]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0		1	0	0	0	1		0	0	0	0	0	
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak																								
Base Vol:	310	120		0		0	57		770		241		0		230		0		0		0			
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
Initial Bse:	310	120		0		0	57		770		241		0		230		0		0		0			
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90			
PHF Volume:	344	133		0		0	63		856		268		0		256		0		0		0			
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0		0			
Final Vol..	344	133		0		0	63		856		268		0		256		0		0		0			
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4	xxxx			6.2	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	xxxx			3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																								
Cnflict Vol:	919	xxxx	xxxxx	xxxx	xxxx	xxxxx					1313	xxxx			491	xxxx	xxxx	xxxxx						
Potent Cap..	751	xxxx	xxxxx	xxxx	xxxx	xxxxx					176	xxxx			582	xxxx	xxxx	xxxxx						
Move Cap..	751	xxxx	xxxxx	xxxx	xxxx	xxxxx					97	xxxx			582	xxxx	xxxx	xxxxx						
Volume/Cap:	0.46	xxxx	xxxx	xxxx	xxxx	xxxx					2.76	xxxx			0.44	xxxx	xxxx	xxxx						
Level Of Service Module:																								
Queue:	2.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx					25.3	xxxx			2.2	xxxxx	xxxx	xxxxx						
Stopped Del:	13.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx					889.0	xxxx			16.0	xxxxx	xxxx	xxxxx						
LOS by Move:	B	*		*		*					F	*			C	*	*	*						
Movement:	LT - LTR - RT						LT - LTR - RT				LT - LTR - RT								LT - LTR - RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx	xxxx	xxxxx						xxxx	xxxx	xxxxx			
SharedQueue:	2.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx						xxxxx	xxxx	xxxxx			
Shrd StpDel:	13.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx						xxxxx	xxxx	xxxxx			
Shared LOS:	B	*		*		*					*	*	*						*	*	*			
ApproachDel:	xxxxxx						xxxxxx				462.6								xxxxxx					
ApproachLOS:	*						*				F								*					

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #22 Avenida Diablo/Citracado Parkway

****

Average Delay (sec/veh): 7.9 Worst Case Level Of Service: A[9.4]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Yield Sign						Yield Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	0	1		0	0	0	0	0		0	0	0	1	0		1	0	1	0	0	
Volume Module: AM Peak																								
Base Vol:	2		0		212		0		0		0		0		13		9		203		9		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	2		0		212		0		0		0		0		13		9		203		9		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	2		0		236		0		0		0		0		14		10		226		10		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	2		0		236		0		0		0		0		14		10		226		10		0	
Critical Gap Module:																								
Critical Gp:	6.4	xxxx			6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx							
FollowUpTim:	3.5	xxxx			3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx							
Capacity Module:																								
Cnflict Vol:	481	xxxx			19	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				24	xxxx	xxxxx							
Potent Cap..	548	xxxx			1064	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				1603	xxxx	xxxxx							
Move Cap..	489	xxxx			1064	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				1603	xxxx	xxxxx							
Volume/Cap:	0.00	xxxx			0.22	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx				0.14	xxxx	xxxx							
Level Of Service Module:																								
Queue:	0.0	xxxx			0.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				0.5	xxxx	xxxxx							
Stopped Del:	12.4	xxxx			9.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				7.6	xxxx	xxxxx							
LOS by Move:	B	*			A	*	*	*	*	*	*				A	*	*							
Movement:	LT - LTR - RT						LT - LTR - RT				LT - LTR - RT								LT - LTR - RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx	xxxx	xxxxx						xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx						xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx						xxxxx	xxxx	xxxxx			
Shared LOS:	*	*		*		*	*	*	*		*	*	*						*	*	*			
ApproachDel:	9.4						xxxxxx				xxxxxx								xxxxxx					
ApproachLOS:	A						*				*								*					

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #23 Avenida Diablo/Hale Avenue

****

Average Delay (sec/veh): 7.4 Worst Case Level Of Service: B[10.7]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	1	0	0	1		0	1	0	0	0		0	0	1	0	1	
Volume Module: AM Peak																								
Base Vol:	0	0	0				68	0	186				220	3	0				0	17	109			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	0	0				68	0	186				220	3	0				0	17	109			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90			
PHF Volume:	0	0	0				76	0	207				244	3	0				0	19	121			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol..	0	0	0				76	0	207				244	3	0				0	19	121			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				511	xxxx	19				140	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				526	xxxx	1065				1456	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap..	xxxx	xxxx	xxxxx				447	xxxx	1065				1456	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.17	xxxx	0.19				0.17	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.7						0.6	xxxx	xxxxx	xxxxx	xxxx		xxxxx					
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		9.2						8.0	xxxx	xxxxx	xxxxx	xxxx		xxxxx					
LOS by Move:	*	*	*	*	*		A						A	*	*	*	*		*					
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				447	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				0.6	xxxx	xxxxx				0.6	xxxx	xxxxx	xxxxx	xxxx		xxxxx					
Shrd StpDel:	xxxxx	xxxx	xxxxx				14.7	xxxx	xxxxx				8.0	xxxx	xxxxx	xxxxx	xxxx		xxxxx					
Shared LOS:	*	*	*				B	*	*				A	*	*	*	*		*					
ApproachDel:	xxxxxx						10.7						xxxxxx						xxxxxx					
ApproachLOS:	*						B						*						*					

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #24 I-15 NB/Valley Pkwy (NS / EW)

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.837
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): 36.5
Optimal Cycle: 86 Level Of Service: D

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24	0				0	24	7				0	0	0				7	24	7			
Lanes:	0	1	0	0	1		0	0	0	0	0		2	0	3	0	0		0	0	3	0	1	
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak																								
Base Vol:	534	1	395				0	0	0				461	1087	0				0	1107	206			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	534	1	395				0	0	0				461	1087	0				0	1107	206			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90			
PHF Volume:	593	1	439				0	0	0				512	1208	0				0	1230	229			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	593	1	439				0	0	0				512	1208	0				0	1230	229			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Final Vol..	593	1	439				0	0	0				512	1208	0				0	1230	229			
Saturation Flow Module:																								
Sat/Lane:	1900	1900	1900				1900	1900	1900				1900	1900	1900				1900	1900	1900			
Adjustment:	0.83	0.83	0.83				1.00	1.00	1.00				0.90	0.89	1.00				1.00	0.89	0.83			
Lanes:	0.99	0.01	1.00				0.00	0.00	0.00				2.00	3.00	0.00				0.00	3.00	1.00			
Final Sat..	1580	3	1583				0	0	0				3432	5083	0				0	5083	1583			
Capacity Analysis Module:																								
Vol/Sat:	0.38	0.38	0.28				0.00	0.00	0.00				0.15	0.24	0.00				0.00	0.24	0.14			
Crit Moves:		****											****							****				
Green/Cycle:	0.45	0.45	0.45				0.00	0.00	0.00				0.18	0.47	0.00				0.00	0.29	0.29			
Volume/Cap:	0.84	0.84	0.62				0.00	0.00	0.00				0.84	0.51	0.00				0.00	0.84	0.50			
Delay/Veh:	37.7	37.7	26.9				0.0	0.0	0.0				57.4	22.5	0.0				0.0	44.4	36.3			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	37.7	37.7	26.9				0.0	0.0	0.0				57.4	22.5	0.0				0.0	44.4	36.3			
HCM2kAvg:	25	25	13				0	0	0				12	10	0				0	17	7			

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.806
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 60.0
Optimal Cycle: 73 Level Of Service: E

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			0		0	24			7		7	0			7		0	0			0	
Lanes:	1	0	1	0	1		0	1	0	1	0		2	0	3	0	1		2	0	3	1	1	
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak																								
Base Vol:	12		18		83		458		102		656		176		953		46		74		1321		199	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
Initial Bse:	12		18		83		458		102		656		176		953		46		74		1321		199	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90	0.90		0.90		0.90	0.90	0.90		0.90		0.90	0.90
PHF Volume:	13		20		92		509		113		729		196		1059		51		82		1468		221	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	13		20		92		509		113		729		196		1059		51		82		1468		221	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
Final Vol..	13		20		92		509		113		729		196		1059		51		82		1468		221	
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900	1900		1900		1900	1900	1900		1900		1900	1900
Adjustment:	0.93	0.98		0.83		0.84	0.84		0.84		0.84	0.90	0.89		0.83		0.90	0.87	0.87					
Lanes:	1.00	1.00		1.00		0.82	0.18		1.00		2.00	3.00	1.00		2.00		4.00	1.00						
Final Sat..	1769	1862		1583		1304	290		1595		3432	5083	1583		3432		6642	1661						
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01		0.06		0.39	0.39		0.46		0.06	0.21	0.03		0.02		0.22	0.13						
Crit Moves:		****							****		****						****							
Green/Cycle:	0.20	0.20		0.20		0.45	0.45		0.45		0.06	0.25	0.25		0.03		0.22	0.22						
Volume/Cap:	0.04	0.05		0.29		0.87	0.87		1.02		0.98	0.84	0.13		0.84		1.02	0.61						
Delay/Veh:	38.7	38.9		41.3		35.3	35.3		62.1		113.1	48.3	35.3		103.2		73.4	42.8						
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00						
AdjDel/Veh:	38.7	38.9		41.3		35.3	35.3		62.1		113.1	48.3	35.3		103.2		73.4	42.8						
HCM2kAvg:	0		1		3		24		24		35	7	15		1		3	19	8					

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.885
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 43.0
Optimal Cycle: 112 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Ovl						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	2	0	3	0	1		2	0	3	0	1		2	0	1	1	0		2	0	1	1	0	
Volume Module: >> Count Date: 9 Dec 2000 << AM Peak																								
Base Vol:	253		877		96		157		1125		638		422		584		297		177		768		46	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
Initial Bse:	253		877		96		157		1125		638		422		584		297		177		768		46	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
PHF Adj:	0.89	0.89		0.89		0.89	0.89		0.89		0.89	0.89	0.89		0.89		0.89	0.89	0.89		0.89		0.89	0.89
PHF Volume:	284		985		108		176		1264		717		474		656		334		199		863		52	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	284		985		108		176		1264		717		474		656		334		199		863		52	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
Final Vol..	284		985		108		176		1264		717		474		656		334		199		863		52	
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900	1900		1900		1900	1900	1900		1900		1900	1900
Adjustment:	0.90	0.89		0.83		0.90	0.89		0.83		0.90	0.83	0.90		0.88		0.88	0.90	0.90		0.92		0.92	
Lanes:	2.00	3.00		1.00		2.00	3.00		1.00		2.00	1.00	2.00		1.33		0.67	2.00	1.89		0.11			
Final Sat..	3432	5083		1583		3432	5083		1583		3432	1583	3432		2226		1132	3432	3308		198			
Capacity Analysis Module:																								
Vol/Sat:	0.08	0.19		0.07		0.05	0.25		0.45		0.14	0.29	0.29		0.06		0.26	0.26						
Crit Moves:	****								****		****						****							
Green/Cycle:	0.09	0.35		0.35		0.10	0.36		0.51		0.16	0.38	0.38		0.07		0.29	0.29						
Volume/Cap:	0.89	0.56		0.20		0.51	0.70		0.89		0.89	0.78	0.78		0.78		0.89	0.89						
Delay/Veh:	77.8	32.1		27.6		52.3	34.4		37.6		65.7	36.4	36.4		68.6		49.7	49.7						
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00						
AdjDel/Veh:	77.8	32.1		27.6		52.3	34.4		37.6		65.7	36.4	36.4		68.6		49.7	49.7						
HCM2kAvg:	8	10		3		4	14		27		12	18	18		6		19	19						

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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Intersection #27 Valley Park Way / West 9th Ave [NS / EW]

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Cycle (sec): 120 Critical Vol./Cap. (X): 0.749
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 37.5
Optimal Cycle: 74 Level Of Service: D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 12 Dec 2001 << AM Peak												
Base Vol:	9	686	89	121	1054	384	192	215	12	89	366	290
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	686	89	121	1054	384	192	215	12	89	366	290
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	10	762	99	134	1171	427	213	239	13	99	407	322
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	762	99	134	1171	427	213	239	13	99	407	322
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	10	762	99	134	1171	427	213	239	13	99	407	322
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.83	0.93	0.86	0.86	0.93	0.92	0.92	0.93	0.87	0.87
Lanes:	1.00	3.00	1.00	1.00	2.20	0.80	1.00	1.89	0.11	1.00	1.12	0.88
Final Sat..	1769	5083	1583	1769	3577	1303	1769	3324	186	1769	1844	1461
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.06	0.08	0.33	0.33	0.12	0.07	0.07	0.06	0.22	0.22
Crit Moves:	****				****		****				****	
Green/Cycle:	0.06	0.34	0.34	0.13	0.41	0.41	0.15	0.33	0.33	0.10	0.28	0.28
Volume/Cap:	0.10	0.44	0.18	0.59	0.79	0.79	0.79	0.22	0.22	0.58	0.79	0.79
Delay/Veh:	53.9	30.8	28.0	53.1	33.1	33.1	64.1	28.9	28.9	56.6	45.0	45.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	30.8	28.0	53.1	33.1	33.1	64.1	28.9	28.9	56.6	45.0	45.0
HCM2kAvg:	0	7	3	6	19	19	10	3	3	5	14	14

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Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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Intersection #28 Valley Pkwy/11th Street

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.444
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.0
Optimal Cycle: 41 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module: AM Peak												
Base Vol:	72	664	14	34	957	38	45	23	17	28	24	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	72	664	14	34	957	38	45	23	17	28	24	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	80	738	16	38	1063	42	50	26	19	31	27	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	738	16	38	1063	42	50	26	19	31	27	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	80	738	16	38	1063	42	50	26	19	31	27	103
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.94	0.94	0.95	0.88	0.88
Lanes:	1.00	1.96	0.04	1.00	2.00	1.00	1.00	0.58	0.42	1.00	0.21	0.79
Final Sat..	1805	3525	74	1805	3610	1615	1805	1023	756	1805	343	1331
Capacity Analysis Module:												
Vol/Sat:	0.04	0.21	0.21	0.02	0.29	0.03	0.03	0.02	0.02	0.02	0.08	0.08
Crit Moves:	****				****		****				****	
Green/Cycle:	0.10	0.69	0.69	0.07	0.66	0.66	0.06	0.14	0.14	0.10	0.17	0.17
Volume/Cap:	0.44	0.30	0.30	0.30	0.44	0.04	0.44	0.18	0.18	0.18	0.44	0.44
Delay/Veh:	44.1	6.0	6.0	45.6	8.2	5.8	48.0	38.2	38.2	42.0	38.0	38.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.1	6.0	6.0	45.6	8.2	5.8	48.0	38.2	38.2	42.0	38.0	38.0
HCM2kAvg:	3	4	4	1	8	0	2	1	1	1	4	4

****

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 12.1 Worst Case Level Of Service: F[319.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1	0	0 1	0 1	0	0 1
Volume Module: AM Peak												
Base Vol:	67	733	62	33	914	24	23	9	62	20	2	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	733	62	33	914	24	23	9	62	20	2	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	74	814	69	37	1016	27	26	10	69	22	2	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	74	814	69	37	1016	27	26	10	69	22	2	12
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1042	xxxx	xxxxx	883	xxxx	xxxxx	2094	2121	1016	2105	2079	814
Potent Cap..	675	xxxx	xxxxx	774	xxxx	xxxxx	39	51	292	38	54	381
Move Cap..	675	xxxx	xxxxx	774	xxxx	xxxxx	32	43	292	21	46	381
Volume/Cap:	0.11	xxxx	xxxx	0.05	xxxx	xxxx	0.80	0.23	0.24	1.05	0.05	0.03
Level Of Service Module:												
Queue:	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	0.9	xxxxx	xxxx	0.1
Stopped Del:	11.0	xxxx	xxxxx	9.9	xxxx	xxxxx	xxxxx	xxxx	21.1	xxxxx	xxxx	14.8
LOS by Move:	B	*	*	A	*	*	*	*	C	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	34	xxxx	xxxxx	22	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.7	xxxx	xxxxx	3.2	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	337.3	xxxx	xxxxx	471.9	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			128.8			319.5		
ApproachLOS:	*			*			F			F		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.582
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.3
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0 1	1	0	1 0 1	1	0	1 0 1	1	0	1 0 1	0	1
Volume Module: >> Count Date: 8 Jan 2002 << AM Peak												
Base Vol:	157	603	10	27	1071	74	108	6	247	34	8	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	157	603	10	27	1071	74	108	6	247	34	8	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	174	670	11	30	1190	82	120	7	274	38	9	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	670	11	30	1190	82	120	7	274	38	9	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	174	670	11	30	1190	82	120	7	274	38	9	79
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.94	0.94	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.97	0.03	1.00	1.87	0.13	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3544	59	1805	3343	231	1805	1900	1615	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.10	0.19	0.19	0.02	0.36	0.36	0.07	0.00	0.17	0.02	0.00	0.05
Crit Moves:	****				****		****				****	
Green/Cycle:	0.13	0.47	0.47	0.14	0.48	0.48	0.09	0.22	0.22	0.07	0.20	0.20
Volume/Cap:	0.74	0.40	0.40	0.12	0.74	0.74	0.74	0.02	0.76	0.32	0.02	0.24
Delay/Veh:	62.1	20.7	20.7	45.6	27.0	27.0	70.0	36.2	52.4	55.1	38.6	40.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.1	20.7	20.7	45.6	27.0	27.0	70.0	36.2	52.4	55.1	38.6	40.8
HCM2kAvg:	8	8	8	1	20	20	6	0	11	2	0	3

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.868
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 34.7
Optimal Cycle: 94 Level Of Service: C

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	20		7	7	20		0	0	0		0	20	0		20
Lanes:	0 0	2	0	1	1	0	1	0 0	0 0	0	0	0	1	0	0	0 1
Volume Module: AM Peak																
Base Vol.	0	338		193	449	970		0	0	0		0	263	0		274
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	338		193	449	970		0	0	0		0	263	0		274
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.81	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.72
PHF Volume:	0	376		238	499	1078		0	0	0		0	292	0		381
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	376		238	499	1078		0	0	0		0	292	0		381
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	376		238	499	1078		0	0	0		0	292	0		381
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	0.95		0.85	0.95	1.00		1.00	1.00	1.00		1.00	0.95	1.00		0.85
Lanes:	0.00	2.00		1.00	1.00	1.00		0.00	0.00	0.00		0.00	1.00	0.00		1.00
Final Sat..	0	3610		1615	1805	1900		0	0	0		0	1805	0		1615
Capacity Analysis Module:																
Vol/Sat:	0.00	0.10		0.15	0.28	0.57		0.00	0.00	0.00		0.00	0.16	0.00		0.24
Crit Moves:	****					****										****
Green/Cycle:	0.00	0.25		0.25	0.41	0.65		0.00	0.00	0.00		0.00	0.27	0.00		0.27
Volume/Cap:	0.00	0.42		0.60	0.68	0.87		0.00	0.00	0.00		0.00	0.60	0.00		0.87
Delay/Veh:	0.0	38.4		42.6	31.6	23.4		0.0	0.0	0.0		0.0	40.0	0.0		58.3
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	38.4		42.6	31.6	23.4		0.0	0.0	0.0		0.0	40.0	0.0		58.3
HCM2kAvg:	0	6		8	16	34		0	0	0		0	10	0		16

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Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #32 Auto Park Way / West 9th Ave [NS / EW]

****

Cycle (sec): 120 Critical Vol./Cap. (X): 1.166
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 74.8
Optimal Cycle: 180 Level Of Service: E

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Ovl			
Min. Green:	7	24		7	7	24		7	0	24		7	7	24		7
Lanes:	1 0	1	1	0	1	0	1	1 0	1	0	1	0 1	1	0	0	1 0
Volume Module: >> Count Date: 27 Nov 2001 << AM Peak																
Base Vol:	105	780		86	410	762		4	25	319		70	27	164		598
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	105	780		86	410	762		4	25	319		70	27	164		598
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		0.50	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	117	867		96	456	847		4	28	354		39	30	182		664
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	117	867		96	456	847		4	28	354		39	30	182		664
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	117	867		96	456	847		4	28	354		39	30	182		664
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.92		0.92	0.93	0.93		0.93	0.07	0.98		0.83	0.41	0.86		0.86
Lanes:	1.00	1.80		0.20	1.00	1.99		0.01	1.00	1.00		1.00	1.00	0.22		0.78
Final Sat..	1769	3139		346	1769	3516		18	140	1862		1583	780	353		1289
Capacity Analysis Module:																
Vol/Sat:	0.07	0.28		0.28	0.26	0.24		0.24	0.20	0.19		0.02	0.04	0.52		0.52
Crit Moves:		****			****									****		
Green/Cycle:	0.10	0.24		0.24	0.22	0.36		0.36	0.44	0.44		0.44	0.44	0.44		0.66
Volume/Cap:	0.67	1.17		1.17	1.17	0.67		0.67	0.45	0.43		0.06	0.09	1.17		0.78
Delay/Veh:	61.9	133		133.4	145.8	33.8		33.8	28.4	23.4		19.2	19.5	123		17.7
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	61.9	133		133.4	145.8	33.8		33.8	28.4	23.4		19.2	19.5	123		17.7
HCM2kAvg:	6	29		29	29	14		14	9	9		1	1	48		23

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Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.738
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 22.1
Optimal Cycle: 68 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	0	0	0	0	0		1	1	0	0	1		0	0	2	0	1		2	0	2	0	0	
Volume Module: >> Count Date: 27 Nov 2001 << AM Peak																								
Base Vol:	0	0			0		85	22			17		0	647			778		248	1491			0	
Growth Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	0	0			0		85	22			17		0	647			778		248	1491			0	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	0	0			0		94	24			19		0	719			864		276	1657			0	
Reduct Vol:	0	0			0		0	0			0		0	0			0		0	0			0	
Reduced Vol:	0	0			0		94	24			19		0	719			864		276	1657			0	
PCE Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol.:	0	0			0		94	24			19		0	719			864		276	1657			0	
Saturation Flow Module:																								
Sat/Lane:	1900	1900			1900		1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	1.00	1.00			1.00		0.83	0.83			0.83		1.00	0.93			0.83		0.90	0.93			1.00	
Lanes:	0.00	0.00			0.00		1.59	0.41			1.00		0.00	2.00			1.00		2.00	2.00			0.00	
Final Sat.:	0	0			0		2515	651			1583		0	3538			1583		3432	3538			0	
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.00			0.00		0.04	0.04			0.01		0.00	0.20			0.55		0.08	0.47			0.00	
Crit Moves:								****									****		****					
Green/Cycle:	0.00	0.00			0.00		0.20	0.20			0.20		0.00	0.61			0.61		0.09	0.70			0.00	
Volume/Cap:	0.00	0.00			0.00		0.19	0.19			0.06		0.00	0.33			0.89		0.89	0.67			0.00	
Delay/Veh:	0.0	0.0			0.0		40.0	40.0			38.9		0.0	11.5			30.8		80.6	10.9			0.0	
User DelAdj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	0.0	0.0			0.0		40.0	40.0			38.9		0.0	11.5			30.8		80.6	10.9			0.0	
HCM2kAvg:	0	0			0		2	2			1		0	6			31		8	18			0	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave [NS/ EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.676
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.9
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	1	1	0	0	1		0	0	0	0	0		2	0	2	0	0		0	0	2	0	1	
Volume Module: >> Count Date: 27 Nov 2001 << AM Peak																								
Base Vol:	804	9			169		0	0			0		105	677			0		0	919			296	
Growth Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	804	9			169		0	0			0		105	677			0		0	919			296	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	893	10			188		0	0			0		117	752			0		0	1021			329	
Reduct Vol:	0	0			0		0	0			0		0	0			0		0	0			0	
Reduced Vol:	893	10			188		0	0			0		117	752			0		0	1021			329	
PCE Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol.:	893	10			188		0	0			0		117	752			0		0	1021			329	
Saturation Flow Module:																								
Sat/Lane:	1900	1900			1900		1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	0.83	0.83			0.83		1.00	1.00			1.00		0.90	0.93			1.00		1.00	0.93			0.83	
Lanes:	1.98	0.02			1.00		0.00	0.00			0.00		2.00	2.00			0.00		0.00	2.00			1.00	
Final Sat.:	3130	35			1583		0	0			0		3432	3538			0		0	3538			1583	
Capacity Analysis Module:																								
Vol/Sat:	0.29	0.29			0.12		0.00	0.00			0.00		0.03	0.21			0.00		0.00	0.29			0.21	
Crit Moves:	****												****							****				
Green/Cycle:	0.42	0.42			0.42		0.00	0.00			0.00		0.58	0.44			0.00		0.00	0.68			0.49	
Volume/Cap:	0.68	0.68			0.28		0.00	0.00			0.00		0.58	0.44			0.00		0.00	0.68			0.49	
Delay/Veh:	29.9	29.9			23.3		0.0	0.0			0.0		59.4	20.7			0.0		0.0	29.4			25.8	
User DelAdj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	29.9	29.9			23.3		0.0	0.0			0.0		59.4	20.7			0.0		0.0	29.4			25.8	
HCM2kAvg:	16	16			5		0	0			0		3	9			0		0	16			9	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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Intersection #35 San Elijo/Rancho Santa Fe

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.913
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 32.0
Optimal Cycle: 110 Level Of Service: C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	1 0	2 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module: AM Peak												
Base Vol:	0	703	191	205	962	0	0	0	0	567	0	426
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	703	191	205	962	0	0	0	0	567	0	426
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	781	212	228	1069	0	0	0	0	630	0	473
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	781	212	228	1069	0	0	0	0	630	0	473
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	781	212	228	1069	0	0	0	0	630	0	473
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.85
Lanes:	0.00	1.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat..	0	1900	1615	1805	3610	0	0	0	0	3502	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.41	0.13	0.13	0.30	0.00	0.00	0.00	0.00	0.18	0.00	0.29
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.45	0.45	0.14	0.59	0.00	0.00	0.00	0.00	0.32	0.00	0.32
Volume/Cap:	0.00	0.91	0.29	0.91	0.50	0.00	0.00	0.00	0.00	0.56	0.00	0.91
Delay/Veh:	0.0	39.6	17.6	77.0	12.2	0.0	0.0	0.0	0.0	28.7	0.0	53.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	39.6	17.6	77.0	12.2	0.0	0.0	0.0	0.0	28.7	0.0	53.1
HCM2kAvg:	0	26	4	11	10	0	0	0	0	9	0	18

****

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.995
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 53.9
Optimal Cycle: 180 Level Of Service: D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module: AM Peak												
Base Vol.	188	49	66	45	389	56	103	543	576	768	390	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	188	49	66	45	389	56	103	543	576	768	390	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	209	54	73	50	432	62	114	603	640	853	433	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	54	73	50	432	62	114	603	640	853	433	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	209	54	73	50	432	62	114	603	640	853	433	52
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat..	1805	3610	1615	1805	3610	1615	1805	3610	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.12	0.02	0.05	0.03	0.12	0.04	0.06	0.17	0.40	0.24	0.12	0.03
Crit Moves:	****				****				****	****		
Green/Cycle:	0.12	0.15	0.15	0.09	0.12	0.12	0.22	0.40	0.40	0.24	0.42	0.42
Volume/Cap:	0.99	0.10	0.31	0.31	0.99	0.32	0.29	0.42	0.99	0.99	0.29	0.08
Delay/Veh:	104.7	37.0	38.9	43.7	85.7	41.2	32.7	21.9	64.1	67.1	19.2	17.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	104.7	37.0	38.9	43.7	85.7	41.2	32.7	21.9	64.1	67.1	19.2	17.4
HCM2kAvg:	11	1	2	2	11	2	3	7	26	20	4	1

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Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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Intersection #37 Via Rancho Parkway/I-15 NB Ramps

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Cycle (sec): 100 Critical Vol./Cap. (X): 0.535
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 25.8
Optimal Cycle: 43 Level Of Service: C

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	1	0	2	0	2		1	0	2	0	1		2	0	2	0	1		2	0	3	0	1	
Volume Module:																								
Base Vol:	200		49		505		20		59		34		19		497		120		342		1053		83	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	200		49		505		20		59		34		19		497		120		342		1053		83	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	222		54		561		22		66		38		21		552		133		380		1170		92	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	222		54		561		22		66		38		21		552		133		380		1170		92	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	222		54		561		22		66		38		21		552		133		380		1170		92	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.95		0.95		0.75		0.95		0.95		0.85		0.92		0.95		0.85		0.92		0.91		0.85	
Lanes:	1.00		2.00		2.00		1.00		2.00		1.00		2.00		2.00		1.00		2.00		3.00		1.00	
Final Sat..	1805		3610		2842		1805		3610		1615		3502		3610		1615		3502		5187		1615	
Capacity Analysis Module:																								
Vol/Sat:	0.12		0.02		0.20		0.01		0.02		0.02		0.01		0.15		0.08		0.11		0.23		0.06	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.33		0.37		0.37		0.02		0.06		0.06		0.01		0.29		0.29		0.20		0.48		0.48	
Volume/Cap:	0.37		0.04		0.54		0.54		0.29		0.37		0.47		0.54		0.29		0.54		0.47		0.12	
Delay/Veh:	26.1		20.2		25.4		61.3		45.5		47.3		56.8		30.7		28.2		36.5		17.9		14.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	26.1		20.2		25.4		61.3		45.5		47.3		56.8		30.7		28.2		36.5		17.9		14.7	
HCM2kAvg:	6		1		7		2		1		2		1		8		3		6		8		2	

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Harmony Grove Village
Option A: Baseline + P + CP

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	E	61.7	1.090	E	61.7	1.090	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	F	241.3	1.720	F	241.3	1.720	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	F	229.9	1.651	F	229.9	1.651	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	B	10.8	0.491	B	10.8	0.491	+ 0.000 V/C
# 6 Country Club/Entrance # 3	B	10.6	0.000	B	10.6	0.000	+ 0.000 D/V
# 7 Country Club/ Village Road	C	20.1	0.000	C	20.1	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	E	40.2	0.000	E	40.2	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	C	17.0	0.000	C	17.0	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	D	33.7	0.000	D	33.7	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	D	31.4	0.000	D	31.4	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	E	35.1	0.000	E	35.1	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	D	51.3	1.039	D	51.3	1.039	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	F	153.5	0.000	F	153.5	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	54.1	0.853	D	54.1	0.853	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	F	127.1	1.580	F	127.1	1.580	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	F	226.3	0.000	F	226.3	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	F	114.2	0.000	F	114.2	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	D	37.7	0.893	D	37.7	0.893	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	F	50.0	0.000	F	50.0	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	A	9.2	0.000	A	9.2	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	B	10.5	0.000	B	10.5	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	E	57.3	1.130	E	57.3	1.130	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline + P + CP

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Vallev Pkwv	F	87.7	1.115	F	87.7	1.115	+ 0.000 D/V
# 26 Vallev Park Way / Auto Park Wa	D	50.2	0.923	D	50.2	0.923	+ 0.000 D/V
# 27 Vallev Park Way / West 9th Ave	D	44.8	0.781	D	44.8	0.781	+ 0.000 D/V
# 28 Vallev Pkwy/11th Street	B	10.5	0.513	B	10.5	0.513	+ 0.000 D/V
# 29 Vallev Parkway/Avenida Diablo	F	284.3	0.000	F	284.3	0.000	+ 0.000 D/V
# 30 Vallev Pkwv./Citracado Pkwv.	C	27.3	0.493	C	27.3	0.493	+ 0.000 D/V
# 31 Vallev Pkwv./Via Rancho Pkwv.	D	38.9	0.817	D	38.9	0.817	+ 0.000 D/V
# 32 Auto Park Wav / West 9th Ave	C	31.9	0.841	C	31.9	0.841	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	32.6	1.009	C	32.6	1.009	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	29.7	0.685	C	29.7	0.685	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	D	43.1	1.017	D	43.1	1.017	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	45.6	0.956	D	45.6	0.956	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	D	37.6	0.830	D	37.6	0.830	+ 0.000 D/V

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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*******************************************************************************
Intersection #1 Nordahl Rd. / SR-78 WB [NS / EW]
*******************************************************************************
Cycle (sec):        120                 Critical Vol./Cap. (X):          1.090
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):         61.7
Optimal Cycle:      180                 Level Of Service:                   E
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     7   24    0    0   24    7    0    0    0    7   24    7
Lanes:        2  0  2  0  0    0  0  2  0  1    0  0  0  0  0    1  0  1! 0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Dec 2001 << PM Peak
Base Vol.     1135 1014    0    0  757  211    0    0    0  427    6  267
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  1135 1014    0    0  757  211    0    0    0  427    6  267
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90
PHF Volume:   1261 1127    0    0  841  234    0    0    0  474    7  297
Reduct Vol.      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  1261 1127    0    0  841  234    0    0    0  474    7  297
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol..   1261 1127    0    0  841  234    0    0    0  474    7  297
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.71 0.73 1.00 1.00 0.93 0.83 1.00 1.00 1.00 0.68 0.68 0.68
Lanes:        2.00 2.00 0.00 0.00 2.00 1.00 0.00 0.00 0.00 1.60 0.02 1.38
Final Sat..   2693 2776    0    0 3538 1583    0    0    0 2085   22 1791
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.47 0.41 0.00 0.00 0.24 0.15 0.00 0.00 0.00 0.23 0.30 0.17
Crit Moves:   ****                ****                               ****
Green/Cycle:  0.43 0.65 0.00 0.00 0.22 0.22 0.00 0.00 0.00 0.28 0.28 0.28
Volume/Cap:   1.09 0.63 0.00 0.00 1.09 0.68 0.00 0.00 0.00 0.82 1.09 0.60
Delay/Veh:    88.6 13.2  0.0  0.0  106 48.4  0.0  0.0  0.0 46.4  104 38.4
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   88.6 13.2  0.0  0.0  106 48.4  0.0  0.0  0.0 46.4  104 38.4
HCM2kAvg:      35   13    0    0   24    9    0    0    0   13   24    8
*******************************************************************************
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Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp (NS / EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.720
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 241.3
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24	7		7	24	0		7	24	7		0	0	0	
Lanes:	0 0	2 0	1		2 0	2 0	0		0 1	0 1	0		0 0	0 0	0	
Volume Module: >> Count Date: 13 Dec 2001 << PM Peak																
Base Vol:	0	1761	914		372	840	0		263	2	627		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	1761	914		372	840	0		263	2	627		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	1957	1016		413	933	0		292	2	697		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	1957	1016		413	933	0		292	2	697		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	1957	1016		413	933	0		292	2	697		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.73	0.65		0.90	0.93	1.00		0.59	0.59	0.59		1.00	1.00	1.00	
Lanes:	0.00	2.00	1.00		2.00	2.00	0.00		0.99	0.01	1.00		0.00	0.00	0.00	
Final Sat..	0	2776	1242		3432	3538	0		1103	8	1112		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.70	0.82		0.12	0.26	0.00		0.26	0.26	0.63		0.00	0.00	0.00	
Crit Moves:			****		****						****					
Green/Cycle:	0.00	0.48	0.48		0.07	0.55	0.00		0.36	0.36	0.36		0.00	0.00	0.00	
Volume/Cap:	0.00	1.48	1.72		1.72	0.48	0.00		0.73	0.73	1.72		0.00	0.00	0.00	
Delay/Veh:	0.0	247	357.1		387.3	14.2	0.0		29.5	29.5	362.9		0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	247	357.1		387.3	14.2	0.0		29.5	29.5	362.9		0.0	0.0	0.0	
HCM2kAvg:	0	70	84		19	9	0		10	10	65		0	0	0	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.651
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 229.9
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	7		7	24	7		7	24	7		7	24	7	
Lanes:	1 0	2 0	1		2 0	1 1	0		2 0	2 0	1		2 0	2 0	1	
Volume Module: >> Count Date: 13 Dec 2001 << PM Peak																
Base Vol:	649	1813	73		236	835	258		387	645	387		57	535	552	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	649	1813	73		236	835	258		387	645	387		57	535	552	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	721	2014	81		262	928	287		430	717	430		63	594	613	
Reduct Vol.	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	721	2014	81		262	928	287		430	717	430		63	594	613	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	721	2014	81		262	928	287		430	717	430		63	594	613	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.73	0.73	0.65		0.71	0.70	0.70		0.90	0.93	0.83		0.90	0.93	0.83	
Lanes:	1.00	2.00	1.00		2.00	1.53	0.47		2.00	2.00	1.00		2.00	2.00	1.00	
Final Sat..	1388	2776	1242		2693	2047	632		3432	3538	1583		3432	3538	1583	
Capacity Analysis Module:																
Vol/Sat:	0.52	0.73	0.07		0.10	0.45	0.45		0.13	0.20	0.27		0.02	0.17	0.39	
Crit Moves:	****					****			****						****	
Green/Cycle:	0.31	0.52	0.52		0.07	0.27	0.27		0.08	0.26	0.26		0.05	0.23	0.23	
Volume/Cap:	1.65	1.40	0.13		1.40	1.65	1.65		1.65	0.79	1.06		0.34	0.72	1.65	
Delay/Veh:	344.1	212	14.9		263.3	342	342.4		364.9	46.5	106.9		55.7	45.2	350.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	344.1	212	14.9		263.3	342	342.4		364.9	46.5	106.9		55.7	45.2	350.6	
HCM2kAvg:	65	73	2		12	53	53		21	14	23		2	11	53	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club (NS / EW)

Average Delay (sec/veh): 1065.7 Worst Case Level Of Service: F[13236.1

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	1	1 0 2	0	1	0 1 0	0	1	0 0 1!	0	0
Volume Module: >> Count Date: 11 Dec 2001 << PM Peak												
Base Vol:	65 2252		5	39 981		353	263	1	60	1	0	12
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	65 2252		5	39 981		353	263	1	60	1	0	12
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	0.90 0.90		0.90	0.90 0.90		0.90	0.90 0.90		0.90	0.90 0.90		0.90
PHF Volume:	72 2502		6	43 1090		392	292	1	67	1	0	13
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
Final Vol..	72 2502		6	43 1090		392	292	1	67	1	0	13
Critical Gap Module:												
Critical Gp:	4.1 xxxx		xxxxx	4.1 xxxx		xxxxx	7.5	6.5	6.9	7.5 xxxx		6.9
FollowUpTim:	2.2 xxxx		xxxxx	2.2 xxxx		xxxxx	3.5	4.0	3.3	3.5 xxxx		3.3
Capacity Module:												
Cnflict Vol:	1482 xxxx		xxxxx	2508 xxxx		xxxxx	2572	3829	545	3279 xxxx		1251
Potent Cap..	450 xxxx		xxxxx	178 xxxx		xxxxx	13	4	482	4 xxxx		164
Move Cap..	450 xxxx		xxxxx	178 xxxx		xxxxx	8	2	482	1 xxxx		164
Volume/Cap:	0.16 xxxx		xxxx	0.24 xxxx		xxxx	34.69	0.47	0.14	0.78 xxxx		0.08
Level Of Service Module:												
Queue:	0.6 xxxx		xxxxx	0.9 xxxx		xxxxx	xxxxx	xxxx	0.5	xxxxx xxxx		xxxxx
Stopped Del:	14.5 xxxx		xxxxx	31.6 xxxx		xxxxx	xxxxx	xxxx	13.7	xxxxx xxxx		xxxxx
LOS by Move:	B	*	*	D	*	*	*	*	B	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	8	xxxx	xxxxx	xxxx	17	xxxxx
SharedQueue:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	38.5	xxxx	xxxxx	xxxxx	2.2	xxxxx
Shrd StpDel:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	16241	xxxx	xxxxx	xxxxx	479	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			478.6		
ApproachLOS:	*			*			F			F		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.491
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.8
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 1	0	1	0 1	0	0	0 0	0	0	0 0 1!	0	0
Volume Module: PM Peak												
Base Vol:	0 199		9	89 253		0	0	0	0	20	0	81
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	0 199		9	89 253		0	0	0	0	20	0	81
User Adj:	1.00 1.00		0.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	0.90 0.90		0.00	0.90 0.90		0.90	0.90 0.90		0.90	0.90 0.90		0.90
PHF Volume:	0 221		0	99 281		0	0	0	0	22	0	90
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
Reduced Vol:	0 221		0	99 281		0	0	0	0	22	0	90
PCE Adj:	1.00 1.00		0.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00		0.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Final Vol..	0 221		0	99 281		0	0	0	0	22	0	90
Saturation Flow Module:												
Adjustment:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Lanes:	0.00 1.00		1.00	0.26 0.74		0.00	0.00 0.00		0.00	0.20 0.00		0.80
Final Sat..	0 696		0	201 572		0	0 0		0	136 0		551
Capacity Analysis Module:												
Vol/Sat:	xxxx 0.32		xxxx	0.49 0.49		xxxx	xxxx xxxx		xxxx	0.16 xxxx		0.16
Crit Moves:	****			****						****		
Delay/Veh:	0.0 10.0		0.0	11.8 11.8		0.0	0.0 0.0		0.0	8.6 0.0		8.6
Delay Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
AdjDel/Veh:	0.0 10.0		0.0	11.8 11.8		0.0	0.0 0.0		0.0	8.6 0.0		8.6
LOS by Move:	* B			B B		*	* *		*	A *		A
ApproachDel:	10.0			11.8			xxxxxx			8.6		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	10.0			11.8			xxxxxx			8.6		
LOS by Appr:	B			B			*			A		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club/Entrance # 3

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[10.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1	0 0	0 1	0	0 0	0 0	0	0 0	0 0	0	0 1
Volume Module: PM Peak												
Base Vol:	0	335	0	52	494	0	0	0	0	0	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	335	0	52	494	0	0	0	0	0	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	372	0	58	549	0	0	0	0	0	0	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	372	0	58	549	0	0	0	0	0	0	33
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	372	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	372
Potent Cap.:	xxxx	xxxx	xxxxx	1197	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	678
Move Cap..	xxxx	xxxx	xxxxx	1197	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	678
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.2
Stopped Del:	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.6
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.6		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Average Delay (sec/veh): 6.3 Worst Case Level Of Service: C[20.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1	0 1	1 0	1	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module: PM Peak												
Base Vol:	0	184	156	0	261	0	0	0	0	274	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	184	156	0	261	0	0	0	0	274	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	204	173	0	290	0	0	0	0	304	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	204	173	0	290	0	0	0	0	304	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	494	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	538	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	538	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.57	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	20.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	C	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			20.1		
ApproachLOS:	*			*			*			C		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #8 Harmony Grove/Village Road

****

Average Delay (sec/veh): 4.7 Worst Case Level Of Service: E[40.2]

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	1	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0
Volume Module: PM Peak																				
Base Vol:	0	557		0		0	353		274		156		0		0	0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	557		0		0	353		274		156		0		0	0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	619		0		0	392		304		173		0		0	0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol.:	0	619		0		0	392		304		173		0		0	0		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					1011	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					268	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					268	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					0.65	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					40.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*		*		*	*		*		E	*		*	*	*		*		*
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*		*		*	*		*		*	*		*	*	*		*		*
ApproachDel:	xxxxxx			xxxxxx					40.2					xxxxxx						
ApproachLOS:	*			*					E					*						

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #9 Country Club/Entrance # 2

****

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: C[17.0]

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Volume Module: PM Peak																				
Base Vol:	0	169		0		0	202		292		166		0		0	0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	169		0		0	202		292		166		0		0	0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	188		0		0	224		324		184		0		0	0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol.:	0	188		0		0	224		324		184		0		0	0		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					574	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					483	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					483	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					0.38	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					1.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					17.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*		*		*	*		*		C	*		*	*	*		*		*
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*		*		*	*		*		*	*		*	*	*		*		*
ApproachDel:	xxxxxx			xxxxxx					17.0					xxxxxx						
ApproachLOS:	*			*					C					*						

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Country Club/Harmony Grove

Average Delay (sec/veh): 4.8 Worst Case Level Of Service: D[33.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: PM Peak												
Base Vol:	4	8	13	3	17	168	171	568	6	24	277	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	8	13	3	17	168	171	568	6	24	277	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	4	9	14	3	19	187	190	631	7	27	308	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	4	9	14	3	19	187	190	631	7	27	308	6
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1481	1381	634	1390	1382	311	313	xxxx	xxxxx	638	xxxx	xxxxx
Potent Cap..	105	145	482	121	145	734	1258	xxxx	xxxxx	956	xxxx	xxxxx
Move Cap..	59	117	482	94	117	734	1258	xxxx	xxxxx	956	xxxx	xxxxx
Volume/Cap:	0.08	0.08	0.03	0.04	0.16	0.25	0.15	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	8.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	153	xxxxx	xxxx	464	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.6	xxxxx	xxxxx	2.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	33.7	xxxxx	xxxxx	19.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	D	*	*	C	*	*	*	*	*	*	*
ApproachDel:		33.7			19.0			xxxxx			xxxxx	
ApproachLOS:		D			C			*			*	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: D[31.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module: PM Peak												
Base Vol:	0	0	0	56	0	17	29	679	0	0	365	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	56	0	17	29	679	0	0	365	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	62	0	19	32	754	0	0	406	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	62	0	19	32	754	0	0	406	109
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1279	xxxx	460	514	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	185	xxxx	605	1061	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	181	xxxx	605	1061	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.34	xxxx	0.03	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	216	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.6	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	31.4	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	D	*	A	*	*	*	*	*
ApproachDel:		xxxxx			31.4			xxxxx			xxxxx	
ApproachLOS:		*			D			*			*	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #12 Wilgen Road/Harmony Grove

****

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: E[35.1]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module: PM Peak												
Base Vol:	0	31	0	47	0	7	15	615	0	0	304	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	31	0	47	0	7	15	615	0	0	304	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	34	0	52	0	8	17	683	0	0	338	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	34	0	52	0	8	17	683	0	0	338	83
Critical Gap Module:												
Critical Gp:	xxxxx	6.5	xxxxx	7.1	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	4.0	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	1138	xxxxx	1113	xxxx	379	421	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	203	xxxxx	187	xxxx	672	1149	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	200	xxxxx	161	xxxx	672	1149	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	0.17	xxxx	0.32	xxxx	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	26.7	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	D	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	178	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.4	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	35.1	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	E	*	A	*	*	*	*	*
ApproachDel:		26.7			35.1			xxxxxx			xxxxxx	
ApproachLOS:		D			E			*			*	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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Intersection #13 Citracado Pkwy./Vinevard St.

****

Cycle (sec): 100 Critical Vol./Cap. (X): 1.039
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 51.3
Optimal Cycle: 180 Level Of Service: D

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L -	T -	R		L -	T -	R		L -	T -	R		L -	T -	R	
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	2 0	0 0	1		0 0	0 0	0		0 0	1 0	2		2 0	1 0	0	
Volume Module: PM Peak																
Base Vol:	1025	0	464		0	0	0		0	933	295		121	1060	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1025	0	464		0	0	0		0	933	295		121	1060	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	1139	0	516		0	0	0		0	1037	328		134	1178	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	1139	0	516		0	0	0		0	1037	328		134	1178	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	1139	0	516		0	0	0		0	1037	328		134	1178	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.92	1.00	0.85		1.00	1.00	1.00		1.00	1.00	0.75		0.35	1.00	1.00	
Lanes:	2.00	0.00	1.00		0.00	0.00	0.00		0.00	1.00	2.00		2.00	1.00	0.00	
Final Sat..	3502	0	1615		0	0	0		0	1900	2842		1327	1900	0	
Capacity Analysis Module:																
Vol/Sat:	0.33	0.00	0.32		0.00	0.00	0.00		0.00	0.55	0.12		0.10	0.62	0.00	
Crit Moves:	****													****		
Green/Cycle:	0.31	0.00	0.31		0.00	0.00	0.00		0.00	0.60	0.91		0.60	0.60	0.00	
Volume/Cap:	1.04	0.00	1.02		0.00	0.00	0.00		0.00	0.91	0.13		0.17	1.04	0.00	
Delay/Veh:	72.1	0.0	79.4		0.0	0.0	0.0		0.0	29.2	0.5		9.1	57.4	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	72.1	0.0	79.4		0.0	0.0	0.0		0.0	29.2	0.5		9.1	57.4	0.0	
HCM2kAvg:	27	0	23		0	0	0		0	32	1		3	48	0	

****

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa (NS / EW)

Average Delay (sec/veh): 9.2 Worst Case Level Of Service: F[153.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	1	0	0	0	0	1	0	0	1!	0	0	0	0	0
Volume Module: PM Peak																
Base Vol:	26	743		0	0	796	102		63	0	42		0	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	26	743		0	0	796	102		63	0	42		0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	29	826		0	0	884	113		70	0	47		0	0	0	
Reduct Vol.	0	0		0	0	0	0		0	0	0		0	0	0	
Final Vol..	29	826		0	0	884	113		70	0	47		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	998	xxxx	xxxxx	xxxx	xxxx	xxxxx			1824	xxxx		941	xxxx	xxxx	xxxxx	
Potent Cap..	694	xxxx	xxxxx	xxxx	xxxx	xxxxx			85	xxxx		319	xxxx	xxxx	xxxxx	
Move Cap..	694	xxxx	xxxxx	xxxx	xxxx	xxxxx			82	xxxx		319	xxxx	xxxx	xxxxx	
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx			0.85	xxxx		0.15	xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	10.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx		117	xxxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		6.6	xxxxx	xxxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		153	xxxxx	xxxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	F	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				153.5				xxxxxx				
ApproachLOS:	*			*				F				*				

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.853
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 54.1
Optimal Cycle: 98 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	2	0	1	0	1	2	0	1	0	1	1	0	1	0	2	0	1
Volume Module: >> Count Date: 11 Dec 2001 << PM Peak																
Base Vol:	518	317		377	104	153		62	80	962		132	298	541		134
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	518	317		377	104	153		62	80	962		132	298	541		134
User Adj:	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.98		0.98
PHF Adj:	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92
PHF Volume:	555	340		404	111	164		66	86	1030		141	319	579		144
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	555	340		404	111	164		66	86	1030		141	319	579		144
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	555	340		404	111	164		66	86	1030		141	319	579		144
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.90	0.98		0.83	0.90	0.98		0.83	0.93	0.91		0.91	0.93	0.93		0.83
Lanes:	2.00	1.00		1.00	2.00	1.00		1.00	1.00	1.76		0.24	1.00	2.00		1.00
Final Sat..	3432	1862		1583	3432	1862		1583	1769	3055		419	1769	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.16	0.18		0.26	0.03	0.09		0.04	0.05	0.34		0.34	0.18	0.16		0.09
Crit Moves:	****					****				****			****			
Green/Cycle:	0.17	0.30		0.30	0.07	0.20		0.20	0.12	0.35		0.35	0.19	0.41		0.41
Volume/Cap:	0.97	0.61		0.86	0.48	0.44		0.21	0.40	0.97		0.97	0.97	0.40		0.22
Delay/Veh:	79.9	38.1		53.8	55.4	42.9		40.4	50.0	57.7		57.7	90.1	24.9		22.9
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	79.9	38.1		53.8	55.4	42.9		40.4	50.0	57.7		57.7	90.1	24.9		22.9
HCM2kAvg:	15	11		17	3	6		2	3	27		27	17	7		3

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.580
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 127.1
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	7		7	24	7		7	24	7		7	24	7	
Lanes:	1 0	1 0	1		1 0	1 0	1		1 0	1 0	1		1 0	1 0	1	
Volume Module: >> Count Date: 28 Nov 2001 << PM Peak																
Base Vol:	173	315	281		118	344	6		7	219	448		213	57	240	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	173	315	281		118	344	6		7	219	448		213	57	240	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	192	350	312		131	382	7		8	243	498		237	63	267	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	192	350	312		131	382	7		8	243	498		237	63	267	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	192	350	312		131	382	7		8	243	498		237	63	267	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Sat..	298	313	333		276	290	304		281	295	315		284	292	313	
Capacity Analysis Module:																
Vol/Sat:	0.65	1.12	0.94		0.47	1.32	0.02		0.03	0.82	1.58		0.83	0.22	0.85	
Crit Moves:		****				****					****				****	
Delay/Veh:	33.7	121	67.8		26.5	197	14.7		15.7	52.5	303.3		56.2	18.1	54.6	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	33.7	121	67.8		26.5	197	14.7		15.7	52.5	303.3		56.2	18.1	54.6	
LOS by Move:	D	F	F		D	F	B		C	F	F		F	C	F	
ApproachDel:		81.8				152.0				218.8				51.2		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		81.8				152.0				218.8				51.2		
LOS by Appr:		F				F				F				F		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. [NS / EW]

Average Delay (sec/veh): 48.4 Worst Case Level Of Service: F[226.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1 0	0 0	1		0 0	0 0	0		0 0	0 1	0		0 1	0 0	0	
Volume Module: >> Count Date: 28 Nov 2001 << PM Peak																
Base Vol:	99	0	298		0	0	0		0	837	27		201	446	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	99	0	298		0	0	0		0	837	27		201	446	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	110	0	331		0	0	0		0	930	30		223	496	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	110	0	331		0	0	0		0	930	30		223	496	0	
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	xxxx	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1887	xxxx	945		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		960	xxxx	xxxxx	
Potent Cap..	77	xxxx	318		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		717	xxxx	xxxxx	
Move Cap..	56	xxxx	318		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		717	xxxx	xxxxx	
Volume/Cap:	1.96	xxxx	1.04		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		0.31	xxxx	xxxx	
Level Of Service Module:																
Queue:	10.6	xxxx	12.0		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		1.3	xxxx	xxxxx	
Stopped Del:	608.1	xxxx	99.5		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		12.3	xxxx	xxxxx	
LOS by Move:	F	*	F		*	*	*		*	*	*		B	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		1.3	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		12.3	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		B	*	*	
ApproachDel:		226.3				xxxxxx				xxxxxx				xxxxxx		
ApproachLOS:		F				*				*				*		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 8.6 Worst Case Level Of Service: F[114.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			1 0 0 0 1			0 1 0 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak												
Base Vol:	0	0	0	39	0	96	186	1088	0	0	538	51
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	39	0	96	186	1088	0	0	538	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	43	0	107	207	1209	0	0	598	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	43	0	107	207	1209	0	0	598	57
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	2248	xxxx	626	654	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap..	xxxx	xxxx	xxxxx	47	xxxx	488	942	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	38	xxxx	488	942	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.15	xxxx	0.22	0.22	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	4.4	xxxx	0.8	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	359.9	xxxx	14.4	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	B	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			114.2			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.893
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 37.7
Optimal Cycle: 116 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	0	7	7	24	0	0	24	7
Lanes:	0 1 0 1 0			1 0 0 1 0			1 0 1 1 0			1 0 2 0 1		
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak												
Base Vol:	28	12	28	386	9	187	253	1645	14	26	1015	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	12	28	386	9	187	253	1645	14	26	1015	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	31	13	31	429	10	208	281	1828	16	29	1128	397
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	13	31	429	10	208	281	1828	16	29	1128	397
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	31	13	31	429	10	208	281	1828	16	29	1128	397
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	0.93	0.84	0.84	0.93	0.93	0.93	0.93	0.93	0.83
Lanes:	0.83	0.35	0.82	1.00	0.05	0.95	1.00	1.98	0.02	1.00	2.00	1.00
Final Sat..	1339	574	1339	1769	73	1522	1769	3504	30	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.24	0.14	0.14	0.16	0.52	0.52	0.02	0.32	0.25
Crit Moves:		****		****				****		****		
Green/Cycle:	0.03	0.03	0.03	0.27	0.27	0.27	0.20	0.58	0.58	0.02	0.40	0.40
Volume/Cap:	0.89	0.89	0.89	0.89	0.50	0.50	0.79	0.89	0.89	0.89	0.79	0.62
Delay/Veh:	121.7	122	121.7	60.7	37.8	37.8	57.2	27.1	27.1	172.9	34.6	30.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	121.7	122	121.7	60.7	37.8	37.8	57.2	27.1	27.1	172.9	34.6	30.6
HCM2kAvg:	3	3	3	19	7	7	12	33	33	3	20	12

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: F[50.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	1 0	0	1 0	0 0	0 0	0	0 0	1 0	0	1
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak												
Base Vol:	0	689	119	5	483	0	0	0	0	84	0	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	689	119	5	483	0	0	0	0	84	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	766	132	6	537	0	0	0	0	93	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	766	132	6	537	0	0	0	0	93	0	13
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	898	xxxx	xxxxx	xxxx	xxxx	xxxxx	1379	xxxx	832
Potent Cap.:	xxxx	xxxx	xxxxx	765	xxxx	xxxxx	xxxx	xxxx	xxxxx	161	xxxx	372
Move Cap..	xxxx	xxxx	xxxxx	765	xxxx	xxxxx	xxxx	xxxx	xxxxx	160	xxxx	372
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.58	xxxx	0.04
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.1	xxxx	0.1
Stopped Del:	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	55.0	xxxx	15.0
LOS by Move:	*	*	*	A	*	*	*	*	*	F	*	C
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			50.0		
ApproachLOS:	*			*			*			F		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 563.3 Worst Case Level Of Service: F[1032.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0	0 0	0	0 0	1 0	1 0	0	0 1	0	0	0 0
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak												
Base Vol:	246	91	0	0	83	476	750	0	320	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	246	91	0	0	83	476	750	0	320	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	273	101	0	0	92	529	833	0	356	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	273	101	0	0	92	529	833	0	356	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	621	xxxx	xxxxx	xxxx	xxxx	xxxxx	1004	xxxx	357	xxxx	xxxx	xxxxx
Potent Cap..	969	xxxx	xxxxx	xxxx	xxxx	xxxxx	270	xxxx	692	xxxx	xxxx	xxxxx
Move Cap..	969	xxxx	xxxxx	xxxx	xxxx	xxxxx	201	xxxx	692	xxxx	xxxx	xxxxx
Volume/Cap:	0.28	xxxx	xxxx	xxxx	xxxx	xxxx	4.16	xxxx	0.51	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	1.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	82.9	xxxx	3.0	xxxxx	xxxx	xxxxx
Stopped Del:	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1466	xxxx	15.6	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	F	*	C	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	1.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			1032.6			xxxxxx		
ApproachLOS:	*			*			F			*		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #22 Avenida Diablo/Citracado Parkway

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Average Delay (sec/veh): 7.6 Worst Case Level Of Service: A[9.2]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Yield Sign			Yield Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	0 1	0	1 0	1 0	0
Volume Module: PM Peak												
Base Vol:	6	0	161	0	0	0	0	14	4	226	16	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	0	161	0	0	0	0	14	4	226	16	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	7	0	179	0	0	0	0	16	4	251	18	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	7	0	179	0	0	0	0	16	4	251	18	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	538	xxxx	18	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	20	xxxx	xxxxx
Potent Cap.:	508	xxxx	1067	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1609	xxxx	xxxxx
Move Cap..	447	xxxx	1067	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1609	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	0.17	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.16	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	0.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.6	xxxx	xxxxx
Stopped Del:	13.2	xxxx	9.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	B	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	9.2			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #23 Avenida Diablo/Hale Avenue

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Average Delay (sec/veh): 7.6 Worst Case Level Of Service: B[10.5]

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 1	0 0	1	0 1	0 0	0	0 0	1 0	1
Volume Module: PM Peak												
Base Vol:	0	0	0	86	0	217	168	13	0	0	21	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	86	0	217	168	13	0	0	21	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	96	0	241	187	14	0	0	23	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	96	0	241	187	14	0	0	23	94
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	411	xxxx	23	118	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	601	xxxx	1059	1483	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	536	xxxx	1059	1483	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.18	xxxx	0.23	0.13	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.9	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.4	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	536	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.6	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	13.2	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.5			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.130
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): 57.3
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	0		0	24	7		0	0	0		7	24	7	
Lanes:	0 1	0	0 1		0 0	0	0 0		2 0	3	0 0		0 0	3	0 1	
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak																
Base Vol:	228	0	414		0	0	0		821	1623	0		0	1498	683	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	228	0	414		0	0	0		821	1623	0		0	1498	683	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	253	0	460		0	0	0		912	1803	0		0	1664	759	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	253	0	460		0	0	0		912	1803	0		0	1664	759	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	253	0	460		0	0	0		912	1803	0		0	1664	759	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.93	1.00	0.83		1.00	1.00	1.00		0.90	0.89	1.00		1.00	0.89	0.83	
Lanes:	1.00	0.00	1.00		0.00	0.00	0.00		2.00	3.00	0.00		0.00	3.00	1.00	
Final Sat..	1773	0	1583		0	0	0		3432	5083	0		0	5083	1583	
Capacity Analysis Module:																
Vol/Sat:	0.14	0.00	0.29		0.00	0.00	0.00		0.27	0.35	0.00		0.00	0.33	0.48	
Crit Moves:			****						****						****	
Green/Cycle:	0.26	0.00	0.26		0.00	0.00	0.00		0.24	0.66	0.00		0.00	0.42	0.42	
Volume/Cap:	0.56	0.00	1.13		0.00	0.00	0.00		1.13	0.54	0.00		0.00	0.77	1.13	
Delay/Veh:	40.1	0.0	129.6		0.0	0.0	0.0		119.8	11.0	0.0		0.0	31.3	110.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	40.1	0.0	129.6		0.0	0.0	0.0		119.8	11.0	0.0		0.0	31.3	110.9	
HCM2kAvg:	9	0	27		0	0	0		28	12	0		0	19	42	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.115
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 87.7
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	0		0	24	7		7	0	7		0	0	0	
Lanes:	1 0	1	0 1		0 1	0	1 0		2 0	3	0 1		2 0	3	1 1	
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak																
Base Vol:	46	48	307		415	229	414		397	1676	43		276	933	462	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	46	48	307		415	229	414		397	1676	43		276	933	462	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	51	53	341		461	254	460		441	1862	48		307	1037	513	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	51	53	341		461	254	460		441	1862	48		307	1037	513	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	51	53	341		461	254	460		441	1862	48		307	1037	513	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.93	0.98	0.83		0.86	0.86	0.86		0.90	0.89	0.83		0.90	0.85	0.85	
Lanes:	1.00	1.00	1.00		0.79	0.43	0.78		2.00	3.00	1.00		2.00	3.34	1.66	
Final Sat..	1769	1862	1583		1281	707	1278		3432	5083	1583		3432	5383	2666	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.03	0.22		0.36	0.36	0.36		0.13	0.37	0.03		0.09	0.19	0.19	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.20	0.20	0.20		0.32	0.32	0.32		0.16	0.33	0.33		0.08	0.24	0.24	
Volume/Cap:	0.14	0.14	1.08		1.13	1.13	1.13		0.79	1.13	0.09		1.13	0.79	0.79	
Delay/Veh:	39.7	39.7	120.8		109.7	110	109.7		56.0	105	28.2		147.7	44.9	44.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	39.7	39.7	120.8		109.7	110	109.7		56.0	105	28.2		147.7	44.9	44.9	
HCM2kAvg:	2	2	20		34	34	34		10	35	1		11	13	13	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.923
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 50.2
Optimal Cycle: 135 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Ovl						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	2	0	3	0	1		2	0	3	0	1		2	0	1	1	0		2	0	1	1	0	
Volume Module: >> Count Date: 9 Dec 2000 << PM Peak																								
Base Vol:	321	1192		45			140	939		468			849	1044		213			194	603		167		
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Initial Bse:	321	1192		45			140	939		468			849	1044		213			194	603		167		
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	0.90	0.90		0.90			0.90	0.90		0.90			0.90	0.90		0.90			0.90	0.90		0.90		
PHF Volume:	357	1324		50			156	1043		520			943	1160		237			216	670		186		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Reduced Vol:	357	1324		50			156	1043		520			943	1160		237			216	670		186		
PCE Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
MLF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Final Vol.:	357	1324		50			156	1043		520			943	1160		237			216	670		186		
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900			1900	1900		1900			1900	1900		1900			1900	1900		1900		
Adjustment:	0.90	0.89		0.83			0.90	0.89		0.83			0.90	0.91		0.91			0.90	0.90		0.90		
Lanes:	2.00	3.00		1.00			2.00	3.00		1.00			2.00	1.66		0.34			2.00	1.57		0.43		
Final Sat.:	3432	5083		1583			3432	5083		1583			3432	2865		584			3432	2679		742		
Capacity Analysis Module:																								
Vol/Sat:	0.10	0.26		0.03			0.05	0.21		0.33			0.27	0.40		0.40			0.06	0.25		0.25		
Crit Moves:		****					****						****							****				
Green/Cycle:	0.11	0.28		0.28			0.06	0.22		0.52			0.29	0.49		0.49			0.08	0.27		0.27		
Volume/Cap:	0.92	0.93		0.11			0.78	0.92		0.63			0.93	0.83		0.83			0.83	0.93		0.93		
Delay/Veh:	78.5	53.6		32.3			73.0	56.9		22.3			56.1	30.2		30.2			74.6	58.9		58.9		
User DelAdj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
AdjDel/Veh:	78.5	53.6		32.3			73.0	56.9		22.3			56.1	30.2		30.2			74.6	58.9		58.9		
HCM2kAvg:	10	20		1			5	16		14			22	24		24			6	20		20		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.781
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 44.8
Optimal Cycle: 77 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	1	0	3	0	1		1	0	2	1	0		1	0	1	1	0		1	0	1	1	0	
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak																								
Base Vol:	21	1035		147			165	866		253			433	448		6			135	265		49		
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Initial Bse:	21	1035		147			165	866		253			433	448		6			135	265		49		
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	0.90	0.90		0.90			0.90	0.90		0.90			0.90	0.90		0.90			0.90	0.90		0.90		
PHF Volume:	23	1150		163			183	962		281			481	498		7			150	294		54		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Reduced Vol:	23	1150		163			183	962		281			481	498		7			150	294		54		
PCE Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
MLF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Final Vol.:	23	1150		163			183	962		281			481	498		7			150	294		54		
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900			1900	1900		1900			1900	1900		1900			1900	1900		1900		
Adjustment:	0.93	0.89		0.83			0.93	0.86		0.86			0.93	0.93		0.93			0.93	0.91		0.91		
Lanes:	1.00	3.00		1.00			1.00	2.32		0.68			1.00	1.97		0.03			1.00	1.69		0.31		
Final Sat.:	1769	5083		1583			1769	3800		1110			1769	3484		47			1769	2917		539		
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.23		0.10			0.10	0.25		0.25			0.27	0.14		0.14			0.08	0.10		0.10		
Crit Moves:		****					****						****							****				
Green/Cycle:	0.07	0.26		0.26			0.12	0.31		0.31			0.32	0.36		0.36			0.15	0.20		0.20		
Volume/Cap:	0.18	0.86		0.39			0.86	0.81		0.81			0.86	0.39		0.39			0.55	0.50		0.50		
Delay/Veh:	53.1	48.0		36.9			79.6	41.5		41.5			51.3	28.6		28.6			49.4	43.3		43.3		
User DelAdj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
AdjDel/Veh:	53.1	48.0		36.9			79.6	41.5		41.5			51.3	28.6		28.6			49.4	43.3		43.3		
HCM2kAvg:	1	16		5			10	16		16			20	7		7			6	6		6		

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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Intersection #28 Valley Pkwy/11th Street

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.513
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: 47 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module: PM Peak												
Base Vol:	25	1206	9	106	720	72	33	16	67	29	24	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	1206	9	106	720	72	33	16	67	29	24	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	28	1340	10	118	800	80	37	18	74	32	27	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	1340	10	118	800	80	37	18	74	32	27	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	28	1340	10	118	800	80	37	18	74	32	27	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.88	0.88	0.95	0.91	0.91
Lanes:	1.00	1.99	0.01	1.00	2.00	1.00	1.00	0.19	0.81	1.00	0.38	0.62
Final Sat..	1805	3580	27	1805	3610	1615	1805	322	1348	1805	656	1067
Capacity Analysis Module:												
Vol/Sat:	0.02	0.37	0.37	0.07	0.22	0.05	0.02	0.06	0.06	0.02	0.04	0.04
Crit Moves:		****		****				****		****		
Green/Cycle:	0.06	0.73	0.73	0.13	0.80	0.80	0.05	0.11	0.11	0.03	0.10	0.10
Volume/Cap:	0.28	0.51	0.51	0.51	0.28	0.06	0.43	0.51	0.51	0.51	0.43	0.43
Delay/Veh:	46.8	6.0	6.0	42.7	2.6	2.1	49.7	44.6	44.6	54.4	44.5	44.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.8	6.0	6.0	42.7	2.6	2.1	49.7	44.6	44.6	54.4	44.5	44.5
HCM2kAvg:	1	9	9	4	3	1	2	3	3	2	3	3

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Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #29 Valley Parkway/Avenida Diablo

****

Average Delay (sec/veh): 11.7 Worst Case Level Of Service: F[284.3]

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Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1 0	1 0	1			1 0	1 0	1			0 1	0 0	1			0 1	0 0	1		
Volume Module: PM Peak																				
Base Vol:	78	1203	132			11	748	65			19	5	70			9	4	13		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	78	1203	132			11	748	65			19	5	70			9	4	13		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90		
PHF Volume:	87	1337	147			12	831	72			21	6	78			10	4	14		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol..	87	1337	147			12	831	72			21	6	78			10	4	14		
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			7.1	6.5	6.2			7.1	6.5	6.2		
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5	4.0	3.3			3.5	4.0	3.3		
Capacity Module:																				
Cnflict Vol:	903	xxxx	xxxxx			1483	xxxx	xxxxx			2448	2512	831			2443	2438	1337		
Potent Cap..	761	xxxx	xxxxx			459	xxxx	xxxxx			22	29	373			22	32	189		
Move Cap..	761	xxxx	xxxxx			459	xxxx	xxxxx			16	25	373			13	28	189		
Volume/Cap:	0.11	xxxx	xxxx			0.03	xxxx	xxxx			1.35	0.22	0.21			0.78	0.16	0.08		
Level Of Service Module:																				
Queue:	0.4	xxxx	xxxxx			0.1	xxxx	xxxxx			xxxxx	xxxx	0.8			xxxxx	xxxx	0.2		
Stopped Del:	10.3	xxxx	xxxxx			13.0	xxxx	xxxxx			xxxxx	xxxx	17.2			xxxxx	xxxx	25.6		
LOS by Move:	B	*	*			B	*	*			*	*	C			*	*	D		
Movement:	LT -	LTR -	RT			LT -	LTR -	RT			LT -	LTR -	RT			LT -	LTR -	RT		
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			17	xxxx	xxxxx			15	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			3.8	xxxx	xxxxx			2.3	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			753.7	xxxx	xxxxx			543.0	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			F	*	*			F	*	*		
ApproachDel:	xxxxxx					xxxxxx					205.3					284.3				
ApproachLOS:	*					*					F					F				

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.493
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.3
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module: >> Count Date: 8 Jan 2002 << PM Peak												
Base Vol:	167	1134	26	62	702	116	70	8	187	11	7	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	167	1134	26	62	702	116	70	8	187	11	7	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	186	1260	29	69	780	129	78	9	208	12	8	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	1260	29	69	780	129	78	9	208	12	8	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	186	1260	29	69	780	129	78	9	208	12	8	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.93	0.93	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.96	0.04	1.00	1.72	0.28	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3518	81	1805	3033	501	1805	1900	1615	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.10	0.36	0.36	0.04	0.26	0.26	0.04	0.00	0.13	0.01	0.00	0.03
Crit Moves:		****		****			****				****	
Green/Cycle:	0.18	0.57	0.57	0.06	0.45	0.45	0.07	0.21	0.21	0.06	0.20	0.20
Volume/Cap:	0.57	0.63	0.63	0.63	0.57	0.57	0.63	0.02	0.62	0.11	0.02	0.15
Delay/Veh:	47.3	17.9	17.9	66.0	24.8	24.8	64.2	37.8	46.7	53.8	38.6	39.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.3	17.9	17.9	66.0	24.8	24.8	64.2	37.8	46.7	53.8	38.6	39.8
HCM2kAvg:	7	16	16	4	12	12	4	0	8	1	0	1

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.817
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 38.9
Optimal Cycle: 76 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	20	7	7	20	0	0	0	0	20	0	20
Lanes:	0 0	2 0	1	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module: PM Peak												
Base Vol:	0	780	282	332	363	0	0	0	0	228	0	453
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	780	282	332	363	0	0	0	0	228	0	453
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	867	313	369	403	0	0	0	0	253	0	503
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	867	313	369	403	0	0	0	0	253	0	503
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	867	313	369	403	0	0	0	0	253	0	503
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	2.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3610	1615	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.19	0.20	0.21	0.00	0.00	0.00	0.00	0.14	0.00	0.31
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.29	0.29	0.25	0.54	0.00	0.00	0.00	0.00	0.38	0.00	0.38
Volume/Cap:	0.00	0.82	0.66	0.82	0.39	0.00	0.00	0.00	0.00	0.37	0.00	0.82
Delay/Veh:	0.0	44.5	40.6	53.5	16.1	0.0	0.0	0.0	0.0	27.1	0.0	41.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	44.5	40.6	53.5	16.1	0.0	0.0	0.0	0.0	27.1	0.0	41.8
HCM2kAvg:	0	17	11	16	8	0	0	0	0	7	0	19

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.841
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.9
Optimal Cycle: 94 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Ovl			
Min. Green:	7	24		7	7	24		7	0	24		7	7	24		7
Lanes:	1	0	1	1 0	1	0	1	1 0	1	0	1	0 1	1	0	0	1 0
Volume Module: >> Count Date: 27 Nov 2001 << PM Peak																
Base Vol:	92	940	494		26	941	22		19	180	732		155	129	35	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	92	940	494		26	941	22		19	180	732		155	129	35	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.50		1.00	1.00	1.00	
PHF Adj:	0.89	0.89	0.89		0.89	0.89	0.89		0.89	0.89	0.89		0.89	0.89	0.89	
PHF Volume:	103	1056	555		29	1057	25		21	202	411		174	145	39	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	103	1056	555		29	1057	25		21	202	411		174	145	39	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	103	1056	555		29	1057	25		21	202	411		174	145	39	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.93	0.88	0.88		0.93	0.93	0.93		0.52	0.98	0.83		0.50	0.95	0.95	
Lanes:	1.00	1.31	0.69		1.00	1.95	0.05		1.00	1.00	1.00		1.00	0.79	0.21	
Final Sat..	1769	2198	1155		1769	3447	81		994	1862	1583		942	1418	385	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.48	0.48		0.02	0.31	0.31		0.02	0.11	0.26		0.18	0.10	0.10	
Crit Moves:		****			****						****					
Green/Cycle:	0.10	0.55	0.55		0.06	0.51	0.51		0.30	0.30	0.30		0.30	0.30	0.35	
Volume/Cap:	0.60	0.88	0.88		0.28	0.60	0.60		0.07	0.37	0.88		0.63	0.35	0.29	
Delay/Veh:	58.0	29.1	29.1		55.6	21.6	21.6		30.5	33.8	57.5		41.0	33.6	28.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	58.0	29.1	29.1		55.6	21.6	21.6		30.5	33.8	57.5		41.0	33.6	28.2	
HCM2kAvg:	5	29	29		1	14	14		1	6	18		11	5	5	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.009
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.6
Optimal Cycle: 180 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	0	0	0	0 0	1	1	0	0 1	0	0	2	0 1	2	0	2	0 0
Volume Module: >> Count Date: 27 Nov 2001 << PM Peak																
Base Vol:	0	0		0	323		0	146	0	1029	1059		191	1335	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		323		0	146	0	1029	1059		191	1335	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		359		0	162	0	1143	1177		212	1483	0	
Reduct Vol:	0	0	0		0		0	0	0	0	0		0	0	0	
Reduced Vol:	0	0	0		359		0	162	0	1143	1177		212	1483	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	0	0		359		0	162	0	1143	1177		212	1483	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	1.00	1.00		0.93	1.00	0.83		1.00	0.93	0.83		0.90	0.93	1.00	
Lanes:	0.00	0.00	0.00		2.00	0.00	1.00		0.00	2.00	1.00		2.00	2.00	0.00	
Final Sat..	0	0	0		3545		0	1583	0	3538	1583		3432	3538	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.00		0.10	0.00	0.10		0.00	0.32	0.74		0.06	0.42	0.00	
Crit Moves:							****				****		****			
Green/Cycle:	0.00	0.00	0.00		0.10	0.00	0.10		0.00	0.74	0.74		0.06	0.80	0.00	
Volume/Cap:	0.00	0.00	0.00		1.00	0.00	1.01		0.00	0.44	1.01		1.01	0.53	0.00	
Delay/Veh:	0.0	0.0	0.0		100.2	0.0	127.2		0.0	6.2	44.3		120.6	4.4	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	0.0		100.2	0.0	127.2		0.0	6.2	44.3		120.6	4.4	0.0	
HCM2kAvg:	0	0	0		11	0	10		0	8	52		8	10	0	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave [NS/ EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.685
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.7
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	1	1	0	0	1		0	0	0	0	0		2	0	2	0	0		0	0	2	0	1	
Volume Module: >> Count Date: 27 Nov 2001 << PM Peak																								
Base Vol:	749		2		218		0		0		0		229	1123			0		0	778			377	
Growth Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	749		2		218		0		0		0		229	1123			0		0	778			377	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	832		2		242		0		0		0		254	1248			0		0	864			419	
Reduct Vol:	0		0		0		0		0		0		0	0			0		0	0			0	
Reduced Vol:	832		2		242		0		0		0		254	1248			0		0	864			419	
PCE Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol..	832		2		242		0		0		0		254	1248			0		0	864			419	
Saturation Flow Module:																								
Sat/Lane:	1900	1900			1900		1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	0.83	0.83			0.83		1.00	1.00			1.00		0.90	0.93			1.00		1.00	0.93			0.83	
Lanes:	1.99	0.01			1.00		0.00	0.00			0.00		2.00	2.00			0.00		0.00	2.00			1.00	
Final Sat..	3157		8		1583		0		0		0		3432	3538			0		0	3538			1583	
Capacity Analysis Module:																								
Vol/Sat:	0.26	0.26			0.15		0.00	0.00			0.00		0.07	0.35			0.00		0.00	0.24			0.26	
Crit Moves:	****													****					****					
Green/Cycle:	0.38	0.38			0.38		0.00	0.00			0.00		0.11	0.52			0.00		0.00	0.40			0.40	
Volume/Cap:	0.68	0.68			0.40		0.00	0.00			0.00		0.66	0.68			0.00		0.00	0.61			0.66	
Delay/Veh:	32.5	32.5			27.2		0.0	0.0			0.0		55.1	22.9			0.0		0.0	29.1			31.7	
User DelAdj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	32.5	32.5			27.2		0.0	0.0			0.0		55.1	22.9			0.0		0.0	29.1			31.7	
HCM2kAvg:	16	16			7		0	0			0		6	18			0		0	13			13	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 1.017
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 43.1
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Split Phase						Split Phase					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0			0		0	0			0		0	0			0		0	0			0	
Lanes:	0	0	1	0	1		1	0	2	0	0		0	0	0	0	0		2	0	0	0	1	
Volume Module: PM Peak																								
Base Vol:	0	814			345		489	934			0		0	0			0		178	0			216	
Growth Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	0	814			345		489	934			0		0	0			0		178	0			216	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	0	904			383		543	1038			0		0	0			0		198	0			240	
Reduct Vol:	0	0			0		0	0			0		0	0			0		0	0			0	
Reduced Vol:	0	904			383		543	1038			0		0	0			0		198	0			240	
PCE Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol..	0	904			383		543	1038			0		0	0			0		198	0			240	
Saturation Flow Module:																								
Sat/Lane:	1900	1900			1900		1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	1.00	1.00			0.85		0.95	0.95			1.00		1.00	1.00			1.00		0.92	1.00			0.85	
Lanes:	0.00	1.00			1.00		1.00	2.00			0.00		0.00	0.00			0.00		2.00	0.00			1.00	
Final Sat..	0	1900			1615		1805	3610			0		0	0			0		3502	0			1615	
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.48			0.24		0.30	0.29			0.00		0.00	0.00			0.00		0.06	0.00			0.15	
Crit Moves:		****					****																****	
Green/Cycle:	0.00	0.47			0.47		0.30	0.76			0.00		0.00	0.00			0.00		0.15	0.00			0.15	
Volume/Cap:	0.00	1.02			0.51		1.02	0.38			0.00		0.00	0.00			0.00		0.39	0.00			1.02	
Delay/Veh:	0.0	61.2			19.1		78.5	4.0			0.0		0.0	0.0			0.0		39.1	0.0			105.8	
User DelAdj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	0.0	61.2			19.1		78.5	4.0			0.0		0.0	0.0			0.0		39.1	0.0			105.8	
HCM2kAvg:	0	37			8		25	5			0		0	0			0		3	0			12	

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.956
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 45.6
Optimal Cycle: 143 Level Of Service: D

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0		0		0		0		0		0		0		0		0		0		0		0	
Lanes:	1	0	2	0	1		1	0	2	0	1		1	0	2	0	1		2	0	2	0	1	
Volume Module:																								
Base Vol:	145		261		661		49		137		64		58		288		189		712		606		93	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	145		261		661		49		137		64		58		288		189		712		606		93	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	161		290		734		54		152		71		64		320		210		791		673		103	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	161		290		734		54		152		71		64		320		210		791		673		103	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	161		290		734		54		152		71		64		320		210		791		673		103	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.95		0.95		0.85		0.95		0.95		0.85		0.95		0.95		0.85		0.92		0.95		0.85	
Lanes:	1.00		2.00		1.00		1.00		2.00		1.00		1.00		2.00		1.00		2.00		2.00		1.00	
Final Sat..	1805		3610		1615		1805		3610		1615		1805		3610		1615		3502		3610		1615	
Capacity Analysis Module:																								
Vol/Sat:	0.09		0.08		0.45		0.03		0.04		0.04		0.04		0.09		0.13		0.23		0.19		0.06	
Crit Moves:					****		****										****		****					
Green/Cycle:	0.34		0.48		0.48		0.03		0.17		0.17		0.06		0.14		0.14		0.24		0.31		0.31	
Volume/Cap:	0.26		0.17		0.96		0.96		0.25		0.26		0.60		0.65		0.96		0.96		0.60		0.20	
Delay/Veh:	24.2		15.0		47.4		151.1		36.4		36.8		54.6		44.1		91.0		58.8		29.9		25.4	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	24.2		15.0		47.4		151.1		36.4		36.8		54.6		44.1		91.0		58.8		29.9		25.4	
HCM2kAvg:	4		2		27		4		2		2		3		6		10		18		9		2	

****

Harmony Grove Village
Option A: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.830
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 37.6
Optimal Cycle: 85 Level Of Service: D

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0		0		0		0		0		0		0		0		0		0		0		0	
Lanes:	1	0	2	0	2		1	0	2	0	1		2	0	2	0	1		2	0	3	0	1	
Volume Module:																								
Base Vol:	475		181		895		85		232		43		248		685		197		370		730		40	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	475		181		895		85		232		43		248		685		197		370		730		40	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	528		201		994		94		258		48		276		761		219		411		811		44	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	528		201		994		94		258		48		276		761		219		411		811		44	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	528		201		994		94		258		48		276		761		219		411		811		44	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.95		0.95		0.75		0.95		0.95		0.85		0.92		0.95		0.85		0.92		0.91		0.85	
Lanes:	1.00		2.00		2.00		1.00		2.00		1.00		2.00		2.00		1.00		2.00		3.00		1.00	
Final Sat..	1805		3610		2842		1805		3610		1615		3502		3610		1615		3502		5187		1615	
Capacity Analysis Module:																								
Vol/Sat:	0.29		0.06		0.35		0.05		0.07		0.03		0.08		0.21		0.14		0.12		0.16		0.03	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.39		0.42		0.42		0.06		0.10		0.10		0.13		0.25		0.25		0.14		0.26		0.26	
Volume/Cap:	0.75		0.13		0.83		0.83		0.75		0.31		0.59		0.83		0.53		0.83		0.59		0.10	
Delay/Veh:	30.9		17.8		30.7		84.0		53.0		43.3		42.9		41.7		33.6		53.0		32.9		28.0	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	30.9		17.8		30.7		84.0		53.0		43.3		42.9		41.7		33.6		53.0		32.9		28.0	
HCM2kAvg:	16		2		16		5		6		2		5		14		6		9		8		1	

****

Harmony Grove Village

Scenario Report

Scenario:	EX AM
Command:	Default Command
Volume:	EX AM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

****
Intersection #1 Country Club Dr @ Entrance # 5
****
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A
****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T			R	L		T			R	L		T			R	L	-	T			R
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	0	1	0	0		0	0	1	0	0	
Volume Module:																								
Base Vol:	0		0		0		0		0		0		0		17		0		0		108		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
Initial Bse:	0		0		0		0		0		0		0		17		0		0		108		0	
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Volume:	0		0		0		0		0		0		0		17		0		0		108		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	0		0		0		0		0		0		0		17		0		0		108		0	
Adjusted Volume Module:																								
Grade:	0%						0%						0%						0%					
% Cycle/Cars:	xxxx		xxxx				xxxx		xxxx				xxxx		xxxx				xxxx		xxxx			
% Truck/Comb:	xxxx		xxxx				xxxx		xxxx				xxxx		xxxx				xxxx		xxxx			
PCE Adj:	1.10	1.10		1.10		1.10	1.10	1.10		1.10		1.10	1.10	1.00		1.00		1.00	1.10	1.00		1.00		1.00
Cycl/Car PCE:	xxxx		xxxx				xxxx		xxxx				xxxx		xxxx				xxxx		xxxx			
Trck/Cmb PCE:	xxxx		xxxx				xxxx		xxxx				xxxx		xxxx				xxxx		xxxx			
Adj Vol.:	0		0		0		0		0		0		0		17		0		0		108		0	
Critical Gap Module:																								
MoveUp Time:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Critical Gp:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Potent Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Adj Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Move Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																								
Stopped Del:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	*		*		*		*		*		*		*		*		*		*		*		*	
Movement:	LT	-	LTR	-	RT		LT		LTR	-	RT		LT	-	LTR		RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shrd StpDel:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shared LOS:	*		*		*		*		*		*		*		*		*		*		*		*	
ApproachDel:	xxxxxx						xxxxxx						0.0						0.0					
ApproachLOS:	*						*						A						A					

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #3
*******************************************************************************
Average Delay (sec/veh):       0.0           Worst Case Level Of Service:       A
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L     T   - R    L   -  T     R   L     T   -  R   L   -  T   -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign        Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:       0  0  0  0  0    0  0  0  0  0    0  0  1  0  0    0  0  1  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0     0     0     0     0     0     0     4     0     0    19     0
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   0     0     0     0     0     0     0     4     0     0    19     0
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    0     0     0     0     0     0     0     4     0     0    19     0
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Final Vol..    0     0     0     0     0     0     0     4     0     0    19     0
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:            0%                0%                0%                0%
% Cycle/Cars:   xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
% Truck/Comb:   xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
PCE Adj:     1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:   xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Adj Vol..      0     0     0     0     0     0     0     4     0     0    19     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap..   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *     *     *     *     *     *     *     *     *     *     *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT   LTR   RT    LT   LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:    *     *     *     *     *     *     *     *     *     *     *     *
ApproachDel:     xxxxxx            xxxxxx            0.0               0.0
ApproachLOS:       *                 *                 A                 A
```


Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #7 Country Club/ Village Road
*******************************************************************************
Cycle (sec):          100                 Critical Vol./Cap. (X):          0.103
Loss Time (sec):        0 (Y+R =  4 sec) Average Delay (sec/veh):          6.9
Optimal Cycle:          0                 Level Of Service:                    A
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L     T     R    L   -  T   -  R   L   -  T     R   L   -  T   -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       0  0  0  0  0    0  0  1!0  0    0  1  0  0  0    0  0  1!0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: AM Peak
Base Vol:      0     0     0     1     0    96    14     3     0     0    12     7
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   0     0     0     1     0    96    14     3     0     0    12     7
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     0.90  0.90  0.90  0.90  0.90  0.90  0.90  0.90  0.90  0.90  0.90  0.90
PHF Volume:    0     0     0     1     0   107    16     3     0     0    13     8
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   0     0     0     1     0   107    16     3     0     0    13     8
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol..    0     0     0     1     0   107    16     3     0     0    13     8
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       0.00  0.00  0.00  0.01  0.00  0.99  0.82  0.18  0.00  0.00  1.00  1.00
Final Sat..    0     0     0    11     0  1039   663   142     0     0     0  1755
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     xxxx xxxx xxxx  0.10 xxxx  0.10  0.02  0.02  xxxx  xxxx xxxx  0.00
Crit Moves:                  ****              ****                        ****
Delay/Veh:     0.0   0.0   0.0   6.8   0.0   6.8   7.5   7.5   0.0   0.0   0.0   6.8
Delay Adj:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
AdjDel/Veh:    0.0   0.0   0.0   6.8   0.0   6.8   7.5   7.5   0.0   0.0   0.0   6.8
LOS by Move:   *     *     *     A     *     A     A     A     *     *     *     A
ApproachDel:     xxxxxx            6.8               7.5               6.8
Delay Adj:       xxxxx             1.00              1.00              1.00
ApprAdjDel:      xxxxxx            6.8               7.5               6.8
LOS by Appr:       *                 A                 A                 A
*******************************************************************************
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Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****
Intersection #8 Harmony Grove/Village Road
****
Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.2]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0 0	0	0 0	0 1	0	1 0	1! 0	1	0 0	0 0	0
Volume Module: AM Peak												
Base Vol:	2	110	0	0	306	17	3	0	1	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	110	0	0	306	17	3	0	1	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	2	122	0	0	340	19	3	0	1	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	2	122	0	0	340	19	3	0	1	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	359	xxxx	xxxxx	xxxx	xxxx	xxxxx	476	xxxx	349	xxxx	xxxx	xxxxx
Potent Cap..	1211	xxxx	xxxxx	xxxx	xxxx	xxxxx	551	xxxx	698	xxxx	xxxx	xxxxx
Move Cap.:	1211	xxxx	xxxxx	xxxx	xxxx	xxxxx	550	xxxx	698	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	0.00	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	0.0	xxxxx	xxxx	xxxxx
Stopped Del:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.6	xxxx	10.2	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	B	*	B	*	*	*
Movement:	LT - LTR		- RT	LT	LTR	- RT	LT	LTR	RT	LT - LTR		RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	581	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				11.2		xxxxxx		
ApproachLOS:	*			*				B		*		

Harmony Grove Village

Scenario Report

Scenario:	EX PM
Command:	Default Command
Volume:	EX PM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 0	1 0	0	0 0	1 0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	111	0	0	34	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	111	0	0	34	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	111	0	0	34	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	0	0	0	0	111	0	0	34	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	0	0	0	0	0	0	0	111	0	0	34	0
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			0.0			0.0		
ApproachLOS:	*			*			A			A		

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	0 0	0	0 0	1 0	0	0 0	1 0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	22	0	0	8	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	22	0	0	8	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	22	0	0	8	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	0	0	0	0	22	0	0	8	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	0	0	0	0	0	0	0	22	0	0	8	0
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT - LTR - RT			LT - LTR		RT	LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			0.0			0.0		
ApproachLOS:	*			*			A			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.147
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.7
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L T R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	1
Volume Module: PM Peak												
Base Vol:	0	0	0	9	0	28	98	13	0	0	6	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	9	0	28	98	13	0	0	6	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	10	0	31	109	14	0	0	7	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	10	0	31	109	14	0	0	7	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	10	0	31	109	14	0	0	7	2
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.24	0.00	0.76	0.88	0.12	0.00	0.00	1.00	1.00
Final Sat..	0	0	0	225	0	700	739	98	0	0	0	1795
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.04	xxxx	0.04	0.15	0.15	xxxx	xxxx	xxxx	0.00
Crit Moves:						****		****				****
Delay/Veh:	0.0	0.0	0.0	6.9	0.0	6.9	8.0	8.0	0.0	0.0	0.0	6.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	6.9	0.0	6.9	8.0	8.0	0.0	0.0	0.0	6.7
LOS by Move:	*	*	*	A	*	A	A	A	*	*	*	A
ApproachDel:	xxxxxx				6.9			8.0			6.7	
Delay Adj:	xxxxx				1.00			1.00			1.00	
ApprAdjDel:	xxxxxx				6.9			8.0			6.7	
LOS by Appr:	*				A			A			A	

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[12.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L - T - R				L T - R				L T R				L - T - R			
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 1	0	0	0	0 0	0	1	0	1	0	1!	0	1	0 0	0	0 0
Volume Module: PM Peak																
Base Vol:	1	430	0		0	90	7		18	0	4		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1	430	0		0	90	7		18	0	4		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	1	478	0		0	100	8		20	0	4		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	1	478	0		0	100	8		20	0	4		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	108	xxxx	xxxxx		xxxx	xxxx	xxxxx		584	xxxx	104		xxxx	xxxx	xxxxx	
Potent Cap..	1496	xxxx	xxxxx		xxxx	xxxx	xxxxx		477	xxxx	956		xxxx	xxxx	xxxxx	
Move Cap..	1496	xxxx	xxxxx		xxxx	xxxx	xxxxx		477	xxxx	956		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	xxxx	xxxx		xxxx	xxxx	xxxx		0.04	xxxx	0.00		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.1	xxxx	0.0		xxxxx	xxxx	xxxxx	
Stopped Del:	7.4	xxxx	xxxxx		xxxxx	xxxx	xxxxx		12.7	xxxx	8.8		xxxxx	xxxx	xxxxx	
LOS by Move:	A	*	*		*	*	*		B	*	A		*	*	*	
Movement:	LT	LTR	RT		LT	LTR	RT		LT	LTR - RT			LT - LTR		RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	525	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	7.4	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	12.0	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*		*	*	*		*	B	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx					12.0			xxxxxx			
ApproachLOS:	*				*					B			*			

Harmony Grove Village

Scenario Report

Scenario:	EX + P AM
Command:	Default Command
Volume:	E+P AM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #1 Country Club Dr @ Entrance # 5
*******************************************************************************
Average Delay (sec/veh):       1.2           Worst Case Level Of Service:       B
*******************************************************************************
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L     T     R    L     T  -  R    L     T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled      Uncontrolled
Rights:           Include          Include          Include           Include
Lanes:        0  0  0  0  0    1  0  0  0  0    0  0  1  0  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    88    0    0     0  286    0     0  276   54
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0    88    0    0     0  286    0     0  276   54
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0    88    0    0     0  286    0     0  276   54
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Final Vol..     0    0    0    88    0    0     0  286    0     0  276   54
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:     1.10 1.10 1.10  1.10 1.10 1.10  1.10 1.00 1.00  1.10 1.00 1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol..       0    0    0    97    0    0     0  286    0     0  276   54
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx   3.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx   6.5 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   589 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   483 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx xxxxx  1.00 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap..   xxxx xxxx xxxxx   483 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx   9.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *    *     B    *    *     *    *    *     *    *    *
Movement:      LT   LTR   RT    LT - LTR - RT    LT - LTR   RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *    *     *    *    *     *    *    *     *    *    *
ApproachDel:    xxxxxx              9.1              0.0              0.0
ApproachLOS:       *                 B                A                A
```

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 0 0 0			0 0 0 1 0			0 1 0 0 0		
Volume Module:												
Base Vol:	9	0	22	0	0	0	0	215	5	13	151	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	0	22	0	0	0	0	215	5	13	151	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	0	22	0	0	0	0	215	5	13	151	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	9	0	22	0	0	0	0	215	5	13	151	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	10	0	24	0	0	0	0	215	5	14	151	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	382	xxxx	217	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	220	xxxx	xxxxx
Potent Cap..	637	xxxx	1074	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1347	xxxx	xxxxx
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap..	629	xxxx	1074	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1347	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	5.8	xxxx	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR		RT	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	891	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1347	xxxx	xxxxx
Shrd StpDel:	xxxxx	4.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.0	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	4.2			xxxxxx			0.0			0.2		
ApproachLOS:	A			*			A			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.425
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.5
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 1! 0 1		
Volume Module:												
Base Vol:	0	0	0	6	0	152	113	214	0	0	144	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	6	0	152	113	214	0	0	144	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	6	0	152	113	214	0	0	144	16
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	6	0	152	113	214	0	0	144	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	6	0	152	113	214	0	0	144	16
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.04	0.00	0.96	0.35	0.65	0.00	0.00	1.00	1.00
Final Sat..	0	0	0	29	0	732	266	503	0	0	0	1575
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.21	xxxx	0.21	0.43	0.43	xxxx	xxxx	xxxx	0.01
Crit Moves:				****			****					****
Delay/Veh:	0.0	0.0	0.0	8.4	0.0	8.4	10.8	10.8	0.0	0.0	0.0	8.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	8.4	0.0	8.4	10.8	10.8	0.0	0.0	0.0	8.0
LOS by Move:	*	*	*	A	*	A	B	B	*	*	*	A
ApproachDel:	xxxxxx			8.4			10.8			8.0		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			8.4			10.8			8.0		
LOS by Appr:	*			A			B			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #8 Harmony Grove/Village Road

****

Average Delay (sec/veh): 4.0 Worst Case Level Of Service: C[16.6]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L		T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0		1	0	1!	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	2	210		0			0	371		162			236		0		1		0		0		0	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	2	210		0			0	371		162			236		0		1		0		0		0	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	2	210		0			0	371		162			236		0		1		0		0		0	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
Final Vol..	2	210		0			0	371		162			236		0		1		0		0		0	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.4	xxxx			6.2	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5	xxxx			3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																								
Cnflict Vol:	533	xxxx	xxxxx	xxxx	xxxx	xxxxx							666	xxxx			452	xxxx	xxxx	xxxxx				
Potent Cap.:	1045	xxxx	xxxxx	xxxx	xxxx	xxxxx							428	xxxx			612	xxxx	xxxx	xxxxx				
Move Cap..	1045	xxxx	xxxxx	xxxx	xxxx	xxxxx							427	xxxx			612	xxxx	xxxx	xxxxx				
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx							0.55	xxxx			0.00	xxxx	xxxx	xxxx				
Level Of Service Module:																								
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx							1.1	xxxx			0.0	xxxxx	xxxx	xxxxx				
Stopped Del:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx							16.6	xxxx			10.9	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*		*	*	*							C	*			B	*	*	*				
Movement:	LT	LTR	-	RT			LT	LTR	-	RT			LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx		428	xxxxx			xxxx	xxxx	xxxxx			
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx		1.1	xxxxx			xxxxx	xxxxx	xxxxx			
Shrd StpDel:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx		16.6	xxxxx			xxxxx	xxxxx	xxxxx			
Shared LOS:	A	*		*	*	*							*		C	*			*	*	*			
ApproachDel:	xxxxxx						xxxxxx								16.6						xxxxxx			
ApproachLOS:		*						*							C						*			

Harmony Grove Village

Scenario Report

Scenario:	EX + P PM
Command:	Default Command
Volume:	E+P PM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #1 Country Club Dr @ Entrance # 5
*******************************************************************************
Average Delay (sec/veh):       0.9           Worst Case Level Of Service:       C
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L     T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign        Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:       0  0  0  0  0    1  0  0  0  0    0  0  1  0  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0     0     0    66     0     0     0   310     0     0   384   116
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:    0     0     0    66     0     0     0   310     0     0   384   116
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:     0     0     0    66     0     0     0   310     0     0   384   116
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Final Vol..     0     0     0    66     0     0     0   310     0     0   384   116
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:     1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol..       0     0     0    73     0     0     0   310     0     0   384   116
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx   3.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx   6.5 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   752 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   388 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx xxxxx  1.00 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap..   xxxx xxxx xxxxx   388 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx  11.2 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *     *     *     C     *     *     *     *     *     *     *     *
Movement:      LT   LTR    RT    LT - LTR - RT    LT   LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *     *     *     *     *     *     *     *     *     *     *     *
ApproachDel:    xxxxxx            11.2              0.0              0.0
ApproachLOS:       *                C                A                A
```


Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #3
*******************************************************************************
Average Delay (sec/veh):       0.4           Worst Case Level Of Service:       A
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L     T     R    L  -  T  -  R    L  -  T  -  R    L     T     R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign        Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:       0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       7     0    16     0     0     0     0   178    12    29   282     0
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:    7     0    16     0     0     0     0   178    12    29   282     0
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:     7     0    16     0     0     0     0   178    12    29   282     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Final Vol..     7     0    16     0     0     0     0   178    12    29   282     0
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:     1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol..       8     0    18     0     0     0     0   178    12    32   282     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  6.5 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.0 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  495 xxxx   184  xxxx xxxx xxxxx  xxxx xxxx xxxxx   190 xxxx xxxxx
Potent Cap..  547 xxxx  1117  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1392 xxxx xxxxx
Adj Cap:     0.97 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap..    532 xxxx  1117  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1392 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:  6.9 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.6 xxxx xxxxx
LOS by Move:    *     *     *     *     *     *     *     *     *     A     *     *
Movement:      LT   LTR    RT    LT - LTR - RT    LT - LTR - RT    LT   LTR    RT
Shared Cap.: xxxx  837 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1392 xxxx xxxxx
Shrd StpDel:xxxxx  4.4 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.3 xxxx xxxxx
Shared LOS:     *     A     *     *     *     *     *     *     *     A     *     *
ApproachDel:        4.4            xxxxxx              0.0              0.3
ApproachLOS:         A                *                A                A
```

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

****

Intersection #7 Country Club/ Village Road

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.464
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 0 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	1
Volume Module:												
Base Vol:	0	0	0	21	0	144	171	169	0	0	280	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	144	171	169	0	0	280	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	21	0	144	171	169	0	0	280	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	21	0	144	171	169	0	0	280	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	21	0	144	171	169	0	0	280	9
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.13	0.00	0.87	0.50	0.50	0.00	0.00	1.00	1.00
Final Sat..	0	0	0	88	0	606	368	364	0	0	0	1557
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.24	xxxx	0.24	0.46	0.46	xxxx	xxxx	xxxx	0.01
Crit Moves:						****	****					****
Delay/Veh:	0.0	0.0	0.0	9.1	0.0	9.1	11.7	11.7	0.0	0.0	0.0	9.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	9.1	0.0	9.1	11.7	11.7	0.0	0.0	0.0	9.5
LOS by Move:	*	*	*	A	*	A	B	B	*	*	*	A
ApproachDel:	xxxxxx				9.1			11.7			9.5	
Delay Adj:	xxxxx				1.00			1.00			1.00	
ApprAdjDel:	xxxxxx				9.1			11.7			9.5	
LOS by Appr:	*				A			B			A	

****

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #8 Harmony Grove/Village Road

****

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[21.0]

****

Approach:	North Bound						South Bound			East Bound						West Bound					
Movement:	L		T		R		L	T	R	L		T		R		L		T		R	
Control:	Uncontrolled						Uncontrolled			Stop Sign						Stop Sign					
Rights:	Include						Include			Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0	1	0	1		0	0	0	0	0	
Volume Module:																					
Base Vol:	1	507		0		0	224	310		190		0		4		0		0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	1	507		0		0	224	310		190		0		4		0		0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	1	507		0		0	224	310		190		0		4		0		0		0	
Reduct Vol:	0	0		0		0	0	0		0		0		0		0		0		0	
Final Vol..	1	507		0		0	224	310		190		0		4		0		0		0	
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4	xxxx		6.2	xxxxx	xxxx	xxxxx							
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	xxxx		3.3	xxxxx	xxxx	xxxxx							
Capacity Module:																					
Cnflict Vol:	534	xxxx	xxxxx	xxxx	xxxx	xxxxx		888	xxxx		379	xxxx	xxxx	xxxxx							
Potent Cap..	1044	xxxx	xxxxx	xxxx	xxxx	xxxxx		317	xxxx		672	xxxx	xxxx	xxxxx							
Move Cap..	1044	xxxx	xxxxx	xxxx	xxxx	xxxxx		317	xxxx		672	xxxx	xxxx	xxxxx							
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx		0.60	xxxx		0.01	xxxx	xxxx	xxxx							
Level Of Service Module:																					
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		1.2	xxxx		0.0	xxxxx	xxxx	xxxxx							
Stopped Del:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx		21.2	xxxx		10.4	xxxxx	xxxx	xxxxx							
LOS by Move:	A	*		*		*		C	*		B		*		*		*				
Movement:	LT - LTR			RT		LT - LTR		RT	LT - LTR		RT	LT		LTR - RT							
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	320	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx								
Shrd StpDel:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	21.1	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	A	*		*		*		*	C	*		*		*							
ApproachDel:	xxxxxx			xxxxxx				21.0			xxxxxx										
ApproachLOS:	*			*				C			*										

Harmony Grove Village

Scenario Report

Scenario:	E+P+C AM
Command:	Default Command
Volume:	E+P+C AM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L		T	-	R		L	-	T	-	R		L	-	T	-	R		L		T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		1	0	0	0	0		0	0	1	0	0		0	0	0	0	1	0
Volume Module:																								
Base Vol:	0		0		0		88		0		0		0		348		0		0		302		54	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00		1.00	1.00
Initial Bse:	0		0		0		88		0		0		0		348		0		0		302		54	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00		1.00	1.00
PHF Volume:	0		0		0		88		0		0		0		348		0		0		302		54	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	0		0		0		88		0		0		0		348		0		0		302		54	
Adjusted Volume Module:																								
Grade:	0%						0%						0%						0%					
% Cycle/Cars:	xxxx		xxxx				xxxx		xxxx				xxxx		xxxx				xxxx		xxxx			
% Truck/Comb:	xxxx		xxxx				xxxx		xxxx				xxxx		xxxx				xxxx		xxxx			
PCE Adj:	1.10	1.10		1.10		1.10	1.10		1.10		1.10	1.10		1.00		1.00		1.10	1.00		1.00		1.00	1.00
Cycl/Car PCE:	xxxx		xxxx				xxxx		xxxx				xxxx		xxxx				xxxx		xxxx			
Trck/Cmb PCE:	xxxx		xxxx				xxxx		xxxx				xxxx		xxxx				xxxx		xxxx			
Adj Vol..	0		0		0		97		0		0		0		348		0		0		302		54	
Critical Gap Module:																								
MoveUp Time:	xxxx	xxxx		xxxxx			3.4	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx				
Critical Gp:	xxxx	xxxx		xxxxx			6.5	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx				
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			677	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx				
Potent Cap.:	xxxx	xxxx		xxxxx			429	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx				
Adj Cap:	xxxx	xxxx		xxxxx			1.00	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx				
Move Cap..	xxxx	xxxx		xxxxx			429	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx				
Level Of Service Module:																								
Stopped Del:	xxxx	xxxx		xxxxx			10.5	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx				
LOS by Move:	*		*		*		C	*		*		*	*		*		*	*		*		*		*
Movement:	LT		LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT		LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
Shrd StpDel:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*		*		*		*		*		*		*		*		*		*		*		*	
ApproachDel:	xxxxx						10.5						0.0						0.0					
ApproachLOS:	*						C						A						A					

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #3
*******************************************************************************
Average Delay (sec/veh):      0.4           Worst Case Level Of Service:     A
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L     T  -  R    L  -  T  -  R    L     T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:         0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        9    0   22    0    0    0    0  215    5   13  151    0
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:     9    0   22    0    0    0    0  215    5   13  151    0
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:      9    0   22    0    0    0    0  215    5   13  151    0
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Final Vol..      9    0   22    0    0    0    0  215    5   13  151    0
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:      1.10 1.10 1.10  1.10 1.10 1.10  1.10 1.00 1.00  1.10 1.00 1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol..       10    0   24    0    0    0    0  215    5   14  151    0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  6.5 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.0 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  382 xxxx   217  xxxx xxxx xxxxx  xxxx xxxx xxxxx   220 xxxx xxxxx
Potent Cap.:  637 xxxx  1074  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1347 xxxx xxxxx
Adj Cap:     0.99 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap..    629 xxxx  1074  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1347 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level of Service Module:
Stopped Del:  5.8 xxxx   3.4 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.7 xxxx xxxxx
LOS by Move:    *    *    *    *    *    *    *    *    *    A    *    *
Movement:     LT - LTR - RT   LT - LTR   RT   LT - LTR - RT   LT - LTR   RT
Shared Cap.: xxxx  891 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1347 xxxx xxxxx
Shrd StpDel:xxxxx  4.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.0 xxxx xxxxx
Shared LOS:     *    A    *    *    *    *    *    *    *    A    *    *
ApproachDel:        4.2            xxxxxx            0.0            0.2
ApproachLOS:         A               *              A              A
```


Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #7 Country Club/ Village Road
*******************************************************************************
Cycle (sec):        100                 Critical Vol./Cap. (X):        0.472
Loss Time (sec):      0 (Y+R =  4 sec) Average Delay (sec/veh):        10.0
Optimal Cycle:        0                 Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L     T     R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:      0    0    0    0    0    0    0    0    0    0    0    0
Lanes:         0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  1! 0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0    0    0    6    0  176  142  214    0    0  144   16
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:     0    0    0    6    0  176  142  214    0    0  144   16
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:      0    0    0    6    0  176  142  214    0    0  144   16
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:     0    0    0    6    0  176  142  214    0    0  144   16
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol..      0    0    0    6    0  176  142  214    0    0  144   16
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:        0.00 0.00 0.00 0.03 0.00 0.97 0.40 0.60 0.00 0.00 1.00 1.00
Final Sat..      0    0    0   25    0  723  301  454    0    0    0 1534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     xxxx xxxx xxxx 0.24 xxxx 0.24 0.47 0.47 xxxx xxxx xxxx 0.01
Crit Moves:                          ****  ****                         ****
Delay/Veh:    0.0  0.0  0.0  8.7  0.0  8.7 11.6 11.6  0.0  0.0  0.0  8.1
Delay Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  8.7  0.0  8.7 11.6 11.6  0.0  0.0  0.0  8.1
LOS by Move:    *    *    *    A    *    A    B    B    *    *    *    A
ApproachDel:     xxxxxx            8.7            11.6            8.1
Delay Adj:       xxxxx            1.00            1.00           1.00
ApprAdjDel:      xxxxxx            8.7            11.6            8.1
LOS by Appr:        *              A              B              A
*******************************************************************************
```

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****
Intersection #8 Harmony Grove/Village Road
****
Average Delay (sec/veh): 4.2 Worst Case Level Of Service: C[19.3]
****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T			R	L	-	T			R	L	-	T	-		R	L		T	-		R
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0		1	0	1!	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	2	285		0		0	405		162			236		0		1		0		0		0		
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00
Initial Bse:	2	285		0		0	405		162			236		0		1		0		0		0		
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00
PHF Volume:	2	285		0		0	405		162			236		0		1		0		0		0		
Reduct Vol:	0	0		0		0	0		0			0		0		0		0		0		0		
Final Vol..	2	285		0		0	405		162			236		0		1		0		0		0		
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.4	xxxx			6.2	xxxxx	xxxx	xxxxx					
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5	xxxx			3.3	xxxxx	xxxx	xxxxx					
Capacity Module:																								
Cnflict Vol:	567	xxxx	xxxxx	xxxx	xxxx	xxxxx						775	xxxx			486	xxxx	xxxx	xxxxx					
Potent Cap.:	1015	xxxx	xxxxx	xxxx	xxxx	xxxxx						369	xxxx			585	xxxx	xxxx	xxxxx					
Move Cap.:	1015	xxxx	xxxxx	xxxx	xxxx	xxxxx						369	xxxx			585	xxxx	xxxx	xxxxx					
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx						0.64	xxxx			0.00	xxxx	xxxx	xxxx					
Level Of Service Module:																								
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx						1.4	xxxx			0.0	xxxxx	xxxx	xxxxx					
Stopped Del:	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx						19.3	xxxx			11.2	xxxxx	xxxx	xxxxx					
LOS by Move:	A	*		*	*	*						C	*			B	*	*	*					
Movement:	LT	LTR	-	RT	LT	LTR	-	RT				LT	LTR			RT	LT	LTR	RT					
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx					xxxx	369			xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx					xxxxx	1.4			xxxxx	xxxxx	xxxx	xxxxx					
Shrd StpDel:	8.6	xxxx	xxxxx		xxxxx	xxxx	xxxxx					xxxxx	19.3			xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	A	*		*	*	*						*	C			*	*	*	*					
ApproachDel:	xxxxxx				xxxxxx								19.3				xxxxxx							
ApproachLOS:		*				*							C					*						

Harmony Grove Village

Scenario Report

Scenario:	E+P+C PM
Command:	Default Command
Volume:	E+P+C PM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	1 0	0 0	0	0 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	66	0	0	0	349	0	0	480	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	66	0	0	0	349	0	0	480	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	66	0	0	0	349	0	0	480	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	66	0	0	0	349	0	0	480	116
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	0	0	0	73	0	0	0	349	0	0	480	116
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	887	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	324	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	324	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	13.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	*	*	*	*	*	*
Movement:	LT	LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.9			0.0			0.0		
ApproachLOS:	*			C			A			A		

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	7	0	16	0	0	0	0	178	12	29	282	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	0	16	0	0	0	0	178	12	29	282	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	0	16	0	0	0	0	178	12	29	282	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	7	0	16	0	0	0	0	178	12	29	282	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	8	0	18	0	0	0	0	178	12	32	282	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	495	xxxx	184	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	190	xxxx	xxxxx
Potent Cap..	547	xxxx	1117	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx
Adj Cap:	0.97	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap..	532	xxxx	1117	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	6.9	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	- LTR	- RT	LT	LTR	- RT	LT	LTR	- RT	LT	LTR	RT
Shared Cap.:	xxxx	837	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx
Shrd StpDel:	xxxxx	4.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.3	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	4.4			xxxxxx			0.0			0.3		
ApproachLOS:	A			*			A			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.512
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.3
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	1
Volume Module:												
Base Vol:	0	0	0	21	0	229	185	169	0	0	280	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	229	185	169	0	0	280	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	21	0	229	185	169	0	0	280	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	21	0	229	185	169	0	0	280	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	21	0	229	185	169	0	0	280	9
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.08	0.00	0.92	0.52	0.48	0.00	0.00	1.00	1.00
Final Sat..	0	0	0	58	0	636	362	330	0	0	0	1453
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.36	xxxx	0.36	0.51	0.51	xxxx	xxxx	xxxx	0.01
Crit Moves:				****				****				****
Delay/Veh:	0.0	0.0	0.0	10.2	0.0	10.2	13.0	13.0	0.0	0.0	0.0	10.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.2	0.0	10.2	13.0	13.0	0.0	0.0	0.0	10.2
LOS by Move:	*	*	*	B	*	B	B	B	*	*	*	B
ApproachDel:	xxxxxx				10.2			13.0			10.2	
Delay Adj:	xxxxx				1.00			1.00			1.00	
ApprAdjDel:	xxxxxx				10.2			13.0			10.2	
LOS by Appr:	*				B			B			B	

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: E[36.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0 0	0	0 0	0 1	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	1	554	0	0	338	310	190	0	4	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	554	0	0	338	310	190	0	4	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	616	0	0	376	344	211	0	4	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	1	616	0	0	376	344	211	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	720	xxxx	xxxxx	xxxx	xxxx	xxxxx	1166	xxxx	548	xxxx	xxxx	xxxxx
Potent Cap..	891	xxxx	xxxxx	xxxx	xxxx	xxxxx	216	xxxx	540	xxxx	xxxx	xxxxx
Move Cap..	891	xxxx	xxxxx	xxxx	xxxx	xxxxx	216	xxxx	540	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.98	xxxx	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.4	xxxx	0.0	xxxxx	xxxx	xxxxx
Stopped Del:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	36.6	xxxx	11.7	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	E	*	B	*	*	*
Movement:	LT	LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	219	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	36.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	E	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				36.2			xxxxxx	
ApproachLOS:	*			*				E			*	

APPENDIX I

OPTION B: INTERSECTION ANALYSIS WORKSHEETS

Harmony Grove Village
Option B: Baseline

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	31.7	0.566	C	31.7	0.566	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	D	53.1	0.998	D	53.1	0.998	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	D	46.2	0.880	D	46.2	0.880	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	195.5	0.000	F	195.5	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	7.9	0.198	A	7.9	0.198	+ 0.000 V/C
# 6 Country Club Drive/Entrance #3	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 7 Country Club/ Village Rd	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	B	11.3	0.000	B	11.3	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	B	11.4	0.000	B	11.4	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	B	11.5	0.000	B	11.5	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	F	103.5	0.000	F	103.5	0.000	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	A	9.3	0.000	A	9.3	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	35.1	0.615	D	35.1	0.615	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	B	10.2	0.376	B	10.2	0.376	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	B	10.8	0.000	B	10.8	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	B	11.6	0.000	B	11.6	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	28.3	0.618	C	28.3	0.618	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	B	11.7	0.000	B	11.7	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	B	11.6	0.000	B	11.6	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	B	10.8	0.000	B	10.8	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	B	10.2	0.000	B	10.2	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	C	30.9	0.686	C	30.9	0.686	+ 0.000 D/V

Harmony Grove Village
Option B: Baseline

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	D	48.4	0.721	D	48.4	0.721	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	36.3	0.638	D	36.3	0.638	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	C	34.0	0.661	C	34.0	0.661	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	B	11.4	0.422	B	11.4	0.422	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	55.0	0.000	F	55.0	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	33.8	0.529	C	33.8	0.529	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	29.8	0.766	C	29.8	0.766	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	D	44.4	0.982	D	44.4	0.982	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	B	18.6	0.635	B	18.6	0.635	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	24.7	0.551	C	24.7	0.551	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe Dr.	C	33.9	0.918	C	33.9	0.918	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	C	33.3	0.806	C	33.3	0.806	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	24.9	0.509	C	24.9	0.509	+ 0.000 D/V

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.566
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 31.7
Optimal Cycle: 64 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	0		0	24	7		0	0	0		7	24	7	
Lanes:	2	0	2	0 0	0	0	2	0 1	0	0	0	0 0	1	0	1!	0 1
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	391	255	0		0	366	135		0	0	0		441	8	147	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	391	255	0		0	366	135		0	0	0		441	8	147	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	434	283	0		0	407	150		0	0	0		490	9	163	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	434	283	0		0	407	150		0	0	0		490	9	163	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	434	283	0		0	407	150		0	0	0		490	9	163	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.71	0.73	1.00		1.00	0.93	0.83		1.00	1.00	1.00		0.71	0.71	0.71	
Lanes:	2.00	2.00	0.00		0.00	2.00	1.00		0.00	0.00	0.00		1.73	0.03	1.24	
Final Sat..	2693	2776	0		0	3538	1583		0	0	0		2344	36	1685	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.10	0.00		0.00	0.11	0.09		0.00	0.00	0.00		0.21	0.25	0.10	
Crit Moves:	****					****								****		
Green/Cycle:	0.28	0.49	0.00		0.00	0.20	0.20		0.00	0.00	0.00		0.44	0.44	0.44	
Volume/Cap:	0.57	0.21	0.00		0.00	0.57	0.47		0.00	0.00	0.00		0.48	0.57	0.22	
Delay/Veh:	37.6	17.6	0.0		0.0	44.1	43.2		0.0	0.0	0.0		24.3	25.9	21.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	37.6	17.6	0.0		0.0	44.1	43.2		0.0	0.0	0.0		24.3	25.9	21.1	
HCM2kAvg:	8	3	0		0	7	5		0	0	0		8	10	3	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp (NS / EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.998
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 53.1
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24	7		7	24	0		7	24	7		0	0	0	
Lanes:	0	0	2	0 1	2	0	2	0 0	0	1	0	1 0	0	0	0	0 0
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	0	473	333		130	804	0		105	1	641		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	473	333		130	804	0		105	1	641		0	0	0	
User Adj:	1.00	1.00	0.50		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	526	185		144	893	0		117	1	712		0	0	0	
Reduct Vol.	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	526	185		144	893	0		117	1	712		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	526	185		144	893	0		117	1	712		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.73	0.65		0.90	0.93	1.00		0.55	0.55	0.55		1.00	1.00	1.00	
Lanes:	0.00	2.00	1.00		2.00	2.00	0.00		0.99	0.01	1.00		0.00	0.00	0.00	
Final Sat..	0	2776	1242		3432	3538	0		1043	10	1053		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.19	0.15		0.04	0.25	0.00		0.11	0.11	0.68		0.00	0.00	0.00	
Crit Moves:		****			****						****					
Green/Cycle:	0.00	0.24	0.24		0.07	0.31	0.00		0.60	0.60	0.60		0.00	0.00	0.00	
Volume/Cap:	0.00	0.79	0.62		0.60	0.81	0.00		0.19	0.19	1.13		0.00	0.00	0.00	
Delay/Veh:	0.0	41.9	37.9		49.4	36.6	0.0		9.0	9.0	94.0		0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	41.9	37.9		49.4	36.6	0.0		9.0	9.0	94.0		0.0	0.0	0.0	
HCM2kAvg:	0	10	6		3	15	0		2	2	40		0	0	0	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.880
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 46.2
Optimal Cycle: 110 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	2	0 1	2	0	1	1 0	2	0	2	0 1	2	0	2	0 1
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	143	420		40	438	881		142	200	363		328	90	316		185
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	143	420		40	438	881		142	200	363		328	90	316		185
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	159	467		44	487	979		158	222	403		364	100	351		206
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	159	467		44	487	979		158	222	403		364	100	351		206
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	159	467		44	487	979		158	222	403		364	100	351		206
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.73	0.73		0.65	0.71	0.72		0.72	0.90	0.93		0.83	0.90	0.93		0.83
Lanes:	1.00	2.00		1.00	2.00	1.72		0.28	2.00	2.00		1.00	2.00	2.00		1.00
Final Sat..	1388	2776		1242	2693	2341		377	3432	3538		1583	3432	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.11	0.17		0.04	0.18	0.42		0.42	0.06	0.11		0.23	0.03	0.10		0.13
Crit Moves:	****					****						****	****			
Green/Cycle:	0.13	0.31		0.31	0.28	0.46		0.46	0.08	0.25		0.25	0.06	0.24		0.24
Volume/Cap:	0.91	0.54		0.12	0.65	0.91		0.91	0.85	0.45		0.91	0.50	0.42		0.55
Delay/Veh:	94.0	35.2		29.9	40.1	39.6		39.6	76.6	38.0		67.0	56.8	39.2		42.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	94.0	35.2		29.9	40.1	39.6		39.6	76.6	38.0		67.0	56.8	39.2		42.0
HCM2kAvg:	9	8		1	9	23		23	7	6		17	3	6		7

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club (NS / EW)

Average Delay (sec/veh): 17.1 Worst Case Level Of Service: F[195.5]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	2	0	1	1	0	1	0	1	0	1	0	0	1	0	0	1!	0	0
Volume Module: >> Count Date: 11 Dec 2001 << AM																				
Base Vol.	46	433			0	35	1061		142		120		0		40	0		0		0
Growth Adj:	1.00	1.00			1.00	1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	46	433			0	35	1061		142		120		0		40	0		0		0
User Adj:	1.00	1.00			1.00	1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90			0.90	0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	51	481			0	39	1179		158		133		0		44	0		0		0
Reduct Vol.	0	0			0	0	0		0		0		0		0	0		0		0
Final Vol..	51	481			0	39	1179		158		133		0		44	0		0		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			6.4	xxxx			6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5	xxxx			3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1337	xxxx	xxxxx			481	xxxx	xxxxx			1599	xxxx			1179	xxxx	xxxx	xxxxx		
Potent Cap..	516	xxxx	xxxxx			1081	xxxx	xxxxx			117	xxxx			232	xxxx	xxxx	xxxxx		
Move Cap..	516	xxxx	xxxxx			1081	xxxx	xxxxx			105	xxxx			232	xxxx	xxxx	xxxxx		
Volume/Cap:	0.10	xxxx	xxxx			0.04	xxxx	xxxx			1.27	xxxx			0.19	xxxx	xxxx	xxxx		
Level Of Service Module:																				
Queue:	0.3	xxxx	xxxxx			0.1	xxxx	xxxxx			xxxxx	xxxx			0.7	xxxxx	xxxx	xxxxx		
Stopped Del:	12.7	xxxx	xxxxx			8.5	xxxx	xxxxx			xxxxx	xxxx			24.2	xxxxx	xxxx	xxxxx		
LOS by Move:	B	*		*		A	*		*		*	*			C	*	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			105	xxxx	xxxxx			xxxx		0	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			9.1	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			252.6	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*		*		*	*		*		F	*			*	*	*	*		
ApproachDel:	xxxxxx					xxxxxx					195.5					xxxxxx				
ApproachLOS:	*					*					F					*				

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.198
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	0 1	0 0	0	0 0	0 0	0 0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	36	16	46	105	0	0	0	0	10	0	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	36	16	46	105	0	0	0	0	10	0	35
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.00	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	40	0	51	117	0	0	0	0	11	0	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	40	0	51	117	0	0	0	0	11	0	39
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	40	0	51	117	0	0	0	0	11	0	39
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.30	0.70	0.00	0.00	0.00	0.00	0.22	0.00	0.78
Final Sat..	0	755	0	258	590	0	0	0	0	195	0	683
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.05	xxxx	0.20	0.20	xxxx	xxxx	xxxx	xxxx	0.06	xxxx	0.06
Crit Moves:		****		****						****		
Delay/Veh:	0.0	7.7	0.0	8.2	8.2	0.0	0.0	0.0	0.0	7.1	0.0	7.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	7.7	0.0	8.2	8.2	0.0	0.0	0.0	0.0	7.1	0.0	7.1
LOS by Move:	*	A	*	A	A	*	*	*	*	A	*	A
ApproachDel:		7.7			8.2			xxxxxx			7.1	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		7.7			8.2			xxxxxx			7.1	
LOS by Appr:		A			A			*			A	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club Drive/Entrance #3

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1 0	0	0 0	1 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	52	0	0	115	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	52	0	0	115	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	57	0	0	125	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	57	0	0	125	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Rd

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	1		1	0	1	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0	52		0		0	0	115		0		0	0		0		0	0		0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
Initial Bse:	0	52		0		0	0	115		0		0	0		0		0	0		0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90	0.90		0.90		0.90	0.90	0.90		0.90		0.90	0.90	0.90		0.90		0.90
PHF Volume:	0	58		0		0	0	128		0		0	0		0		0	0		0		0		0
Reduct Vol:	0	0		0		0	0	0		0		0	0		0		0	0		0		0		0
Final Vol.:	0	58		0		0	0	128		0		0	0		0		0	0		0		0		0
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
LOS by Move:	*	*		*		*	*	*		*		*	*	*		*		*	*	*		*		*
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		xxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Shared LOS:	*	*		*		*	*	*		*		*	*	*		*		*	*	*		*		*
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	*						*						*						*					

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 5.9 Worst Case Level Of Service: B[11.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	1	0	1		0	1	0	0	1	
Volume Module:																								
Base Vol:	0	45		66		0	100		0		0	0		0		234		0		0				
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00						
Initial Bse:	0	45		66		0	100		0		0	0		0		234		0		0				
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00						
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90						
PHF Volume:	0	50		73		0	111		0		0	0		0		260		0		0				
Reduct Vol:	0	0		0		0	0		0		0	0		0		0		0		0				
Final Vol.:	0	50		73		0	111		0		0	0		0		260		0		0				
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		6.4	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		3.5	xxxx	xxxxx				
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		161	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		834	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		834	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		0.31	xxxx	xxxx				
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx
LOS by Move:	*	*		*		*	*	*		*		*	*	*		*		*	*	*		*		*
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx	xxxxx		xxxx		834	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		1.3	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		11.3	xxxx	xxxxx				
Shared LOS:	*	*		*		*	*	*		*		*	*	*		*		B	*	*				
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						11.3					
ApproachLOS:	*						*						*						B					

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 0	0	0	1	0 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	52		0	0	115		0	0	0		0	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	52		0	0	115		0	0	0		0	0	0		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0	52		0	0	115		0	0	0		0	0	0		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol.:	0	52		0	0	115		0	0	0		0	0	0		0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		*	-	*		*	*	*		*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	0		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 COuntry Club/Harmony Grove

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: B[11.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	0	1!	0 0	0	1	0	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	0	2		12	2		1	105	13	98		0	3	318		2
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	2		12	2		1	105	13	98		0	3	318		2
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	2		13	2		1	117	14	109		0	3	353		2
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol.:	0	2		13	2		1	117	14	109		0	3	353		2
Critical Gap Module:																
Critical Gp:	xxxxx	6.5		6.2	7.1	6.5		6.2	4.1	xxxx		xxxxx	4.1	xxxx		xxxxx
FollowUpTim:	xxxxx	4.0		3.3	3.5	4.0		3.3	2.2	xxxx		xxxxx	2.2	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	500		109	507	499		354	356	xxxx		xxxxx	109	xxxx		xxxxx
Potent Cap.:	xxxx	476		950	480	476		694	1214	xxxx		xxxxx	1494	xxxx		xxxxx
Move Cap.:	xxxx	469		950	466	470		694	1214	xxxx		xxxxx	1494	xxxx		xxxxx
Volume/Cap:	xxxx	0.00		0.01	0.00	0.00		0.17	0.01	xxxx		xxxx	0.00	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	0.0	xxxx		xxxxx	0.0	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	8.0	xxxx		xxxxx	7.4	xxxx		xxxxx
LOS by Move:	*	-		*	*	*		*	A	*		*	A	*		*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		829	xxxx	685		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		0.1	xxxxx	0.6		xxxxx	0.0	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		9.4	xxxxx	11.4		xxxxx	8.0	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		A	*	B		-	A	*		*	*	-		-
ApproachDel:	9.4				11.4				xxxxxx				xxxxxx			
ApproachLOS:	A				B				*				*			

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	0	1	0 0	0	0	1	0 0
Volume Module:																
Base Vol:	0	0	0	0	0	0	0	111	0	0	423	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	111	0	0	423	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	0	0	0	0	123	0	0	470	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	0	0	0	0	123	0	0	470	0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	0	1	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0	2	0	1	0	94	0	0	416	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	2	0	1	0	94	0	0	416	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	2	0	1	0	94	0	0	416	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	2	0	1	0	94	0	0	416	3

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	512	xxxx	418	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	526	xxxx	640	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	526	xxxx	640	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	559	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	11.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			11.5			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Average Delay (sec/veh): 6.6 Worst Case Level Of Service: F[103.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	1	0 1	1	0	1	0 0
Volume Module:																
Base Vol:	80	0	20		0	0	0		0	775	20		20	688	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	80	0	20		0	0	0		0	775	20		20	688	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	89	0	22		0	0	0		0	861	22		22	764	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	89	0	22		0	0	0		0	861	22		22	764	0	
Critical Gap Module:																
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1670	xxxx		861	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		883	xxxx	xxxxx	
Potent Cap..	107	xxxx		358	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		774	xxxx	xxxxx	
Move Cap..	104	xxxx		358	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		774	xxxx	xxxxx	
Volume/Cap:	0.85	xxxx		0.06	xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:																
Queue:	4.9	xxxx		0.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	
Stopped Del:	125.5	xxxx		15.7	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.8	xxxx	xxxxx	
LOS by Move:	F	*		C	*	*	*		*	*	*		A	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	103.5				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	F				*				*				*			

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa [NS / EW]

Average Delay (sec/veh): 6.7 Worst Case Level Of Service: A[9.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	0	1 0	0	1	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << AM Peak																
Base Vol:	1	0	110		0	0	0		0	68	4		330	38	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1	0	110		0	0	0		0	68	4		330	38	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	1	0	122		0	0	0		0	76	4		367	42	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	1	0	122		0	0	0		0	76	4		367	42	0	
Critical Gap Module:																
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	853	xxxx		78	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		80	xxxx	xxxxx	
Potent Cap..	329	xxxx		983	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		1518	xxxx	xxxxx	
Move Cap..	252	xxxx		983	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		1518	xxxx	xxxxx	
Volume/Cap:	0.00	xxxx		0.12	xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		0.24	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx		0.4	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.9	xxxx	xxxxx	
Stopped Del:	19.3	xxxx		9.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.1	xxxx	xxxxx	
LOS by Move:	C	*		A	*	*	*		*	*	*		A	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.9	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.1	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		A	*	*	
ApproachDel:	9.3				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	A				*				*				*			

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.615
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.1
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module: >> Count Date: 11 Dec 2001 << AM												
Base Vol:	156	69	60	71	187	50	41	538	196	165	482	82
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	69	60	71	187	50	41	538	196	165	482	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	173	77	67	79	208	56	46	598	218	183	536	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	77	67	79	208	56	46	598	218	183	536	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	173	77	67	79	208	56	46	598	218	183	536	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.93	0.98	0.83	0.93	0.89	0.89	0.93	0.93	0.83
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.47	0.53	1.00	2.00	1.00
Final Sat..	1769	1862	1583	1769	1862	1583	1769	2489	907	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.10	0.04	0.04	0.04	0.11	0.04	0.03	0.24	0.24	0.10	0.15	0.06
Crit Moves:	****				****			****		****		
Green/Cycle:	0.16	0.28	0.28	0.08	0.20	0.20	0.12	0.38	0.38	0.16	0.42	0.42
Volume/Cap:	0.63	0.15	0.15	0.56	0.56	0.18	0.21	0.63	0.63	0.63	0.36	0.14
Delay/Veh:	52.2	33.0	33.1	57.9	45.1	40.1	47.8	31.3	31.3	51.2	23.8	21.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.2	33.0	33.1	57.9	45.1	40.1	47.8	31.3	31.3	51.2	23.8	21.4
HCM2kAvg:	7	2	2	4	7	2	2	13	13	8	7	2

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.376
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 10.2
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module: >> Count Date: 28 Nov 2001 << AM												
Base Vol:	2	7	5	201	21	18	7	3	2	28	11	214
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	7	5	201	21	18	7	3	2	28	11	214
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	2	8	6	223	23	20	8	3	2	31	12	238
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	8	6	223	23	20	8	3	2	31	12	238
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	2	8	6	223	23	20	8	3	2	31	12	238
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat..	525	566	637	594	644	735	523	564	633	583	634	728
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.01	0.38	0.04	0.03	0.01	0.01	0.00	0.05	0.02	0.33
Crit Moves:		****		****			****					****
Delay/Veh:	9.1	8.7	8.0	11.9	8.3	7.5	9.2	8.7	8.0	9.0	8.2	9.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.1	8.7	8.0	11.9	8.3	7.5	9.2	8.7	8.0	9.0	8.2	9.6
LOS by Move:	A	A	A	B	A	A	A	A	A	A	A	A
ApproachDel:		8.5			11.2			8.9			9.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.5			11.2			8.9			9.5	
LOS by Appr:		A			B			A			A	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. [NS / EW]

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: B[10.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 0 1 0			0 1 0 0 0		
Volume Module: >> Count Date: 28 Nov 2001 << AM												
Base Vol:	46	0	66	0	0	0	0	81	85	60	219	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	0	66	0	0	0	0	81	85	60	219	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	51	0	73	0	0	0	0	90	94	67	243	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	51	0	73	0	0	0	0	90	94	67	243	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	514	xxxx	137	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	184	xxxx	xxxxx
Potent Cap.:	521	xxxx	911	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1390	xxxx	xxxxx
Move Cap..	501	xxxx	911	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1390	xxxx	xxxxx
Volume/Cap:	0.10	xxxx	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
Queue:	0.3	xxxx	0.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Stopped Del:	13.0	xxxx	9.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	B	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:	10.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: B[11.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			1 0 0 0 1			0 1 0 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 12 Dec 2001 <<												
Base Vol:	0	0	0	28	0	49	50	226	0	0	235	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	28	0	49	50	226	0	0	235	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	31	0	54	56	251	0	0	261	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	31	0	54	56	251	0	0	261	46
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	646	xxxx	284	307	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	439	xxxx	760	1265	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	424	xxxx	760	1265	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.07	xxxx	0.07	0.04	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.2	xxxx	0.2	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	14.2	xxxx	10.1	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	B	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			11.6			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.618
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.3
Optimal Cycle: 51 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	0	7	7	24	0	0	24	7
Lanes:	0 1	0	0 1	1	0 1	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module: >> Count Date: 12 Dec 2001 << AM												
Base Vol:	6	4	5	356	13	174	100	608	14	28	840	293
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	4	5	356	13	174	100	608	14	28	840	293
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	7	4	6	396	14	193	111	676	16	31	933	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	4	6	396	14	193	111	676	16	31	933	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	7	4	6	396	14	193	111	676	16	31	933	326
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.83	0.93	0.98	0.83	0.93	0.93	0.93	0.93	0.93	0.83
Lanes:	0.60	0.40	1.00	1.00	1.00	1.00	1.00	1.95	0.05	1.00	2.00	1.00
Final Sat..	1085	723	1583	1769	1862	1583	1769	3448	79	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.00	0.22	0.01	0.12	0.06	0.20	0.20	0.02	0.26	0.21
Crit Moves:	****			****			****				****	
Green/Cycle:	0.01	0.01	0.01	0.36	0.36	0.36	0.10	0.49	0.49	0.04	0.43	0.43
Volume/Cap:	0.62	0.62	0.35	0.62	0.02	0.34	0.62	0.40	0.40	0.41	0.62	0.48
Delay/Veh:	110.3	110	72.2	33.3	24.6	28.2	58.1	19.9	19.9	59.6	27.6	25.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	110.3	110	72.2	33.3	24.6	28.2	58.1	19.9	19.9	59.6	27.6	25.4
HCM2kAvg:	1	1	1	13	0	5	5	8	8	2	14	9

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[11.7]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module: >> Count Date: 12 Dec 2001 <<																				
Base Vol:	0	173		14		6	236		0		0		0		0	37		0		5
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	173		14		6	236		0		0		0		0	37		0		5
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	192		16		7	262		0		0		0		0	41		0		6
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol..	0	192		16		7	262		0		0		0		0	41		0		6
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	6.4		xxxx		6.2
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	3.5		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		208	xxxx		xxxxx		xxxx		xxxx		xxxxx	476		xxxx		200
Potent Cap.:	xxxx	xxxx		xxxxx		1375	xxxx		xxxxx		xxxx		xxxx		xxxxx	552		xxxx		846
Move Cap..	xxxx	xxxx		xxxxx		1375	xxxx		xxxxx		xxxx		xxxx		xxxxx	550		xxxx		846
Volume/Cap:	xxxx	xxxx		xxxx		0.00	xxxx		xxxx		xxxx		xxxx		xxxx	0.07		xxxx		0.01
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx		xxxxx		xxxx		xxxxx	0.2		xxxx		0.0
Stopped Del:	xxxxx	xxxx		xxxxx		7.6	xxxx		xxxxx		xxxxx		xxxx		xxxxx	12.1		xxxx		9.3
LOS by Move:	*	*		*		A	*		*		-		*		*	B		*		A
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx		7.6	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		A	*		*		*	*		*		*	*		*	
ApproachDel.	xxxxxx					xxxxxx					xxxxxx					11.7				
ApproachLOS:	*					*					*					B				

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: B[11.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	1	0	0	0 1	0	0	0	0 0
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	60	120		0	0	57		216	67		0	30	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	60	120		0	0	57		216	67		0	30	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	67	133		0	0	63		240	74		0	33	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol.:	67	133		0	0	63		240	74		0	33	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4	xxxx		6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	xxxx		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	303	xxxx	xxxxx	xxxx	xxxx	xxxxx		450	xxxx		183	xxxx	xxxx	xxxxx		
Potent Cap.:	1269	xxxx	xxxxx	xxxx	xxxx	xxxxx		571	xxxx		864	xxxx	xxxx	xxxxx		
Move Cap.:	1269	xxxx	xxxxx	xxxx	xxxx	xxxxx		547	xxxx		864	xxxx	xxxx	xxxxx		
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx		0.14	xxxx		0.04	xxxx	xxxx	xxxx		
Level Of Service Module:																
Queue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.5	xxxx		0.1	xxxxx	xxxx	xxxxx		
Stopped Del:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		12.6	xxxx		9.3	xxxxx	xxxx	xxxxx		
LOS by Move:	A	*	*	*	*	*		B	*		A	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT			LT - LTR - RT				LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shrd StpDel:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shared LOS:	A	*	*	*	*	*		*	*	*		*	*	*		
ApproachDel:	xxxxxx				xxxxxx			11.6				xxxxxx				
ApproachLOS:	*				*			B				*				

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 4.4 Worst Case Level Of Service: B[10.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	1	0 1	1	0	1	0 0
Volume Module:																
Base Vol:	100		0	40	0		0	0	0		50	30	60		170	0
Growth Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	100		0	40	0		0	0	0		50	30	60		170	0
User Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Volume:	100		0	40	0		0	0	0		50	30	60		170	0
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Final Vol.:	100		0	40	0		0	0	0		50	30	60		170	0
Critical Gap Module:																
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			4.1	xxxx	xxxxx	
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	340	xxxx		50	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			80	xxxx	xxxxx	
Potent Cap.:	660	xxxx		1024	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			1531	xxxx	xxxxx	
Move Cap.:	640	xxxx		1024	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			1531	xxxx	xxxxx	
Volume/Cap:	0.16	xxxx		0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx			0.04	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.6	xxxx		0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.1	xxxx	xxxxx	
Stopped Del:	11.7	xxxx		8.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			7.4	xxxx	xxxxx	
LOS by Move:	B	*		A	*	*	*	*	*	*			A	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	10.8				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	B				*				*				*			

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: B[10.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	1	0	0 1	0	1	0	0 0	0	0	1	0 1
Volume Module:																
Base Vol:	0	0	0		50	0	60		25	65	0		0	180	30	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		50	0	60		25	65	0		0	180	30	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		56	0	67		28	72	0		0	200	33	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		56	0	67		28	72	0		0	200	33	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		328	xxxx	200		233	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		671	xxxx	846		1346	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap..	xxxx	xxxx	xxxxx		660	xxxx	846		1346	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.08	xxxx	0.08		0.02	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.3		0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		9.6		7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*	A		A	*	*		*	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		660	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		0.3	xxxx	xxxxx		0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx		11.0	xxxx	xxxxx		7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*		B	*	*		A	*	*		*	*	*	
ApproachDel:	xxxxxx				10.2				xxxxxx				xxxxxx			
ApproachLOS:	*				B				*				*			

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.686
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 30.9
Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	0	0		0	7	24		7
Lanes:	0	1	0	0 1	0	0	0	0 0	2	0	3	0 0	0	0	3	0 1
Volume Module: >> Count Date: 12 Dec 2001 << AM																
Base Vol:	205	1	395		0	0	0		438	1006	0		0	986	206	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	205	1	395		0	0	0		438	1006	0		0	986	206	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	228	1	439		0	0	0		487	1118	0		0	1096	229	
Reduct Vol.	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	228	1	439		0	0	0		487	1118	0		0	1096	229	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	228	1	439		0	0	0		487	1118	0		0	1096	229	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.83	0.83	0.83		1.00	1.00	1.00		0.90	0.89	1.00		1.00	0.89	0.83	
Lanes:	0.99	0.01	1.00		0.00	0.00	0.00		2.00	3.00	0.00		0.00	3.00	1.00	
Final Sat..	1575	8	1583		0	0	0		3432	5083	0		0	5083	1583	
Capacity Analysis Module:																
Vol/Sat:	0.14	0.14	0.28		0.00	0.00	0.00		0.14	0.22	0.00		0.00	0.22	0.14	
Crit Moves:			****						****					****		
Green/Cycle:	0.40	0.40	0.40		0.00	0.00	0.00		0.21	0.52	0.00		0.00	0.31	0.31	
Volume/Cap:	0.36	0.36	0.69		0.00	0.00	0.00		0.69	0.42	0.00		0.00	0.69	0.46	
Delay/Veh:	25.2	25.2	32.6		0.0	0.0	0.0		46.8	17.8	0.0		0.0	37.2	33.7	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	25.2	25.2	32.6		0.0	0.0	0.0		46.8	17.8	0.0		0.0	37.2	33.7	
HCM2kAvg:	7	7	14		0	0	0		10	8	0		0	13	7	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.721
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 48.4
Optimal Cycle: 64 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	7	0	7	0	0	0
Lanes:	1 0	1 0	1	0 1	0 1	0	2 0	2 0	1	2 0	2 1	1
Volume Module: >> Count Date: 12 Dec 2001 << AM												
Base Vol:	12	18	83	458	102	636	75	869	46	74	877	199
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	18	83	458	102	636	75	869	46	74	877	199
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	13	20	92	509	113	707	83	966	51	82	974	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	20	92	509	113	707	83	966	51	82	974	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	13	20	92	509	113	707	83	966	51	82	974	221
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.84	0.84	0.84	0.90	0.89	0.83	0.90	0.87	0.87
Lanes:	1.00	1.00	1.00	0.82	0.18	1.00	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat..	1769	1862	1583	1306	291	1596	3432	5083	1583	3432	6588	1647
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.06	0.39	0.39	0.44	0.02	0.19	0.03	0.02	0.15	0.13
Crit Moves:		****				****		****		****		
Green/Cycle:	0.20	0.20	0.20	0.49	0.49	0.49	0.07	0.21	0.21	0.03	0.17	0.17
Volume/Cap:	0.04	0.05	0.29	0.80	0.80	0.91	0.36	0.91	0.15	0.91	0.87	0.79
Delay/Veh:	38.7	38.9	41.3	28.5	28.5	36.5	54.5	57.2	38.9	122.5	55.1	50.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.7	38.9	41.3	28.5	28.5	36.5	54.5	57.2	38.9	122.5	55.1	50.8
HCM2kAvg:	0	1	3	21	21	28	2	15	2	3	12	10

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.638
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 36.3
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	2 0	3 0	1	2 0	3 0	1	2 0	1 1	0	2 0	1 1	0
Volume Module: >> Count Date: 9 Dec 2000 << AM												
Base Vol:	203	811	96	157	950	388	269	431	297	177	529	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	203	811	96	157	950	388	269	431	297	177	529	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	226	901	107	174	1056	431	299	479	330	197	588	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	226	901	107	174	1056	431	299	479	330	197	588	51
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	226	901	107	174	1056	431	299	479	330	197	588	51
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.89	0.83	0.90	0.89	0.83	0.90	0.87	0.87	0.90	0.92	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	1.18	0.82	2.00	1.84	0.16
Final Sat..	3432	5083	1583	3432	5083	1583	3432	1967	1355	3432	3216	280
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.07	0.05	0.21	0.27	0.09	0.24	0.24	0.06	0.18	0.18
Crit Moves:	****				****			****		****		
Green/Cycle:	0.10	0.33	0.33	0.10	0.33	0.47	0.14	0.38	0.38	0.09	0.33	0.33
Volume/Cap:	0.64	0.53	0.20	0.53	0.64	0.58	0.61	0.64	0.64	0.64	0.56	0.56
Delay/Veh:	55.5	32.9	28.9	53.1	35.3	24.5	50.5	31.4	31.4	57.1	33.7	33.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.5	32.9	28.9	53.1	35.3	24.5	50.5	31.4	31.4	57.1	33.7	33.7
HCM2kAvg:	5	9	3	4	12	12	6	13	13	5	10	10

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.661
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 12 Dec 2001 << AM												
Base Vol:	9	662	83	121	1040	271	146	160	12	85	162	290
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	662	83	121	1040	271	146	160	12	85	162	290
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	10	736	92	134	1156	301	162	178	13	94	180	322
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	736	92	134	1156	301	162	178	13	94	180	322
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	10	736	92	134	1156	301	162	178	13	94	180	322
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.83	0.93	0.86	0.86	0.93	0.92	0.92	0.93	0.84	0.84
Lanes:	1.00	3.00	1.00	1.00	2.38	0.62	1.00	1.86	0.14	1.00	1.00	1.00
Final Sat..	1769	5083	1583	1769	3907	1018	1769	3258	244	1769	1599	1599
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.06	0.08	0.30	0.30	0.09	0.05	0.05	0.05	0.11	0.20
Crit Moves:	****				****		****					****
Green/Cycle:	0.06	0.35	0.35	0.13	0.42	0.42	0.13	0.32	0.32	0.09	0.29	0.29
Volume/Cap:	0.10	0.42	0.17	0.57	0.70	0.70	0.70	0.17	0.17	0.56	0.39	0.70
Delay/Veh:	53.9	29.9	27.2	52.3	29.5	29.5	59.0	29.0	29.0	56.4	34.5	41.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	29.9	27.2	52.3	29.5	29.5	59.0	29.0	29.0	56.4	34.5	41.2
HCM2kAvg:	0	7	2	6	15	15	7	2	2	4	5	12

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.422
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 11.4
Optimal Cycle: 30 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	2	658	14	31	953	28	27	19	5	27	22	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	658	14	31	953	28	27	19	5	27	22	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	2	731	16	34	1059	31	30	21	6	30	24	97
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	731	16	34	1059	31	30	21	6	30	24	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	2	731	16	34	1059	31	30	21	6	30	24	97
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.97	0.97	0.95	0.88	0.88
Lanes:	1.00	1.96	0.04	1.00	2.00	1.00	1.00	0.79	0.21	1.00	0.20	0.80
Final Sat..	1805	3524	75	1805	3610	1615	1805	1458	384	1805	337	1335
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.02	0.29	0.02	0.02	0.01	0.01	0.02	0.07	0.07
Crit Moves:	****				****		****				****	
Green/Cycle:	0.00	0.64	0.64	0.06	0.70	0.70	0.04	0.10	0.10	0.11	0.17	0.17
Volume/Cap:	0.42	0.32	0.32	0.32	0.42	0.03	0.42	0.15	0.15	0.15	0.42	0.42
Delay/Veh:	96.2	8.3	8.3	46.9	6.7	4.7	50.9	41.6	41.6	40.3	38.0	38.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	96.2	8.3	8.3	46.9	6.7	4.7	50.9	41.6	41.6	40.3	38.0	38.0
HCM2kAvg:	0	5	5	1	7	0	2	1	1	1	4	4

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 7.0 Worst Case Level Of Service: F[55.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	0	1	1 0 1	0	1	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	30	350	25	25	810	140	70	10	45	40	10	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	350	25	25	810	140	70	10	45	40	10	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	350	25	25	810	140	70	10	45	40	10	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	30	350	25	25	810	140	70	10	45	40	10	30
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	950	xxxx	xxxxx	375	xxxx	xxxxx	1303	1295	810	1368	1410	350
Potent Cap..	731	xxxx	xxxxx	1195	xxxx	xxxxx	139	164	383	125	140	698
Move Cap..	731	xxxx	xxxxx	1195	xxxx	xxxxx	119	154	383	100	131	698
Volume/Cap:	0.04	xxxx	xxxx	0.02	xxxx	xxxx	0.59	0.07	0.12	0.40	0.08	0.04
Level Of Service Module:												
Queue:	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	0.4	xxxxx	xxxx	0.1
Stopped Del:	10.1	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	15.6	xxxxx	xxxx	10.4
LOS by Move:	B	*	*	A	*	*	*	*	C	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	123	xxxx	xxxxx	105	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.4	xxxx	xxxxx	2.1	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	77.2	xxxx	xxxxx	66.9	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			55.0			45.7		
ApproachLOS:	*			*			F			E		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.529
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.8
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1 0	1	1	0	1 0	1	1	0	1 0	1	0	1	1 0	1	0	1
Volume Module: >> Count Date: 8 Jan 2002 << AM																
Base Vol.	180	397		10	26	900		49	108		6	228	34		8	71
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	180	397		10	26	900		49	108		6	228	34		8	71
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	200	441		11	29	1000		54	120		7	253	38		9	79
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	200	441		11	29	1000		54	120		7	253	38		9	79
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol..	200	441		11	29	1000		54	120		7	253	38		9	79
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900		1900	1900	1900		1900	1900
Adjustment:	0.95	0.95		0.95	0.95	0.94		0.94	0.95		1.00	0.85	0.95		1.00	0.85
Lanes:	1.00	1.95		0.05	1.00	1.90		0.10	1.00		1.00	1.00	1.00		1.00	1.00
Final Sat..	1805	3507		88	1805	3396		185	1805		1900	1615	1805		1900	1615
Capacity Analysis Module:																
Vol/Sat:	0.11	0.13		0.13	0.02	0.29		0.29	0.07		0.00	0.16	0.02		0.00	0.05
Crit Moves:	****					****			****						****	
Green/Cycle:	0.16	0.47		0.47	0.14	0.44		0.44	0.10		0.23	0.23	0.07		0.20	0.20
Volume/Cap:	0.67	0.27		0.27	0.12	0.67		0.67	0.67		0.02	0.68	0.31		0.02	0.24
Delay/Veh:	53.1	19.7		19.7	45.8	28.1		28.1	62.0		35.6	47.0	54.8		38.6	40.8
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	53.1	19.7		19.7	45.8	28.1		28.1	62.0		35.6	47.0	54.8		38.6	40.8
HCM2kAvg:	8	5		5	1	16		16	6		0	10	2		0	3

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.766
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 29.8
Optimal Cycle: 64 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	20	7	7	20	0	0	0	0	20	0	20
Lanes:	0 0	2 0	1	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	314	182	400	941	0	0	0	0	257	0	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	314	182	400	941	0	0	0	0	257	0	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.81	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.72
PHF Volume:	0	349	225	444	1046	0	0	0	0	286	0	278
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	349	225	444	1046	0	0	0	0	286	0	278
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	349	225	444	1046	0	0	0	0	286	0	278
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	2.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat..	0	3610	1615	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.14	0.25	0.55	0.00	0.00	0.00	0.00	0.16	0.00	0.17
Crit Moves:	****				****					****		
Green/Cycle:	0.00	0.29	0.29	0.43	0.72	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Volume/Cap:	0.00	0.33	0.48	0.57	0.77	0.00	0.00	0.00	0.00	0.77	0.00	0.83
Delay/Veh:	0.0	33.7	35.9	27.1	13.2	0.0	0.0	0.0	0.0	54.1	0.0	61.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	33.7	35.9	27.1	13.2	0.0	0.0	0.0	0.0	54.1	0.0	61.8
HCM2kAvg:	0	5	7	13	25	0	0	0	0	12	0	12

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.982
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 44.4
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	7	24	7	7	24	7	0	24	7	7	24	7
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1	1 0	0 1	0
Volume Module: >> Count Date: 27 Nov 2001 << AM Peak												
Base Vol:	3	580	86	408	675	4	25	271	3	27	6	586
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	580	86	408	675	4	25	271	3	27	6	586
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	3	644	96	453	750	4	28	301	2	30	7	651
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	644	96	453	750	4	28	301	2	30	7	651
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	3	644	96	453	750	4	28	301	2	30	7	651
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.91	0.91	0.93	0.93	0.93	0.12	0.98	0.83	0.45	0.83	0.83
Lanes:	1.00	1.74	0.26	1.00	1.99	0.01	1.00	1.00	1.00	1.00	0.01	0.99
Final Sat..	1769	3022	448	1769	3513	21	222	1862	1583	855	16	1570
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.26	0.21	0.21	0.13	0.16	0.00	0.04	0.41	0.41
Crit Moves:		****		****							****	
Green/Cycle:	0.10	0.22	0.22	0.26	0.38	0.38	0.42	0.42	0.42	0.42	0.42	0.68
Volume/Cap:	0.02	0.98	0.98	0.98	0.57	0.57	0.30	0.38	0.00	0.08	0.98	0.61
Delay/Veh:	48.5	75.1	75.1	81.2	30.4	30.4	24.7	24.2	20.1	20.9	64.5	11.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.5	75.1	75.1	81.2	30.4	30.4	24.7	24.2	20.1	20.9	64.5	11.3
HCM2kAvg:	0	19	19	23	11	11	6	8	0	1	30	13

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.635
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 18.6
Optimal Cycle: 67 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	0 0	0	0	0	1 1	0	0	1	0 0	2	0	1	2 0	2	0	0
Volume Module: >> Count Date: 27 Nov 2001 << AM																
Base Vol:	0	0		0	85	22		17	0	603		646	248	1162		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	85	22		17	0	603		646	248	1162		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	94	24		19	0	670		718	276	1291		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	0		0	94	24		19	0	670		718	276	1291		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	0		0	94	24		19	0	670		718	276	1291		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00		1.00	0.83	0.83		0.83	1.00	0.93		0.83	0.90	0.93		1.00
Lanes:	0.00	0.00		0.00	1.59	0.41		1.00	0.00	2.00		1.00	2.00	2.00		0.00
Final Sat..	0	0		0	2515	651		1583	0	3538		1583	3432	3538		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00		0.00	0.04	0.04		0.01	0.00	0.19		0.45	0.08	0.36		0.00
Crit Moves:						****						****	****			
Green/Cycle:	0.00	0.00		0.00	0.20	0.20		0.20	0.00	0.59		0.59	0.11	0.70		0.00
Volume/Cap:	0.00	0.00		0.00	0.19	0.19		0.06	0.00	0.32		0.76	0.76	0.52		0.00
Delay/Veh:	0.0	0.0		0.0	40.0	40.0		38.9	0.0	12.2		21.8	61.5	8.7		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	0.0		0.0	40.0	40.0		38.9	0.0	12.2		21.8	61.5	8.7		0.0
HCM2kAvg:	0	0		0	2	2		1	0	6		21	7	11		0

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave (NS/ EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.551
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.7
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1 1	0	0	1	0 0	0	0	0	2 0	2	0	0	0 0	2	0	1
Volume Module: >> Count Date: 27 Nov 2001 << AM																
Base Vol:	570	9		169	0	0		0	105	634		0	0	823		296
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	570	9		169	0	0		0	105	634		0	0	823		296
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	633	10		188	0	0		0	117	704		0	0	914		329
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	633	10		188	0	0		0	117	704		0	0	914		329
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	633	10		188	0	0		0	117	704		0	0	914		329
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.83	0.83		0.83	1.00	1.00		1.00	0.90	0.93		1.00	1.00	0.93		0.83
Lanes:	1.97	0.03		1.00	0.00	0.00		0.00	2.00	2.00		0.00	0.00	2.00		1.00
Final Sat..	3116	49		1583	0	0		0	3432	3538		0	0	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.20	0.20		0.12	0.00	0.00		0.00	0.03	0.20		0.00	0.00	0.26		0.21
Crit Moves:	****								****					****		
Green/Cycle:	0.37	0.37		0.37	0.00	0.00		0.00	0.06	0.53		0.00	0.00	0.47		0.47
Volume/Cap:	0.55	0.55		0.32	0.00	0.00		0.00	0.55	0.37		0.00	0.00	0.55		0.44
Delay/Veh:	30.6	30.6		27.4	0.0	0.0		0.0	57.8	16.6		0.0	0.0	23.2		21.8
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	30.6	30.6		27.4	0.0	0.0		0.0	57.8	16.6		0.0	0.0	23.2		21.8
HCM2kAvg:	11	11		5	0	0		0	3	7		0	0	12		8

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe Dr.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.918
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 33.9
Optimal Cycle: 113 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Split Phase					Split Phase				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0			0	0	0			0	0	0			0	0	0			0
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module:																				
Base Vol:	0	703		178		174	962		0		0	0		0		546	0		377	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0	703		178		174	962		0		0	0		0		546	0		377	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92	
PHF Volume:	0	764		193		189	1046		0		0	0		0		593	0		410	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	0	764		193		189	1046		0		0	0		0		593	0		410	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	0	764		193		189	1046		0		0	0		0		593	0		410	
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	1.00	1.00		0.85		0.95	0.95		1.00		1.00	1.00		1.00		0.95	1.00		0.85	
Lanes:	0.00	1.00		1.00		1.00	2.00		0.00		0.00	0.00		0.00		1.00	0.00		1.00	
Final Sat..	0	1900		1615		1805	3610		0		0	0		0		1805	0		1615	
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.40		0.12		0.10	0.29		0.00		0.00	0.00		0.00		0.33	0.00		0.25	
Crit Moves:		****				****										****				
Green/Cycle:	0.00	0.44		0.44		0.11	0.55		0.00		0.00	0.00		0.00		0.36	0.00		0.36	
Volume/Cap:	0.00	0.92		0.27		0.92	0.52		0.00		0.00	0.00		0.00		0.92	0.00		0.71	
Delay/Veh:	0.0	41.4		18.2		84.5	14.4		0.0		0.0	0.0		0.0		48.9	0.0		31.7	
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	0.0	41.4		18.2		84.5	14.4		0.0		0.0	0.0		0.0		48.9	0.0		31.7	
HCM2kAvg:	0	26		4		9	10		0		0	0		0		23	0		12	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.806
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.3
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0			0	0	0			0	0	0			0	0	0			0
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	0	1	2	0	2	0	1
Volume Module:																				
Base Vol:	13	49		66		45	389		56		103	522		520		756	282		47	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	13	49		66		45	389		56		103	522		520		756	282		47	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92	
PHF Volume:	14	53		72		49	423		61		112	567		565		822	307		51	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	14	53		72		49	423		61		112	567		565		822	307		51	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	14	53		72		49	423		61		112	567		565		822	307		51	
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	0.95	0.95		0.85		0.95	0.95		0.85		0.95	0.95		0.85		0.92	0.95		0.85	
Lanes:	1.00	2.00		1.00		1.00	2.00		1.00		1.00	2.00		1.00		2.00	2.00		1.00	
Final Sat..	1805	3610		1615		1805	3610		1615		1805	3610		1615		3502	3610		1615	
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.01		0.04		0.03	0.12		0.04		0.06	0.16		0.35		0.23	0.08		0.03	
Crit Moves:	****						****							****		****				
Green/Cycle:	0.01	0.10		0.10		0.06	0.15		0.15		0.31	0.43		0.43		0.29	0.42		0.42	
Volume/Cap:	0.81	0.15		0.46		0.46	0.81		0.26		0.20	0.36		0.81		0.81	0.20		0.08	
Delay/Veh:	172.1	41.7		44.9		48.7	50.3		38.6		25.9	19.1		31.5		37.7	18.5		17.5	
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	172.1	41.7		44.9		48.7	50.3		38.6		25.9	19.1		31.5		37.7	18.5		17.5	
HCM2kAvg:	2	1		3		2	9		2		3	6		17		14	3		1	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.509
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.9
Optimal Cycle: 41 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	2	1 0	2 0	1	2 0	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	168	49	491	2	59	34	19	488	120	330	1035	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	49	491	2	59	34	19	488	120	330	1035	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	187	54	546	2	66	38	21	542	133	367	1150	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	187	54	546	2	66	38	21	542	133	367	1150	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	187	54	546	2	66	38	21	542	133	367	1150	54
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.75	0.95	0.95	0.85	0.92	0.95	0.85	0.92	0.91	0.85
Lanes:	1.00	2.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat..	1805	3610	2842	1805	3610	1615	3502	3610	1615	3502	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.10	0.02	0.19	0.00	0.02	0.02	0.01	0.15	0.08	0.10	0.22	0.03
Crit Moves:			****	****				****		****		
Green/Cycle:	0.31	0.38	0.38	0.00	0.07	0.07	0.01	0.29	0.29	0.21	0.49	0.49
Volume/Cap:	0.33	0.04	0.51	0.51	0.26	0.33	0.45	0.51	0.28	0.51	0.45	0.07
Delay/Veh:	27.0	19.7	24.4	124.8	44.6	46.0	55.9	29.7	27.4	35.8	17.0	13.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.0	19.7	24.4	124.8	44.6	46.0	55.9	29.7	27.4	35.8	17.0	13.6
HCM2kAvg:	5	1	7	0	1	1	1	7	3	6	8	1

Harmony Grove Village
Option B: Baseline

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	33.2	0.785	C	33.2	0.785	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	E	74.9	1.215	E	74.9	1.215	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	E	78.4	1.087	E	78.4	1.087	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	356.7	0.000	F	356.7	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	7.8	0.131	A	7.8	0.131	+ 0.000 V/C
# 6 Country Club Drive/Entrance #3	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 7 Country Club/ Village Rd	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	B	10.1	0.000	B	10.1	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	B	13.0	0.000	B	13.0	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	B	11.3	0.000	B	11.3	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	F	125.5	0.000	F	125.5	0.000	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	B	11.8	0.000	B	11.8	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	C	34.5	0.538	C	34.5	0.538	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	A	9.9	0.327	A	9.9	0.327	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	B	12.8	0.000	B	12.8	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	C	16.3	0.000	C	16.3	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	33.7	0.721	C	33.7	0.721	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	B	12.9	0.000	B	12.9	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	C	19.0	0.000	C	19.0	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	B	10.8	0.000	B	10.8	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	F	58.4	0.000	F	58.4	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	E	55.8	1.115	E	55.8	1.115	+ 0.000 D/V

Harmony Grove Village
Option B: Baseline

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	E	74.1	1.064	E	74.1	1.064	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	40.4	0.732	D	40.4	0.732	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	D	38.1	0.623	D	38.1	0.623	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	A	9.2	0.454	A	9.2	0.454	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	910.4	0.000	F	910.4	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	28.3	0.440	C	28.3	0.440	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	32.8	0.683	C	32.8	0.683	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	C	26.6	0.745	C	26.6	0.745	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	20.8	0.830	C	20.8	0.830	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	26.3	0.591	C	26.3	0.591	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe Dr.	C	30.9	0.925	C	30.9	0.925	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	42.2	0.923	D	42.2	0.923	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	35.0	0.782	C	35.0	0.782	+ 0.000 D/V

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.785
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 33.2
Optimal Cycle: 68 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	0	0	0	7	24	7
Lanes:	2 0	2 0	0	0 0	2 0	1	0 0	0 0	0	1 0	1! 0	1
Volume Module: >> Count Date: 13 Dec 2001 << PM												
Base Vol:	620	819	0	0	649	211	0	0	0	332	6	267
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	620	819	0	0	649	211	0	0	0	332	6	267
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	689	910	0	0	721	234	0	0	0	369	7	297
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	689	910	0	0	721	234	0	0	0	369	7	297
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	689	910	0	0	721	234	0	0	0	369	7	297
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.71	0.73	1.00	1.00	0.93	0.83	1.00	1.00	1.00	0.67	0.67	0.67
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.54	0.02	1.44
Final Sat..	2693	2776	0	0	3538	1583	0	0	0	1967	25	1832
Capacity Analysis Module:												
Vol/Sat:	0.26	0.33	0.00	0.00	0.20	0.15	0.00	0.00	0.00	0.19	0.27	0.16
Crit Moves:	****				****						****	
Green/Cycle:	0.33	0.59	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.34	0.34	0.34
Volume/Cap:	0.78	0.56	0.00	0.00	0.78	0.57	0.00	0.00	0.00	0.55	0.78	0.48
Delay/Veh:	41.3	15.8	0.0	0.0	45.8	40.5	0.0	0.0	0.0	32.8	40.5	31.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.3	15.8	0.0	0.0	45.8	40.5	0.0	0.0	0.0	32.8	40.5	31.5
HCM2kAvg:	14	11	0	0	14	8	0	0	0	8	14	7

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp [NS / EW]

Cycle (sec): 100 Critical Vol./Cap. (X): 1.215
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 74.9
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24		7	7	24		0	7	24		7	0	0		0
Lanes:	0	0	2	0 1	2	0	2	0 0	0	1	0	1 0	0	0	0	0 0
Volume Module: >> Count Date: 13 Dec 2001 << PM																
Base Vol:	0	1068		719	372	601		0	263		2	357	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	1068		719	372	601		0	263		2	357	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	1187		799	413	668		0	292		2	397	0		0	0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	1187		799	413	668		0	292		2	397	0		0	0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	1187		799	413	668		0	292		2	397	0		0	0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	0.73		0.65	0.90	0.93		1.00	0.61	0.61		0.61	1.00	1.00		1.00
Lanes:	0.00	2.00		1.00	2.00	2.00		0.00	0.99	0.01		1.00	0.00	0.00		0.00
Final Sat..	0	2776		1242	3432	3538		0	1151		9	1160	0		0	0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.43		0.64	0.12	0.19		0.00	0.25	0.25		0.34	0.00	0.00		0.00
Crit Moves:				****	****							****				
Green/Cycle:	0.00	0.53		0.53	0.10	0.63		0.00	0.28	0.28		0.28	0.00	0.00		0.00
Volume/Cap:	0.00	0.81		1.22	1.22	0.30		0.00	0.90	0.90		1.22	0.00	0.00		0.00
Delay/Veh:	0.0	22.8		133.9	165.8	8.6		0.0	48.5	48.5		148.2	0.0	0.0		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	22.8		133.9	165.8	8.6		0.0	48.5	48.5		148.2	0.0	0.0		0.0
HCM2kAvg:	0	17		44	14	5		0	13	13		26	0	0		0

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.087
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 78.4
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	2	0 1	2	0	1	1 0	2	0	2	0 1	2	0	2	0 1
Volume Module: >> Count Date: 13 Dec 2001 << PM																
Base Vol:	252	982		73	236	383		238	311	643		260	57	533		552
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	252	982		73	236	383		238	311	643		260	57	533		552
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	280	1091		81	262	426		264	346	714		289	63	592		613
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	280	1091		81	262	426		264	346	714		289	63	592		613
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	280	1091		81	262	426		264	346	714		289	63	592		613
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.73	0.73		0.65	0.71	0.69		0.69	0.90	0.93		0.83	0.90	0.93		0.83
Lanes:	1.00	2.00		1.00	2.00	1.23		0.77	2.00	2.00		1.00	2.00	2.00		1.00
Final Sat..	1388	2776		1242	2693	1615		1003	3432	3538		1583	3432	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.20	0.39		0.07	0.10	0.26		0.26	0.10	0.20		0.18	0.02	0.17		0.39
Crit Moves:		****			****				****							****
Green/Cycle:	0.20	0.36		0.36	0.09	0.26		0.26	0.09	0.35		0.35	0.10	0.36		0.36
Volume/Cap:	1.03	1.09		0.18	1.09	1.03		1.03	1.09	0.58		0.52	0.18	0.47		1.09
Delay/Veh:	111.3	93.5		26.4	137.8	87.9		87.9	130.3	32.6		32.1	49.7	30.1		102.4
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	111.3	93.5		26.4	137.8	87.9		87.9	130.3	32.6		32.1	49.7	30.1		102.4
HCM2kAvg:	16	30		2	10	19		19	12	11		9	1	8		33

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club [NS / EW]

Average Delay (sec/veh): 31.8 Worst Case Level Of Service: F[356.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	2 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module: >> Count Date: 11 Dec 2001 << PM												
Base Vol:	65	1104	5	39	646	95	127	1	60	1	0	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	1104	5	39	646	95	127	1	60	1	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	72	1227	6	43	718	106	141	1	67	1	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	72	1227	6	43	718	106	141	1	67	1	0	13
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	xxxx	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	823	xxxx	xxxxx	1232	xxxx	xxxxx	1562	2181	718	2262	xxxx	613
Potent Cap..	807	xxxx	xxxxx	565	xxxx	xxxxx	91	46	429	29	xxxx	492
Move Cap..	807	xxxx	xxxxx	565	xxxx	xxxxx	78	39	429	21	xxxx	492
Volume/Cap:	0.09	xxxx	xxxx	0.08	xxxx	xxxx	1.82	0.03	0.16	0.05	xxxx	0.03
Level Of Service Module:												
Queue:	0.3	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	0.5	xxxxx	xxxx	xxxxx
Stopped Del:	9.9	xxxx	xxxxx	11.9	xxxx	xxxxx	xxxxx	xxxx	14.9	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	B	*	*	*	*	B	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	77	xxxx	xxxxx	xxxx	181	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.4	xxxx	xxxxx	xxxxx	0.3	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	516.9	xxxx	xxxxx	xxxxx	26.7	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			356.7			26.7		
ApproachLOS:	*			*			F			D		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.131
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.8
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	90	7	43	39	0	0	0	0	9	0	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	90	7	43	39	0	0	0	0	9	0	43
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.00	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	100	0	48	43	0	0	0	0	10	0	48
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	100	0	48	43	0	0	0	0	10	0	48
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	100	0	48	43	0	0	0	0	10	0	48
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.52	0.48	0.00	0.00	0.00	0.00	0.17	0.00	0.83
Final Sat..	0	761	0	430	390	0	0	0	0	155	0	740
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.13	xxxx	0.11	0.11	xxxx	xxxx	xxxx	xxxx	0.06	xxxx	0.06
Crit Moves:		****			****					****		
Delay/Veh:	0.0	8.1	0.0	7.9	7.9	0.0	0.0	0.0	0.0	7.1	0.0	7.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.1	0.0	7.9	7.9	0.0	0.0	0.0	0.0	7.1	0.0	7.1
LOS by Move:	*	A	*	A	A	*	*	*	*	A	*	A
ApproachDel:		8.1			7.9			xxxxxx			7.1	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		8.1			7.9			xxxxxx			7.1	
LOS by Appr:		A			A			*			A	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club Drive/Entrance #3

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 1	0	0	0 0 0	0	0	0 0 1!	0	0
Volume Module:												
Base Vol:	0	97	0	0	48	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	97	0	0	48	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	97	0	0	48	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	97	0	0	48	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Rd

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	1	1 0 1	0	0	0 0 0	0	0	1 0 0	0	1
Volume Module:												
Base Vol:	0	97	0	0	48	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	97	0	0	48	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	108	0	0	53	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	108	0	0	53	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B(10.1)

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 1	0	1	0 1	0	0 1
Volume Module:												
Base Vol:	0	150	293	0	40	0	0	0	0	65	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	150	293	0	40	0	0	0	0	65	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	167	326	0	44	0	0	0	0	72	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	167	326	0	44	0	0	0	0	72	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	211	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	782	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	782	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	782	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.1	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	B	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.1		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A(0.0)

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 1	0	0	0 0 1!	0	0	0 0	0	0 0
Volume Module:												
Base Vol:	0	97	0	0	48	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	97	0	0	48	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	108	0	0	53	0	0	0	0	0	0	0
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	108	0	0	53	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 COuntry Club/Harmony Grove

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: B[13.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	1	1	6	3	5	26	105	422	0	5	87	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	1	6	3	5	26	105	422	0	5	87	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	1	7	3	6	29	117	469	0	6	97	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	1	1	7	3	6	29	117	469	0	6	97	6
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	830	816	469	817	813	99	102	xxxx	xxxxx	469	xxxx	xxxxx
Potent Cap.:	292	314	599	298	315	962	1502	xxxx	xxxxx	1103	xxxx	xxxxx
Move Cap..	260	286	599	274	287	962	1502	xxxx	xxxxx	1103	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.01	0.01	0.02	0.03	0.08	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	461	xxxxx	xxxx	614	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.2	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	13.0	xxxxx	xxxxx	11.2	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	*	*	*
ApproachDel:		13.0			11.2			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 0	1 0	0	0 0	1 0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	527	0	0	114	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	527	0	0	114	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	0	0	0	0	586	0	0	127	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	0	0	0	0	586	0	0	127	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		*			*			*			*	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0	0	0				1	0	1				3	511	0				0	108	3			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	0	0				1	0	1				3	511	0				0	108	3			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90			
PHF Volume:	0	0	0				1	0	1				3	568	0				0	120	3			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				1	0	1				3	568	0				0	120	3			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				696	xxxx	122				123	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Potent Cap.:	xxxx	xxxx	xxxxx				411	xxxx	935				1476	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Move Cap.:	xxxx	xxxx	xxxxx				410	xxxx	935				1476	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	xxxx	xxxx	xxxx				0.00	xxxx	0.00				0.00	xxxx	xxxx	xxxx	xxxx	xxxx						
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*							A	*	*	*	*	*						
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx			570	xxxxx					xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx			0.0	xxxxx					0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx			11.3	xxxxx					7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*			B	*					A	*	*	*	*	*						
ApproachDel:	xxxxxx						11.3						xxxxxx						xxxxxx					
ApproachLOS:	*						B						*						*					

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Average Delay (sec/veh): 5.8 Worst Case Level Of Service: F[125.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	0	1		0	0	0	0	0		0	0	1	0	1		1	0	1	0	0	
Volume Module:																								
Base Vol:	60	0	20				0	0	0				0	892	20				20	765	0			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	60	0	20				0	0	0				0	892	20				20	765	0			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90			
PHF Volume:	67	0	22				0	0	0				0	991	22				22	850	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	67	0	22				0	0	0				0	991	22				22	850	0			
Critical Gap Module:																								
Critical Gp:	6.4	xxxx	6.2				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx	3.3				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1886	xxxx	991				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				1013	xxxx	xxxxx			
Potent Cap.:	79	xxxx	301				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				692	xxxx	xxxxx			
Move Cap.:	77	xxxx	301				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				692	xxxx	xxxxx			
Volume/Cap:	0.87	xxxx	0.07				xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				0.03	xxxx	xxxx			
Level Of Service Module:																								
Queue:	4.4	xxxx	0.2				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.1	xxxx	xxxxx			
Stopped Del:	161.4	xxxx	17.9				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				10.4	xxxx	xxxxx			
LOS by Move:	F	*	C				*	*	*				*	*	*				B	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	125.5						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	F						*						*						*					

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa (NS / EW)

Average Delay (sec/veh): 8.8 Worst Case Level Of Service: B(11.8)

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	0	1 0	0	1	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << PM Peak																
Base Vol:	8	0	425		0	0	0		0	56	7		98	74	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	8	0	425		0	0	0		0	56	7		98	74	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	9	0	472		0	0	0		0	62	8		109	82	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	9	0	472		0	0	0		0	62	8		109	82	0	
Critical Gap Module:																
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	366	xxxx		66	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		70	xxxx	xxxxx	
Potent Cap..	634	xxxx		998	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		1531	xxxx	xxxxx	
Move Cap..	597	xxxx		998	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		1531	xxxx	xxxxx	
Volume/Cap:	0.01	xxxx		0.47	xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		0.07	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx		2.6	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Stopped Del:	11.1	xxxx		11.8	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		7.5	xxxx	xxxxx	
LOS by Move:	B	*		B	*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		7.5	xxxx	xxxxx	
Shared LOS:	*	*		*	*	*	*		*	*	*		A	*	*	
ApproachDel:		11.8				xxxxxx				xxxxxx				xxxxxx		
ApproachLOS:		B				*				*				*		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.538
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.5
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	0 1	1	0	1	0 1	1	0	1	1 0	1	0	2	0 1
Volume Module: >> Count Date: 11 Dec 2001 << AM																
Base Vol:	225	188		166	104	68		62	80	709		103	68	478		134
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	225	188		166	104	68		62	80	709		103	68	478		134
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	250	209		184	116	76		69	89	788		114	76	531		149
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	250	209		184	116	76		69	89	788		114	76	531		149
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	250	209		184	116	76		69	89	788		114	76	531		149
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.98		0.83	0.93	0.98		0.83	0.93	0.91		0.91	0.93	0.93		0.83
Lanes:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.75		0.25	1.00	2.00		1.00
Final Sat..	1769	1862		1583	1769	1862		1583	1769	3030		440	1769	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.14	0.11		0.12	0.07	0.04		0.04	0.05	0.26		0.26	0.04	0.15		0.09
Crit Moves:	****					****				****			****			
Green/Cycle:	0.22	0.32		0.32	0.10	0.20		0.20	0.11	0.41		0.41	0.07	0.37		0.37
Volume/Cap:	0.63	0.35		0.37	0.63	0.20		0.22	0.47	0.63		0.63	0.63	0.41		0.25
Delay/Veh:	45.6	31.7		32.0	58.2	40.3		40.5	52.1	29.2		29.2	65.2	28.3		26.6
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	45.6	31.7		32.0	58.2	40.3		40.5	52.1	29.2		29.2	65.2	28.3		26.6
HCM2kAvg:	10	6		5	5	2		2	4	14		14	4	7		4

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.327
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 9.9
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module: >> Count Date: 28 Nov 2001 << PM												
Base Vol:	3	27	27	170	17	6	7	21	4	5	7	212
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	27	27	170	17	6	7	21	4	5	7	212
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	3	30	30	189	19	7	8	23	4	6	8	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	30	30	189	19	7	8	23	4	6	8	236
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	3	30	30	189	19	7	8	23	4	6	8	236
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat..	537	580	654	582	629	717	529	571	642	577	627	720
Capacity Analysis Module:												
Vol/Sat:	0.01	0.05	0.05	0.32	0.03	0.01	0.01	0.04	0.01	0.01	0.01	0.33
Crit Moves:		****		****				****				****
Delay/Veh:	9.0	8.8	8.0	11.3	8.3	7.5	9.2	8.8	7.9	8.7	8.3	9.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.0	8.8	8.0	11.3	8.3	7.5	9.2	8.8	7.9	8.7	8.3	9.7
LOS by Move:	A	A	A	B	A	A	A	A	A	A	A	A
ApproachDel:		8.4			10.9			8.8			9.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.4			10.9			8.8			9.6	
LOS by Appr:		A			B			A			A	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. [NS / EW]

Average Delay (sec/veh): 6.2 Worst Case Level Of Service: B[12.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module: >> Count Date: 28 Nov 2001 << PM												
Base Vol:	49	0	290	0	0	0	0	204	49	62	128	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	49	0	290	0	0	0	0	204	49	62	128	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	54	0	322	0	0	0	0	227	54	69	142	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	54	0	322	0	0	0	0	227	54	69	142	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	534	xxxx	254	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	281	xxxx	xxxxx
Potent Cap..	507	xxxx	785	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1281	xxxx	xxxxx
Move Cap..	485	xxxx	785	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1281	xxxx	xxxxx
Volume/Cap:	0.11	xxxx	0.41	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
Queue:	0.4	xxxx	2.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Stopped Del.	13.4	xxxx	12.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx
LOS by Move:	B	*	B	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:		12.8			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		B			*			*			*	

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: C[16.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	1	0	0	0 1	0	1	0	0 0	0	0	0	1 0
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	0	0	0		39	0		35	130	472		0	0	140		51
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0	0		39	0		35	130	472		0	0	140		51
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0	0		43	0		39	144	524		0	0	156		57
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Final Vol..	0	0	0		43	0		39	144	524		0	0	156		57
Critical Gap Module:																
Critical Gp:	xxxx	xxxx	xxxx		6.4	xxxx		6.2	4.1	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx
FollowUpTim:	xxxx	xxxx	xxxx		3.5	xxxx		3.3	2.2	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxx		997	xxxx		184	212	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx
Potent Cap.:	xxxx	xxxx	xxxx		273	xxxx		864	1370	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx
Move Cap.:	xxxx	xxxx	xxxx		249	xxxx		864	1370	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx
Volume/Cap:	xxxx	xxxx	xxxx		0.17	xxxx		0.05	0.11	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxx	xxxx	xxxx		0.6	xxxx		0.1	0.4	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx
Stopped Del:	xxxx	xxxx	xxxx		22.5	xxxx		9.4	7.9	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx
LOS by Move:	*	*	*		C	*		A	A	*	*		*	*		*
Movement:	LT -	LTR -	RT		LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	xxxx	xxxx		xxxx	xxxx		xxxx
SharedQueue:	xxxx	xxxx	xxxx		xxxx	xxxx		xxxx	0.4	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx
Shrd StpDel:	xxxx	xxxx	xxxx		xxxx	xxxx		xxxx	7.9	xxxx	xxxx	xxxx	xxxx	xxxx		xxxx
Shared LOS:	*	*	*		*	*		*	A	*	*		*	*		*
ApproachDel:	xxxxxx				16.3				xxxxxx				xxxxxx			
ApproachLOS:	*				C				*				*			

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.721
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.7
Optimal Cycle: 65 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		7	0		7	7	24		0	0	24		7
Lanes:	0	1	0	0 1	1	0	1	0 1	1	0	1	1 0	1	0	2	0 1
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	28	12	28		386	9		176	209	1001		14	26	617		357
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	28	12	28		386	9		176	209	1001		14	26	617		357
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	31	13	31		429	10		196	232	1112		16	29	686		397
Reduct Vol.	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	31	13	31		429	10		196	232	1112		16	29	686		397
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	31	13	31		429	10		196	232	1112		16	29	686		397
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	0.95	0.83		0.93	0.98		0.83	0.93	0.93		0.93	0.93	0.93		0.83
Lanes:	0.70	0.30	1.00		1.00	1.00		1.00	1.00	1.97		0.03	1.00	2.00		1.00
Final Sat..	1259	540	1583		1769	1862		1583	1769	3482		49	1769	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.02	0.02	0.02		0.24	0.01		0.12	0.13	0.32		0.32	0.02	0.19		0.25
Crit Moves:	****				****				****							****
Green/Cycle:	0.03	0.03	0.03		0.34	0.34		0.34	0.18	0.50		0.50	0.03	0.35		0.35
Volume/Cap:	0.72	0.72	0.57		0.72	0.02		0.37	0.72	0.63		0.63	0.63	0.56		0.72
Delay/Veh:	91.3	91.3	71.1		39.2	26.6		30.6	54.0	22.5		22.5	83.6	32.3		38.7
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	91.3	91.3	71.1		39.2	26.6		30.6	54.0	22.5		22.5	83.6	32.3		38.7
HCM2kAvg:	3	3	2		16	0		6	10	15		15	2	10		14

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[12.9]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module: >> Count Date: 12 Dec 2001 <<																				
Base Vol:	0	345		46		5	128		0		0		0		0	55		0		12
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	345		46		5	128		0		0		0		0	55		0		12
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	383		51		6	142		0		0		0		0	61		0		13
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol.:	0	383		51		6	142		0		0		0		0	61		0		13
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	6.4		xxxx		6.2
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	3.5		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		434	xxxx		xxxxx		xxxx		xxxx		xxxxx	562		xxxx		409
Potent Cap.:	xxxx	xxxx		xxxxx		1136	xxxx		xxxxx		xxxx		xxxx		xxxxx	491		xxxx		647
Move Cap.:	xxxx	xxxx		xxxxx		1136	xxxx		xxxxx		xxxx		xxxx		xxxxx	490		xxxx		647
Volume/Cap:	xxxx	xxxx		xxxx		0.00	xxxx		xxxx		xxxx		xxxx		xxxx	0.12		xxxx		0.02
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx		xxxxx		xxxx		xxxxx	0.4		xxxx		0.1
Stopped Del:	xxxxx	xxxx		xxxxx		8.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	13.4		xxxx		10.7
LOS by Move:	*	*		*		A	*		*		*		*		*	B		*		B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		8.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shared LOS:	*	*		*		A	*		*		*		*		*	*		*		*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					12.9				
ApproachLOS:	*					*					*					B				

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 10.5 Worst Case Level Of Service: C[19.0]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module: >> Count Date: 12 Dec 2001 <<																				
Base Vol:	51	91		0		0	83		140		342		0		60	0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	51	91		0		0	83		140		342		0		60	0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	57	101		0		0	92		156		380		0		67	0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol.:	57	101		0		0	92		156		380		0		67	0		0		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		6.4	xxxx		6.2	xxxxx	xxxx		xxxxx		
FollowUpTim:	2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		3.5	xxxx		3.3	xxxxx	xxxx		xxxxx		
Capacity Module:																				
Cnflict Vol:	248	xxxx		xxxxx		xxxx	xxxx		xxxxx		384	xxxx		170	xxxx	xxxx		xxxxx		
Potent Cap.:	1330	xxxx		xxxxx		xxxx	xxxx		xxxxx		622	xxxx		879	xxxx	xxxx		xxxxx		
Move Cap.:	1330	xxxx		xxxxx		xxxx	xxxx		xxxxx		601	xxxx		879	xxxx	xxxx		xxxxx		
Volume/Cap:	0.04	xxxx		xxxx		xxxx	xxxx		xxxx		0.63	xxxx		0.08	xxxx	xxxx		xxxx		
Level Of Service Module:																				
Queue:	0.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		4.4	xxxx		0.2	xxxxx	xxxx		xxxxx		
Stopped Del:	7.8	xxxx		xxxxx		xxxxx	xxxx		xxxxx		20.7	xxxx		9.4	xxxxx	xxxx		xxxxx		
LOS by Move:	A	*		*		*	*		*		C	*		A	*	*		*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	0.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	7.8	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	A	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					19.0					xxxxxx				
ApproachLOS:	*					*					C					*				

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[10.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	55	0	55	0	0	0	0	200	125	60	35	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	55	0	55	0	0	0	0	200	125	60	35	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	61	0	61	0	0	0	0	222	139	67	39	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	61	0	61	0	0	0	0	222	139	67	39	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	394	xxxx	222	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	361	xxxx	xxxxx
Potent Cap..	614	xxxx	822	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1209	xxxx	xxxxx
Move Cap..	588	xxxx	822	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1209	xxxx	xxxxx
Volume/Cap:	0.10	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	xxxx	xxxx
Level Of Service Module:												
Queue:	0.3	xxxx	0.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Stopped Del:	11.8	xxxx	9.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	B	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	10.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 9.3 Worst Case Level Of Service: F[58.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0 1	0	0 1	0 1	0	0 0	0 0	1	0 1
Volume Module:												
Base Vol:	0	0	0	30	0	30	552	200	0	0	65	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	30	552	200	0	0	65	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	33	0	33	613	222	0	0	72	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	33	0	33	613	222	0	0	72	56
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1521	xxxx	72	128	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	132	xxxx	996	1471	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	65	xxxx	996	1471	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.51	xxxx	0.03	0.42	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.7	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	65	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	108.1	xxxx	xxxxx	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	F	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			58.4			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.115
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 55.8
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	0	0	0	7	24	7
Lanes:	0 1	0	0 1	0 0	0	0 0	2 0	3	0 0	0 0	3	0 1
Volume Module: >> Count Date: 12 Dec 2001 << PM												
Base Vol:	133	0	414	0	0	0	806	1499	0	0	1388	683
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	0	414	0	0	0	806	1499	0	0	1388	683
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	148	0	460	0	0	0	896	1666	0	0	1542	759
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	0	460	0	0	0	896	1666	0	0	1542	759
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	148	0	460	0	0	0	896	1666	0	0	1542	759
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	0.90	0.89	1.00	1.00	0.89	0.83
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat..	1773	0	1583	0	0	0	3432	5083	0	0	5083	1583
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.29	0.00	0.00	0.00	0.26	0.33	0.00	0.00	0.30	0.48
Crit Moves:			****				****					****
Green/Cycle:	0.26	0.00	0.26	0.00	0.00	0.00	0.23	0.66	0.00	0.00	0.43	0.43
Volume/Cap:	0.32	0.00	1.11	0.00	0.00	0.00	1.11	0.49	0.00	0.00	0.71	1.11
Delay/Veh:	36.2	0.0	123.6	0.0	0.0	0.0	114.1	10.2	0.0	0.0	29.0	104.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.2	0.0	123.6	0.0	0.0	0.0	114.1	10.2	0.0	0.0	29.0	104.6
HCM2kAvg:	5	0	26	0	0	0	27	10	0	0	16	41

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.064
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 74.1
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	7	0	7	0	0	0
Lanes:	1 0	1	0 1	0	1	0 1	2 0	3	0 1	2 0	3	1 1
Volume Module: >> Count Date: 12 Dec 2001 << PM												
Base Vol:	46	48	307	415	229	362	88	1548	43	276	743	462
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	48	307	415	229	362	88	1548	43	276	743	462
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	51	53	341	461	254	402	98	1720	48	307	826	513
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	53	341	461	254	402	98	1720	48	307	826	513
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	51	53	341	461	254	402	98	1720	48	307	826	513
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.86	0.86	0.86	0.90	0.89	0.83	0.90	0.84	0.84
Lanes:	1.00	1.00	1.00	0.82	0.46	0.72	2.00	3.00	1.00	2.00	3.08	1.92
Final Sat..	1769	1862	1583	1353	747	1180	3432	5083	1583	3432	4926	3063
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.22	0.34	0.34	0.34	0.03	0.34	0.03	0.09	0.17	0.17
Crit Moves:			****			****		****		****		
Green/Cycle:	0.20	0.20	0.20	0.32	0.32	0.32	0.10	0.32	0.32	0.08	0.30	0.30
Volume/Cap:	0.14	0.14	1.06	1.06	1.06	1.06	0.27	1.06	0.09	1.06	0.56	0.56
Delay/Veh:	39.5	39.4	116.0	87.2	87.2	87.2	50.0	82.5	28.9	125.9	35.8	35.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.5	39.4	116.0	87.2	87.2	87.2	50.0	82.5	28.9	125.9	35.8	35.8
HCM2kAvg:	2	2	19	30	30	30	2	30	1	11	9	9

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.732
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 40.4
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	2 0	3 0	1	2 0	3 0	1	2 0	1 1	0	2 0	1 1	0
Volume Module: >> Count Date: 9 Dec 2000 << PM												
Base Vol:	301	1024	45	140	823	303	568	705	213	194	437	167
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	301	1024	45	140	823	303	568	705	213	194	437	167
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	334	1138	50	156	914	337	631	783	237	216	486	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	334	1138	50	156	914	337	631	783	237	216	486	186
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	334	1138	50	156	914	337	631	783	237	216	486	186
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.89	0.83	0.90	0.89	0.83	0.90	0.90	0.90	0.90	0.89	0.89
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	1.54	0.46	2.00	1.45	0.55
Final Sat..	3432	5083	1583	3432	5083	1583	3432	2622	792	3432	2455	938
Capacity Analysis Module:												
Vol/Sat:	0.10	0.22	0.03	0.05	0.18	0.21	0.18	0.30	0.30	0.06	0.20	0.20
Crit Moves:	****				****		****				****	
Green/Cycle:	0.13	0.30	0.30	0.08	0.25	0.50	0.25	0.43	0.43	0.09	0.27	0.27
Volume/Cap:	0.73	0.74	0.11	0.58	0.73	0.43	0.73	0.69	0.69	0.69	0.73	0.73
Delay/Veh:	56.0	39.9	30.4	56.5	43.9	19.7	44.5	29.2	29.2	59.6	42.9	42.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.0	39.9	30.4	56.5	43.9	19.7	44.5	29.2	29.2	59.6	42.9	42.9
HCM2kAvg:	8	14	1	4	12	8	13	16	16	5	13	13

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.623
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 38.1
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 12 Dec 2001 << PM												
Base Vol:	21	1020	142	165	835	162	278	304	6	126	133	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	1020	142	165	835	162	278	304	6	126	133	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	23	1133	158	183	928	180	309	338	7	140	148	54
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	1133	158	183	928	180	309	338	7	140	148	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	23	1133	158	183	928	180	309	338	7	140	148	54
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.83	0.93	0.87	0.87	0.93	0.93	0.93	0.93	0.89	0.89
Lanes:	1.00	3.00	1.00	1.00	2.51	0.49	1.00	1.96	0.04	1.00	1.46	0.54
Final Sat..	1769	5083	1583	1769	4155	806	1769	3459	68	1769	2482	914
Capacity Analysis Module:												
Vol/Sat:	0.01	0.22	0.10	0.10	0.22	0.22	0.17	0.10	0.10	0.08	0.06	0.06
Crit Moves:		****		****			****				****	
Green/Cycle:	0.09	0.31	0.31	0.14	0.36	0.36	0.24	0.32	0.32	0.13	0.20	0.20
Volume/Cap:	0.14	0.72	0.32	0.72	0.62	0.62	0.72	0.31	0.31	0.63	0.30	0.30
Delay/Veh:	50.2	38.2	32.0	58.3	32.1	32.1	47.2	31.1	31.1	55.4	41.1	41.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.2	38.2	32.0	58.3	32.1	32.1	47.2	31.1	31.1	55.4	41.1	41.1
HCM2kAvg:	1	13	4	8	12	12	12	5	5	6	3	3

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.454
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 9.2
Optimal Cycle: 32 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	9	1022	10	78	737	58	23	23	3	15	12	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	1022	10	78	737	58	23	23	3	15	12	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	10	1136	11	87	819	64	26	26	3	17	13	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	1136	11	87	819	64	26	26	3	17	13	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	10	1136	11	87	819	64	26	26	3	17	13	42
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.98	0.98	0.95	0.89	0.89
Lanes:	1.00	1.98	0.02	1.00	2.00	1.00	1.00	0.88	0.12	1.00	0.24	0.76
Final Sat..	1805	3571	35	1805	3610	1615	1805	1652	216	1805	404	1279
Capacity Analysis Module:												
Vol/Sat:	0.01	0.32	0.32	0.05	0.23	0.04	0.01	0.02	0.02	0.01	0.03	0.03
Crit Moves:		****		****			****				****	
Green/Cycle:	0.02	0.70	0.70	0.11	0.79	0.79	0.03	0.07	0.07	0.04	0.07	0.07
Volume/Cap:	0.29	0.45	0.45	0.45	0.29	0.05	0.45	0.24	0.24	0.24	0.45	0.45
Delay/Veh:	52.9	6.7	6.7	43.7	3.0	2.4	53.3	45.4	45.4	48.4	47.1	47.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.9	6.7	6.7	43.7	3.0	2.4	53.3	45.4	45.4	48.4	47.1	47.1
HCM2kAvg:	1	8	8	3	4	0	1	1	1	1	2	2

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 143.9 Worst Case Level Of Service: F[910.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	30	900	50	30	400	45	180	10	80	50	12	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	900	50	30	400	45	180	10	80	50	12	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	33	1000	56	33	444	50	200	11	89	56	13	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	33	1000	56	33	444	50	200	11	89	56	13	44
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	494	xxxx	xxxxx	1056	xxxx	xxxxx	1634	1633	444	1653	1628	1000
Potent Cap..	1080	xxxx	xxxxx	667	xxxx	xxxxx	82	102	618	79	103	298
Move Cap..	1080	xxxx	xxxxx	667	xxxx	xxxxx	58	94	618	58	95	298
Volume/Cap:	0.03	xxxx	xxxx	0.05	xxxx	xxxx	3.43	0.12	0.14	0.96	0.14	0.15
Level Of Service Module:												
Queue:	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	0.5	xxxxx	xxxx	0.5
Stopped Del:	8.4	xxxx	xxxxx	10.7	xxxx	xxxxx	xxxxx	xxxx	11.8	xxxxx	xxxx	19.2
LOS by Move:	A	*	*	B	*	*	*	*	B	*	*	C
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	60	xxxx	xxxxx	63	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	22.5	xxxx	xxxxx	5.5	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1289	xxxx	xxxxx	253.4	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			910.4			161.5		
ApproachLOS:	*			*			F			F		

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.440
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.3
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module: >> Count Date: 8 Jan 2002 << PM												
Base Vol:	189	980	26	62	500	103	70	8	200	11	7	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	189	980	26	62	500	103	70	8	200	11	7	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	210	1089	29	69	556	114	78	9	222	12	8	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1089	29	69	556	114	78	9	222	12	8	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	210	1089	29	69	556	114	78	9	222	12	8	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.93	0.93	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.95	0.05	1.00	1.66	0.34	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3503	93	1805	2916	601	1805	1900	1615	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.12	0.31	0.31	0.04	0.19	0.19	0.04	0.00	0.14	0.01	0.00	0.03
Crit Moves:		****		****			****				****	
Green/Cycle:	0.23	0.55	0.55	0.07	0.39	0.39	0.08	0.21	0.21	0.06	0.20	0.20
Volume/Cap:	0.51	0.56	0.56	0.56	0.48	0.48	0.56	0.02	0.64	0.11	0.02	0.15
Delay/Veh:	41.4	17.6	17.6	59.9	27.5	27.5	58.5	37.2	47.0	53.5	38.6	39.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.4	17.6	17.6	59.9	27.5	27.5	58.5	37.2	47.0	53.5	38.6	39.8
HCM2kAvg:	7	13	13	3	9	9	4	0	8	1	0	1

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.683
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 32.8
Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	20	7	7	20	0	0	0	0	20	0	20
Lanes:	0 0	2 0	1	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	742	276	230	333	0	0	0	0	214	0	380
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	742	276	230	333	0	0	0	0	214	0	380
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	824	307	256	370	0	0	0	0	238	0	422
Reduct Vol.:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	824	307	256	370	0	0	0	0	238	0	422
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	824	307	256	370	0	0	0	0	238	0	422
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	2.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3610	1615	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.19	0.14	0.19	0.00	0.00	0.00	0.00	0.13	0.00	0.26
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.33	0.33	0.21	0.54	0.00	0.00	0.00	0.00	0.38	0.00	0.38
Volume/Cap:	0.00	0.68	0.57	0.68	0.36	0.00	0.00	0.00	0.00	0.34	0.00	0.68
Delay/Veh:	0.0	36.1	34.2	49.0	15.8	0.0	0.0	0.0	0.0	26.6	0.0	34.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	36.1	34.2	49.0	15.8	0.0	0.0	0.0	0.0	26.6	0.0	34.1
HCM2kAvg:	0	14	10	10	8	0	0	0	0	6	0	14

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.745
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.6
Optimal Cycle: 69 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Ovl			
Min. Green:	7	24		7	7	24		7	0	24		7	7	24		7
Lanes:	1	0	1	1 0	1	0	1	1 0	1	0	1	0 1	1	0	0	1 0
Volume Module: >> Count Date: 27 Nov 2001 << PM Peak																
Base Vol:	3	825	494		14	734		22	19	26	634		155	49		33
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	3	825	494		14	734		22	19	26	634		155	49		33
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.50		1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90		0.90
PHF Volume:	3	917	549		16	816		24	21	29	352		172	54		37
Reduct Vol:	0	0	0		0	0		0	0	0	0		0	0		0
Reduced Vol:	3	917	549		16	816		24	21	29	352		172	54		37
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
Final Vol..	3	917	549		16	816		24	21	29	352		172	54		37
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900	1900		1900	1900		1900
Adjustment:	0.93	0.88	0.88		0.93	0.93		0.93	0.67	0.98	0.83		0.73	0.92		0.92
Lanes:	1.00	1.25	0.75		1.00	1.94		0.06	1.00	1.00	1.00		1.00	0.60		0.40
Final Sat..	1769	2089	1251		1769	3421		103	1274	1862	1583		1385	1046		704
Capacity Analysis Module:																
Vol/Sat:	0.00	0.44	0.44		0.01	0.24		0.24	0.02	0.02	0.22		0.12	0.05		0.05
Crit Moves:		****			****						****					
Green/Cycle:	0.12	0.56	0.56		0.06	0.50		0.50	0.28	0.28	0.28		0.28	0.28		0.34
Volume/Cap:	0.02	0.79	0.79		0.15	0.48		0.48	0.06	0.05	0.79		0.44	0.18		0.15
Delay/Veh:	46.4	23.1	23.1		54.4	20.3		20.3	31.4	31.4	48.6		36.0	32.7		27.6
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
AdjDel/Veh:	46.4	23.1	23.1		54.4	20.3		20.3	31.4	31.4	48.6		36.0	32.7		27.6
HCM2kAvg:	0	22	22		1	10		10	1	1	14		7	3		2

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.830
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 20.8
Optimal Cycle: 90 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	0	0	0	0 0	1	1	0	0 1	0	0	2	0 1	2	0	2	0 0
Volume Module: >> Count Date: 27 Nov 2001 << PM																
Base Vol:	0	0	0		323	0		146	0	939	830		191	1078		0
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	0	0	0		323	0		146	0	939	830		191	1078		0
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90		0.90
PHF Volume:	0	0	0		359	0		162	0	1043	922		212	1198		0
Reduct Vol:	0	0	0		0	0		0	0	0	0		0	0		0
Reduced Vol:	0	0	0		359	0		162	0	1043	922		212	1198		0
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
Final Vol..	0	0	0		359	0		162	0	1043	922		212	1198		0
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900	1900		1900	1900		1900
Adjustment:	1.00	1.00	1.00		0.93	1.00		0.83	1.00	0.93	0.83		0.90	0.93		1.00
Lanes:	0.00	0.00	0.00		2.00	0.00		1.00	0.00	2.00	1.00		2.00	2.00		0.00
Final Sat..	0	0	0		3545	0		1583	0	3538	1583		3432	3538		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.00		0.10	0.00		0.10	0.00	0.29	0.58		0.06	0.34		0.00
Crit Moves:								****			****		****			
Green/Cycle:	0.00	0.00	0.00		0.12	0.00		0.12	0.00	0.70	0.70		0.07	0.78		0.00
Volume/Cap:	0.00	0.00	0.00		0.82	0.00		0.83	0.00	0.42	0.83		0.83	0.44		0.00
Delay/Veh:	0.0	0.0	0.0		62.9	0.0		76.1	0.0	7.7	18.1		74.6	4.6		0.0
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
AdjDel/Veh:	0.0	0.0	0.0		62.9	0.0		76.1	0.0	7.7	18.1		74.6	4.6		0.0
HCM2kAvg:	0	0	0		9	0		8	0	8	26		6	8		0

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave [NS/ EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.591
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.3
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 1	0 0	1	0 0	0 0	0	2 0	2 0	0	0 0	2 0	1
Volume Module: >> Count Date: 27 Nov 2001 << PM												
Base Vol:	548	2	218	0	0	0	229	1033	0	0	721	377
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	548	2	218	0	0	0	229	1033	0	0	721	377
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	609	2	242	0	0	0	254	1148	0	0	801	419
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	609	2	242	0	0	0	254	1148	0	0	801	419
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	609	2	242	0	0	0	254	1148	0	0	801	419
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.83	0.83	1.00	1.00	1.00	0.90	0.93	1.00	1.00	0.93	0.83
Lanes:	1.99	0.01	1.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat..	3154	12	1583	0	0	0	3432	3538	0	0	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.15	0.00	0.00	0.00	0.07	0.32	0.00	0.00	0.23	0.26
Crit Moves:		****					****					****
Green/Cycle:	0.33	0.33	0.33	0.00	0.00	0.00	0.13	0.57	0.00	0.00	0.45	0.45
Volume/Cap:	0.59	0.59	0.47	0.00	0.00	0.00	0.59	0.57	0.00	0.00	0.51	0.59
Delay/Veh:	34.6	34.6	32.8	0.0	0.0	0.0	51.7	16.5	0.0	0.0	23.9	26.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.6	34.6	32.8	0.0	0.0	0.0	51.7	16.5	0.0	0.0	23.9	26.2
HCM2kAvg:	11	11	7	0	0	0	6	13	0	0	11	12

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe Dr.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.925
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 30.9
Optimal Cycle: 118 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	1 0	2 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	814	320	425	934	0	0	0	0	161	0	179
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	814	320	425	934	0	0	0	0	161	0	179
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	885	348	462	1015	0	0	0	0	175	0	195
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	885	348	462	1015	0	0	0	0	175	0	195
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	885	348	462	1015	0	0	0	0	175	0	195
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	1.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat..	0	1900	1615	1805	3610	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.47	0.22	0.26	0.28	0.00	0.00	0.00	0.00	0.10	0.00	0.12
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.50	0.50	0.28	0.78	0.00	0.00	0.00	0.00	0.13	0.00	0.13
Volume/Cap:	0.00	0.93	0.43	0.93	0.36	0.00	0.00	0.00	0.00	0.74	0.00	0.93
Delay/Veh:	0.0	37.5	16.1	58.4	3.5	0.0	0.0	0.0	0.0	54.1	0.0	84.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	37.5	16.1	58.4	3.5	0.0	0.0	0.0	0.0	54.1	0.0	84.7
HCM2kAvg:	0	30	7	19	5	0	0	0	0	7	0	9

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.923
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 42.2
Optimal Cycle: 122 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	68	261	661	49	137	64	58	216	151	705	504	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	261	661	49	137	64	58	216	151	705	504	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	76	290	734	54	152	71	64	240	168	783	560	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	290	734	54	152	71	64	240	168	783	560	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	76	290	734	54	152	71	64	240	168	783	560	103
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat..	1805	3610	1615	1805	3610	1615	1805	3610	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.45	0.03	0.04	0.04	0.04	0.07	0.10	0.22	0.16	0.06
Crit Moves:			****	****					****	****		
Green/Cycle:	0.26	0.49	0.49	0.03	0.27	0.27	0.07	0.11	0.11	0.24	0.29	0.29
Volume/Cap:	0.16	0.16	0.92	0.92	0.16	0.16	0.54	0.59	0.92	0.92	0.54	0.22
Delay/Veh:	29.1	14.0	39.9	137.9	28.0	28.1	50.0	44.5	89.2	52.5	30.5	27.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.1	14.0	39.9	137.9	28.0	28.1	50.0	44.5	89.2	52.5	30.5	27.3
HCM2kAvg:	2	2	25	4	2	2	3	4	8	17	8	2

Harmony Grove Village
Option B: Baseline

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.782
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.0
Optimal Cycle: 73 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	2	1 0	2 0	1	2 0	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	401	181	865	43	232	43	248	679	197	360	711	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	401	181	865	43	232	43	248	679	197	360	711	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	446	201	961	48	258	48	276	754	219	400	790	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	446	201	961	48	258	48	276	754	219	400	790	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	446	201	961	48	258	48	276	754	219	400	790	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.75	0.95	0.95	0.85	0.92	0.95	0.85	0.92	0.91	0.85
Lanes:	1.00	2.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat..	1805	3610	2842	1805	3610	1615	3502	3610	1615	3502	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.25	0.06	0.34	0.03	0.07	0.03	0.08	0.21	0.14	0.11	0.15	0.01
Crit Moves:			****	****				****		****		
Green/Cycle:	0.36	0.43	0.43	0.03	0.10	0.10	0.14	0.27	0.27	0.15	0.27	0.27
Volume/Cap:	0.68	0.13	0.78	0.78	0.68	0.28	0.56	0.78	0.51	0.78	0.56	0.05
Delay/Veh:	30.0	17.1	27.6	94.7	48.2	42.2	41.5	38.1	32.0	48.8	31.7	26.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.0	17.1	27.6	94.7	48.2	42.2	41.5	38.1	32.0	48.8	31.7	26.9
HCM2kAvg:	13	2	14	3	5	2	5	13	6	8	7	1

Harmony Grove Village
Option B: Baseline + P

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	32.2	0.606	C	32.2	0.606	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	E	65.6	1.085	E	65.6	1.085	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	D	50.3	0.926	D	50.3	0.926	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	668.8	0.000	F	668.8	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	8.8	0.301	A	8.8	0.301	+ 0.000 V/C
# 6 Country Club Drive/Entrance #	B	10.4	0.000	B	10.4	0.000	+ 0.000 D/V
# 7 Country CLub/ Street A	B	11.9	0.000	B	11.9	0.000	+ 0.000 D/V
# 8 Harmony Grove/Street A	E	37.4	0.000	E	37.4	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	B	13.3	0.000	B	13.3	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	B	14.2	0.000	B	14.2	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	C	17.9	0.000	C	17.9	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	B	14.3	0.000	B	14.3	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	A	1.7	0.502	A	1.7	0.502	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	B	11.0	0.000	B	11.0	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	35.4	0.630	D	35.4	0.630	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	B	11.1	0.436	B	11.1	0.436	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	B	12.9	0.000	B	12.9	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	B	12.2	0.000	B	12.2	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	28.4	0.626	C	28.4	0.626	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	C	23.6	0.000	C	23.6	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	B	13.7	0.000	B	13.7	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	C	15.1	0.000	C	15.1	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	B	11.3	0.000	B	11.3	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	C	30.9	0.694	C	30.9	0.694	+ 0.000 D/V

Harmony Grove Village
Option B: Baseline + P

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	D	49.6	0.735	D	49.6	0.735	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	36.4	0.650	D	36.4	0.650	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	D	35.2	0.690	D	35.2	0.690	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	B	12.2	0.451	B	12.2	0.451	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	361.7	0.000	F	361.7	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	D	39.2	0.738	D	39.2	0.738	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	31.9	0.826	C	31.9	0.826	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	D	44.7	0.989	D	44.7	0.989	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	B	19.7	0.680	B	19.7	0.680	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	25.3	0.567	C	25.3	0.567	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	35.0	0.928	C	35.0	0.928	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	C	34.3	0.841	C	34.3	0.841	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	24.9	0.514	C	24.9	0.514	+ 0.000 D/V

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.606
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 32.2
Optimal Cycle: 64 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	0	0		0	7	24		7
Lanes:	2 0	2 0		0	0 0	2 0		1	0 0	0 0		0	1 0	1! 0		1
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	458	273		0	0	377		135	0	0		0	455	8		147
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	458	273		0	0	377		135	0	0		0	455	8		147
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	509	303		0	0	419		150	0	0		0	506	9		163
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	509	303		0	0	419		150	0	0		0	506	9		163
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	509	303		0	0	419		150	0	0		0	506	9		163
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.71	0.73		1.00	1.00	0.93		0.83	1.00	1.00		1.00	0.71	0.71		0.71
Lanes:	2.00	2.00		0.00	0.00	2.00		1.00	0.00	0.00		0.00	1.74	0.02		1.24
Final Sat..	2693	2776		0	0	3538		1583	0	0		0	2357	35		1681
Capacity Analysis Module:																
Vol/Sat:	0.19	0.11		0.00	0.00	0.12		0.09	0.00	0.00		0.00	0.21	0.25		0.10
Crit Moves:	****					****								****		
Green/Cycle:	0.31	0.51		0.00	0.00	0.20		0.20	0.00	0.00		0.00	0.41	0.41		0.41
Volume/Cap:	0.61	0.21		0.00	0.00	0.59		0.47	0.00	0.00		0.00	0.52	0.61		0.23
Delay/Veh:	36.5	16.2		0.0	0.0	44.9		43.5	0.0	0.0		0.0	26.5	28.5		22.8
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	36.5	16.2		0.0	0.0	44.9		43.5	0.0	0.0		0.0	26.5	28.5		22.8
HCM2kAvg:	9	3		0	0	8		5	0	0		0	9	11		3

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp [NS / EW]

Cycle (sec): 100 Critical Vol./Cap. (X): 1.085
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 65.6
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24		7	7	24		0	7	24		7	0	0		0
Lanes:	0 0	2 0		1	2 0	2 0		0	0 1	0 1		0	0 0	0 0		0
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	0	558		356	130	829		0	105	1		683	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	558		356	130	829		0	105	1		683	0	0		0
User Adj:	1.00	1.00		0.50	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	620		198	144	921		0	117	1		759	0	0		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	620		198	144	921		0	117	1		759	0	0		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	620		198	144	921		0	117	1		759	0	0		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	0.73		0.65	0.90	0.93		1.00	0.55	0.55		0.55	1.00	1.00		1.00
Lanes:	0.00	2.00		1.00	2.00	2.00		0.00	0.99	0.01		1.00	0.00	0.00		0.00
Final Sat..	0	2776		1242	3432	3538		0	1041	10		1051	0	0		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.22		0.16	0.04	0.26		0.00	0.11	0.11		0.72	0.00	0.00		0.00
Crit Moves:		****			****							****				
Green/Cycle:	0.00	0.24		0.24	0.07	0.31		0.00	0.60	0.60		0.60	0.00	0.00		0.00
Volume/Cap:	0.00	0.93		0.66	0.60	0.84		0.00	0.19	0.19		1.20	0.00	0.00		0.00
Delay/Veh:	0.0	56.9		39.9	49.4	38.1		0.0	9.0	9.0		124.6	0.0	0.0		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	56.9		39.9	49.4	38.1		0.0	9.0	9.0		124.6	0.0	0.0		0.0
HCM2kAvg:	0	13		7	3	16		0	2	2		47	0	0		0

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.926
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 50.3
Optimal Cycle: 137 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	1	0	2	0	1	2	0	1	1	0	2	0	2	0	1	2	0	2	0	1
Volume Module: >> Count Date: 13 Dec 2001 << AM																				
Base Vol:	155	528		40		438	948		142		200	363		336		90	316		185	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	155	528		40		438	948		142		200	363		336		90	316		185	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	172	587		44		487	1053		158		222	403		373		100	351		206	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	172	587		44		487	1053		158		222	403		373		100	351		206	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	172	587		44		487	1053		158		222	403		373		100	351		206	
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	0.73	0.73		0.65		0.71	0.72		0.72		0.90	0.93		0.83		0.90	0.93		0.83	
Lanes:	1.00	2.00		1.00		2.00	1.74		0.26		2.00	2.00		1.00		2.00	2.00		1.00	
Final Sat..	1388	2776		1242		2693	2369		355		3432	3538		1583		3432	3538		1583	
Capacity Analysis Module:																				
Vol/Sat:	0.12	0.21		0.04		0.18	0.44		0.44		0.06	0.11		0.24		0.03	0.10		0.13	
Crit Moves:	****						****							****		****				
Green/Cycle:	0.13	0.32		0.32		0.27	0.47		0.47		0.07	0.25		0.25		0.06	0.23		0.23	
Volume/Cap:	0.96	0.66		0.11		0.66	0.96		0.96		0.87	0.46		0.96		0.50	0.43		0.56	
Delay/Veh:	106.0	36.9		28.8		40.8	46.8		46.8		80.4	38.8		78.7		56.8	39.8		42.9	
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	106.0	36.9		28.8		40.8	46.8		46.8		80.4	38.8		78.7		56.8	39.8		42.9	
HCM2kAvg:	10	10		1		9	27		27		7	7		18		3	6		7	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club [NS / EW]

Average Delay (sec/veh): 88.4 Worst Case Level Of Service: F[668.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	2	0	1	1	0	1	0	1	0	1	0	0	1	0	0	1!	0	0
Volume Module: >> Count Date: 11 Dec 2001 << AM																				
Base Vol:	46	442		0		35	1067		212		233	0		40		0	0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	46	442		0		35	1067		212		233	0		40		0	0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	51	491		0		39	1186		236		259	0		44		0	0		0	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Final Vol..	51	491		0		39	1186		236		259	0		44		0	0		0	
Critical Gap Module:																				
Critical Gp:	4.1	xxxx		xxxxx		4.1	xxxx		xxxxx		6.4	xxxx		6.2		xxxxx	xxxx		xxxxx	
FollowUpTim:	2.2	xxxx		xxxxx		2.2	xxxx		xxxxx		3.5	xxxx		3.3		xxxxx	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	1421	xxxx		xxxxx		491	xxxx		xxxxx		1611	xxxx		1186		xxxx	xxxx		xxxxx	
Potent Cap..	479	xxxx		xxxxx		1072	xxxx		xxxxx		115	xxxx		230		xxxx	xxxx		xxxxx	
Move Cap..	479	xxxx		xxxxx		1072	xxxx		xxxxx		103	xxxx		230		xxxx	xxxx		xxxxx	
Volume/Cap:	0.11	xxxx		xxxx		0.04	xxxx		xxxx		2.52	xxxx		0.19		xxxx	xxxx		xxxx	
Level Of Service Module:																				
Queue:	0.4	xxxx		xxxxx		0.1	xxxx		xxxxx		xxxxx	xxxx		0.7		xxxxx	xxxx		xxxxx	
Stopped Del:	13.4	xxxx		xxxxx		8.5	xxxx		xxxxx		xxxxx	xxxx		24.4		xxxxx	xxxx		xxxxx	
LOS by Move:	B	*		*		A	*		*		*	*		C		*	*		*	
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		103	xxxx		xxxxx		xxxx	0		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		23.6	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		779.5	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		F	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					668.8					xxxxxx				
ApproachLOS:	*					*					F					*				

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.301
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.8
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Stop Sign						Stop Sign					
Rights:	Ignore						Include						Include						Include					
Min. Green:	0		0		0		0		0		0		0		0		0		0		0		0	
Lanes:	0	0	1	0	1		0	1	0	0	0		0	0	0	0	0		0	0	1!	0	0	
Volume Module: AM Peak																								
Base Vol:	0	135		16		54	167		0		0		0		0		0		10		0		49	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0	135		16		54	167		0		0		0		0		0		10		0		49	
User Adj:	1.00	1.00		0.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.00		0.90	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0	150		0		60	186		0		0		0		0		0		11		0		54	
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0		0		0	
Reduced Vol:	0	150		0		60	186		0		0		0		0		0		11		0		54	
PCE Adj:	1.00	1.00		0.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00	1.00		0.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol.:	0	150		0		60	186		0		0		0		0		0		11		0		54	
Saturation Flow Module:																								
Adjustment:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Lanes:	0.00	1.00		1.00		0.24	0.76		0.00		0.00		0.00		0.00		0.00		0.17		0.00		0.83	
Final Sat.:	0	737		0		199	617		0		0		0		0		0		132		0		647	
Capacity Analysis Module:																								
Vol/Sat:	xxxx	0.20		xxxx		0.30	0.30		xxxx		xxxx		xxxx		xxxx		xxxx		0.08		xxxx		0.08	
Crit Moves:		****					****												****					
Delay/Veh:	0.0	8.7		0.0		9.2	9.2		0.0		0.0		0.0		0.0		0.0		7.7		0.0		7.7	
Delay Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	0.0	8.7		0.0		9.2	9.2		0.0		0.0		0.0		0.0		0.0		7.7		0.0		7.7	
LOS by Move:	*	A		*		A	A		*		*		*		*		*		A		*		A	
ApproachDel:		8.7					9.2				xxxxxx										7.7			
Delay Adj:		1.00					1.00				xxxxx										1.00			
ApprAdjDel:		8.7					9.2				xxxxxx										7.7			
LOS by Appr:		A					A				*										A			

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club Drive/Entrance # 3

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	0		0	1	0	0	0		0	0	0	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	0	313		0		24	278		0		0		0		0		0		0		0		40	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0	313		0		24	278		0		0		0		0		0		0		0		40	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.92	0.92		0.92		0.92	0.92		0.92		0.92		0.92		0.92		0.92		0.92		0.92		0.92	
PHF Volume:	0	340		0		26	302		0		0		0		0		0		0		0		43	
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0		0		0	
Final Vol.:	0	340		0		26	302		0		0		0		0		0		0		0		43	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx				6.2	
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx				3.3	
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		340	xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx				340	
Potent Cap.:	xxxx	xxxx		xxxxx		1230	xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx				707	
Move Cap.:	xxxx	xxxx		xxxxx		1230	xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx				707	
Volume/Cap:	xxxx	xxxx		xxxx		0.02	xxxx		xxxx		xxxx		xxxx		xxxx		xxxx		xxxx				0.06	
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		0.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx				0.2	
Stopped Del:	xxxxx	xxxx		xxxxx		8.0	xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx				10.4	
LOS by Move:	*	*		*		A	*		*		*		*		*		*		*				B	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT				
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx					
SharedQueue:	xxxxx	xxxx		xxxxx		0.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx					
Shrd StpDel:	xxxxx	xxxx		xxxxx		8.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx					
Shared LOS:	*	*		*		A	*		*		*	*		*		*	*		*					
ApproachDel:		xxxxxx					xxxxxx					xxxxxx								10.4				
ApproachLOS:		*					*					*								B				

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country CLub/ Street A

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: B[11.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1 0	1	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	151	202	0	177	0	0	0	0	106	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	151	202	0	177	0	0	0	0	106	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	168	224	0	197	0	0	0	0	118	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	168	224	0	197	0	0	0	0	118	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	364	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	639	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	639	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.18	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.9		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Street A

Average Delay (sec/veh): 17.3 Worst Case Level Of Service: E[37.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	0	90	133	30	128	56	90	111	0	276	70	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	90	133	30	128	56	90	111	0	276	70	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	100	148	33	142	62	100	123	0	307	78	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	100	148	33	142	62	100	123	0	307	78	44
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	xxxxx	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	248	xxxx	xxxxx	444	457	xxxxx	402	371	100
Potent Cap.:	xxxx	xxxx	xxxxx	1330	xxxx	xxxxx	528	503	xxxxx	563	562	961
Move Cap.:	xxxx	xxxx	xxxxx	1330	xxxx	xxxxx	440	491	xxxxx	445	548	961
Volume/Cap:	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	0.23	0.25	xxxx	0.69	0.14	0.05
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.9	1.0	xxxxx	xxxxx	xxxx	0.1
Stopped Del:	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	15.6	14.8	xxxxx	xxxxx	xxxx	8.9
LOS by Move:	*	*	*	A	*	*	C	B	*	*	*	A
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	463	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	40.7	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	E	*	*
ApproachDel:	xxxxxx			xxxxxx			15.1			37.4		
ApproachLOS:	*			*			C			E		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 4.9 Worst Case Level Of Service: B[13.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 0	1	0	1 0 0	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0	97	0	0	143	135	216	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	97	0	0	143	135	216	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	105	0	0	155	147	235	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	105	0	0	155	147	235	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	334	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	665	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	665	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.35	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.3			xxxxxx		
ApproachLOS:	*			*			B			*		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 COuntry Club/Harmony Grove

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: B[14.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	0 0 1!	0	0	0 0 1!	0	0
Volume Module:												
Base Vol:	5	11	21	2	7	127	48	202	3	9	383	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	11	21	2	7	127	48	202	3	9	383	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	12	23	2	8	141	53	224	3	10	426	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	6	12	23	2	8	141	53	224	3	10	426	2
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	854	781	226	797	781	427	428	xxxx	xxxxx	228	xxxx	xxxxx
Potent Cap..	281	329	818	307	329	632	1142	xxxx	xxxxx	1352	xxxx	xxxxx
Move Cap..	205	311	818	277	310	632	1142	xxxx	xxxxx	1352	xxxx	xxxxx
Volume/Cap:	0.03	0.04	0.03	0.01	0.03	0.22	0.05	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	433	xxxxx	xxxx	590	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	14.2	xxxxx	xxxxx	13.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	*	*	*	*	*	*
ApproachDel:	14.2			13.2			xxxxxx			xxxxxx		
ApproachLOS:	B			B			*			*		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[17.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0	0	0				85	0		22			14	168		0			0	462		53		
Growth Adj:	1.00	1.00	1.00				1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Initial Bse:	0	0	0				85	0		22			14	168		0			0	462		53		
User Adj:	1.00	1.00	1.00				1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	0.90	0.90	0.90				0.90	0.90		0.90			0.90	0.90		0.90			0.90	0.90		0.90		
PHF Volume:	0	0	0				94	0		24			16	187		0			0	513		59		
Reduct Vol:	0	0	0				0	0		0			0	0		0			0	0		0		
Final Vol.:	0	0	0				94	0		24			16	187		0			0	513		59		
Critical Gap Module:																								
Critical Gp:	xxxx	xxxx	xxxxx				6.4	xxxx		6.2			4.1	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
FollowUpTim:	xxxx	xxxx	xxxxx				3.5	xxxx		3.3			2.2	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				761	xxxx		543			572	xxxx		xxxxx			xxxx	xxxx		xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx				376	xxxx		544			1011	xxxx		xxxxx			xxxx	xxxx		xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx				372	xxxx		544			1011	xxxx		xxxxx			xxxx	xxxx		xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx				0.25	xxxx		0.04			0.02	xxxx		xxxx			xxxx	xxxx		xxxx		
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							8.6	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
LOS by Move:	*	*	*	*	*	*							A	*		*			*	*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	398	xxxxx							xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.2	xxxxx							0.0	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	17.9	xxxxx							8.6	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*	*	*	C	*							A	*		*			*	*		*		
ApproachDel:	xxxxxx				17.9								xxxxxx						xxxxxx					
ApproachLOS:	*				C								*						*					

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[14.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0	0	0				56	0		10			6	111		0			0	443		37		
Growth Adj:	1.00	1.00	1.00				1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Initial Bse:	0	0	0				56	0		10			6	111		0			0	443		37		
User Adj:	1.00	1.00	1.00				1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	0.92	0.92	0.92				0.92	0.92		0.92			0.92	0.92		0.92			0.92	0.92		0.92		
PHF Volume:	0	0	0				61	0		11			7	121		0			0	482		40		
Reduct Vol:	0	0	0				0	0		0			0	0		0			0	0		0		
Final Vol.:	0	0	0				61	0		11			7	121		0			0	482		40		
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx		6.2			4.1	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx		3.3			2.2	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				635	xxxx		502			522	xxxx		xxxxx			xxxx	xxxx		xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx				446	xxxx		574			1055	xxxx		xxxxx			xxxx	xxxx		xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx				444	xxxx		574			1055	xxxx		xxxxx			xxxx	xxxx		xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx				0.14	xxxx		0.02			0.01	xxxx		xxxx			xxxx	xxxx		xxxx		
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							8.4	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
LOS by Move:	*	*	*	*	*	*							A	*		*			*	*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	459	xxxxx							xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx							0.0	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	14.3	xxxxx							8.4	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*	*	*	B	*							A	*		*			*	*		*		
ApproachDel:	xxxxxx				14.3								xxxxxx						xxxxxx					
ApproachLOS:	*				B								*						*					

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.502
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 1.7
Optimal Cycle: 34 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 0	1	0 0	0 0	0	0 0	1 0	1	2 0	1 0	0
Volume Module:												
Base Vol:	9	0	5	0	0	0	0	775	6	3	688	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	0	5	0	0	0	0	775	6	3	688	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	10	0	6	0	0	0	0	861	7	3	764	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	0	6	0	0	0	0	861	7	3	764	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	10	0	6	0	0	0	0	861	7	3	764	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.11	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	2.00	1.00	0.00
Final Sat..	3502	0	1615	0	0	0	0	1900	1615	420	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.01	0.40	0.00
Crit Moves:			****					****				
Green/Cycle:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.90	0.91	0.90	0.90	0.00
Volume/Cap:	0.42	0.00	0.50	0.00	0.00	0.00	0.00	0.50	0.00	0.01	0.45	0.00
Delay/Veh:	60.8	0.0	81.4	0.0	0.0	0.0	0.0	1.1	0.4	0.5	1.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.8	0.0	81.4	0.0	0.0	0.0	0.0	1.1	0.4	0.5	1.0	0.0
HCM2kAvg:	1	0	1	0	0	0	0	5	0	0	4	0

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa (NS / EW)

Average Delay (sec/veh): 8.0 Worst Case Level Of Service: B[11.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1 0	0 0	1		0 0	0 0	0		0 0	0 1	0		0 1	0 0	0	
Volume Module: >> Count Date: 28 Nov 2001 << AM Peak																
Base Vol:	15	0	231		0	0	0		0	68	12		406	38	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	15	0	231		0	0	0		0	68	12		406	38	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	17	0	257		0	0	0		0	76	13		451	42	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	17	0	257		0	0	0		0	76	13		451	42	0	
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx			
Capacity Module:																
Cnflict Vol:	1027	xxxx	82	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		89	xxxx	xxxxx			
Potent Cap..	260	xxxx	977	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1507	xxxx	xxxxx			
Move Cap..	179	xxxx	977	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1507	xxxx	xxxxx			
Volume/Cap:	0.09	xxxx	0.26	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.30	xxxx	xxxx			
Level Of Service Module:																
Queue:	0.3	xxxx	1.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		1.3	xxxx	xxxxx			
Stopped Del:	27.2	xxxx	10.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		8.4	xxxx	xxxxx			
LOS by Move:	D	*	A	*	*	*	*	*	*		A	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		1.3	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		8.4	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	-		A	*	*			
ApproachDel:	11.0			xxxxxx			xxxxxx				xxxxxx					
ApproachLOS:	B			*			*				*					

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.630
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.4
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0
Volume Module: >> Count Date: 11 Dec 2001 << AM												
Base Vol:	156	101	64	71	207	50	41	538	196	168	482	82
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	101	64	71	207	50	41	538	196	168	482	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	173	112	71	79	230	56	46	598	218	187	536	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	112	71	79	230	56	46	598	218	187	536	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	173	112	71	79	230	56	46	598	218	187	536	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.93	0.98	0.83	0.93	0.89	0.89	0.93	0.93	0.83
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.47	0.53	1.00	2.00	1.00
Final Sat..	1769	1862	1583	1769	1862	1583	1769	2489	907	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.10	0.06	0.04	0.04	0.12	0.04	0.03	0.24	0.24	0.11	0.15	0.06
Crit Moves:	****				****			****		****		
Green/Cycle:	0.15	0.27	0.27	0.08	0.20	0.20	0.12	0.38	0.38	0.17	0.42	0.42
Volume/Cap:	0.63	0.22	0.16	0.56	0.62	0.18	0.21	0.63	0.63	0.63	0.36	0.14
Delay/Veh:	52.3	33.8	33.2	58.0	46.9	40.1	47.8	31.5	31.5	51.1	23.7	21.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.3	33.8	33.2	58.0	46.9	40.1	47.8	31.5	31.5	51.1	23.7	21.3
HCM2kAvg:	7	3	2	4	8	2	2	13	13	8	7	2

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.436
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 11.1
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1	0	1	0	1	1	0	1	0	1	0	1
Volume Module: >> Count Date: 28 Nov 2001 << AM												
Base Vol:	2	7	19	224	21	18	7	3	2	50	11	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	7	19	224	21	18	7	3	2	50	11	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	2	8	21	249	23	20	8	3	2	56	12	278
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	8	21	249	23	20	8	3	2	56	12	278
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	2	8	21	249	23	20	8	3	2	56	12	278
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat..	502	540	603	571	615	699	498	534	596	568	615	706
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.04	0.44	0.04	0.03	0.02	0.01	0.00	0.10	0.02	0.39
Crit Moves:			****	****			****					****
Delay/Veh:	9.4	9.0	8.4	13.1	8.5	7.7	9.5	9.0	8.3	9.4	8.4	10.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.4	9.0	8.4	13.1	8.5	7.7	9.5	9.0	8.3	9.4	8.4	10.6
LOS by Move:	A	A	A	B	A	A	A	A	A	A	A	B
ApproachDel:	8.6			12.4			9.2			10.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.6			12.4			9.2			10.3		
LOS by Appr:	A			B			A			B		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. (NS / EW)

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: B(12.9)

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module: >> Count Date: 28 Nov 2001 << AM																		
Base Vol:	104	0	129		0	0	0		0	81	122		99	219	0			
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00			
Initial Bse:	104	0	129		0	0	0		0	81	122		99	219	0			
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90			
PHF Volume:	116	0	143		0	0	0		0	90	136		110	243	0			
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0			
Final Vol..	116	0	143		0	0	0		0	90	136		110	243	0			
Critical Gap Module:																		
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx					
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx					
Capacity Module:																		
Cnflict Vol:	621	xxxx	158	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		226	xxxx	xxxxx					
Potent Cap..	451	xxxx	888	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1343	xxxx	xxxxx					
Move Cap..	421	xxxx	888	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1343	xxxx	xxxxx					
Volume/Cap:	0.27	xxxx	0.16	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.08	xxxx	xxxx					
Level Of Service Module:																		
Queue:	1.1	xxxx	0.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.3	xxxx	xxxxx					
Stopped Del:	16.8	xxxx	9.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.9	xxxx	xxxxx					
LOS by Move:	C	*	A	*	*	*	*	*	*		A	*	*					
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.3	xxxx	xxxxx					
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.9	xxxx	xxxxx					
Shared LOS:	*	*	*	*	*	*	*	*	*		A	*	*					
ApproachDel:	12.9			xxxxxx			xxxxxx			xxxxxx								
ApproachLOS:	B			*			*			*								

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B(12.2)

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	1	0
Volume Module: >> Count Date: 12 Dec 2001 <<																	
Base Vol:	0	0	0		28	0	60		68	271	0		0	263	41		
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		
Initial Bse:	0	0	0		28	0	60		68	271	0		0	263	41		
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		
PHF Volume:	0	0	0		31	0	67		76	301	0		0	292	46		
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0		
Final Vol..	0	0	0		31	0	67		76	301	0		0	292	46		
Critical Gap Module:																	
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Capacity Module:																	
Cnflict Vol:	xxxx	xxxx	xxxxx		767	xxxx	315		338	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Potent Cap..	xxxx	xxxx	xxxxx		373	xxxx	730		1233	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Move Cap..	xxxx	xxxx	xxxxx		355	xxxx	730		1233	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx		0.09	xxxx	0.09		0.06	xxxx	xxxx	xxxx	xxxx	xxxx			
Level Of Service Module:																	
Queue:	xxxxx	xxxx	xxxxx		0.3	xxxx	0.3		0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx		16.1	xxxx	10.4		8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*		C	*	B		A	*	*	*	*	*			
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*		*	*	*		A	*	*	*	*	*			
ApproachDel:	xxxxxx				12.2				xxxxxx			xxxxxx					
ApproachLOS:	*				B				*			*					

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.626
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.4
Optimal Cycle: 52 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0		0		0		7		0		7		7		24		0		0		24		7	
Lanes:	0	1	0	0	1		1	0	1	0	1		1	0	1	1	0		1	0	2	0	1	
Volume Module: >> Count Date: 12 Dec 2001 << AM																								
Base Vol:	6		4		5		356		13		174		100		612		14		28		843		293	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
Initial Bse:	6		4		5		356		13		174		100		612		14		28		843		293	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
PHF Adj:	0.89	0.89		0.89		0.89	0.89		0.89		0.89	0.89	0.89		0.89		0.89	0.89	0.89		0.89		0.89	0.89
PHF Volume:	7		4		6		400		15		196		112		688		16		31		947		329	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	7		4		6		400		15		196		112		688		16		31		947		329	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
Final Vol..	7		4		6		400		15		196		112		688		16		31		947		329	
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900	1900		1900		1900	1900	1900		1900		1900	1900
Adjustment:	0.95	0.95		0.83		0.93	0.93		0.98		0.83	0.93	0.93		0.93		0.93	0.93	0.93		0.93		0.93	0.83
Lanes:	0.60	0.40		1.00		1.00	1.00		1.00		1.00	1.00	1.96		0.04		1.00	2.00	1.00		2.00		1.00	1.00
Final Sat..	1085		723		1583		1769		1862		1583	1769	3448		79		1769	3538	1583					
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01		0.00		0.23	0.01		0.12		0.06	0.20		0.20		0.02	0.27		0.21					
Crit Moves:		****				****					****						****							
Green/Cycle:	0.01	0.01		0.01		0.36	0.36		0.36		0.10	0.49		0.49		0.04	0.43		0.43					
Volume/Cap:	0.63	0.63		0.36		0.63	0.02		0.34		0.63	0.41		0.41		0.41	0.63		0.49					
Delay/Veh:	112.9	113		72.4		33.6	24.7		28.3		58.5	20.0		20.0		59.5	27.7		25.4					
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00					
AdjDel/Veh:	112.9	113		72.4		33.6	24.7		28.3		58.5	20.0		20.0		59.5	27.7		25.4					
HCM2kAvg:	1		1		1		13		0		5	5		8		8	2		14		9			

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[23.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module: >> Count Date: 12 Dec 2001 <<																								
Base Vol:	0		231		36		6		727		0		0		0		0		51		0		5	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
Initial Bse:	0		231		36		6		727		0		0		0		0		51		0		5	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90	0.90		0.90		0.90	0.90	0.90		0.90		0.90	0.90
PHF Volume:	0		257		40		7		808		0		0		0		0		57		0		6	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	0		257		40		7		808		0		0		0		0		57		0		6	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		6.4	xxxx		6.2					
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		3.5	xxxx		3.3					
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		297	xxxx		xxxxx		xxxx	xxxx		xxxxx		1098	xxxx		277					
Potent Cap.:	xxxx	xxxx		xxxxx		1276	xxxx		xxxxx		xxxx	xxxx		xxxxx		238	xxxx		767					
Move Cap..	xxxx	xxxx		xxxxx		1276	xxxx		xxxxx		xxxx	xxxx		xxxxx		237	xxxx		767					
Volume/Cap:	xxxx	xxxx		xxxx		0.01	xxxx		xxxx		xxxx	xxxx		xxxx		0.24	xxxx		0.01					
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.9	xxxx		0.0					
Stopped Del:	xxxxx	xxxx		xxxxx		7.8	xxxx		xxxxx		xxxxx	xxxx		xxxxx		24.9	xxxx		9.7					
LOS by Move:	*		*		*	A		*		*		*		*		C		*		A				
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT		LT	-	LTR	-	RT	LT	-	LTR	-	RT			
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx					
SharedQueue:	xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx					
Shrd StpDel:	xxxxx	xxxx		xxxxx		7.8	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx					
Shared LOS:	*		*		*	A		*		*		*		*		*		*		*				
ApproachDel:	xxxxxx					xxxxxx					xxxxxx						23.6							
ApproachLOS:		*					*					*						C						

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: B[13.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module: >> Count Date: 12 Dec 2001 <<																				
Base Vol:	60	156		0		0	79	244	112		0	30		0		0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00		1.00
Initial Bse:	60	156		0		0	79	244	112		0	30		0		0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90	0.90	0.90		0.90	0.90		0.90		0.90		0.90		0.90
PHF Volume:	67	173		0		0	88	271	124		0	33		0		0		0		0
Reduct Vol:	0	0		0		0	0	0	0		0	0		0		0		0		0
Final Vol..	67	173		0		0	88	271	124		0	33		0		0		0		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx		xxxxx		xxxxx	xxxx	xxxxx	6.4	xxxx		6.2	xxxxx		xxxx	xxxxx				
FollowUpTim:	2.2	xxxx		xxxxx		xxxxx	xxxx	xxxxx	3.5	xxxx		3.3	xxxxx		xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	359	xxxx		xxxxx		xxxx	xxxx	xxxxx	530	xxxx		223	xxxx		xxxx	xxxxx				
Potent Cap..	1211	xxxx		xxxxx		xxxx	xxxx	xxxxx	513	xxxx		821	xxxx		xxxx	xxxxx				
Move Cap..	1211	xxxx		xxxxx		xxxx	xxxx	xxxxx	491	xxxx		821	xxxx		xxxx	xxxxx				
Volume/Cap:	0.06	xxxx		xxxx		xxxx	xxxx	xxxx	0.25	xxxx		0.04	xxxx		xxxx	xxxx				
Level Of Service Module:																				
Queue:	0.2	xxxx		xxxxx		xxxxx	xxxx	xxxxx	1.0	xxxx		0.1	xxxxx		xxxx	xxxxx				
Stopped Del:	8.1	xxxx		xxxxx		xxxxx	xxxx	xxxxx	14.8	xxxx		9.6	xxxxx		xxxx	xxxxx				
LOS by Move:	A	*		*		*	*	*	B	*		A	*		*	*				
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx		xxxxx	xxxx		xxxx	xxxxx				
SharedQueue:	0.2	xxxx		xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx		xxxxx	xxxxx		xxxx	xxxxx				
Shrd StpDel:	8.1	xxxx		xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx		xxxxx	xxxxx		xxxx	xxxxx				
Shared LOS:	A	*		*		*	*	*	*	*		*	*		*	*				
ApproachDel:	xxxxxx					xxxxxx				13.7					xxxxxx					
ApproachLOS:		*					*			B						*				

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 4.5 Worst Case Level Of Service: C[15.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0
Volume Module:																				
Base Vol:	147		0		40	0		0		0	0	153		106		60	235		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	147		0		40	0		0		0	0	153		106		60	235		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	163		0		44	0		0		0	0	170		118		67	261		0	
Reduct Vol:	0		0		0	0		0		0	0	0		0		0	0		0	
Final Vol..	163		0		44	0		0		0	0	170		118		67	261		0	
Critical Gap Module:																				
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx						
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	564	xxxx		170	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		288	xxxx	xxxxx						
Potent Cap..	490	xxxx		879	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1286	xxxx	xxxxx						
Move Cap..	471	xxxx		879	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1286	xxxx	xxxxx						
Volume/Cap:	0.35	xxxx		0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.05	xxxx	xxxx						
Level Of Service Module:																				
Queue:	1.5	xxxx		0.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.2	xxxx	xxxxx						
Stopped Del:	16.7	xxxx		9.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx						
LOS by Move:	C	*		A	*	*	*	*	*	*		A	*	*						
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx				
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx				
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx				
Shared LOS:	*	*		*		*	*	*	*	*		*	*	*		*				
ApproachDel:		15.1				xxxxxx				xxxxxx					xxxxxx					
ApproachLOS:		C					*									*				

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: B[11.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 1	0 0	1	0 1	0 0	0	0 0	1 0	1
Volume Module:												
Base Vol:	0	0	0	50	0	82	61	132	0	0	223	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	82	61	132	0	0	223	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	56	0	91	68	147	0	0	248	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	56	0	91	68	147	0	0	248	33
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	530	xxxx	248	281	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	513	xxxx	796	1293	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	492	xxxx	796	1293	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.11	xxxx	0.11	0.05	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.4	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.1	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	492	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	13.3	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			11.3			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.694
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 30.9
Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	0	0	0	7	24	7
Lanes:	0 1	0 0	1	0 0	0 0	0	2 0	3 0	0	0 0	3 0	1
Volume Module: >> Count Date: 12 Dec 2001 << AM												
Base Vol:	219	1	395	0	0	0	447	1037	0	0	1006	206
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	219	1	395	0	0	0	447	1037	0	0	1006	206
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	243	1	439	0	0	0	497	1152	0	0	1118	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	1	439	0	0	0	497	1152	0	0	1118	229
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	243	1	439	0	0	0	497	1152	0	0	1118	229
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.83	0.83	1.00	1.00	1.00	0.90	0.89	1.00	1.00	0.89	0.83
Lanes:	0.99	0.01	1.00	0.00	0.00	0.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat..	1576	7	1583	0	0	0	3432	5083	0	0	5083	1583
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.28	0.00	0.00	0.00	0.14	0.23	0.00	0.00	0.22	0.14
Crit Moves:			****				****				****	
Green/Cycle:	0.40	0.40	0.40	0.00	0.00	0.00	0.21	0.53	0.00	0.00	0.32	0.32
Volume/Cap:	0.39	0.39	0.69	0.00	0.00	0.00	0.69	0.43	0.00	0.00	0.69	0.46
Delay/Veh:	26.0	26.0	33.3	0.0	0.0	0.0	46.9	17.6	0.0	0.0	37.2	33.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.0	26.0	33.3	0.0	0.0	0.0	46.9	17.6	0.0	0.0	37.2	33.4
HCM2kAvg:	7	7	14	0	0	0	10	9	0	0	13	7

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.735
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 49.6
Optimal Cycle: 64 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			0	0	24			7	7	0			7	0	0			0
Lanes:	1	0	1	0	1	0	1	0	1	0	2	0	3	0	1	2	0	3	1	1
Volume Module: >> Count Date: 12 Dec 2001 << AM																				
Base Vol:	12	18			83	458	102			642	97	909			46	74	911			199
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	12	18			83	458	102			642	97	909			46	74	911			199
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	13	20			92	509	113			713	108	1010			51	82	1012			221
Reduct Vol:	0	0			0	0	0			0	0	0			0	0	0			0
Reduced Vol:	13	20			92	509	113			713	108	1010			51	82	1012			221
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Final Vol..	13	20			92	509	113			713	108	1010			51	82	1012			221
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900			1900
Adjustment:	0.93	0.98			0.83	0.84	0.84			0.84	0.90	0.89			0.83	0.90	0.87			0.87
Lanes:	1.00	1.00			1.00	0.82	0.18			1.00	2.00	3.00			1.00	2.00	4.00			1.00
Final Sat..	1769	1862			1583	1306	291			1596	3432	5083			1583	3432	6595			1649
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.01			0.06	0.39	0.39			0.45	0.03	0.20			0.03	0.02	0.15			0.13
Crit Moves:		****								****		****				****				
Green/Cycle:	0.20	0.20			0.20	0.48	0.48			0.48	0.07	0.22			0.22	0.03	0.17			0.17
Volume/Cap:	0.04	0.05			0.29	0.81	0.81			0.92	0.47	0.92			0.15	0.92	0.88			0.77
Delay/Veh:	38.7	38.9			41.3	29.2	29.2			39.1	55.5	58.8			38.4	128.7	54.9			49.5
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
AdjDel/Veh:	38.7	38.9			41.3	29.2	29.2			39.1	55.5	58.8			38.4	128.7	54.9			49.5
HCM2kAvg:	0	1			3	21	21			29	3	16			2	4	12			10

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.650
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 36.4
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Ovl					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	1	1	0	2	0	1	1	0
Volume Module: >> Count Date: 9 Dec 2000 << AM																				
Base Vol:	203	886			96	157	993			388	269	435			297	177	532			46
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	203	886			96	157	993			388	269	435			297	177	532			46
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	226	984			107	174	1103			431	299	483			330	197	591			51
Reduct Vol.	0	0			0	0	0			0	0	0			0	0	0			0
Reduced Vol:	226	984			107	174	1103			431	299	483			330	197	591			51
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Final Vol..	226	984			107	174	1103			431	299	483			330	197	591			51
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900			1900
Adjustment:	0.90	0.89			0.83	0.90	0.89			0.83	0.90	0.87			0.87	0.90	0.92			0.92
Lanes:	2.00	3.00			1.00	2.00	3.00			1.00	2.00	1.19			0.81	2.00	1.84			0.16
Final Sat..	3432	5083			1583	3432	5083			1583	3432	1974			1348	3432	3217			278
Capacity Analysis Module:																				
Vol/Sat:	0.07	0.19			0.07	0.05	0.22			0.27	0.09	0.24			0.24	0.06	0.18			0.18
Crit Moves:	****						****					****				****				
Green/Cycle:	0.10	0.34			0.34	0.10	0.33			0.48	0.14	0.38			0.38	0.09	0.32			0.32
Volume/Cap:	0.65	0.57			0.20	0.52	0.65			0.57	0.62	0.65			0.65	0.65	0.57			0.57
Delay/Veh:	56.2	33.2			28.5	52.8	34.9			23.8	50.9	32.1			32.1	57.8	34.3			34.3
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
AdjDel/Veh:	56.2	33.2			28.5	52.8	34.9			23.8	50.9	32.1			32.1	57.8	34.3			34.3
HCM2kAvg:	5	10			3	4	12			12	6	13			13	5	10			10

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.690
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.2
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	3	0 1	1	0	2	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module: >> Count Date: 12 Dec 2001 << AM																
Base Vol:	9	711		123	121	1071		288	172	182		12	111	176		290
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	9	711		123	121	1071		288	172	182		12	111	176		290
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	10	790		137	134	1190		320	191	202		13	123	196		322
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	10	790		137	134	1190		320	191	202		13	123	196		322
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	10	790		137	134	1190		320	191	202		13	123	196		322
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.89		0.83	0.93	0.86		0.86	0.93	0.92		0.92	0.93	0.84		0.84
Lanes:	1.00	3.00		1.00	1.00	2.36		0.64	1.00	1.88		0.12	1.00	1.00		1.00
Final Sat.:	1769	5083		1583	1769	3878		1043	1769	3289		217	1769	1604		1604
Capacity Analysis Module:																
Vol/Sat:	0.01	0.16		0.09	0.08	0.31		0.31	0.11	0.06		0.06	0.07	0.12		0.20
Crit Moves:	****					****			****							****
Green/Cycle:	0.06	0.35		0.35	0.13	0.42		0.42	0.15	0.31		0.31	0.11	0.27		0.27
Volume/Cap:	0.10	0.45		0.25	0.58	0.73		0.73	0.73	0.20		0.20	0.64	0.44		0.73
Delay/Veh:	53.9	30.5		28.3	52.5	30.5		30.5	59.0	30.3		30.3	58.2	36.2		43.4
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	53.9	30.5		28.3	52.5	30.5		30.5	59.0	30.3		30.3	58.2	36.2		43.4
HCM2kAvg:	0	8		4	6	17		17	9	2		3	6	6		12

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.451
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 12.2
Optimal Cycle: 32 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	1	0	1	1 0	1	0	2	0 1	1	0	0	1 0	1	0	0	1 0
Volume Module:																
Base Vol:	2	725		14	31	996		42	49	19		5	27	22		87
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	2	725		14	31	996		42	49	19		5	27	22		87
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	2	806		16	34	1107		47	54	21		6	30	24		97
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	2	806		16	34	1107		47	54	21		6	30	24		97
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	2	806		16	34	1107		47	54	21		6	30	24		97
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	0.95		0.95	0.95	0.95		0.85	0.95	0.97		0.97	0.95	0.88		0.88
Lanes:	1.00	1.96		0.04	1.00	2.00		1.00	1.00	0.79		0.21	1.00	0.20		0.80
Final Sat.:	1805	3531		68	1805	3610		1615	1805	1458		384	1805	337		1335
Capacity Analysis Module:																
Vol/Sat:	0.00	0.23		0.23	0.02	0.31		0.03	0.03	0.01		0.01	0.02	0.07		0.07
Crit Moves:	****					****			****					****		
Green/Cycle:	0.00	0.63		0.63	0.05	0.68		0.68	0.07	0.11		0.11	0.12	0.16		0.16
Volume/Cap:	0.45	0.36		0.36	0.36	0.45		0.04	0.45	0.14		0.14	0.14	0.45		0.45
Delay/Veh:	103.9	9.0		9.0	48.1	7.5		5.3	47.6	40.9		40.9	39.5	39.2		39.2
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	103.9	9.0		9.0	48.1	7.5		5.3	47.6	40.9		40.9	39.5	39.2		39.2
HCM2kAvg:	0	6		6	2	8		0	2	1		1	1	4		4

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 45.4 Worst Case Level Of Service: F[361.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	0 1		1 0 1	0 1		0 1	0 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	30	350	25	25	810	183	137	10	45	40	10	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	350	25	25	810	183	137	10	45	40	10	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	33	389	28	28	900	203	152	11	50	44	11	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	33	389	28	28	900	203	152	11	50	44	11	33
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1103	xxxx	xxxxx	417	xxxx	xxxxx	1447	1439	900	1543	1614	389
Potent Cap.:	640	xxxx	xxxxx	1153	xxxx	xxxxx	110	134	340	95	105	664
Move Cap.:	640	xxxx	xxxxx	1153	xxxx	xxxxx	90	124	340	71	97	664
Volume/Cap:	0.05	xxxx	xxxx	0.02	xxxx	xxxx	1.69	0.09	0.15	0.63	0.11	0.05
Level Of Service Module:												
Queue:	0.2	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	0.5	xxxxx	xxxx	0.2
Stopped Del:	10.9	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	17.4	xxxxx	xxxx	10.7
LOS by Move:	B	*	*	A	*	*	*	*	C	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	92	xxxx	xxxxx	75	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.5	xxxx	xxxxx	3.5	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	467.1	xxxx	xxxxx	133.9	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			361.7			87.7		
ApproachLOS:	*			*			F			F		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.738
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 39.2
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0 1	1 0		1 0 1	1 0		1 0 1	0 1		1 0 1	0 1	
Volume Module: >> Count Date: 8 Jan 2002 << AM												
Base Vol:	227	397	10	26	900	49	108	6	304	34	8	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	227	397	10	26	900	49	108	6	304	34	8	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	252	441	11	29	1000	54	120	7	338	38	9	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	441	11	29	1000	54	120	7	338	38	9	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	252	441	11	29	1000	54	120	7	338	38	9	79
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.94	0.94	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.95	0.05	1.00	1.90	0.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3507	88	1805	3396	185	1805	1900	1615	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.14	0.13	0.13	0.02	0.29	0.29	0.07	0.00	0.21	0.02	0.00	0.05
Crit Moves:	****				****				****	****		
Green/Cycle:	0.18	0.44	0.44	0.13	0.39	0.39	0.08	0.27	0.27	0.06	0.25	0.25
Volume/Cap:	0.76	0.29	0.29	0.12	0.76	0.76	0.80	0.01	0.76	0.36	0.02	0.20
Delay/Veh:	56.7	21.6	21.6	46.6	34.7	34.7	80.0	31.8	47.8	56.4	34.0	35.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.7	21.6	21.6	46.6	34.7	34.7	80.0	31.8	47.8	56.4	34.0	35.8
HCM2kAvg:	11	5	5	1	18	18	7	0	13	2	0	2

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.826
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 31.9
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	20		7	7	20		0	0	0		0	20	0		20
Lanes:	0 0	2	0	1	1	0	1	0	0 0	0	0	0	1	0	0	1
Volume Module:																
Base Vol:	0	325		182	458	959		0	0	0		0	257	0		236
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	325		182	458	959		0	0	0		0	257	0		236
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.81	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.72
PHF Volume:	0	361		225	509	1066		0	0	0		0	286	0		328
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	361		225	509	1066		0	0	0		0	286	0		328
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	0	361		225	509	1066		0	0	0		0	286	0		328
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	0.95		0.85	0.95	1.00		1.00	1.00	1.00		0.95	1.00	0.85		0.85
Lanes:	0.00	2.00		1.00	1.00	1.00		0.00	0.00	0.00		1.00	0.00	1.00		1.00
Final Sat.:	0	3610		1615	1805	1900		0	0	0		1805	0	1615		
Capacity Analysis Module:																
Vol/Sat:	0.00	0.10		0.14	0.28	0.56		0.00	0.00	0.00		0.16	0.00	0.20		
Crit Moves:	****					****								****		
Green/Cycle:	0.00	0.25		0.25	0.43	0.68		0.00	0.00	0.00		0.25	0.00	0.25		
Volume/Cap:	0.00	0.40		0.55	0.66	0.83		0.00	0.00	0.00		0.64	0.00	0.83		
Delay/Veh:	0.0	37.6		40.6	29.6	18.6		0.0	0.0	0.0		43.8	0.0	56.1		
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		
AdjDel/Veh:	0.0	37.6		40.6	29.6	18.6		0.0	0.0	0.0		43.8	0.0	56.1		
HCM2kAvg:	0	6		8	16	30		0	0	0		11	0	14		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.989
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 44.7
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Ovl			
Min. Green:	7	24		7	7	24		7	0	24		7	7	24		7
Lanes:	1 0	1	1	0	1	0	1	1	0	1	0	1	1	0	0	1 0
Volume Module: >> Count Date: 27 Nov 2001 << AM																
Base Vol:	43	583		86	408	679		4	25	271		65	27	6		586
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	43	583		86	408	679		4	25	271		65	27	6		586
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	48	651		96	456	759		4	28	303		73	30	7		655
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	48	651		96	456	759		4	28	303		73	30	7		655
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	48	651		96	456	759		4	28	303		73	30	7		655
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.91		0.91	0.93	0.93		0.93	0.11	0.98		0.83	0.45	0.83		0.83
Lanes:	1.00	1.74		0.26	1.00	1.99		0.01	1.00	1.00		1.00	1.00	0.01		0.99
Final Sat.:	1769	3024		446	1769	3514		21	214	1862		1583	851	16		1570
Capacity Analysis Module:																
Vol/Sat:	0.03	0.22		0.22	0.26	0.22		0.22	0.13	0.16		0.05	0.04	0.42		0.42
Crit Moves:		****			****									****		
Green/Cycle:	0.10	0.22		0.22	0.26	0.38		0.38	0.42	0.42		0.42	0.42	0.42		0.68
Volume/Cap:	0.27	0.99		0.99	0.99	0.57		0.57	0.31	0.39		0.11	0.08	0.99		0.61
Delay/Veh:	50.6	76.7		76.7	83.1	30.3		30.3	25.0	24.3		21.1	20.9	66.3		11.4
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	50.6	76.7		76.7	83.1	30.3		30.3	25.0	24.3		21.1	20.9	66.3		11.4
HCM2kAvg:	2	19		19	23	11		11	6	8		2	1	31		14

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.680
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 19.7
Optimal Cycle: 67 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	0 0	0	0	0	1 1	0	0	1	0 0	2	0	1	2 0	2	0	0
Volume Module: >> Count Date: 27 Nov 2001 << AM																
Base Vol:	0	0		0	85	22		17	0	611		704	248	1205		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	85	22		17	0	611		704	248	1205		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	94	24		19	0	679		782	276	1339		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	0		0	94	24		19	0	679		782	276	1339		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	0		0	94	24		19	0	679		782	276	1339		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00		1.00	0.83	0.83		0.83	1.00	0.93		0.83	0.90	0.93		1.00
Lanes:	0.00	0.00		0.00	1.59	0.41		1.00	0.00	2.00		1.00	2.00	2.00		0.00
Final Sat..	0	0		0	2515	651		1583	0	3538		1583	3432	3538		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00		0.00	0.04	0.04		0.01	0.00	0.19		0.49	0.08	0.38		0.00
Crit Moves:						****						****	****			
Green/Cycle:	0.00	0.00		0.00	0.20	0.20		0.20	0.00	0.60		0.60	0.10	0.70		0.00
Volume/Cap:	0.00	0.00		0.00	0.19	0.19		0.06	0.00	0.32		0.82	0.82	0.54		0.00
Delay/Veh:	0.0	0.0		0.0	40.0	40.0		38.9	0.0	11.8		24.5	67.9	8.9		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	0.0		0.0	40.0	40.0		38.9	0.0	11.8		24.5	67.9	8.9		0.0
HCM2kAvg:	0	0		0	2	2		1	0	6		24	7	12		0

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave (NS/ EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.567
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 25.3
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1 1	0	0	1	0 0	0	0	0	2 0	2	0	0	0 0	2	0	1
Volume Module: >> Count Date: 27 Nov 2001 << AM																
Base Vol:	607	9		169	0	0		0	105	642		0	0	829		296
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	607	9		169	0	0		0	105	642		0	0	829		296
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	674	10		188	0	0		0	117	713		0	0	921		329
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol.	674	10		188	0	0		0	117	713		0	0	921		329
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	674	10		188	0	0		0	117	713		0	0	921		329
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.83	0.83		0.83	1.00	1.00		1.00	0.90	0.93		1.00	1.00	0.93		0.83
Lanes:	1.97	0.03		1.00	0.00	0.00		0.00	2.00	2.00		0.00	0.00	2.00		1.00
Final Sat..	3119	46		1583	0	0		0	3432	3538		0	0	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.22	0.22		0.12	0.00	0.00		0.00	0.03	0.20		0.00	0.00	0.26		0.21
Crit Moves:	****								****					****		
Green/Cycle:	0.38	0.38		0.38	0.00	0.00		0.00	0.06	0.52		0.00	0.00	0.46		0.46
Volume/Cap:	0.57	0.57		0.31	0.00	0.00		0.00	0.57	0.39		0.00	0.00	0.57		0.45
Delay/Veh:	30.0	30.0		26.4	0.0	0.0		0.0	58.6	17.5		0.0	0.0	24.2		22.6
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	30.0	30.0		26.4	0.0	0.0		0.0	58.6	17.5		0.0	0.0	24.2		22.6
HCM2kAvg:	12	12		5	0	0		0	3	8		0	0	13		8

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.928
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 35.0
Optimal Cycle: 120 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	1 0	2 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	703	183	180	962	0	0	0	0	555	0	386
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	703	183	180	962	0	0	0	0	555	0	386
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	764	199	196	1046	0	0	0	0	603	0	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	764	199	196	1046	0	0	0	0	603	0	420
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	764	199	196	1046	0	0	0	0	603	0	420
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	1.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat..	0	1900	1615	1805	3610	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.12	0.11	0.29	0.00	0.00	0.00	0.00	0.33	0.00	0.26
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.43	0.43	0.12	0.55	0.00	0.00	0.00	0.00	0.36	0.00	0.36
Volume/Cap:	0.00	0.93	0.28	0.93	0.53	0.00	0.00	0.00	0.00	0.93	0.00	0.72
Delay/Veh:	0.0	43.4	18.5	86.1	14.5	0.0	0.0	0.0	0.0	50.5	0.0	32.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	43.4	18.5	86.1	14.5	0.0	0.0	0.0	0.0	50.5	0.0	32.1
HCM2kAvg:	0	27	4	10	10	0	0	0	0	23	0	12

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.841
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.3
Optimal Cycle: 88 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	13	49	66	45	389	56	103	535	565	756	318	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	49	66	45	389	56	103	535	565	756	318	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	14	53	72	49	423	61	112	582	614	822	346	51
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	53	72	49	423	61	112	582	614	822	346	51
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	14	53	72	49	423	61	112	582	614	822	346	51
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat..	1805	3610	1615	1805	3610	1615	1805	3610	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.04	0.03	0.12	0.04	0.06	0.16	0.38	0.23	0.10	0.03
Crit Moves:	****				****				****	****		
Green/Cycle:	0.01	0.09	0.09	0.06	0.14	0.14	0.29	0.45	0.45	0.28	0.44	0.44
Volume/Cap:	0.84	0.16	0.48	0.48	0.84	0.27	0.22	0.36	0.84	0.84	0.22	0.07
Delay/Veh:	191.1	42.0	45.5	49.3	54.0	39.1	27.3	18.0	32.9	40.6	17.2	16.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	191.1	42.0	45.5	49.3	54.0	39.1	27.3	18.0	32.9	40.6	17.2	16.0
HCM2kAvg:	2	1	3	2	9	2	3	6	19	15	3	1

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.514
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.9
Optimal Cycle: 42 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	2	1 0	2 0	1	2 0	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	196	49	491	2	59	34	19	501	120	330	1043	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	196	49	491	2	59	34	19	501	120	330	1043	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	218	54	546	2	66	38	21	557	133	367	1159	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	218	54	546	2	66	38	21	557	133	367	1159	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	218	54	546	2	66	38	21	557	133	367	1159	54
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.75	0.95	0.95	0.85	0.92	0.95	0.85	0.92	0.91	0.85
Lanes:	1.00	2.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat..	1805	3610	2842	1805	3610	1615	3502	3610	1615	3502	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.12	0.02	0.19	0.00	0.02	0.02	0.01	0.15	0.08	0.10	0.22	0.03
Crit Moves:			****	****				****		****		
Green/Cycle:	0.31	0.37	0.37	0.00	0.06	0.06	0.01	0.30	0.30	0.20	0.49	0.49
Volume/Cap:	0.38	0.04	0.51	0.51	0.30	0.38	0.46	0.51	0.28	0.51	0.46	0.07
Delay/Veh:	27.1	19.9	24.7	128.2	45.7	47.6	55.9	29.4	27.0	36.0	16.8	13.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.1	19.9	24.7	128.2	45.7	47.6	55.9	29.4	27.0	36.0	16.8	13.5
HCM2kAvg:	6	1	7	0	1	2	1	7	3	6	8	1

Harmony Grove Village
Option B: Baseline + P

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	34.5	0.827	C	34.5	0.827	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	F	99.4	1.333	F	99.4	1.333	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	F	91.4	1.131	F	91.4	1.131	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	854.3	0.000	F	854.3	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	9.0	0.314	A	9.0	0.314	+ 0.000 V/C
# 6 Country Club Drive/Entrance #	B	10.2	0.000	B	10.2	0.000	+ 0.000 D/V
# 7 Country CLub/ Street A	C	15.8	0.000	C	15.8	0.000	+ 0.000 D/V
# 8 Harmony Grove/Street A	D	32.1	0.000	D	32.1	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	B	13.6	0.000	B	13.6	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	C	21.6	0.000	C	21.6	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	C	20.4	0.000	C	20.4	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	C	16.0	0.000	C	16.0	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	A	1.8	0.576	A	1.8	0.576	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	B	13.7	0.000	B	13.7	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	C	34.9	0.570	C	34.9	0.570	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	B	11.1	0.431	B	11.1	0.431	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	C	15.9	0.000	C	15.9	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	C	16.8	0.000	C	16.8	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	33.7	0.721	C	33.7	0.721	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	C	15.8	0.000	C	15.8	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	D	31.5	0.000	D	31.5	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	C	16.5	0.000	C	16.5	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	F	78.0	0.000	F	78.0	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	E	55.9	1.117	E	55.9	1.117	+ 0.000 D/V

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Harmony Grove Village
Option B: Baseline + P

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	E	76.2	1.076	E	76.2	1.076	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	40.8	0.756	D	40.8	0.756	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	D	39.4	0.656	D	39.4	0.656	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	A	10.0	0.554	A	10.0	0.554	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	D	39.2	0.758	D	39.2	0.758	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	D	36.5	0.775	D	36.5	0.775	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	C	28.5	0.765	C	28.5	0.765	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	21.7	0.864	C	21.7	0.864	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	27.6	0.620	C	27.6	0.620	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	32.5	0.938	C	32.5	0.938	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	44.9	0.949	D	44.9	0.949	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	D	35.6	0.785	D	35.6	0.785	+ 0.000 D/V

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #1 Nordahl Rd. / SR-78 WB (NS / EW)

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.827
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 34.5
Optimal Cycle: 79 Level Of Service: C

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	0	0		0	7	24		7
Lanes:	2 0	2 0		0	0 0	2 0		1	0 0	0 0		0	1 0	1! 0		1
Volume Module: >> Count Date: 13 Dec 2001 << PM																
Base Vol:	670	832		0	0	672		211	0	0		0	361	6		267
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	670	832		0	0	672		211	0	0		0	361	6		267
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	744	924		0	0	747		234	0	0		0	401	7		297
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	744	924		0	0	747		234	0	0		0	401	7		297
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	744	924		0	0	747		234	0	0		0	401	7		297
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.71	0.73		1.00	1.00	0.93		0.83	1.00	1.00		1.00	0.68	0.68		0.68
Lanes:	2.00	2.00		0.00	0.00	2.00		1.00	0.00	0.00		0.00	1.56	0.02		1.42
Final Sat.:	2693	2776		0	0	3538		1583	0	0		0	2005	24		1818
Capacity Analysis Module:																
Vol/Sat:	0.28	0.33		0.00	0.00	0.21		0.15	0.00	0.00		0.00	0.20	0.28		0.16
Crit Moves:	****					****								****		
Green/Cycle:	0.33	0.59		0.00	0.00	0.26		0.26	0.00	0.00		0.00	0.34	0.34		0.34
Volume/Cap:	0.83	0.56		0.00	0.00	0.83		0.58	0.00	0.00		0.00	0.60	0.83		0.49
Delay/Veh:	43.1	15.6		0.0	0.0	48.5		41.2	0.0	0.0		0.0	34.0	43.4		31.9
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	43.1	15.6		0.0	0.0	48.5		41.2	0.0	0.0		0.0	34.0	43.4		31.9
HCM2kAvg:	16	11		0	0	15		8	0	0		0	9	15		7

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Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp [NS / EW]

Cycle (sec): 100 Critical Vol./Cap. (X): 1.333
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 99.4
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Permitted						Permitted					
Rights:	Include						Include						Include						Include					
Min. Green:	0		24		?		?		24		0		?		24		?		0		0		0	
Lanes:	0	0	2	0	1		2	0	2	0	0		0	1	0	1	0		0	0	0	0	0	
Volume Module: >> Count Date: 13 Dec 2001 << PM																								
Base Vol:	0	1131		736			372		653		0		263		2		445		0		0		0	
Growth Adj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0	1131		736			372		653		0		263		2		445		0		0		0	
User Adj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90			0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0	1257		818			413		726		0		292		2		494		0		0		0	
Reduct Vol:	0	0		0			0		0		0		0		0		0		0		0		0	
Reduced Vol:	0	1257		818			413		726		0		292		2		494		0		0		0	
PCE Adj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol.:	0	1257		818			413		726		0		292		2		494		0		0		0	
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900			1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	1.00	0.73		0.65			0.90		0.93		1.00		0.60		0.60		0.60		1.00		1.00		1.00	
Lanes:	0.00	2.00		1.00			2.00		2.00		0.00		0.99		0.01		1.00		0.00		0.00		0.00	
Final Sat.:	0	2776		1242			3432		3538		0		1131		9		1139		0		0		0	
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.45		0.66			0.12		0.21		0.00		0.26		0.26		0.43		0.00		0.00		0.00	
Crit Moves:				****			****										****							
Green/Cycle:	0.00	0.49		0.49			0.09		0.58		0.00		0.33		0.33		0.33		0.00		0.00		0.00	
Volume/Cap:	0.00	0.92		1.33			1.33		0.35		0.00		0.79		0.79		1.33		0.00		0.00		0.00	
Delay/Veh:	0.0	33.2		186.0			215.7		11.0		0.0		35.1		35.1		194.8		0.0		0.0		0.0	
User DelAdj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	0.0	33.2		186.0			215.7		11.0		0.0		35.1		35.1		194.8		0.0		0.0		0.0	
HCM2kAvg:	0	22		52			16		6		0		11		11		36		0		0		0	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.131
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 91.4
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	?		24		?		?		24		?		?		24		?		?		24		?	
Lanes:	1	0	2	0	1		2	0	1	1	0		2	0	2	0	1		2	0	2	0	1	
Volume Module: >> Count Date: 13 Dec 2001 << PM																								
Base Vol:	262	1062		73			236		523		238		311		643		278		57		533		552	
Growth Adj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	262	1062		73			236		523		238		311		643		278		57		533		552	
User Adj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90			0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	291	1180		81			262		581		264		346		714		309		63		592		613	
Reduct Vol:	0	0		0			0		0		0		0		0		0		0		0		0	
Reduced Vol.:	291	1180		81			262		581		264		346		714		309		63		592		613	
PCE Adj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol.:	291	1180		81			262		581		264		346		714		309		63		592		613	
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900			1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.73	0.73		0.65			0.71		0.70		0.70		0.90		0.93		0.83		0.90		0.93		0.83	
Lanes:	1.00	2.00		1.00			2.00		1.37		0.63		2.00		2.00		1.00		2.00		2.00		1.00	
Final Sat.:	1388	2776		1242			2693		1818		827		3432		3538		1583		3432		3538		1583	
Capacity Analysis Module:																								
Vol/Sat:	0.21	0.43		0.07			0.10		0.32		0.32		0.10		0.20		0.20		0.02		0.17		0.39	
Crit Moves:	****								****				****										****	
Green/Cycle:	0.19	0.38		0.38			0.09		0.28		0.28		0.09		0.34		0.34		0.10		0.34		0.34	
Volume/Cap:	1.13	1.12		0.17			1.12		1.13		1.13		1.13		0.60		0.58		0.19		0.49		1.13	
Delay/Veh:	144.7	102		24.8			148.1		118		118.1		146.2		34.1		34.6		50.1		31.4		119.3	
User DelAdj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	144.7	102		24.8			148.1		118		118.1		146.2		34.1		34.6		50.1		31.4		119.3	
HCM2kAvg:	19	33		2			10		25		25		12		11		10		1		9		35	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club [NS / EW]

Average Delay (sec/veh): 97.0 Worst Case Level Of Service: F[854.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	1	1 0	1	0	1 0	0	1	0 0	1!	0 0
Volume Module: >> Count Date: 11 Dec 2001 << PM												
Base Vol:	65	1111	5	39	658	241	210	1	60	1	0	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	1111	5	39	658	241	210	1	60	1	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	72	1234	6	43	731	268	233	1	67	1	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	72	1234	6	43	731	268	233	1	67	1	0	13
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	xxxx	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	999	xxxx	xxxxx	1240	xxxx	xxxxx	1579	2202	731	2364	xxxx	617
Potent Cap..	693	xxxx	xxxxx	562	xxxx	xxxxx	88	45	422	24	xxxx	490
Move Cap..	693	xxxx	xxxxx	562	xxxx	xxxxx	75	37	422	17	xxxx	490
Volume/Cap:	0.10	xxxx	xxxx	0.08	xxxx	xxxx	3.13	0.03	0.16	0.06	xxxx	0.03
Level Of Service Module:												
Queue:	0.3	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	0.6	xxxxx	xxxx	xxxxx
Stopped Del:	10.8	xxxx	xxxxx	11.9	xxxx	xxxxx	xxxxx	xxxx	15.1	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	B	*	*	*	*	C	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	74	xxxx	xxxxx	xxxx	159	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	23.7	xxxx	xxxxx	xxxxx	0.3	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1093	xxxx	xxxxx	xxxxx	29.9	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			854.3			29.9		
ApproachLOS:	*			*			F			D		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.314
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.0
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	0 1	0	1	0 0	0	0	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	0	163	7	61	167	0	0	0	0	9	0	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	163	7	61	167	0	0	0	0	9	0	53
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.00	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	181	0	68	186	0	0	0	0	10	0	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	181	0	68	186	0	0	0	0	10	0	59
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	181	0	68	186	0	0	0	0	10	0	59
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.27	0.73	0.00	0.00	0.00	0.00	0.15	0.00	0.85
Final Sat..	0	735	0	216	590	0	0	0	0	111	0	652
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.25	xxxx	0.31	0.31	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	0.09
Crit Moves:		****		****						****		
Delay/Veh:	0.0	9.1	0.0	9.4	9.4	0.0	0.0	0.0	0.0	7.8	0.0	7.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	9.1	0.0	9.4	9.4	0.0	0.0	0.0	0.0	7.8	0.0	7.8
LOS by Move:	*	A	*	A	A	*	*	*	*	A	*	A
ApproachDel:		9.1			9.4			xxxxxx			7.8	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		9.1			9.4			xxxxxx			7.8	
LOS by Appr:		A			A			*			A	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club Drive/Entrance # 3

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[10.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 1	0	0 0	0 0	0	0 0	0 0	0	1
Volume Module:												
Base Vol:	0	289	0	52	386	0	0	0	0	0	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	289	0	52	386	0	0	0	0	0	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	314	0	57	420	0	0	0	0	0	0	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	314	0	57	420	0	0	0	0	0	0	33
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	314	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	314
Potent Cap.:	xxxx	xxxx	xxxxx	1258	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	731
Move Cap..	xxxx	xxxx	xxxxx	1258	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	731
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1
Stopped Del:	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.2
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.2		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country CLub/ Street A

Average Delay (sec/veh): 5.5 Worst Case Level Of Service: C[15.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	1	1 0	1	0 0	0 0	0	0 0	1 0	0	1
Volume Module:												
Base Vol:	0	170	149	0	176	0	0	0	0	262	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	170	149	0	176	0	0	0	0	262	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	189	166	0	196	0	0	0	0	291	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	189	166	0	196	0	0	0	0	291	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	384	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	622	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	622	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.47	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.5	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	C	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			15.8		
ApproachLOS:	*			*			*			C		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Street A

Average Delay (sec/veh): 10.9 Worst Case Level Of Service: D[32.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 1	0	1	0 1	0	0 1
Volume Module:												
Base Vol:	0	183	343	15	98	117	66	83	0	151	145	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	183	343	15	98	117	66	83	0	151	145	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	203	381	17	109	130	73	92	0	168	161	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	203	381	17	109	130	73	92	0	168	161	22
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	xxxxx	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	584	xxxx	xxxxx	628	727	xxxxx	457	476	203
Potent Cap.:	xxxx	xxxx	xxxxx	1000	xxxx	xxxxx	398	353	xxxxx	518	491	842
Move Cap..	xxxx	xxxx	xxxxx	1000	xxxx	xxxxx	284	347	xxxxx	406	483	842
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	0.26	0.27	xxxx	0.41	0.33	0.03
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	1.0	1.0	xxxxx	xxxxx	xxxx	0.1
Stopped Del:	xxxxx	xxxx	xxxxx	8.7	xxxx	xxxxx	22.0	19.1	xxxxx	xxxxx	xxxx	9.4
LOS by Move:	*	*	*	A	*	*	C	C	*	*	*	A
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	441	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.1	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	33.6	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	D	*	*
ApproachDel:	xxxxxx			xxxxxx			20.4			32.1		
ApproachLOS:	*			*			C			D		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: B[13.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 0	1	0	1 0 0	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0	130	0	0	106	280	159	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	130	0	0	106	280	159	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	144	0	0	118	311	177	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	144	0	0	118	311	177	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	418	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	596	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	596	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.30	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.6			xxxxxx		
ApproachLOS:	*			*			B			*		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Country Club/Harmony Grove

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: C[21.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	4	8	13	3	17	73	132	498	6	17	221	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	8	13	3	17	73	132	498	6	17	221	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	4	9	14	3	19	81	147	553	7	19	246	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	4	9	14	3	19	81	147	553	7	19	246	6
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1186	1139	557	1148	1139	248	251	xxxx	xxxxx	560	xxxx	xxxxx
Potent Cap..	167	203	534	177	203	795	1326	xxxx	xxxxx	1021	xxxx	xxxxx
Move Cap..	123	175	534	149	175	795	1326	xxxx	xxxxx	1021	xxxx	xxxxx
Volume/Cap:	0.04	0.05	0.03	0.02	0.11	0.10	0.11	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	8.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	244	xxxxx	xxxx	445	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	21.6	xxxxx	xxxxx	15.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:	21.6			15.5			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: C[20.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	63	0	16	29	573	0	0	183	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	63	0	16	29	573	0	0	183	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	70	0	18	32	637	0	0	203	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	70	0	18	32	637	0	0	203	122
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	966	xxxx	264	326	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	285	xxxx	779	1245	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	279	xxxx	779	1245	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.25	xxxx	0.02	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	321	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.1	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	20.4	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			20.4			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[16.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	0	0	1!	0	0	1	0	0	0	0	0	1
Volume Module:																
Base Vol:	0	0	0		41	0	8		15	546	0		0	128	73	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		41	0	8		15	546	0		0	128	73	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		46	0	9		17	607	0		0	142	81	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		46	0	9		17	607	0		0	142	81	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		823	xxxx	183		223	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		346	xxxx	865		1357	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap..	xxxx	xxxx	xxxxx		343	xxxx	865		1357	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.13	xxxx	0.01		0.01	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*			A	*	*	*	*	*		
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	380	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	16.0	xxxxx			7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	*	C	*			A	*	*	*	*	*		
ApproachDel:	xxxxxx				16.0				xxxxxx				xxxxxx			
ApproachLOS:	*				C				*				*			

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.576
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 1.8
Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	2	0	0	0	1	0	0	0	0	0	0	0	1	0	1	2	0	1	0	0
Volume Module:																
Base Vol:	7	0	3		0	0	0		0	892	12		6	765	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	7	0	3		0	0	0		0	892	12		6	765	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	8	0	3		0	0	0		0	991	13		7	850	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	8	0	3		0	0	0		0	991	13		7	850	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	8	0	3		0	0	0		0	991	13		7	850	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.92	1.00	0.85		1.00	1.00	1.00		1.00	1.00	0.85		0.11	1.00	1.00	
Lanes:	2.00	0.00	1.00		0.00	0.00	0.00		0.00	1.00	1.00		2.00	1.00	0.00	
Final Sat..	3502	0	1615		0	0	0		0	1900	1615		413	1900	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.52	0.01		0.02	0.45	0.00	
Crit Moves:	****									****						
Green/Cycle:	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.91	0.91		0.91	0.91	0.00	
Volume/Cap:	0.58	0.00	0.53		0.00	0.00	0.00		0.00	0.58	0.01		0.02	0.49	0.00	
Delay/Veh:	98.8	0.0	118.7		0.0	0.0	0.0		0.0	1.4	0.4		0.5	1.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	98.8	0.0	118.7		0.0	0.0	0.0		0.0	1.4	0.4		0.5	1.0	0.0	
HCM2kAvg:	1	0	1		0	0	0		0	7	0		0	5	0	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa (NS / EW)

Average Delay (sec/veh): 9.9 Worst Case Level Of Service: B(13.7)

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:		Include			Include			Include			Include	
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 0 1 0			0 1 0 0 0		
Volume Module: >> Count Date: 28 Nov 2001 << PM Peak												
Base Vol:	18	0	514	0	0	0	0	56	25	255	74	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	0	514	0	0	0	0	56	25	255	74	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	20	0	571	0	0	0	0	62	28	283	82	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	20	0	571	0	0	0	0	62	28	283	82	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	725	xxxx	76	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	90	xxxx	xxxxx
Potent Cap..	392	xxxx	985	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1505	xxxx	xxxxx
Move Cap..	325	xxxx	985	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1505	xxxx	xxxxx
Volume/Cap:	0.06	xxxx	0.58	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.19	xxxx	xxxx
Level Of Service Module:												
Queue:	0.2	xxxx	3.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx
Stopped Del:	16.8	xxxx	13.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	C	*	B	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:		13.7			xxxxx			xxxxx			xxxxx	
ApproachLOS:		B			*			*			*	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.570
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.9
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:		Include			Include			Include			Include	
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0 1 0 1			1 0 1 0 1			1 0 1 1 0			1 0 2 0 1		
Volume Module: >> Count Date: 11 Dec 2001 << AM												
Base Vol:	225	212	169	104	109	62	80	709	103	74	478	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	225	212	169	104	109	62	80	709	103	74	478	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	250	236	188	116	121	69	89	788	114	82	531	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	236	188	116	121	69	89	788	114	82	531	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	250	236	188	116	121	69	89	788	114	82	531	149
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.93	0.98	0.83	0.93	0.91	0.91	0.93	0.93	0.83
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.75	0.25	1.00	2.00	1.00
Final Sat..	1769	1862	1583	1769	1862	1583	1769	3030	440	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.14	0.13	0.12	0.07	0.07	0.04	0.05	0.26	0.26	0.05	0.15	0.09
Crit Moves:	****				****			****		****		
Green/Cycle:	0.22	0.32	0.32	0.10	0.20	0.20	0.11	0.41	0.41	0.07	0.37	0.37
Volume/Cap:	0.64	0.40	0.37	0.63	0.33	0.22	0.46	0.64	0.64	0.64	0.40	0.25
Delay/Veh:	46.0	32.5	32.2	58.5	41.6	40.5	52.0	29.6	29.6	64.5	28.1	26.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.0	32.5	32.2	58.5	41.6	40.5	52.0	29.6	29.6	64.5	28.1	26.4
HCM2kAvg:	10	7	5	5	4	2	4	14	14	4	7	4

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.431
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 11.1
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1
Volume Module: >> Count Date: 28 Nov 2001 << PM																
Base Vol:	3	27		56	217	17		6	7	21		4	22		7	239
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	3	27		56	217	17		6	7	21		4	22		7	239
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90
PHF Volume:	3	30		62	241	19		7	8	23		4	24		8	266
Reduct Vol:	0	0		0	0	0		0	0	0		0	0		0	0
Reduced Vol:	3	30		62	241	19		7	8	23		4	24		8	266
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Final Vol..	3	30		62	241	19		7	8	23		4	24		8	266
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Lanes:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
Final Sat..	509	548		614	559	600		679	491	528		588	548		593	676
Capacity Analysis Module:																
Vol/Sat:	0.01	0.05		0.10	0.43	0.03		0.01	0.02	0.04		0.01	0.04		0.01	0.39
Crit Moves:				****	****					****						****
Delay/Veh:	9.4	9.2		8.7	13.2	8.6		7.7	9.6	9.3		8.3	9.3		8.6	10.8
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	9.4	9.2		8.7	13.2	8.6		7.7	9.6	9.3		8.3	9.3		8.6	10.8
LOS by Move:	A	A		A	B	A		A	A	A		A	A		A	B
ApproachDel:		8.9				12.8				9.2					10.6	
Delay Adj:		1.00				1.00				1.00					1.00	
ApprAdjDel:		8.9				12.8				9.2					10.6	
LOS by Appr:		A				B				A					B	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. [NS / EW]

Average Delay (sec/veh): 7.8 Worst Case Level Of Service: C[15.9]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module: >> Count Date: 28 Nov 2001 << PM																				
Base Vol:	93		0		335	0		0		0	0		204		125	143		128		0
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	93		0		335	0		0		0	0		204		125	143		128		0
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	103		0		372	0		0		0	0		227		139	159		142		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol..	103		0		372	0		0		0	0		227		139	159		142		0
Critical Gap Module:																				
Critical Gp:	6.4	xxxx		6.2	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx						4.1	xxxx	xxxx		
FollowUpTim:	3.5	xxxx		3.3	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx						2.2	xxxx	xxxx		
Capacity Module:																				
Cnflict Vol:	756	xxxx		296	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx						366	xxxx	xxxx		
Potent Cap..	376	xxxx		743	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx						1193	xxxx	xxxx		
Move Cap..	334	xxxx		743	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx						1193	xxxx	xxxx		
Volume/Cap:	0.31	xxxx		0.50	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx						0.13	xxxx	xxxx		
Level Of Service Module:																				
Queue:	1.3	xxxx		2.8	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx						0.5	xxxx	xxxx		
Stopped Del:	20.6	xxxx		14.6	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx						8.5	xxxx	xxxx		
LOS by Move:	C	*		B	*	*	*	*	*	*						A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			0.5	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			8.5	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			*	*	*			A	*	*		
ApproachDel:		15.9				xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:		C				*					*					*				

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: C[16.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	1	0	0	0 1	0	1	0	0 0	0	0	0	1 0
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	0	0	0		39	0	58		142	505	0		0	198	51	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		39	0	58		142	505	0		0	198	51	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		43	0	64		158	561	0		0	220	57	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		43	0	64		158	561	0		0	220	57	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		1125	xxxx	248		277	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		229	xxxx	795		1298	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap..	xxxx	xxxx	xxxxx		206	xxxx	795		1298	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.21	xxxx	0.08		0.12	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		0.8	xxxx	0.3		0.4	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		27.1	xxxx	9.9		8.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		D	*	A		A	*	*		*	A	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.4	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		A	*	*		*	*	*	
ApproachDel:	xxxxxx				16.8				xxxxxx				xxxxxx			
ApproachLOS:	*				C				*				*			

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.721
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.7
Optimal Cycle: 65 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		7	0	7		7	24	0		0	24	7	
Lanes:	0	1	0	0 1	1	0	1	0 1	1	0	1	1 0	1	0	2	0 1
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	28	12	28		386	9	176		209	1004	14		26	623	357	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	28	12	28		386	9	176		209	1004	14		26	623	357	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	31	13	31		429	10	196		232	1116	16		29	692	397	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	31	13	31		429	10	196		232	1116	16		29	692	397	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	31	13	31		429	10	196		232	1116	16		29	692	397	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.83		0.93	0.98	0.83		0.93	0.93	0.93		0.93	0.93	0.83	
Lanes:	0.70	0.30	1.00		1.00	1.00	1.00		1.00	1.97	0.03		1.00	2.00	1.00	
Final Sat..	1259	540	1583		1769	1862	1583		1769	3482	49		1769	3538	1583	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.02	0.02		0.24	0.01	0.12		0.13	0.32	0.32		0.02	0.20	0.25	
Crit Moves:	****				****				****						****	
Green/Cycle:	0.03	0.03	0.03		0.34	0.34	0.34		0.18	0.50	0.50		0.03	0.35	0.35	
Volume/Cap:	0.72	0.72	0.57		0.72	0.02	0.37		0.72	0.64	0.64		0.54	0.56	0.72	
Delay/Veh:	91.3	91.3	71.1		39.2	26.6	30.6		54.0	22.5	22.5		84.0	32.4	38.7	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	91.3	91.3	71.1		39.2	26.6	30.6		54.0	22.5	22.5		84.0	32.4	38.7	
HCM2kAvg:	3	3	2		16	0	6		10	15	15		2	11	14	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: C[15.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	0	388		62	5	203		0	0		0		84		0	12
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00	1.00
Initial Bse:	0	388		62	5	203		0	0		0		84		0	12
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90		0.90		0.90	0.90
PHF Volume:	0	431		69	6	226		0	0		0		93		0	13
Reduct Vol:	0	0		0	0	0		0	0		0		0		0	0
Final Vol..	0	431		69	6	226		0	0		0		93		0	13

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	500	xxxx	xxxxx	xxxx	xxxx	xxxxx	702	xxxx	466
Potent Cap..	xxxx	xxxx	xxxxx	1075	xxxx	xxxxx	xxxx	xxxx	xxxxx	407	xxxx	601
Move Cap..	xxxx	xxxx	xxxxx	1075	xxxx	xxxxx	xxxx	xxxx	xxxxx	406	xxxx	601
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.23	xxxx	0.02

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.9	xxxx	0.1
Stopped Del:	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	16.5	xxxx	11.1
LOS by Move:	*	*	*	A	*	*	*	*	*	C	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			15.8		
ApproachLOS:		*			*			*			C	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 15.2 Worst Case Level Of Service: D[31.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak																
Base Vol:	51	117		0	0	129		198	375		0		60		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00	1.00
Initial Bse:	51	117		0	0	129		198	375		0		60		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90		0.90		0.90	0.90
PHF Volume:	57	130		0	0	143		220	417		0		67		0	0
Reduct Vol:	0	0		0	0	0		0	0		0		0		0	0
Final Vol..	57	130		0	0	143		220	417		0		67		0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4	xxxx		6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	xxxx		3.3	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	363	xxxx	xxxxx	xxxx	xxxx	xxxxx		497	xxxx		253	xxxx	xxxx	xxxxx
Potent Cap..	1206	xxxx	xxxxx	xxxx	xxxx	xxxxx		536	xxxx		790	xxxx	xxxx	xxxxx
Move Cap..	1206	xxxx	xxxxx	xxxx	xxxx	xxxxx		516	xxxx		790	xxxx	xxxx	xxxxx
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx		0.81	xxxx		0.08	xxxx	xxxx	xxxx

Level Of Service Module:

Queue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.7	xxxx		0.3	xxxxx	xxxx	xxxxx
Stopped Del:	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		35.0	xxxx		10.0	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	-	*	*	*		D	*		A	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd StpDel:	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*	*	*	*		*	*	*	*	*	*	
ApproachDel:	xxxxxx			xxxxxx				31.5			xxxxxx			
ApproachLOS:		*			*			D				*		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 4.4 Worst Case Level Of Service: C[16.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	0	1		0	0	0	0	0		0	0	1	0	1		1	0	1	0	0	
Volume Module:																								
Base Vol:	153		0		55		0		0		0		0		276		181		60		168		0	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	153		0		55		0		0		0		0		276		181		60		168		0	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	170		0		61		0		0		0		0		307		201		67		187		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	170		0		61		0		0		0		0		307		201		67		187		0	
Critical Gap Module:																								
Critical Gp:	6.4	xxxx			6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						4.1	xxxx	xxxxx					
FollowUpTim:	3.5	xxxx			3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						2.2	xxxx	xxxxx					
Capacity Module:																								
Cnflict Vol:	627	xxxx			307	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						508	xxxx	xxxxx					
Potent Cap.:	451	xxxx			738	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						1067	xxxx	xxxxx					
Move Cap..	429	xxxx			738	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						1067	xxxx	xxxxx					
Volume/Cap:	0.40	xxxx			0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx						0.06	xxxx	xxxx					
Level Of Service Module:																								
Queue:	1.9	xxxx			0.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						0.2	xxxx	xxxxx					
Stopped Del:	18.8	xxxx			10.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						8.6	xxxx	xxxxx					
LOS by Move:	C		*		B	*	*	*	*	*	*						A	*	*					
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT				
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx						
Shared LOS:	*		*		*	*	*	*	*	*	*						*	*						
ApproachDel:			16.5					xxxxxx					xxxxxx					xxxxxx						
ApproachLOS:			C					*					*					*						

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 12.4 Worst Case Level Of Service: F[78.0]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	1	0	0	1		0	1	0	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	0		0		0		30		0		77		578		250		0		0		151		50	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0		0		0		30		0		77		578		250		0		0		151		50	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0		0		0		33		0		86		642		278		0		0		168		56	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	0		0		0		33		0		86		642		278		0		0		168		56	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx			6.4	xxxx		6.2			4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5	xxxx		3.3			2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx			1730	xxxx		168			223	xxxx	xxxxx	xxxx	xxxx	xxxxx							
Potent Cap.:	xxxx	xxxx	xxxxx			98	xxxx		882			1357	xxxx	xxxxx	xxxx	xxxx	xxxxx							
Move Cap..	xxxx	xxxx	xxxxx			39	xxxx		882			1357	xxxx	xxxxx	xxxx	xxxx	xxxxx							
Volume/Cap:	xxxx	xxxx	xxxx			0.85	xxxx		0.10			0.47	xxxx	xxxx	xxxx	xxxx	xxxx							
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx				0.3			2.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx							
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx				9.5			10.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx							
LOS by Move:	*		*		*	*	*		A			B	*	*	*	*	*							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT				
Shared Cap.:	xxxx	xxxx	xxxxx			39	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx			3.2	xxxx	xxxxx			2.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd StpDel:	xxxxx	xxxx	xxxxx			253.7	xxxx	xxxxx			10.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*		*		*	F	*		*		B	*	*	*	*	*								
ApproachDel:			xxxxxx					78.0					xxxxxx					xxxxxx						
ApproachLOS:			*					F					*					*						

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.117
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 55.9
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	0	0		0	7	24		7
Lanes:	0	1	0	0	1	0	0	0	0	0	2	0	0	0	3	0	1
Volume Module: >> Count Date: 12 Dec 2001 << PM																	
Base Vol:	162		0	414		0		0	813	1522		0		0	1429		683
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	162		0	414		0		0	813	1522		0		0	1429		683
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	180		0	460		0		0	903	1691		0		0	1588		759
Reduct Vol:	0		0	0		0		0	0	0		0		0	0		0
Reduced Vol:	180		0	460		0		0	903	1691		0		0	1588		759
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	180		0	460		0		0	903	1691		0		0	1588		759
Saturation Flow Module:																	
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	1.00		0.83	1.00	1.00		1.00	0.90	0.89		1.00	1.00	0.89		0.83
Lanes:	1.00	0.00		1.00	0.00	0.00		0.00	2.00	3.00		0.00	0.00	3.00		1.00
Final Sat..	1773		0	1583		0		0	3432	5083		0		0	5083		1583
Capacity Analysis Module:																	
Vol/Sat:	0.10	0.00		0.29	0.00	0.00		0.00	0.26	0.33		0.00	0.00	0.31		0.48
Crit Moves:				****					****							****
Green/Cycle:	0.26	0.00		0.26	0.00	0.00		0.00	0.24	0.66		0.00	0.00	0.43		0.43
Volume/Cap:	0.39	0.00		1.12	0.00	0.00		0.00	1.12	0.50		0.00	0.00	0.73		1.12
Delay/Veh:	37.1	0.0		124.5	0.0	0.0		0.0	114.8	10.2		0.0	0.0	29.7		105.6
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	37.1	0.0		124.5	0.0	0.0		0.0	114.8	10.2		0.0	0.0	29.7		105.6
HCM2kAvg:	6	0		27	0	0		0	27	10		0	0	17		41

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.076
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 76.2
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	7	0		7	0	0		0
Lanes:	1	0	1	0	1	0	1	0	1	0	2	0	0	0	1	1
Volume Module: >> Count Date: 12 Dec 2001 << PM																	
Base Vol:	46		48	307	415		229	374	104	1578		43	276		813	462
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	46		48	307	415		229	374	104	1578		43	276		813	462
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	51		53	341	461		254	416	116	1753		48	307		903	513
Reduct Vol:	0		0	0	0		0	0	0	0		0	0		0	0
Reduced Vol:	51		53	341	461		254	416	116	1753		48	307		903	513
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	51		53	341	461		254	416	116	1753		48	307		903	513
Saturation Flow Module:																	
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.98		0.83	0.86	0.86		0.86	0.90	0.89		0.83	0.90	0.84		0.84
Lanes:	1.00	1.00		1.00	0.82	0.45		0.73	2.00	3.00		1.00	2.00	3.19		1.81
Final Sat..	1769	1862		1583	1336	737		1204	3432	5083		1583	3432	5110		2904
Capacity Analysis Module:																	
Vol/Sat:	0.03	0.03		0.22	0.35	0.35		0.35	0.03	0.34		0.03	0.09	0.18		0.18
Crit Moves:				****	****					****			****			
Green/Cycle:	0.20	0.20		0.20	0.32	0.32		0.32	0.10	0.32		0.32	0.08	0.30		0.30
Volume/Cap:	0.14	0.14		1.08	1.08	1.08		1.08	0.34	1.08		0.09	1.08	0.58		0.58
Delay/Veh:	39.7	39.7		120.1	91.2	91.2		91.2	50.9	86.5		28.6	129.9	35.7		35.7
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	39.7	39.7		120.1	91.2	91.2		91.2	50.9	86.5		28.6	129.9	35.7		35.7
HCM2kAvg:	2	2		20	31	31		31	2	31		1	11	9		9

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.756
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 40.8
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Ovl						Include						Include					
Min. Green:	7	24				7	7	24				7	7	24				7	7	24				7
Lanes:	2	0	3	0	1		2	0	3	0	1		2	0	1	1	0		2	0	1	1	0	
Volume Module: >> Count Date: 9 Dec 2000 << PM																								
Base Vol:	301	1080			45		140	911			303		568	708			213		194	443			167	
Growth Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	301	1080			45		140	911			303		568	708			213		194	443			167	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	334	1200			50		156	1012			337		631	787			237		216	492			186	
Reduct Vol:	0	0			0		0	0			0		0	0			0		0	0			0	
Reduced Vol:	334	1200			50		156	1012			337		631	787			237		216	492			186	
PCE Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol..	334	1200			50		156	1012			337		631	787			237		216	492			186	
Saturation Flow Module:																								
Sat/Lane:	1900	1900			1900		1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	0.90	0.89			0.83		0.90	0.89			0.83		0.90	0.90			0.90		0.90	0.89			0.89	
Lanes:	2.00	3.00			1.00		2.00	3.00			1.00		2.00	1.54			0.46		2.00	1.45			0.55	
Final Sat..	3432	5083			1583		3432	5083			1583		3432	2624			790		3432	2464			929	
Capacity Analysis Module:																								
Vol/Sat:	0.10	0.24			0.03		0.05	0.20			0.21		0.18	0.30			0.30		0.06	0.20			0.20	
Crit Moves:	****							****					****							****				
Green/Cycle:	0.13	0.31			0.31		0.08	0.26			0.51		0.24	0.42			0.42		0.09	0.26			0.26	
Volume/Cap:	0.76	0.75			0.10		0.58	0.76			0.42		0.76	0.71			0.71		0.71	0.76			0.76	
Delay/Veh:	57.7	38.9			29.2		56.7	43.2			18.9		46.1	30.6			30.6		61.1	44.3			44.3	
User DelAdj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	57.7	38.9			29.2		56.7	43.2			18.9		46.1	30.6			30.6		61.1	44.3			44.3	
HCM2kAvg:	8	15			1		4	13			8		13	16			16		6	13			13	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.656
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 39.4
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24				7	7	24				7	7	24				7	7	24				7
Lanes:	1	0	3	0	1		1	0	2	1	0		1	0	1	1	0		1	0	1	1	0	
Volume Module: >> Count Date: 12 Dec 2001 << PM																								
Base Vol:	21	1056			172		165	898			197		298	320			6		178	162			49	
Growth Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	21	1056			172		165	898			197		298	320			6		178	162			49	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	23	1173			191		183	998			219		331	356			7		198	180			54	
Reduct Vol:	0	0			0		0	0			0		0	0			0		0	0			0	
Reduced Vol:	23	1173			191		183	998			219		331	356			7		198	180			54	
PCE Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol..	23	1173			191		183	998			219		331	356			7		198	180			54	
Saturation Flow Module:																								
Sat/Lane:	1900	1900			1900		1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	0.93	0.89			0.83		0.93	0.87			0.87		0.93	0.93			0.93		0.93	0.90			0.90	
Lanes:	1.00	3.00			1.00		1.00	2.46			0.54		1.00	1.96			0.04		1.00	1.54			0.46	
Final Sat..	1769	5083			1583		1769	4056			890		1769	3462			65		1769	2621			793	
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.23			0.12		0.10	0.25			0.25		0.19	0.10			0.10		0.11	0.07			0.07	
Crit Moves:		****					****						****							****				
Green/Cycle:	0.09	0.31			0.31		0.14	0.36			0.36		0.25	0.29			0.29		0.16	0.20			0.20	
Volume/Cap:	0.15	0.75			0.39		0.75	0.68			0.68		0.75	0.35			0.35		0.69	0.34			0.34	
Delay/Veh:	51.3	39.1			33.0		61.3	33.4			33.4		48.1	34.0			34.0		54.5	41.5			41.5	
User DelAdj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	51.3	39.1			33.0		61.3	33.4			33.4		48.1	34.0			34.0		54.5	41.5			41.5	
HCM2kAvg:	1	14			6		8	13			13		13	5			5		8	4			4	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.554
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 10.0
Optimal Cycle: 38 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	8	1252	8	97	798	77	36	13	1	29	16	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	1252	8	97	798	77	36	13	1	29	16	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	9	1391	9	108	887	86	40	14	1	32	18	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	1391	9	108	887	86	40	14	1	32	18	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	9	1391	9	108	887	86	40	14	1	32	18	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.99	0.99	0.95	0.90	0.90
Lanes:	1.00	1.99	0.01	1.00	2.00	1.00	1.00	0.93	0.07	1.00	0.31	0.69
Final Sat..	1805	3583	23	1805	3610	1615	1805	1745	134	1805	524	1179
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.39	0.06	0.25	0.05	0.02	0.01	0.01	0.02	0.03	0.03
Crit Moves:		****		****			****				****	
Green/Cycle:	0.02	0.70	0.70	0.11	0.79	0.79	0.04	0.03	0.03	0.07	0.06	0.06
Volume/Cap:	0.31	0.55	0.55	0.55	0.31	0.07	0.55	0.26	0.26	0.26	0.55	0.55
Delay/Veh:	54.7	7.6	7.6	45.8	2.9	2.3	56.2	49.5	49.5	45.2	52.0	52.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.7	7.6	7.6	45.8	2.9	2.3	56.2	49.5	49.5	45.2	52.0	52.0
HCM2kAvg:	1	11	11	4	4	1	2	1	1	1	3	3

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 225.2 Worst Case Level Of Service: F[1319.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	30	900	50	30	400	131	230	10	80	50	12	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	900	50	30	400	131	230	10	80	50	12	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	33	1000	56	33	444	146	256	11	89	56	13	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	33	1000	56	33	444	146	256	11	89	56	13	44
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	590	xxxx	xxxxx	1056	xxxx	xxxxx	1634	1633	444	1701	1723	1000
Potent Cap..	995	xxxx	xxxxx	667	xxxx	xxxxx	82	102	618	74	90	298
Move Cap..	995	xxxx	xxxxx	667	xxxx	xxxxx	57	94	618	54	83	298
Volume/Cap:	0.03	xxxx	xxxx	0.05	xxxx	xxxx	4.46	0.12	0.14	1.03	0.16	0.15
Level Of Service Module:												
Queue:	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	0.5	xxxxx	xxxx	0.5
Stopped Del:	8.7	xxxx	xxxxx	10.7	xxxx	xxxxx	xxxxx	xxxx	11.8	xxxxx	xxxx	19.2
LOS by Move:	A	*	*	B	*	*	*	*	B	*	*	C
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	58	xxxx	xxxxx	58	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	29.5	xxxx	xxxxx	5.8	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1755	xxxx	xxxxx	300.1	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			1319.2			189.9		
ApproachLOS:	*			*			F			F		

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Vallev Pkwv./Citracado Pkwv.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.758
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 39.2
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	1 0	1	0 1
Volume Module: >> Count Date: 8 Jan 2002 << PM												
Base Vol:	287	980	26	62	500	103	70	8	256	11	7	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	287	980	26	62	500	103	70	8	256	11	7	43
User Adj:	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	395	1350	36	85	689	142	96	11	353	15	10	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	395	1350	36	85	689	142	96	11	353	15	10	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	395	1350	36	85	689	142	96	11	353	15	10	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.93	0.93	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.95	0.05	1.00	1.66	0.34	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat..	1805	3503	93	1805	2916	601	1805	1900	1615	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.22	0.39	0.39	0.05	0.24	0.24	0.05	0.01	0.22	0.01	0.01	0.04
Crit Moves:	****				****				****	****		
Green/Cycle:	0.27	0.49	0.49	0.07	0.30	0.30	0.07	0.27	0.27	0.06	0.26	0.26
Volume/Cap:	0.80	0.78	0.78	0.63	0.80	0.80	0.71	0.02	0.80	0.14	0.02	0.14
Delay/Veh:	49.6	27.3	27.3	63.3	43.5	43.5	70.8	31.9	50.6	54.3	33.4	34.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.6	27.3	27.3	63.3	43.5	43.5	70.8	31.9	50.6	54.3	33.4	34.6
HCM2kAvg:	16	22	22	4	16	16	5	0	14	1	0	2

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Vallev Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.775
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 36.5
Optimal Cycle: 66 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	20	7	7	20	0	0	0	0	20	0	20
Lanes:	0 0	2	0 1	1 0	1	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	765	276	273	346	0	0	0	0	214	0	455
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	765	276	273	346	0	0	0	0	214	0	455
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	850	307	303	384	0	0	0	0	238	0	506
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	850	307	303	384	0	0	0	0	238	0	506
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	850	307	303	384	0	0	0	0	238	0	506
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	2.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat..	0	3610	1615	1805	1900	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.19	0.17	0.20	0.00	0.00	0.00	0.00	0.13	0.00	0.31
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.30	0.30	0.22	0.52	0.00	0.00	0.00	0.00	0.40	0.00	0.40
Volume/Cap:	0.00	0.77	0.62	0.77	0.39	0.00	0.00	0.00	0.00	0.33	0.00	0.77
Delay/Veh:	0.0	41.5	38.4	53.5	17.5	0.0	0.0	0.0	0.0	24.8	0.0	36.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	41.5	38.4	53.5	17.5	0.0	0.0	0.0	0.0	24.8	0.0	36.8
HCM2kAvg:	0	16	10	13	8	0	0	0	0	6	0	18

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.765
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.5
Optimal Cycle: 73 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	7	24	7	7	24	7	0	24	7	7	24	7
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1	1 0	0 1	0
Volume Module: >> Count Date: 27 Nov 2001 << PM												
Base Vol:	84	831	494	14	737	22	19	26	680	155	49	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	831	494	14	737	22	19	26	680	155	49	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	93	923	549	16	819	24	21	29	378	172	54	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	923	549	16	819	24	21	29	378	172	54	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	93	923	549	16	819	24	21	29	378	172	54	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.93	0.93	0.93	0.67	0.98	0.83	0.73	0.92	0.92
Lanes:	1.00	1.25	0.75	1.00	1.94	0.06	1.00	1.00	1.00	1.00	0.60	0.40
Final Sat..	1769	2095	1245	1769	3422	102	1277	1862	1583	1385	1046	704
Capacity Analysis Module:												
Vol/Sat:	0.05	0.44	0.44	0.01	0.24	0.24	0.02	0.02	0.24	0.12	0.05	0.05
Crit Moves:		****		****					****			
Green/Cycle:	0.12	0.55	0.55	0.06	0.49	0.49	0.30	0.30	0.30	0.30	0.30	0.35
Volume/Cap:	0.45	0.81	0.81	0.15	0.49	0.49	0.06	0.05	0.81	0.42	0.18	0.15
Delay/Veh:	50.7	24.9	24.9	54.4	21.1	21.1	30.3	30.3	49.1	34.7	31.6	26.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.7	24.9	24.9	54.4	21.1	21.1	30.3	30.3	49.1	34.7	31.6	26.5
HCM2kAvg:	4	24	24	1	10	10	1	1	15	7	2	2

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.864
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 21.7
Optimal Cycle: 102 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	0 0	0 0	0	1 1	0 0	1	0 0	2 0	1	2 0	2 0	0
Volume Module: >> Count Date: 27 Nov 2001 << PM												
Base Vol:	0	0	0	323	0	146	0	945	873	191	1165	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	323	0	146	0	945	873	191	1165	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	359	0	162	0	1050	970	212	1294	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	359	0	162	0	1050	970	212	1294	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	359	0	162	0	1050	970	212	1294	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.83	1.00	0.93	0.83	0.90	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	2.00	2.00	0.00
Final Sat..	0	0	0	3545	0	1583	0	3538	1583	3432	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.30	0.61	0.06	0.37	0.00
Crit Moves:						****			****	****		
Green/Cycle:	0.00	0.00	0.00	0.12	0.00	0.12	0.00	0.71	0.71	0.07	0.78	0.00
Volume/Cap:	0.00	0.00	0.00	0.85	0.00	0.86	0.00	0.42	0.86	0.86	0.47	0.00
Delay/Veh:	0.0	0.0	0.0	67.2	0.0	83.3	0.0	7.3	20.2	80.7	4.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	67.2	0.0	83.3	0.0	7.3	20.2	80.7	4.7	0.0
HCM2kAvg:	0	0	0	9	0	8	0	8	29	6	8	0

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave [NS/ EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.620
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.6
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	1	1	0	0	1		0	0	0	0	0		2	0	2	0	0		0	0	2	0	1	
Volume Module: >> Count Date: 27 Nov 2001 << PM																								
Base Vol:	623		2		218		0		0		0		229		1039		0		0		733		377	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	623		2		218		0		0		0		229		1039		0		0		733		377	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	692		2		242		0		0		0		254		1154		0		0		814		419	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	692		2		242		0		0		0		254		1154		0		0		814		419	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	692		2		242		0		0		0		254		1154		0		0		814		419	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.83		0.83		0.83		1.00		1.00		1.00		0.90		0.93		1.00		1.00		0.93		0.83	
Lanes:	1.99		0.01		1.00		0.00		0.00		0.00		2.00		2.00		0.00		0.00		2.00		1.00	
Final Sat..	3155		10		1583		0		0		0		3432		3538		0		0		3538		1583	
Capacity Analysis Module:																								
Vol/Sat:	0.22		0.22		0.15		0.00		0.00		0.00		0.07		0.33		0.00		0.00		0.23		0.26	
Crit Moves:	****												****										****	
Green/Cycle:	0.35		0.35		0.35		0.00		0.00		0.00		0.12		0.55		0.00		0.00		0.43		0.43	
Volume/Cap:	0.62		0.62		0.43		0.00		0.00		0.00		0.62		0.60		0.00		0.00		0.54		0.62	
Delay/Veh:	33.2		33.2		30.1		0.0		0.0		0.0		53.1		18.9		0.0		0.0		26.0		28.6	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	33.2		33.2		30.1		0.0		0.0		0.0		53.1		18.9		0.0		0.0		26.0		28.6	
HCM2kAvg:	13		13		7		0		0		0		6		14		0		0		11		12	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.938
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 32.5
Optimal Cycle: 127 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Split Phase						Split Phase					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0			0		0	0			0		0	0			0		0	0			0	
Lanes:	0	0	1	0	1		1	0	2	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0		814		331		437		934		0		0		0		0		168		0		185	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0		814		331		437		934		0		0		0		0		168		0		185	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.92		0.92		0.92		0.92		0.92		0.92		0.92		0.92		0.92		0.92		0.92		0.92	
PHF Volume:	0		885		360		475		1015		0		0		0		0		183		0		201	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	0		885		360		475		1015		0		0		0		0		183		0		201	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	0		885		360		475		1015		0		0		0		0		183		0		201	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	1.00		1.00		0.85		0.95		0.95		1.00		1.00		1.00		1.00		0.95		1.00		0.85	
Lanes:	0.00		1.00		1.00		1.00		2.00		0.00		0.00		0.00		0.00		1.00		0.00		1.00	
Final Sat..	0		1900		1615		1805		3610		0		0		0		0		1805		0		1615	
Capacity Analysis Module:																								
Vol/Sat:	0.00		0.47		0.22		0.26		0.28		0.00		0.00		0.00		0.00		0.10		0.00		0.12	
Crit Moves:			****				****																****	
Green/Cycle:	0.00		0.50		0.50		0.28		0.78		0.00		0.00		0.00		0.00		0.13		0.00		0.13	
Volume/Cap:	0.00		0.94		0.45		0.94		0.36		0.00		0.00		0.00		0.00		0.76		0.00		0.94	
Delay/Veh:	0.0		40.1		16.7		60.4		3.5		0.0		0.0		0.0		0.0		55.2		0.0		87.1	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	0.0		40.1		16.7		60.4		3.5		0.0		0.0		0.0		0.0		55.2		0.0		87.1	
HCM2kAvg:	0		31		7		20		5		0		0		0		0		8		0		10	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.949
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 44.9
Optimal Cycle: 138 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	0 1	2	0	2	0 1
Volume Module:																
Base Vol:	68	261	661		49	137	64		58	226	184		705	579	93	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	68	261	661		49	137	64		58	226	184		705	579	93	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	76	290	734		54	152	71		64	251	204		783	643	103	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	76	290	734		54	152	71		64	251	204		783	643	103	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	76	290	734		54	152	71		64	251	204		783	643	103	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.85		0.95	0.95	0.85		0.95	0.95	0.85		0.92	0.95	0.85	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		2.00	2.00	1.00	
Final Sat..	1805	3610	1615		1805	3610	1615		1805	3610	1615		3502	3610	1615	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.08	0.45		0.03	0.04	0.04		0.04	0.07	0.13		0.22	0.18	0.06	
Crit Moves:			****		****						****		****			
Green/Cycle:	0.25	0.48	0.48		0.03	0.26	0.26		0.06	0.13	0.13		0.24	0.31	0.31	
Volume/Cap:	0.17	0.17	0.95		0.95	0.16	0.17		0.58	0.52	0.95		0.95	0.58	0.21	
Delay/Veh:	29.6	14.8	45.7		148.4	28.5	28.7		53.1	41.4	89.9		57.6	30.0	25.8	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	29.6	14.8	45.7		148.4	28.5	28.7		53.1	41.4	89.9		57.6	30.0	25.8	
HCM2kAvg:	2	2	27		4	2	2		3	4	10		17	9	2	

Harmony Grove Village
Option B: Baseline + P

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.785
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.6
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	0 2	1	0	2	0 1	2	0	2	0 1	2	0	3	0 1
Volume Module:																
Base Vol:	459	181	865		43	232	43		248	689	197		360	728	21	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	459	181	865		43	232	43		248	689	197		360	728	21	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	510	201	961		48	258	48		276	766	219		400	809	23	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol.	510	201	961		48	258	48		276	766	219		400	809	23	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	510	201	961		48	258	48		276	766	219		400	809	23	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.75		0.95	0.95	0.85		0.92	0.95	0.85		0.92	0.91	0.85	
Lanes:	1.00	2.00	2.00		1.00	2.00	1.00		2.00	2.00	1.00		2.00	3.00	1.00	
Final Sat..	1805	3610	2842		1805	3610	1615		3502	3610	1615		3502	5187	1615	
Capacity Analysis Module:																
Vol/Sat:	0.28	0.06	0.34		0.03	0.07	0.03		0.08	0.21	0.14		0.11	0.16	0.01	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.37	0.43	0.43		0.03	0.09	0.09		0.14	0.27	0.27		0.15	0.28	0.28	
Volume/Cap:	0.76	0.13	0.79		0.79	0.76	0.32		0.56	0.79	0.50		0.79	0.56	0.05	
Delay/Veh:	32.8	17.2	27.9		95.7	54.0	43.5		41.7	38.1	31.7		49.1	31.6	26.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	32.8	17.2	27.9		95.7	54.0	43.5		41.7	38.1	31.7		49.1	31.6	26.6	
HCM2kAvg:	16	2	15		3	6	2		5	13	6		8	8	1	

Harmony Grove Village
Option B: Baseline + P + CP

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	D	37.2	0.805	D	37.2	0.805	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	F	304.9	1.800	F	304.9	1.800	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	F	240.1	1.707	F	240.1	1.707	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	9.7	0.383	A	9.7	0.383	+ 0.000 V/C
# 6 Country Club Drive/Entrance #3	B	11.0	0.000	B	11.0	0.000	+ 0.000 D/V
# 7 Country Club/ Village Road	B	12.6	0.000	B	12.6	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	F	81.1	0.000	F	81.1	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	C	15.6	0.000	C	15.6	0.000	+ 0.000 D/V
# 10 Country Club/Harmony Grove	C	19.8	0.000	C	19.8	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	C	24.7	0.000	C	24.7	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	C	19.0	0.000	C	19.0	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	D	51.4	1.384	D	51.4	1.384	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	C	15.7	0.000	C	15.7	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	41.7	0.836	D	41.7	0.836	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	F	82.6	1.397	F	82.6	1.397	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	F	475.2	0.000	F	475.2	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	F	50.5	0.000	F	50.5	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	D	46.5	0.997	D	46.5	0.997	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	F	98.5	0.000	F	98.5	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	F	438.9	0.000	F	438.9	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	C	17.3	0.000	C	17.3	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	B	13.0	0.000	B	13.0	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	D	35.9	0.829	D	35.9	0.829	+ 0.000 D/V

Harmony Grove Village
Option B: Baseline + P + CP

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	E	59.9	0.806	E	59.9	0.806	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	38.2	0.775	D	38.2	0.775	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	D	45.4	0.877	D	45.4	0.877	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	B	15.9	0.512	B	15.9	0.512	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	614.9	0.000	F	614.9	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	D	45.8	0.839	D	45.8	0.839	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	D	38.2	0.901	D	38.2	0.901	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	D	50.6	1.055	D	50.6	1.055	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	22.3	0.742	C	22.3	0.742	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	28.8	0.716	C	28.8	0.716	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	D	41.1	0.974	D	41.1	0.974	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	50.9	0.976	D	50.9	0.976	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	25.7	0.537	C	25.7	0.537	+ 0.000 D/V

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.805
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 37.2
Optimal Cycle: 73 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	0		0	24	7		0	0	0		7	24	7	
Lanes:	2 0	2 0	0		0 0	2 0	1		0 0	0 0	0		1 0	11 0	1	
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	586	332	0		0	563	135		0	0	0		649	8	147	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	586	332	0		0	563	135		0	0	0		649	8	147	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	651	369	0		0	626	150		0	0	0		721	9	163	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	651	369	0		0	626	150		0	0	0		721	9	163	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	651	369	0		0	626	150		0	0	0		721	9	163	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.71	0.73	1.00		1.00	0.93	0.83		1.00	1.00	1.00		0.73	0.73	0.73	
Lanes:	2.00	2.00	0.00		0.00	2.00	1.00		0.00	0.00	0.00		1.80	0.02	1.18	
Final Sat..	2693	2776	0		0	3538	1583		0	0	0		2489	27	1634	
Capacity Analysis Module:																
Vol/Sat:	0.24	0.13	0.00		0.00	0.18	0.09		0.00	0.00	0.00		0.29	0.33	0.10	
Crit Moves:	****					****								****		
Green/Cycle:	0.30	0.52	0.00		0.00	0.22	0.22		0.00	0.00	0.00		0.41	0.41	0.41	
Volume/Cap:	0.81	0.26	0.00		0.00	0.81	0.43		0.00	0.00	0.00		0.72	0.81	0.25	
Delay/Veh:	44.7	16.0	0.0		0.0	50.5	41.2		0.0	0.0	0.0		31.9	35.9	23.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	44.7	16.0	0.0		0.0	50.5	41.2		0.0	0.0	0.0		31.9	35.9	23.6	
HCM2kAvg:	14	4	0		0	13	5		0	0	0		14	17	2	

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp (NS / EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.800
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 304.9
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24	7		7	24	0		7	24	7		0	0	0	
Lanes:	0 0	2 0	1		2 0	2 0	0		0 1	0 1	0		0 0	0 0	0	
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	0	715	393		130	1209	0		105	1	1168		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	715	393		130	1209	0		105	1	1168		0	0	0	
User Adj:	1.00	1.00	0.50		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	794	218		144	1343	0		117	1	1298		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	794	218		144	1343	0		117	1	1298		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	794	218		144	1343	0		117	1	1298		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.73	0.65		0.90	0.93	1.00		0.54	0.54	0.54		1.00	1.00	1.00	
Lanes:	0.00	2.00	1.00		2.00	2.00	0.00		0.99	0.01	1.00		0.00	0.00	0.00	
Final Sat..	0	2776	1242		3432	3538	0		1022	10	1031		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.29	0.18		0.04	0.38	0.00		0.11	0.11	1.26		0.00	0.00	0.00	
Crit Moves:	****					****					****					
Green/Cycle:	0.00	0.19	0.19		0.05	0.24	0.00		0.67	0.67	0.67		0.00	0.00	0.00	
Volume/Cap:	0.00	1.48	0.91		0.89	1.58	0.00		0.17	0.17	1.88		0.00	0.00	0.00	
Delay/Veh:	0.0	268	74.8		88.6	306	0.0		6.2	6.2	416.7		0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	268	74.8		88.6	306	0.0		6.2	6.2	416.7		0.0	0.0	0.0	
HCM2kAvg:	0	30	10		5	52	0		2	2	132		0	0	0	

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.707
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 240.1
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	1	0	2	0	1		2	0	1	1	0		2	0	2	0	1		2	0	2	0	1	
Volume Module: >> Count Date: 13 Dec 2001 << AM																								
Base Vol:	238	737			40		438	1737			218		220	375			741		90	328			185	
Growth Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	238	737			40		438	1737			218		220	375			741		90	328			185	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	264	819			44		487	1930			242		244	417			823		100	364			206	
Reduct Vol:	0	0			0		0	0			0		0	0			0		0	0			0	
Reduced Vol:	264	819			44		487	1930			242		244	417			823		100	364			206	
PCE Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol..	264	819			44		487	1930			242		244	417			823		100	364			206	
Saturation Flow Module:																								
Sat/Lane:	1900	1900			1900		1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	0.73	0.73			0.65		0.71	0.72			0.72		0.90	0.93			0.83		0.90	0.93			0.83	
Lanes:	1.00	2.00			1.00		2.00	1.78			0.22		2.00	2.00			1.00		2.00	2.00			1.00	
Final Sat..	1388	2776			1242		2693	2425			304		3432	3538			1583		3432	3538			1583	
Capacity Analysis Module:																								
Vol/Sat:	0.19	0.29			0.04		0.18	0.80			0.80		0.07	0.12			0.52		0.03	0.10			0.13	
Crit Moves:	****							****									****		****					
Green/Cycle:	0.11	0.34			0.34		0.21	0.44			0.44		0.09	0.29			0.29		0.06	0.26			0.26	
Volume/Cap:	1.79	0.86			0.10		0.86	1.79			1.79		0.78	0.41			1.79		0.50	0.40			0.50	
Delay/Veh:	434.9	45.1			27.1		58.8	392			392.2		64.9	34.5			406.8		56.8	37.2			39.1	
User DelAdj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	434.9	45.1			27.1		58.8	392			392.2		64.9	34.5			406.8		56.8	37.2			39.1	
HCM2kAvg:	27	17			1		12	98			98		7	6			75		3	6			7	

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club [NS / EW]

Average Delay (sec/veh): 1447.8 Worst Case Level Of Service: F[15251.4

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	2	0	1		1	0	1	0	1		0	1	0	0	1		0	0	1!	0	0	
Volume Module: >> Count Date: 11 Dec 2001 << AM																								
Base Vol:	46	683			0		35	2276			251		305	0			40		0	0			0	
Growth Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	46	683			0		35	2276			251		305	0			40		0	0			0	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	51	759			0		39	2529			279		339	0			44		0	0			0	
Reduct Vol:	0	0			0		0	0			0		0	0			0		0	0			0	
Final Vol..	51	759			0		39	2529			279		339	0			44		0	0			0	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx			xxxxx		4.1	xxxx			xxxxx		6.4	xxxx			6.2		xxxxx	xxxx			xxxxx	
FollowUpTim:	2.2	xxxx			xxxxx		2.2	xxxx			xxxxx		3.5	xxxx			3.3		xxxxx	xxxx			xxxxx	
Capacity Module:																								
Cnflict Vol:	2808	xxxx			xxxxx		759	xxxx			xxxxx		3088	xxxx			2529		xxxx	xxxx			xxxxx	
Potent Cap..	137	xxxx			xxxxx		853	xxxx			xxxxx		13	xxxx			35		xxxx	xxxx			xxxxx	
Move Cap..	137	xxxx			xxxxx		853	xxxx			xxxxx		9	xxxx			35		xxxx	xxxx			xxxxx	
Volume/Cap:	0.37	xxxx			xxxx		0.05	xxxx			xxxx		37.44	xxxx			1.25		xxxx	xxxx			xxxx	
Level Of Service Module:																								
Queue:	1.6	xxxx			xxxxx		0.1	xxxx			xxxxx		xxxxx	xxxx			4.7		xxxxx	xxxx			xxxxx	
Stopped Del:	46.0	xxxx			xxxxx		9.4	xxxx			xxxxx		xxxxx	xxxx			409.5		xxxxx	xxxx			xxxxx	
LOS by Move:	E	*			*		A	*			*		*	*			F		*	*			*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx			xxxxx		xxxx	xxxx			xxxxx		9	xxxx			xxxxx		xxxx	0			xxxxx	
SharedQueue:	xxxxx	xxxx			xxxxx		xxxxx	xxxx			xxxxx		44.1	xxxx			xxxxx		xxxxx	xxxx			xxxxx	
Shrd StpDel:	xxxxx	xxxx			xxxxx		xxxxx	xxxx			xxxxx		17198	xxxx			xxxxx		xxxxx	xxxx			xxxxx	
Shared LOS:	*	*			*		*	*			*		F	*			*		*	*			*	
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	*						*						F						*					

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.383
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.7
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Ignore				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1!	0
Volume Module:																
Base Vol:	0	187	27		80	191	0		0	0	0		12	0	71	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	187	27		80	191	0		0	0	0		12	0	71	
User Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.00		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	208	0		89	212	0		0	0	0		13	0	79	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	208	0		89	212	0		0	0	0		13	0	79	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	208	0		89	212	0		0	0	0		13	0	79	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	1.00	1.00		0.30	0.70	0.00		0.00	0.00	0.00		0.14	0.00	0.86	
Final Sat..	0	717	0		232	555	0		0	0	0		105	0	623	
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.29	xxxx		0.38	0.38	xxxx		xxxx	xxxx	xxxx		0.13	xxxx	0.13	
Crit Moves:		****			****								****			
Delay/Veh:	0.0	9.6	0.0		10.2	10.2	0.0		0.0	0.0	0.0		8.1	0.0	8.1	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	9.6	0.0		10.2	10.2	0.0		0.0	0.0	0.0		8.1	0.0	8.1	
LOS by Move:	*	A	*		B	B	*		*	*	*		A	*	A	
ApproachDel:		9.6				10.2				xxxxxx				8.1		
Delay Adj:		1.00				1.00				xxxxx				1.00		
ApprAdjDel:		9.6				10.2				xxxxxx				8.1		
LOS by Appr:		A				B				*				A		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club Drive/Entrance #3

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[11.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1
Volume Module:																
Base Vol:	0	375	0		24	304	0		0	0	0		0	0	40	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	375	0		24	304	0		0	0	0		0	0	40	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	0	408	0		26	330	0		0	0	0		0	0	43	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	408	0		26	330	0		0	0	0		0	0	43	
Critical Gap Module:																
Critical Gp:	xxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	6.2	
FollowUpTim:	xxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	3.3	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		408	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	408	
Potent Cap.:	xxxx	xxxx	xxxxx		1162	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	648	
Move Cap..	xxxx	xxxx	xxxxx		1162	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	648	
Volume/Cap:	xxxx	xxxx	xxxx		0.02	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	0.07	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	0.2	
Stopped Del:	xxxxx	xxxx	xxxxx		8.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	11.0	
LOS by Move:	*	*	*		A	*	*		*	*	*		*	*	B	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		8.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		A	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				11.0			
ApproachLOS:	*				*				*				B			

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: B[12.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1 0	1	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	180	202	0	201	0	0	0	0	106	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	180	202	0	201	0	0	0	0	106	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	200	224	0	223	0	0	0	0	118	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	200	224	0	223	0	0	0	0	118	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	423	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	591	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	591	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.20	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.6		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 31.0 Worst Case Level Of Service: F[81.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	0	165	133	30	162	56	90	111	0	276	70	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	165	133	30	162	56	90	111	0	276	70	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	183	148	33	180	62	100	123	0	307	78	44
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	183	148	33	180	62	100	123	0	307	78	44
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	xxxxx	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	331	xxxx	xxxxx	565	578	xxxxx	523	492	183
Potent Cap.:	xxxx	xxxx	xxxxx	1240	xxxx	xxxxx	439	430	xxxxx	468	480	864
Move Cap..	xxxx	xxxx	xxxxx	1240	xxxx	xxxxx	356	418	xxxxx	354	468	864
Volume/Cap:	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	0.28	0.29	xxxx	0.87	0.17	0.05
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	1.1	1.2	xxxxx	xxxxx	xxxx	0.2
Stopped Del:	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	19.0	17.2	xxxxx	xxxxx	xxxx	9.4
LOS by Move:	*	*	*	A	*	*	C	C	*	*	*	A
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	372	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.8	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	89.4	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			18.0			81.1		
ApproachLOS:	*			*			C			F		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 4.9 Worst Case Level Of Service: C[15.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	0		0	0	0	1	0		1	0	0	0	0		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	159		0		0	169		135		216		0		0		0		0		0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0	159		0		0	169		135		216		0		0		0		0		0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0	177		0		0	188		150		240		0		0		0		0		0		0	
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0		0		0	
Final Vol..	0	177		0		0	188		150		240		0		0		0		0		0		0	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4		xxxx	xxxxx	xxxxx	xxxx	xxxxx							
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5		xxxx	xxxxx	xxxxx	xxxx	xxxxx							
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					439		xxxx	xxxxx	xxxx	xxxx	xxxxx							
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					579		xxxx	xxxxx	xxxx	xxxx	xxxxx							
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					579		xxxx	xxxxx	xxxx	xxxx	xxxxx							
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					0.41		xxxx	xxxx	xxxx	xxxx	xxxx							
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					2.0		xxxx	xxxxx	xxxxx	xxxx	xxxxx							
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					15.6		xxxxx	xxxxx	xxxxx	xxxx	xxxxx							
LOS by Move:	*	*		*		*					C		*		*		*							
Movement:	LT - LTR - RT						LT - LTR - RT						LT - LTR - RT						LT - LTR - RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*		*		*					*		*		*									
ApproachDel:	xxxxxx						xxxxxx						15.6						xxxxxx					
ApproachLOS:	*						*						C						*					

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Country Club/Harmony Grove

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: C[19.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		0	0	1!	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	5	11		21		2	7		153		110	255		3		11	456		2					
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00					
Initial Bse:	5	11		21		2	7		153		110	255		3		11	456		2					
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00					
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90					
PHF Volume:	6	12		23		2	8		170		122	283		3		12	507		2					
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0					
Final Vol..	6	12		23		2	8		170		122	283		3		12	507		2					
Critical Gap Module:																								
Critical Gp:	7.1	6.5		6.2		7.1	6.5		6.2		4.1	xxxx	xxxxx			4.1	xxxx	xxxxx						
FollowUpTim:	3.5	4.0		3.3		3.5	4.0		3.3		2.2	xxxx	xxxxx			2.2	xxxx	xxxxx						
Capacity Module:																								
Cnflict Vol:	1151	1063		285		1079	1063		508		509	xxxx	xxxxx			287	xxxx	xxxxx						
Potent Cap..	177	225		759		198	225		569		1066	xxxx	xxxxx			1287	xxxx	xxxxx						
Move Cap.:	108	196		759		164	195		569		1066	xxxx	xxxxx			1287	xxxx	xxxxx						
Volume/Cap:	0.05	0.06		0.03		0.01	0.04		0.30		0.11	xxxx	xxxx			0.01	xxxx	xxxx						
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					0.4	xxxx	xxxxx			0.0	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					8.8	xxxx	xxxxx			7.8	xxxx	xxxxx						
LOS by Move:	*	*		*		*					A	*		*		A	*		*					
Movement:	LT - LTR - RT						LT - LTR - RT						LT - LTR - RT						LT - LTR - RT					
Shared Cap.:	xxxx	284	xxxxx	xxxx	511	xxxxx					xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	1.6	xxxxx					xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx						
Shrd StpDel:	xxxxx	19.8	xxxxx	xxxxx	15.8	xxxxx					xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx						
Shared LOS:	*	C		*		*	C		*		*	*		*		*	*		*						
ApproachDel:	19.8					15.8					xxxxxx					xxxxxx								
ApproachLOS:	C					C					*					*								

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: C[24.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module: AM Peak												
Base Vol:	0	0	0	85	0	22	14	286	0	0	549	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	85	0	22	14	286	0	0	549	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	94	0	24	16	318	0	0	610	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	94	0	24	16	318	0	0	610	59
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	988	xxxx	639	669	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	276	xxxx	479	931	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	273	xxxx	479	931	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.35	xxxx	0.05	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	299	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.8	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	24.7	xxxxx	8.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			24.7			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: C[19.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	56	0	10	6	233	0	0	541	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	56	0	10	6	233	0	0	541	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	62	0	11	7	259	0	0	601	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	62	0	11	7	259	0	0	601	41
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	894	xxxx	622	642	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	314	xxxx	491	952	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	313	xxxx	491	952	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.20	xxxx	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	331	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	19.0	xxxxx	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			19.0			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Cycle (sec): 100 Critical Vol./Cap. (X): 1.384
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 51.4
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0	0 1	0 0	0	0 0	0 0	1	0 1	2 0	1	0 0
Volume Module:												
Base Vol:	214	0	91	0	0	0	0	920	1093	494	729	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	214	0	91	0	0	0	0	920	1093	494	729	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	238	0	101	0	0	0	0	1022	1214	549	810	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	238	0	101	0	0	0	0	1022	1214	549	810	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	238	0	101	0	0	0	0	1022	1214	549	810	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.12	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	2.00	1.00	0.00
Final Sat..	3502	0	1615	0	0	0	0	1900	1615	461	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.06	0.00	0.00	0.00	0.00	0.54	0.75	1.19	0.43	0.00
Crit Moves:	****									****		
Green/Cycle:	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.86	0.91	0.86	0.86	0.00
Volume/Cap:	1.38	0.00	1.28	0.00	0.00	0.00	0.00	0.62	0.83	1.38	0.50	0.00
Delay/Veh:	252.1	0.0	239.6	0.0	0.0	0.0	0.0	2.9	5.6	194.7	1.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	252.1	0.0	239.6	0.0	0.0	0.0	0.0	2.9	5.6	194.7	1.9	0.0
HCM2kAvg:	10	0	8	0	0	0	0	10	16	141	6	0

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa (NS / EW)

Average Delay (sec/veh): 10.6 Worst Case Level Of Service: C(15.7)

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	0	1 0	0 1	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << AM Peak												
Base Vol:	29	0	455	0	0	0	0	97	19	495	44	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	0	455	0	0	0	0	97	19	495	44	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	32	0	506	0	0	0	0	108	21	550	49	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	32	0	506	0	0	0	0	108	21	550	49	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1267	xxxx	118	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	129	xxxx	xxxxx
Potent Cap..	186	xxxx	933	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1457	xxxx	xxxxx
Move Cap..	106	xxxx	933	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1457	xxxx	xxxxx
Volume/Cap:	0.30	xxxx	0.54	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.38	xxxx	xxxx
Level Of Service Module:												
Queue:	1.2	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.8	xxxx	xxxxx
Stopped Del:	53.1	xxxx	13.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx
LOS by Move:	F	*	B	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.8	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:	15.7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.836
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 41.7
Optimal Cycle: 92 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module: >> Count Date: 11 Dec 2001 << AM												
Base Vol:	185	113	81	71	277	50	41	586	339	260	749	82
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	185	113	81	71	277	50	41	586	339	260	749	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	206	126	90	79	308	56	46	651	377	289	832	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	206	126	90	79	308	56	46	651	377	289	832	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	206	126	90	79	308	56	46	651	377	289	832	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.93	0.98	0.83	0.93	0.88	0.88	0.93	0.93	0.83
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.27	0.73	1.00	2.00	1.00
Final Sat..	1769	1862	1583	1769	1862	1583	1769	2118	1225	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.12	0.07	0.06	0.04	0.17	0.04	0.03	0.31	0.31	0.16	0.24	0.06
Crit Moves:	****				****			****		****		
Green/Cycle:	0.14	0.26	0.26	0.08	0.20	0.20	0.11	0.37	0.37	0.19	0.45	0.45
Volume/Cap:	0.84	0.26	0.22	0.58	0.83	0.18	0.23	0.84	0.84	0.84	0.52	0.13
Delay/Veh:	72.1	35.3	34.9	59.9	60.1	40.1	49.2	40.0	40.0	62.9	24.1	19.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	72.1	35.3	34.9	59.9	60.1	40.1	49.2	40.0	40.0	62.9	24.1	19.4
HCM2kAvg:	10	4	3	4	13	2	2	20	20	13	11	2

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.397
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 82.6
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module: >> Count Date: 28 Nov 2001 << AM												
Base Vol:	470	18	41	312	76	18	7	39	83	161	221	268
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	470	18	41	312	76	18	7	39	83	161	221	268
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	522	20	46	347	84	20	8	43	92	179	246	298
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	522	20	46	347	84	20	8	43	92	179	246	298
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	522	20	46	347	84	20	8	43	92	179	246	298
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat..	374	377	408	373	385	413	318	334	358	385	408	444
Capacity Analysis Module:												
Vol/Sat:	1.40	0.05	0.11	0.93	0.22	0.05	0.02	0.13	0.26	0.47	0.60	0.67
Crit Moves:	****			****					****			****
Delay/Veh:	220.0	12.3	12.1	61.3	14.3	11.5	13.8	14.5	15.4	19.5	23.4	25.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	220.0	12.3	12.1	61.3	14.3	11.5	13.8	14.5	15.4	19.5	23.4	25.2
LOS by Move:	F	B	B	F	B	B	B	B	C	C	C	D
ApproachDel:	196.9			50.3			15.1			23.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	196.9			50.3			15.1			23.2		
LOS by Appr:	F			F			C			C		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. (NS / EW)

Average Delay (sec/veh): 91.6 Worst Case Level Of Service: F[475.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 0 1 0			0 1 0 0 0		
Volume Module: >> Count Date: 28 Nov 2001 << AM												
Base Vol:	123	0	242	0	0	0	0	184	210	377	798	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	242	0	0	0	0	184	210	377	798	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	137	0	269	0	0	0	0	204	233	419	887	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	137	0	269	0	0	0	0	204	233	419	887	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	2046	xxxx	321	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	438	xxxx	xxxxx
Potent Cap..	62	xxxx	720	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1122	xxxx	xxxxx
Move Cap..	38	xxxx	720	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1122	xxxx	xxxxx
Volume/Cap:	3.59	xxxx	0.37	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.37	xxxx	xxxx
Level Of Service Module:												
Queue:	15.6	xxxx	1.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.8	xxxx	xxxxx
Stopped Del:	1385	xxxx	13.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.1	xxxx	xxxxx
LOS by Move:	F	*	B	*	*	*	*	*	*	B	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.8	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.1	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	B	*	*
ApproachDel:	475.2			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 5.9 Worst Case Level Of Service: F[50.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			1 0 0 0 1			0 1 0 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 12 Dec 2001 <<												
Base Vol:	0	0	0	28	0	157	93	473	0	0	976	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	28	0	157	93	473	0	0	976	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	31	0	174	103	526	0	0	1084	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	31	0	174	103	526	0	0	1084	46
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1839	xxxx	1107	1130	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	84	xxxx	258	626	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	73	xxxx	258	626	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.43	xxxx	0.68	0.17	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	1.7	xxxx	4.4	0.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	87.5	xxxx	43.9	11.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	E	B	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	B	*	*	*	*	*
ApproachDel:	xxxxxx			50.5			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.997
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 46.5
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	0	7	7	24	0	0	24	7
Lanes:	0 1	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module: >> Count Date: 12 Dec 2001 << AM												
Base Vol:	6	4	5	356	13	221	108	677	14	28	1203	293
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	4	5	356	13	221	108	677	14	28	1203	293
User Adj:	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	9	6	7	526	19	327	160	1000	21	41	1778	433
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	6	7	526	19	327	160	1000	21	41	1778	433
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	9	6	7	526	19	327	160	1000	21	41	1778	433
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.93	0.84	0.84	0.93	0.93	0.93	0.93	0.93	0.83
Lanes:	0.80	0.53	0.67	1.00	0.06	0.94	1.00	1.96	0.04	1.00	2.00	1.00
Final Sat..	1317	878	1098	1769	89	1509	1769	3456	71	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.30	0.22	0.22	0.09	0.29	0.29	0.02	0.50	0.27
Crit Moves:	****			****			****				****	
Green/Cycle:	0.01	0.01	0.01	0.30	0.30	0.30	0.09	0.55	0.55	0.04	0.50	0.50
Volume/Cap:	1.00	1.00	1.00	1.00	0.73	0.73	1.00	0.53	0.53	0.53	1.00	0.54
Delay/Veh:	248.8	249	248.8	80.3	43.2	43.2	124.6	17.3	17.3	62.5	50.1	21.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	248.8	249	248.8	80.3	43.2	43.2	124.6	17.3	17.3	62.5	50.1	21.1
HCM2kAvg:	2	2	2	27	13	13	10	12	12	2	40	11

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 8.8 Worst Case Level Of Service: F[98.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 0	0	1	0	0 1	0	0	0	0 0	0	0	0	1 0	0	0	1
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	0	446	48		6	790	0		0	0	0		121	0	5	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	446	48		6	790	0		0	0	0		121	0	5	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	496	53		7	878	0		0	0	0		134	0	6	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	496	53		7	878	0		0	0	0		134	0	6	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx	6.2	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx	3.3	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		549	xxxx	xxxxx	xxxx	xxxx	xxxxx			1413	xxxx	522	
Potent Cap.:	xxxx	xxxx	xxxxx		1031	xxxx	xxxxx	xxxx	xxxx	xxxxx			153	xxxx	558	
Move Cap..	xxxx	xxxx	xxxxx		1031	xxxx	xxxxx	xxxx	xxxx	xxxxx			153	xxxx	558	
Volume/Cap:	xxxx	xxxx	xxxx		0.01	xxxx	xxxx	xxxx	xxxx	xxxx			0.88	xxxx	0.01	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.1	xxxx	0.0	
Stopped Del:	xxxxx	xxxx	xxxxx		8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx			102.1	xxxx	11.5	
LOS by Move:	*	*	*		A	*	*	*	*	*			F	*	B	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT	LT -	LTR -	RT			LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		A	*	*	*	*	*			*	*	*	
ApproachDel:	xxxxxx				xxxxxx			xxxxxx					98.5			
ApproachLOS:	*				*			*					F			

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 102.8 Worst Case Level Of Service: F[438.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0		1	0	0	0	1		0	0	0	0	0	
Volume Module: >> Count Date: 12 Dec 2001 <<																								
Base Vol:	187	156		0		0	79	856	302		0	82		0		0		0						
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00						
Initial Bse:	187	156		0		0	79	856	302		0	82		0		0		0						
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00		1.00		1.00						
PHF Adj:	0.90	0.90		0.90		0.90	0.90	0.90	0.90		0.90	0.90		0.90		0.90		0.90						
PHF Volume:	208	173		0		0	88	951	336		0	91		0		0		0						
Reduct Vol:	0	0		0		0	0	0	0		0	0		0		0		0						
Final Vol..	208	173		0		0	88	951	336		0	91		0		0		0						
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx		6.2	xxxxx	xxxx	xxxxx									
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx		3.3	xxxxx	xxxx	xxxxx									
Capacity Module:																								
Cnflict Vol:	1039	xxxx	xxxxx	xxxx	xxxx	xxxxx			1152	xxxx		563	xxxx	xxxx	xxxxx									
Potent Cap..	677	xxxx	xxxxx	xxxx	xxxx	xxxxx			220	xxxx		529	xxxx	xxxx	xxxxx									
Move Cap..	677	xxxx	xxxxx	xxxx	xxxx	xxxxx			161	xxxx		529	xxxx	xxxx	xxxxx									
Volume/Cap:	0.31	xxxx	xxxx	xxxx	xxxx	xxxx			2.08	xxxx		0.17	xxxx	xxxx	xxxx									
Level Of Service Module:																								
Queue:	1.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx			26.5	xxxx		0.6	xxxxx	xxxx	xxxxx									
Stopped Del:	12.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx			554.4	xxxx		13.2	xxxxx	xxxx	xxxxx									
LOS by Move:	B	*		*		*	*	*	F	*		B	*	*	*									
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx									
SharedQueue:	1.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx									
Shrd StpDel:	12.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx									
Shared LOS:	B	*		*		*	*	*	*	*		*	*	*	*									
ApproachDel:	xxxxxx						xxxxxx					438.9							xxxxxx					
ApproachLOS:	*						*					F							*					

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 6.5 Worst Case Level Of Service: C[17.3]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	0	1		0	0	0	0	0		0	0	1	0	1		1	0	1	0	0	
Volume Module:																								
Base Vol:	147		0	137		0		0		0		0	153	106	102	235		0						
Growth Adj:	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00						
Initial Bse:	147		0	137		0		0		0		0	153	106	102	235		0						
User Adj:	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00						
PHF Adj:	0.82	0.82		0.82	0.82		0.82		0.82	0.82		0.82	0.82	0.82	0.82	0.82		0.82						
PHF Volume:	179		0	167		0		0		0		0	187	129	124	287		0						
Reduct Vol:	0		0	0		0		0		0		0	0	0	0	0		0						
Final Vol..	179		0	167		0		0		0		0	187	129	124	287		0						
Critical Gap Module:																								
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					4.1	xxxx	xxxxx							
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					2.2	xxxx	xxxxx							
Capacity Module:																								
Cnflict Vol:	722	xxxx		187	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					316	xxxx	xxxxx							
Potent Cap..	397	xxxx		861	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					1256	xxxx	xxxxx							
Move Cap..	367	xxxx		861	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					1256	xxxx	xxxxx							
Volume/Cap:	0.49	xxxx		0.19	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					0.10	xxxx	xxxx							
Level Of Service Module:																								
Queue:	2.6	xxxx		0.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					0.3	xxxx	xxxxx							
Stopped Del:	23.9	xxxx		10.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					8.2	xxxx	xxxxx							
LOS by Move:	C	*		B	*	*	*	*	*	*					A	*	*							
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx									
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx									
Shared LOS:	*	*		*	*	*	*	*	*	*		*	*	*	*									
ApproachDel:		17.3					xxxxxx					xxxxxx							xxxxxx					
ApproachLOS:		C					*					*							*					

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 4.9 Worst Case Level Of Service: B[13.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	1	0	0 1	0	1	0	0 0	0	0	1	0 1
Volume Module:																
Base Vol:	0	0		0	60	0		124	158	132		0	0	223		60
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	60	0		124	158	132		0	0	223		60
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	67	0		138	176	147		0	0	248		67
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	0	0		0	67	0		138	176	147		0	0	248		67
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	6.4	xxxx		6.2	4.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	3.5	xxxx		3.3	2.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	746	xxxx		248	314	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	384	xxxx		796	1257	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	339	xxxx		796	1257	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	0.20	xxxx		0.17	0.14	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		0.6	0.5	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		10.5	8.3	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		B	A	*		*	*	*		*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		xxxxx	339	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	0.7	xxxx		xxxxx	0.5	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	18.2	xxxx		xxxxx	8.3	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	C	*		*	A	*		*	*	*		*
ApproachDel:	xxxxxx				13.0				xxxxxx				xxxxxx			
ApproachLOS:	*				B				*				*			

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.829
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 35.9
Optimal Cycle: 80 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	0	0		0	7	24		7
Lanes:	0	1	0	0 1	0	0	0	0 0	2	0	2	0 0	0	0	3	0 1
Volume Module: >> Count Date: 12 Dec 2001 << AM																
Base Vol:	534	1		395	0	0		0	461	1082		0	0	1107		206
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	534	1		395	0	0		0	461	1082		0	0	1107		206
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	593	1		439	0	0		0	512	1202		0	0	1230		229
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol.	593	1		439	0	0		0	512	1202		0	0	1230		229
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	593	1		439	0	0		0	512	1202		0	0	1230		229
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.83	0.83		0.83	1.00	1.00		1.00	0.90	0.89		1.00	1.00	0.89		0.83
Lanes:	0.99	0.01		1.00	0.00	0.00		0.00	2.00	3.00		0.00	0.00	3.00		1.00
Final Sat..	1580	3		1583	0	0		0	3432	5083		0	0	5083		1583
Capacity Analysis Module:																
Vol/Sat:	0.38	0.38		0.28	0.00	0.00		0.00	0.15	0.24		0.00	0.00	0.24		0.14
Crit Moves:		****							****					****		
Green/Cycle:	0.45	0.45		0.45	0.00	0.00		0.00	0.18	0.47		0.00	0.00	0.29		0.29
Volume/Cap:	0.83	0.83		0.61	0.00	0.00		0.00	0.83	0.50		0.00	0.00	0.83		0.50
Delay/Veh:	36.8	36.8		26.4	0.0	0.0		0.0	56.6	22.1		0.0	0.0	43.7		36.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	36.8	36.8		26.4	0.0	0.0		0.0	56.6	22.1		0.0	0.0	43.7		36.0
HCM2kAvg:	24	24		13	0	0		0	12	10		0	0	16		7

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy INS / EWI

Cycle (sec): 120 Critical Vol./Cap. (X): 0.806
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 59.9
Optimal Cycle: 73 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	0	0	24	7	7	0	7	0	0	0
Lanes:	1 0	1 0	1	0 1	0 1	0	2 0	3 0	1	2 0	3 1	1
Volume Module: >> Count Date: 12 Dec 2001 << AM												
Base Vol:	12	18	83	458	102	656	176	948	46	74	1321	199
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	18	83	458	102	656	176	948	46	74	1321	199
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	13	20	92	509	113	729	196	1053	51	82	1468	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	20	92	509	113	729	196	1053	51	82	1468	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	13	20	92	509	113	729	196	1053	51	82	1468	221
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.84	0.84	0.84	0.90	0.89	0.83	0.90	0.87	0.87
Lanes:	1.00	1.00	1.00	0.82	0.18	1.00	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat..	1769	1862	1583	1304	290	1595	3432	5083	1583	3432	6642	1661
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.06	0.39	0.39	0.46	0.06	0.21	0.03	0.02	0.22	0.13
Crit Moves:		****				****	****				****	
Green/Cycle:	0.20	0.20	0.20	0.45	0.45	0.45	0.06	0.25	0.25	0.03	0.22	0.22
Volume/Cap:	0.04	0.05	0.29	0.87	0.87	1.02	0.98	0.84	0.13	0.84	1.02	0.61
Delay/Veh:	38.7	38.9	41.3	35.3	35.3	62.1	113.1	48.1	35.3	102.1	73.4	42.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.7	38.9	41.3	35.3	35.3	62.1	113.1	48.1	35.3	102.1	73.4	42.8
HCM2kAvg:	0	1	3	24	24	35	7	15	1	3	19	8

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way INS / EWI

Cycle (sec): 120 Critical Vol./Cap. (X): 0.775
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 38.2
Optimal Cycle: 75 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	2 0	3 0	1	2 0	3 0	1	2 0	1 1	0	2 0	1 1	0
Volume Module: >> Count Date: 9 Dec 2000 << AM												
Base Vol:	203	998	96	157	1265	549	294	470	297	177	731	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	203	998	96	157	1265	549	294	470	297	177	731	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	226	1109	107	174	1406	610	327	522	330	197	812	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	226	1109	107	174	1406	610	327	522	330	197	812	51
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	226	1109	107	174	1406	610	327	522	330	197	812	51
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.89	0.83	0.90	0.89	0.83	0.90	0.88	0.88	0.90	0.92	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	1.23	0.77	2.00	1.88	0.12
Final Sat..	3432	5083	1583	3432	5083	1583	3432	2042	1290	3432	3298	208
Capacity Analysis Module:												
Vol/Sat:	0.07	0.22	0.07	0.05	0.28	0.39	0.10	0.26	0.26	0.06	0.25	0.25
Crit Moves:	****					****	****				****	
Green/Cycle:	0.08	0.36	0.36	0.10	0.37	0.50	0.12	0.36	0.36	0.08	0.32	0.32
Volume/Cap:	0.77	0.60	0.19	0.52	0.74	0.77	0.77	0.71	0.71	0.70	0.77	0.77
Delay/Veh:	66.0	31.8	26.3	53.1	34.0	29.5	59.7	35.2	35.2	61.3	40.5	40.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.0	31.8	26.3	53.1	34.0	29.5	59.7	35.2	35.2	61.3	40.5	40.5
HCM2kAvg:	6	11	3	4	16	20	8	14	14	5	16	16

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.877
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 45.4
Optimal Cycle: 108 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	1	0	3	0	1		1	0	2	1	0		1	0	1	1	0		1	0	1	1	0	
Volume Module: >> Count Date: 12 Dec 2001 << AM																								
Base Vol:		9	731		125		121	1082		548			264	283		12			112	427		290		
Growth Adj:		1.00	1.00		1.00		1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Initial Bse:		9	731		125		121	1082		548			264	283		12			112	427		290		
User Adj:		1.00	1.00		1.00		1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:		0.90	0.90		0.90		0.90	0.90		0.90			0.90	0.90		0.90			0.90	0.90		0.90		
PHF Volume:		10	812		139		134	1202		609			293	314		13			124	474		322		
Reduct Vol:		0	0		0		0	0		0			0	0		0			0	0		0		
Reduced Vol:		10	812		139		134	1202		609			293	314		13			124	474		322		
PCE Adj:		1.00	1.00		1.00		1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
MLF Adj:		1.00	1.00		1.00		1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Final Vol.:		10	812		139		134	1202		609			293	314		13			124	474		322		
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900	1900		1900		1900	1900	1900		1900		1900	1900	1900		1900		1900
Adjustment:	0.93	0.89		0.83		0.93	0.85		0.85		0.93	0.93		0.93		0.93		0.93	0.87		0.87			
Lanes:	1.00	3.00		1.00		1.00	2.00		1.00		1.00	1.92		0.08		1.00		1.19	0.81					
Final Sat.:	1769	5083		1583		1769	3219		1610		1769	3374		143		1769		1978	1344					
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.16		0.09		0.08	0.37		0.38		0.17	0.09		0.09		0.07		0.24	0.24					
Crit Moves:	****								****		****							****						
Green/Cycle:	0.06	0.34		0.34		0.13	0.41		0.41		0.18	0.32		0.32		0.11		0.26	0.26					
Volume/Cap:	0.10	0.47		0.26		0.59	0.92		0.93		0.93	0.29		0.29		0.62		0.93	0.93					
Delay/Veh:	53.9	31.6		29.2		53.6	41.3		42.8		81.8	30.5		30.5		56.6		60.1	60.1					
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00					
AdjDel/Veh:	53.9	31.6		29.2		53.6	41.3		42.8		81.8	30.5		30.5		56.6		60.1	60.1					
HCM2kAvg:	0	8		4		6	25		26		15	4		4		6		18	18					

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.512
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 15.9
Optimal Cycle: 35 Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0			0		0	0			0		0	0			0		0	0			0	
Lanes:	1	0	1	1	0		1	0	2	0	1		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:		72	731		14		34	1000		46			59	23		17			28	24		93		
Growth Adj:		1.00	1.00		1.00		1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Initial Bse:		72	731		14		34	1000		46			59	23		17			28	24		93		
User Adj:		1.00	1.00		1.00		1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:		0.90	0.90		0.90		0.90	0.90		0.90			0.90	0.90		0.90			0.90	0.90		0.90		
PHF Volume:		80	812		16		38	1111		51			66	26		19			31	27		103		
Reduct Vol:		0	0		0		0	0		0			0	0		0			0	0		0		
Reduced Vol:		80	812		16		38	1111		51			66	26		19			31	27		103		
PCE Adj:		1.00	1.00		1.00		1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
MLF Adj:		1.00	1.00		1.00		1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Final Vol.:		80	812		16		38	1111		51			66	26		19			31	27		103		
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900	1900		1900		1900	1900	1900		1900		1900	1900	1900		1900		1900
Adjustment:	0.95	0.95		0.95		0.95	0.95		0.85		0.95	0.94		0.94		0.95		0.88	0.88					
Lanes:	1.00	1.96		0.04		1.00	2.00		1.00		1.00	0.58		0.42		1.00		0.21	0.79					
Final Sat.:	1805	3532		68		1805	3610		1615		1805	1023		756		1805		343	1331					
Capacity Analysis Module:																								
Vol/Sat:	0.04	0.23		0.23		0.02	0.31		0.03		0.04	0.02		0.02		0.02		0.08	0.08					
Crit Moves:	****						****				****							****						
Green/Cycle:	0.09	0.63		0.63		0.06	0.60		0.60		0.07	0.13		0.13		0.09		0.15	0.15					
Volume/Cap:	0.51	0.36		0.36		0.36	0.51		0.05		0.51	0.19		0.19		0.19		0.51	0.51					
Delay/Veh:	46.5	9.0		9.0		47.6	11.7		8.2		48.3	39.1		39.1		42.6		40.8	40.8					
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00					
AdjDel/Veh:	46.5	9.0		9.0		47.6	11.7		8.2		48.3	39.1		39.1		42.6		40.8	40.8					
HCM2kAvg:	3	6		6		2	10		1		3	1		1		1		4	4					

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 76.4 Worst Case Level Of Service: F[614.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1 0 1			1 0 1 0 1			0 1 0 0 1			0 1 0 0 1		
Volume Module:												
Base Vol:	61	426	25	25	827	183	137	10	55	40	10	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	426	25	25	827	183	137	10	55	40	10	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	68	473	28	28	919	203	152	11	61	44	11	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	68	473	28	28	919	203	152	11	61	44	11	33
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1122	xxxx	xxxxx	501	xxxx	xxxxx	1619	1611	919	1721	1787	473
Potent Cap..	630	xxxx	xxxxx	1074	xxxx	xxxxx	84	105	332	71	82	595
Move Cap..	630	xxxx	xxxxx	1074	xxxx	xxxxx	63	92	332	47	72	595
Volume/Cap:	0.11	xxxx	xxxx	0.03	xxxx	xxxx	2.42	0.12	0.18	0.94	0.16	0.06
Level Of Service Module:												
Queue:	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	0.7	xxxxx	xxxx	0.2
Stopped Del:	11.4	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	18.3	xxxxx	xxxx	11.4
LOS by Move:	B	*	*	A	*	*	*	*	C	*	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	64	xxxx	xxxxx	51	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	16.2	xxxx	xxxxx	4.9	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	838.2	xxxx	xxxxx	284.1	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			614.9			181.9		
ApproachLOS:	*			*			F			F		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.839
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 45.8
Optimal Cycle: 93 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0 1 1 0			1 0 1 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module: >> Count Date: 8 Jan 2002 << AM												
Base Vol:	326	486	10	27	934	49	108	6	333	34	8	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	326	486	10	27	934	49	108	6	333	34	8	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	362	540	11	30	1038	54	120	7	370	38	9	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol.	362	540	11	30	1038	54	120	7	370	38	9	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	362	540	11	30	1038	54	120	7	370	38	9	79
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.94	0.94	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.96	0.04	1.00	1.90	0.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat..	1805	3527	73	1805	3406	179	1805	1900	1615	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.20	0.15	0.15	0.02	0.30	0.30	0.07	0.00	0.23	0.02	0.00	0.05
Crit Moves:	****				****				****	****		
Green/Cycle:	0.23	0.45	0.45	0.13	0.35	0.35	0.08	0.26	0.26	0.06	0.24	0.24
Volume/Cap:	0.87	0.34	0.34	0.13	0.87	0.87	0.83	0.01	0.87	0.36	0.02	0.20
Delay/Veh:	62.5	21.7	21.7	46.3	43.5	43.5	85.9	32.8	60.0	56.4	34.8	36.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.5	21.7	21.7	46.3	43.5	43.5	85.9	32.8	60.0	56.4	34.8	36.6
HCM2kAvg:	16	6	6	1	22	22	7	0	16	2	0	2

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec):	120	Critical Vol./Cap. (X):	0.901
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	38.2
Optimal Cycle:	112	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	20	7		7	20	0		0	0	0		20	0	20	
Lanes:	0 0	2	0	1	1	0	1	0	0	0 0	0	0	1	0	0	1
Volume Module:																
Base Vol:	0	338	193		493	970	0		0	0	0		263	0	310	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	338	193		493	970	0		0	0	0		263	0	310	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.81		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.72	
PHF Volume:	0	376	238		548	1078	0		0	0	0		292	0	431	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	376	238		548	1078	0		0	0	0		292	0	431	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	0	376	238		548	1078	0		0	0	0		292	0	431	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.95	0.85		0.95	1.00	1.00		1.00	1.00	1.00		0.95	1.00	0.85	
Lanes:	0.00	2.00	1.00		1.00	1.00	0.00		0.00	0.00	0.00		1.00	0.00	1.00	
Final Sat.:	0	3610	1615		1805	1900	0		0	0	0		1805	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.10	0.15		0.30	0.57	0.00		0.00	0.00	0.00		0.16	0.00	0.27	
Crit Moves:	****					****									****	
Green/Cycle:	0.00	0.22	0.22		0.41	0.63	0.00		0.00	0.00	0.00		0.30	0.00	0.30	
Volume/Cap:	0.00	0.47	0.66		0.75	0.90	0.00		0.00	0.00	0.00		0.55	0.00	0.90	
Delay/Veh:	0.0	40.9	47.0		34.6	28.6	0.0		0.0	0.0	0.0		36.7	0.0	60.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	40.9	47.0		34.6	28.6	0.0		0.0	0.0	0.0		36.7	0.0	60.6	
HCM2kAvg:	0	6	9		19	37	0		0	0	0		10	0	19	

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave [NS / EW]

Cycle (sec):	120	Critical Vol./Cap. (X):	1.055
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	50.6
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Ovl			
Min. Green:	7	24	7		7	24	7		0	24	7		7	24	7	
Lanes:	1 0	1	1	0	1	0	1	1	0	1 0	1	0	1	0	0	1 0
Volume Module: >> Count Date: 27 Nov 2001 << AM Peak																
Base Vol:	139	474	86		410	708	4		25	319	124		27	164	593	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	139	474	86		410	708	4		25	319	124		27	164	593	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.50		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	154	527	96		456	787	4		28	354	69		30	182	659	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	154	527	96		456	787	4		28	354	69		30	182	659	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	154	527	96		456	787	4		28	354	69		30	182	659	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.93	0.91	0.91		0.93	0.93	0.93		0.07	0.98	0.83		0.42	0.87	0.87	
Lanes:	1.00	1.69	0.31		1.00	1.99	0.01		1.00	1.00	1.00		1.00	0.22	0.78	
Final Sat.:	1769	2926	531		1769	3514	20		134	1862	1583		804	356	1288	
Capacity Analysis Module:																
Vol/Sat:	0.09	0.18	0.18		0.26	0.22	0.22		0.21	0.19	0.04		0.04	0.51	0.51	
Crit Moves:		****			****									****		
Green/Cycle:	0.12	0.20	0.20		0.23	0.31	0.31		0.47	0.47	0.47		0.47	0.47	0.70	
Volume/Cap:	0.72	0.90	0.90		1.10	0.72	0.72		0.45	0.41	0.09		0.08	1.10	0.73	
Delay/Veh:	61.6	61.7	61.7		119.5	38.8	38.8		26.6	21.5	18.0		17.9	95.0	13.5	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	61.6	61.7	61.7		119.5	38.8	38.8		26.6	21.5	18.0		17.9	95.0	13.5	
HCM2kAvg:	7	15	15		27	14	14		9	8	1		1	44	20	

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.742
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 22.3
Optimal Cycle: 69 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	0 0	0 0	0	1 1	0 0	1	0 0	2 0	1	2 0	2 0	0
Volume Module: >> Count Date: 27 Nov 2001 << AM												
Base Vol:	0	0	0	85	22	17	0	642	783	248	1492	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	85	22	17	0	642	783	248	1492	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	94	24	19	0	713	870	276	1658	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	94	24	19	0	713	870	276	1658	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	94	24	19	0	713	870	276	1658	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.83	0.83	0.83	1.00	0.93	0.83	0.90	0.93	1.00
Lanes:	0.00	0.00	0.00	1.59	0.41	1.00	0.00	2.00	1.00	2.00	2.00	0.00
Final Sat..	0	0	0	2515	651	1583	0	3538	1583	3432	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.04	0.01	0.00	0.20	0.55	0.08	0.47	0.00
Crit Moves:					****				****	****		
Green/Cycle:	0.00	0.00	0.00	0.20	0.20	0.20	0.00	0.61	0.61	0.09	0.70	0.00
Volume/Cap:	0.00	0.00	0.00	0.19	0.19	0.06	0.00	0.33	0.90	0.90	0.67	0.00
Delay/Veh:	0.0	0.0	0.0	40.0	40.0	38.9	0.0	11.5	31.4	81.7	10.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	40.0	40.0	38.9	0.0	11.5	31.4	81.7	10.9	0.0
HCM2kAvg:	0	0	0	2	2	1	0	6	31	8	18	0

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave (NS/ EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.716
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.8
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 1	0 0	1	0 0	0 0	0	2 0	2 0	0	0 0	2 0	1
Volume Module: >> Count Date: 27 Nov 2001 << AM												
Base Vol:	807	9	169	0	0	0	105	672	0	0	917	296
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	807	9	169	0	0	0	105	672	0	0	917	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	949	11	199	0	0	0	124	791	0	0	1079	348
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	949	11	199	0	0	0	124	791	0	0	1079	348
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	949	11	199	0	0	0	124	791	0	0	1079	348
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.83	0.83	1.00	1.00	1.00	0.90	0.93	1.00	1.00	0.93	0.83
Lanes:	1.98	0.02	1.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat..	3130	35	1583	0	0	0	3432	3538	0	0	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.30	0.30	0.13	0.00	0.00	0.00	0.04	0.22	0.00	0.00	0.30	0.22
Crit Moves:	****						****				****	
Green/Cycle:	0.42	0.42	0.42	0.00	0.00	0.00	0.06	0.48	0.00	0.00	0.42	0.42
Volume/Cap:	0.72	0.72	0.30	0.00	0.00	0.00	0.62	0.47	0.00	0.00	0.72	0.52
Delay/Veh:	31.0	31.0	23.4	0.0	0.0	0.0	60.9	21.1	0.0	0.0	30.6	26.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.0	31.0	23.4	0.0	0.0	0.0	60.9	21.1	0.0	0.0	30.6	26.4
HCM2kAvg:	18	18	5	0	0	0	3	10	0	0	17	10

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.974
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 41.1
Optimal Cycle: 164 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	1 0	2 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	703	191	205	962	0	0	0	0	567	0	426
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	703	191	205	962	0	0	0	0	567	0	426
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	781	212	228	1069	0	0	0	0	630	0	473
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	781	212	228	1069	0	0	0	0	630	0	473
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	781	212	228	1069	0	0	0	0	630	0	473
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	1.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat..	0	1900	1615	1805	3610	0	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.41	0.13	0.13	0.30	0.00	0.00	0.00	0.00	0.35	0.00	0.29
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.42	0.42	0.13	0.55	0.00	0.00	0.00	0.00	0.36	0.00	0.36
Volume/Cap:	0.00	0.97	0.31	0.97	0.54	0.00	0.00	0.00	0.00	0.97	0.00	0.82
Delay/Veh:	0.0	53.8	19.5	94.7	14.6	0.0	0.0	0.0	0.0	60.5	0.0	38.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	53.8	19.5	94.7	14.6	0.0	0.0	0.0	0.0	60.5	0.0	38.0
HCM2kAvg:	0	30	4	12	11	0	0	0	0	26	0	15

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.976
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 50.9
Optimal Cycle: 162 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	188	49	66	45	389	56	103	547	580	768	395	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	188	49	66	45	389	56	103	547	580	768	395	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	204	53	72	49	423	61	112	595	630	835	429	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	53	72	49	423	61	112	595	630	835	429	51
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	204	53	72	49	423	61	112	595	630	835	429	51
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat..	1805	3610	1615	1805	3610	1615	1805	3610	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.11	0.01	0.04	0.03	0.12	0.04	0.06	0.16	0.39	0.24	0.12	0.03
Crit Moves:	****				****				****	****		
Green/Cycle:	0.12	0.15	0.15	0.09	0.12	0.12	0.22	0.40	0.40	0.24	0.42	0.42
Volume/Cap:	0.98	0.10	0.30	0.30	0.98	0.31	0.28	0.41	0.98	0.98	0.28	0.07
Delay/Veh:	99.2	37.0	38.8	43.7	80.8	41.2	32.8	21.8	58.9	62.5	19.0	17.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	99.2	37.0	38.8	43.7	80.8	41.2	32.8	21.8	58.9	62.5	19.0	17.2
HCM2kAvg:	11	1	2	2	11	2	3	7	25	19	4	1

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.537
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 25.7
Optimal Cycle: 43 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	0	2	1	0	2	0	1	2	0	2	0	1	2	0	3	0	1
Volume Module:																
Base Vol:	203		49		505	20		59		34	19		501		120	342		1055		83
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	203		49		505	20		59		34	19		501		120	342		1055		83
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	226		54		561	22		66		38	21		557		133	380		1172		92
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	226		54		561	22		66		38	21		557		133	380		1172		92
PCE Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	226		54		561	22		66		38	21		557		133	380		1172		92
Saturation Flow Module:																
Sat/Lane:	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900		1900
Adjustment:	0.95		0.95		0.75	0.95		0.95		0.85	0.92		0.95		0.85	0.92		0.91		0.85
Lanes:	1.00		2.00		2.00	1.00		2.00		1.00	2.00		2.00		1.00	2.00		3.00		1.00
Final Sat..	1805		3610		2842	1805		3610		1615	3502		3610		1615	3502		5187		1615
Capacity Analysis Module:																
Vol/Sat:	0.12		0.02		0.20	0.01		0.02		0.02	0.01		0.15		0.08	0.11		0.23		0.06
Crit Moves:					****	****							****			****				
Green/Cycle:	0.33		0.37		0.37	0.02		0.06		0.06	0.01		0.29		0.29	0.20		0.48		0.48
Volume/Cap:	0.38		0.04		0.54	0.54		0.29		0.38	0.47		0.54		0.29	0.54		0.47		0.12
Delay/Veh:	26.1		20.3		25.5	61.6		45.6		47.5	56.8		30.6		28.0	36.5		17.8		14.6
User DelAdj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	26.1		20.3		25.5	61.6		45.6		47.5	56.8		30.6		28.0	36.5		17.8		14.6
HCM2kAvg:	6		1		7	2		1		2	1		8		3	6		8		2

Harmony Grove Village
Option B: Baseline + P + CP

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	E	61.7	1.090	E	61.7	1.090	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	F	243.0	1.720	F	243.0	1.720	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	F	230.1	1.652	F	230.1	1.652	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	B	10.8	0.494	B	10.8	0.494	+ 0.000 V/C
# 6 Country Club Drive/Entrance #3	B	10.5	0.000	B	10.5	0.000	+ 0.000 D/V
# 7 Country Club/ Village Road	C	19.3	0.000	C	19.3	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	F	83.2	0.000	F	83.2	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	C	16.5	0.000	C	16.5	0.000	+ 0.000 D/V
# 10 Country Club/Harmony Grove	D	34.9	0.000	D	34.9	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	D	34.1	0.000	D	34.1	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	C	24.2	0.000	C	24.2	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	D	38.5	0.957	D	38.5	0.957	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	C	20.2	0.000	C	20.2	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	44.9	0.796	D	44.9	0.796	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	F	55.9	1.164	F	55.9	1.164	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	F	956.0	0.000	F	956.0	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	F	183.7	0.000	F	183.7	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	D	35.1	0.788	D	35.1	0.788	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	F	138.6	0.000	F	138.6	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	F	930.7	0.000	F	930.7	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	C	24.4	0.000	C	24.4	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	F	278.8	0.000	F	278.8	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	E	57.4	1.133	E	57.4	1.133	+ 0.000 D/V

Harmony Grove Village
Option B: Baseline + P + CP

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	F	87.5	1.114	F	87.5	1.114	+ 0.000 D/V
# 26 Valley Park Wav / Auto Park Wa	D	46.1	0.880	D	46.1	0.880	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	E	58.0	0.840	E	58.0	0.840	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	B	14.5	0.603	B	14.5	0.603	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	D	42.9	0.810	D	42.9	0.810	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	D	42.0	0.861	D	42.0	0.861	+ 0.000 D/V
# 32 Auto Park Wav / West 9th Ave	C	34.0	0.831	C	34.0	0.831	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	32.9	1.011	C	32.9	1.011	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	29.8	0.686	C	29.8	0.686	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	D	43.9	1.017	D	43.9	1.017	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	45.9	0.958	D	45.9	0.958	+ 0.000 D/V
# 37 Via Rancho Parkwav/I-15 NB Ram	D	37.7	0.831	D	37.7	0.831	+ 0.000 D/V

Harmonv Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #1 Nordahl Rd. / SR-78 WB (NS / EW)

****

Cycle (sec): 120 Critical Vol./Cap. (X): 1.090
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 61.7
Optimal Cycle: 180 Level Of Service: E

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	0		0	24		7	0	0	0		7	24		7
Lanes:	2 0	2 0	0		0 0	2 0		1	0 0	0 0	0		1 0	1! 0		1
Volume Module: >> Count Date: 13 Dec 2001 << PM																
Base Vol:	1135	1014	0		0	757	211		0	0	0		427	6	267	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1135	1014	0		0	757	211		0	0	0		427	6	267	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	1261	1127	0		0	841	234		0	0	0		474	7	297	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	1261	1127	0		0	841	234		0	0	0		474	7	297	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	1261	1127	0		0	841	234		0	0	0		474	7	297	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.71	0.73	1.00		1.00	0.93	0.83		1.00	1.00	1.00		0.68	0.68	0.68	
Lanes:	2.00	2.00	0.00		0.00	2.00	1.00		0.00	0.00	0.00		1.60	0.02	1.38	
Final Sat..	2693	2776	0		0	3538	1583		0	0	0		2085	22	1791	
Capacity Analysis Module:																
Vol/Sat:	0.47	0.41	0.00		0.00	0.24	0.15		0.00	0.00	0.00		0.23	0.30	0.17	
Crit Moves:	****					****								****		
Green/Cycle:	0.43	0.65	0.00		0.00	0.22	0.22		0.00	0.00	0.00		0.28	0.28	0.28	
Volume/Cap:	1.09	0.63	0.00		0.00	1.09	0.68		0.00	0.00	0.00		0.82	1.09	0.60	
Delay/Veh:	88.6	13.2	0.0		0.0	106	48.4		0.0	0.0	0.0		46.4	104	38.4	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	88.6	13.2	0.0		0.0	106	48.4		0.0	0.0	0.0		46.4	104	38.4	
HCM2kAvg:	35	13	0		0	24	9		0	0	0		13	24	8	

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Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp [NS / EW]

Cycle (sec): 100 Critical Vol./Cap. (X): 1.720
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 243.0
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	24	7	7	24	0	7	24	7	0	0	0
Lanes:	0 0	2 0	1	2 0	2 0	0	0 1	0 1	0	0 0	0 0	0
Volume Module: >> Count Date: 13 Dec 2001 << PM												
Base Vol:	0	1761	914	372	804	0	263	2	627	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1761	914	372	804	0	263	2	627	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	1957	1016	413	893	0	292	2	697	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1957	1016	413	893	0	292	2	697	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	1957	1016	413	893	0	292	2	697	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.73	0.65	0.90	0.93	1.00	0.59	0.59	0.59	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.99	0.01	1.00	0.00	0.00	0.00
Final Sat..	0	2776	1242	3432	3538	0	1103	8	1112	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.70	0.82	0.12	0.25	0.00	0.26	0.26	0.63	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.48	0.48	0.07	0.55	0.00	0.36	0.36	0.36	0.00	0.00	0.00
Volume/Cap:	0.00	1.48	1.72	1.72	0.46	0.00	0.73	0.73	1.72	0.00	0.00	0.00
Delay/Veh:	0.0	247	357.1	387.3	14.0	0.0	29.5	29.5	362.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	247	357.1	387.3	14.0	0.0	29.5	29.5	362.9	0.0	0.0	0.0
HCM2kAvg:	0	70	84	19	8	0	10	10	65	0	0	0

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.652
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 230.1
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	2 0	1	2 0	1 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module: >> Count Date: 13 Dec 2001 << PM												
Base Vol:	650	1813	73	236	835	258	387	645	387	57	535	552
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	650	1813	73	236	835	258	387	645	387	57	535	552
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	722	2014	81	262	928	287	430	717	430	63	594	613
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	722	2014	81	262	928	287	430	717	430	63	594	613
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	722	2014	81	262	928	287	430	717	430	63	594	613
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.73	0.73	0.65	0.71	0.70	0.70	0.90	0.93	0.83	0.90	0.93	0.83
Lanes:	1.00	2.00	1.00	2.00	1.53	0.47	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat..	1388	2776	1242	2693	2047	632	3432	3538	1583	3432	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.52	0.73	0.07	0.10	0.45	0.45	0.13	0.20	0.27	0.02	0.17	0.39
Crit Moves:	****				****		****					****
Green/Cycle:	0.32	0.52	0.52	0.07	0.27	0.27	0.08	0.26	0.26	0.05	0.23	0.23
Volume/Cap:	1.65	1.40	0.13	1.40	1.65	1.65	1.65	0.79	1.06	0.34	0.72	1.65
Delay/Veh:	344.4	211	14.9	263.1	343	342.8	365.3	46.5	107.1	55.7	45.3	351.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	344.4	211	14.9	263.1	343	342.8	365.3	46.5	107.1	55.7	45.3	351.0
HCM2kAvg:	65	73	2	12	53	53	21	14	23	2	11	53

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vinevard Ave/Country Club [NS / EW]

Average Delay (sec/veh): 772.2 Worst Case Level Of Service: F[9534.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	1	1 0	1	0	1	0	0	1	0 0 1!	0 0
Volume Module: >> Count Date: 11 Dec 2001 << PM												
Base Vol:	65	2253	5	39	981	353	263	1	60	1	0	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	2253	5	39	981	353	263	1	60	1	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	72	2503	6	43	1090	392	292	1	67	1	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	72	2503	6	43	1090	392	292	1	67	1	0	13
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	xxxx	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	1482	xxxx	xxxxx	2509	xxxx	xxxxx	2573	3830	1090	4054	xxxx	1252
Potent Cap..	454	xxxx	xxxxx	181	xxxx	xxxxx	17	4	262	1	xxxx	210
Move Cap..	454	xxxx	xxxxx	181	xxxx	xxxxx	12	2	262	0	xxxx	210
Volume/Cap:	0.16	xxxx	xxxx	0.24	xxxx	xxxx	25.12	0.46	0.25	2.32	xxxx	0.06
Level Of Service Module:												
Queue:	0.6	xxxx	xxxxx	0.9	xxxx	xxxxx	xxxxx	xxxx	1.0	xxxxx	xxxx	xxxxx
Stopped Del:	14.4	xxxx	xxxxx	31.1	xxxx	xxxxx	xxxxx	xxxx	23.4	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	D	*	*	*	*	C	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	11	xxxx	xxxxx	xxxx	6	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	38.1	xxxx	xxxxx	xxxxx	2.9	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11696	xxxx	xxxxx	xxxxx	1763	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			9534.8			1763.5		
ApproachLOS:	*			*			F			F		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.494
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.8
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Ignore				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0 0	1	0	1	0	1	0	0	0	0	0	0	0	0	1!	0 0
Volume Module:																
Base Vol:	0	199	9		91	253	0		0	0	0		20	0	81	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	199	9		91	253	0		0	0	0		20	0	81	
User Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.00		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	221	0		101	281	0		0	0	0		22	0	90	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	221	0		101	281	0		0	0	0		22	0	90	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	221	0		101	281	0		0	0	0		22	0	90	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	1.00	1.00		0.26	0.74	0.00		0.00	0.00	0.00		0.20	0.00	0.80	
Final Sat..	0	696	0		205	569	0		0	0	0		136	0	550	
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.32	xxxx	0.49	0.49	xxxx	xxxx	xxxx	xxxx	0.16	xxxx	0.16				
Crit Moves:		****			****					****						
Delay/Veh:	0.0	10.0	0.0	11.9	11.9	0.0	0.0	0.0	0.0	8.6	0.0	8.6				
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	0.0	10.0	0.0	11.9	11.9	0.0	0.0	0.0	0.0	8.6	0.0	8.6				
LOS by Move:	*	B	*	B	B	*	*	*	*	A	*	A				
ApproachDel:		10.0			11.9			xxxxxx			8.6					
Delay Adj:		1.00			1.00			xxxxx			1.00					
ApprAdjDel:		10.0			11.9			xxxxxx			8.6					
LOS by Appr:		B			B			*			A					

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club Drive/Entrance #3

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[10.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1 0	0	0 1	0 0	0	0 0	0 0	0	0 0	0 0	1
Volume Module:												
Base Vol:	0	328	0	52	482	0	0	0	0	0	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	328	0	52	482	0	0	0	0	0	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	364	0	58	536	0	0	0	0	0	0	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	364	0	58	536	0	0	0	0	0	0	33
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	364	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	364
Potent Cap.:	xxxx	xxxx	xxxxx	1205	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	685
Move Cap..	xxxx	xxxx	xxxxx	1205	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	685
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.2
Stopped Del:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.5
LOS by Move:	-	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.5		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Average Delay (sec/veh): 5.9 Worst Case Level Of Service: C[19.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1 0	1	1 0	1 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	184	149	0	261	0	0	0	0	262	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	184	149	0	261	0	0	0	0	262	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	204	166	0	290	0	0	0	0	291	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	204	166	0	290	0	0	0	0	291	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	494	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	538	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	538	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.54	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.2	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	19.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	C	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			19.3		
ApproachLOS:	*			*			*			C		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 22.2 Worst Case Level Of Service: F[83.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1 0 1			1 0 1 0 1			1 0 1 0 1			0 1 0 0 1		
Volume Module:												
Base Vol:	0	230	343	15	212	117	66	83	0	151	145	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	230	343	15	212	117	66	83	0	151	145	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	256	381	17	236	130	73	92	0	168	161	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	256	381	17	236	130	73	92	0	168	161	22
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	xxxxx	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	637	xxxx	xxxxx	807	906	xxxxx	636	654	256
Potent Cap..	xxxx	xxxx	xxxxx	957	xxxx	xxxxx	302	278	xxxxx	394	389	788
Move Cap..	xxxx	xxxx	xxxxx	957	xxxx	xxxxx	195	273	xxxxx	287	382	788
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	0.38	0.34	xxxx	0.58	0.42	0.03
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	1.6	1.4	xxxxx	xxxxx	xxxx	0.1
Stopped Del:	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx	34.3	24.7	xxxxx	xxxxx	xxxx	9.7
LOS by Move:	*	*	*	A	*	*	D	C	*	*	*	A
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	327	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.2	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	88.1	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			29.0			83.2		
ApproachLOS:	*			*			D			F		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: C[16.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1 0 0			0 0 0 1 0			1 0 0 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	169	0	0	202	280	159	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	169	0	0	202	280	159	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	188	0	0	224	311	177	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	188	0	0	224	311	177	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	568	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	488	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	488	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.36	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	16.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	C	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.5			xxxxxx		
ApproachLOS:	*			*			C			*		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Country Club/Harmony Grove

Average Delay (sec/veh): 4.9 Worst Case Level Of Service: D[34.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		0	0	1!	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	4	8	13		3	17	169	171	574		6	24	289	5										
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00										
Initial Bse:	4	8	13		3	17	169	171	574		6	24	289	5										
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00										
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90	0.90	0.90		0.90	0.90	0.90	0.90										
PHF Volume:	4	9	14		3	19	188	190	638		7	27	321	6										
Reduct Vol:	0	0	0		0	0	0	0	0		0	0	0	0										
Final Vol..	4	9	14		3	19	188	190	638		7	27	321	6										
Critical Gap Module:																								
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx										
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx										
Capacity Module:																								
Cnflict Vol:	1502	1401	641		1410	1402	324	327	xxxx	xxxxx		644	xxxx	xxxxx										
Potent Cap..	101	141	478		117	141	722	1244	xxxx	xxxxx		950	xxxx	xxxxx										
Move Cap..	56	114	478		91	114	722	1244	xxxx	xxxxx		950	xxxx	xxxxx										
Volume/Cap:	0.08	0.08	0.03		0.04	0.17	0.26	0.15	xxxx	xxxx		0.03	xxxx	xxxx										
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	0.5	xxxx	xxxxx		0.1	xxxx	xxxxx										
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx		8.9	xxxx	xxxxx										
LOS by Move:	*	*	*		*	*	*	A	*	*		A	*	*										
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	148	xxxxx		xxxx	454	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx										
SharedQueue:	xxxxx	0.7	xxxxx		xxxxx	2.4	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx										
Shrd StpDel:	xxxxx	34.9	xxxxx		xxxxx	19.6	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx										
Shared LOS:	*	D	*		*	C	*	*	*	*		*	*	*										
ApproachDel:	34.9					19.6		xxxxxx				xxxxxx												
ApproachLOS:	D					C		*				*												

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: D[34.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module: PM Peak																								
Base Vol:	0	0	0		63	0	17	29	679		0	0	365	110										
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00										
Initial Bse:	0	0	0		63	0	17	29	679		0	0	365	110										
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00										
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90	0.90	0.90		0.90	0.90	0.90	0.90										
PHF Volume:	0	0	0		70	0	19	32	754		0	0	406	122										
Reduct Vol:	0	0	0		0	0	0	0	0		0	0	0	0										
Final Vol..	0	0	0		70	0	19	32	754		0	0	406	122										
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2	4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx										
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3	2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx										
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx		1286	xxxx	467	528	xxxx	xxxxx		xxxx	xxxx	xxxxx										
Potent Cap.:	xxxx	xxxx	xxxxx		183	xxxx	600	1050	xxxx	xxxxx		xxxx	xxxx	xxxxx										
Move Cap..	xxxx	xxxx	xxxxx		179	xxxx	600	1050	xxxx	xxxxx		xxxx	xxxx	xxxxx										
Volume/Cap:	xxxx	xxxx	xxxx		0.39	xxxx	0.03	0.03	xxxx	xxxx		xxxx	xxxx	xxxx										
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx										
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx										
LOS by Move:	*	*	*		*	*	*	A	*	*		*	*	*										
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	210	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx										
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	1.9	xxxxx	0.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx										
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	34.1	xxxxx	8.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx										
Shared LOS:	*	*	*		*	D	*	A	*	*		*	*	*										
ApproachDel:	xxxxxx					34.1		xxxxxx				xxxxxx												
ApproachLOS:	*					D		*				*												

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #12 Wilgen Road/Harmony Grove

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Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[24.2]

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	41	0	8	15	667	0	0	312	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	41	0	8	15	667	0	0	312	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	46	0	9	17	741	0	0	347	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	46	0	9	17	741	0	0	347	81
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1162	xxxx	387	428	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	218	xxxx	665	1142	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	215	xxxx	665	1142	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.21	xxxx	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	242	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	24.2	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			24.2			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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Intersection #13 Citracado Pkwy./Vineyard St.

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Cycle (sec): 100 Critical Vol./Cap. (X): 0.957
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 38.5
Optimal Cycle: 144 Level Of Service: D

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Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L -	T -	R		L -	T -	R		L -	T -	R		L -	T -	R	
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	2 0	0 0	1		0 0	0 0	0		0 0	1 0	1		2 0	1 0	0	
Volume Module:																
Base Vol:	1026	0	464		0	0	0		0	933	295		121	910	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1026	0	464		0	0	0		0	933	295		121	910	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	1140	0	516		0	0	0		0	1037	328		134	1011	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	1140	0	516		0	0	0		0	1037	328		134	1011	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	1140	0	516		0	0	0		0	1037	328		134	1011	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.92	1.00	0.85		1.00	1.00	1.00		1.00	1.00	0.85		0.46	1.00	1.00	
Lanes:	2.00	0.00	1.00		0.00	0.00	0.00		0.00	1.00	1.00		2.00	1.00	0.00	
Final Sat..	3502	0	1615		0	0	0		0	1900	1615		1740	1900	0	
Capacity Analysis Module:																
Vol/Sat:	0.33	0.00	0.32		0.00	0.00	0.00		0.00	0.55	0.20		0.08	0.53	0.00	
Crit Moves:	****									****						
Green/Cycle:	0.34	0.00	0.34		0.00	0.00	0.00		0.00	0.57	0.91		0.57	0.57	0.00	
Volume/Cap:	0.96	0.00	0.94		0.00	0.00	0.00		0.00	0.96	0.22		0.14	0.93	0.00	
Delay/Veh:	49.1	0.0	56.1		0.0	0.0	0.0		0.0	38.3	0.6		10.1	34.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	49.1	0.0	56.1		0.0	0.0	0.0		0.0	38.3	0.6		10.1	34.0	0.0	
HCM2kAvg:	23	0	20		0	0	0		0	36	1		2	33	0	

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Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa [NS / EW]

Average Delay (sec/veh): 12.8 Worst Case Level Of Service: C[20.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	0	1 0	0	1	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << PM Peak																
Base Vol:	26		0	609	0		0	0	0		63	44	562		102	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26		0	609	0		0	0	0		63	44	562		102	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	29		0	677	0		0	0	0		70	49	624		113	0
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Final Vol..	29		0	677	0		0	0	0		70	49	624		113	0
Critical Gap Module:																
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1457	xxxx		94	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		119	xxxx	xxxxx		
Potent Cap..	143	xxxx		962	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1469	xxxx	xxxxx		
Move Cap..	68	xxxx		962	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1469	xxxx	xxxxx		
Volume/Cap:	0.42	xxxx	0.70	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.43	xxxx	xxxx		
Level Of Service Module:																
Queue:	1.7	xxxx		6.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		
Stopped Del:	92.1	xxxx		17.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		9.2	xxxx	xxxxx		
LOS by Move:	F	*		C	*	*	*	*	*	*		A	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.2	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		A	*	*	
ApproachDel:	20.2				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	C				*				*				*			

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vinevard Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.796
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 44.9
Optimal Cycle: 80 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	0 1	1	0	1	0 1	1	0	1	1 0	1	0	2	0 1
Volume Module: >> Count Date: 11 Dec 2001 << AM																
Base Vol.	368	278		257	104	126		62	80	962		132	96	541		134
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	368	278		257	104	126		62	80	962		132	96	541		134
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	409	309		286	116	140		69	89	1069		147	107	601		149
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	409	309		286	116	140		69	89	1069		147	107	601		149
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	409	309		286	116	140		69	89	1069		147	107	601		149
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.98		0.83	0.93	0.98		0.83	0.93	0.91		0.91	0.93	0.93		0.83
Lanes:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.76		0.24	1.00	2.00		1.00
Final Sat..	1769	1862		1583	1769	1862		1583	1769	3055		419	1769	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.23	0.17		0.18	0.07	0.08		0.04	0.05	0.35		0.35	0.06	0.17		0.09
Crit Moves:	****					****				****			****			
Green/Cycle:	0.25	0.34		0.34	0.11	0.20		0.20	0.10	0.38		0.38	0.07	0.35		0.35
Volume/Cap:	0.92	0.49		0.53	0.59	0.38		0.22	0.50	0.92		0.92	0.92	0.49		0.27
Delay/Veh:	67.1	31.8		32.8	55.2	42.2		40.5	53.2	45.4		45.4	113.5	31.2		28.5
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	67.1	31.8		32.8	55.2	42.2		40.5	53.2	45.4		45.4	113.5	31.2		28.5
HCM2kAvg:	19	9		9	5	5		2	4	25		25	7	9		4

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.164
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 55.9
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module: >> Count Date: 28 Nov 2001 << PM												
Base Vol:	113	82	167	235	28	6	7	219	443	44	57	327
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	82	167	235	28	6	7	219	443	44	57	327
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	126	91	186	261	31	7	8	243	492	49	63	363
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	91	186	261	31	7	8	243	492	49	63	363
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	126	91	186	261	31	7	8	243	492	49	63	363
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat..	334	350	378	336	344	367	352	383	423	344	362	401
Capacity Analysis Module:												
Vol/Sat:	0.38	0.26	0.49	0.78	0.09	0.02	0.02	0.64	1.16	0.14	0.17	0.91
Crit Moves:			****	****					****			****
Delay/Veh:	18.9	15.9	19.9	40.5	13.7	12.2	12.6	26.0	124.4	14.4	14.3	53.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.9	15.9	19.9	40.5	13.7	12.2	12.6	26.0	124.4	14.4	14.3	53.4
LOS by Move:	C	C	C	E	B	B	B	D	F	B	B	F
ApproachDel:	18.7			37.1			91.0			44.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	18.7			37.1			91.0			44.1		
LOS by Appr:	C			E			F			E		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. [NS / EW]

Average Delay (sec/veh): 340.6 Worst Case Level Of Service: F[956.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0	1	0 0	0	0	0 0	1	0	0 1	0	0
Volume Module: >> Count Date: 28 Nov 2001 << PM												
Base Vol:	187	0	623	0	0	0	0	754	143	321	260	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	187	0	623	0	0	0	0	754	143	321	260	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	208	0	692	0	0	0	0	838	159	357	289	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	208	0	692	0	0	0	0	838	159	357	289	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1919	xxxx	917	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	997	xxxx	xxxxx
Potent Cap..	74	xxxx	330	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	694	xxxx	xxxxx
Move Cap.:	36	xxxx	330	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	694	xxxx	xxxxx
Volume/Cap:	5.78	xxxx	2.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.51	xxxx	xxxx
Level Of Service Module:												
Queue:	24.6	xxxx	50.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.0	xxxx	xxxxx
Stopped Del:	2371	xxxx	531.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.5	xxxx	xxxxx
LOS by Move:	F	*	F	*	*	*	*	*	*	C	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.5	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	C	*	*
ApproachDel:	956.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 12.4 Worst Case Level Of Service: F[183.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	1 0	0 0	1	0 1	0 0	0	0 0	0 1	0
Volume Module: >> Count Date: 12 Dec 2001 <<												
Base Vol:	0	0	0	39	0	90	235	1255	0	0	427	51
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	39	0	90	235	1255	0	0	427	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	43	0	100	261	1394	0	0	474	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	43	0	100	261	1394	0	0	474	57
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	2419	xxxx	503	531	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	36	xxxx	573	1047	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	28	xxxx	573	1047	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.54	xxxx	0.17	0.25	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	5.1	xxxx	0.6	1.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	578.6	xxxx	12.6	9.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	B	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			183.7			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.788
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.1
Optimal Cycle: 78 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	0	7	7	24	0	0	24	7
Lanes:	0 1	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module: >> Count Date: 12 Dec 2001 << PM												
Base Vol:	28	12	28	386	9	187	253	1345	14	26	707	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	12	28	386	9	187	253	1345	14	26	707	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	31	13	31	429	10	208	281	1494	16	29	786	397
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	13	31	429	10	208	281	1494	16	29	786	397
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	31	13	31	429	10	208	281	1494	16	29	786	397
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	0.93	0.84	0.84	0.93	0.93	0.93	0.93	0.93	0.83
Lanes:	0.83	0.35	0.82	1.00	0.05	0.95	1.00	1.98	0.02	1.00	2.00	1.00
Final Sat..	1339	574	1339	1769	73	1522	1769	3498	36	1769	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.24	0.14	0.14	0.16	0.43	0.43	0.02	0.22	0.25
Crit Moves:		****		****				****		****		
Green/Cycle:	0.03	0.03	0.03	0.31	0.31	0.31	0.22	0.54	0.54	0.02	0.34	0.34
Volume/Cap:	0.79	0.79	0.79	0.79	0.44	0.44	0.73	0.79	0.79	0.79	0.64	0.73
Delay/Veh:	92.0	92.0	92.0	45.5	33.9	33.9	50.4	24.2	24.2	128.4	34.3	39.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	92.0	92.0	92.0	45.5	33.9	33.9	50.4	24.2	24.2	128.4	34.3	39.3
HCM2kAvg:	3	3	3	17	7	7	11	23	23	3	13	14

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 9.6 Worst Case Level Of Service: F[138.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module: >> Count Date: 12 Dec 2001 <<												
Base Vol:	0	891	128	5	495	0	0	0	0	101	0	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	891	128	5	495	0	0	0	0	101	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	990	142	6	550	0	0	0	0	112	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	990	142	6	550	0	0	0	0	112	0	13
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1132	xxxx	xxxxx	xxxx	xxxx	xxxxx	1622	xxxx	1061
Potent Cap.:	xxxx	xxxx	xxxxx	624	xxxx	xxxxx	xxxx	xxxx	xxxxx	114	xxxx	274
Move Cap..:	xxxx	xxxx	xxxxx	624	xxxx	xxxxx	xxxx	xxxx	xxxxx	114	xxxx	274
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.99	xxxx	0.05
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	0.2
Stopped Del:	xxxxx	xxxx	xxxxx	10.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	152.9	xxxx	18.8
LOS by Move:	*	*	*	B	*	*	*	*	*	F	*	C
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	10.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			138.6		
ApproachLOS:	*			*			*			F		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 532.1 Worst Case Level Of Service: F[930.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0 0 0			0 0 0 1 0			1 0 0 0 1			0 0 0 0 0		
Volume Module: >> Count Date: 12 Dec 2001 <<												
Base Vol:	110	117	0	0	129	512	966	0	190	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	117	0	0	129	512	966	0	190	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	122	130	0	0	143	569	1073	0	211	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	122	130	0	0	143	569	1073	0	211	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	712	xxxx	xxxxx	xxxx	xxxx	xxxxx	802	xxxx	428	xxxx	xxxx	xxxxx
Potent Cap.:	897	xxxx	xxxxx	xxxx	xxxx	xxxxx	356	xxxx	631	xxxx	xxxx	xxxxx
Move Cap..:	897	xxxx	xxxxx	xxxx	xxxx	xxxxx	316	xxxx	631	xxxx	xxxx	xxxxx
Volume/Cap:	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	3.40	xxxx	0.33	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	98.8	xxxx	1.5	xxxxx	xxxx	xxxxx
Stopped Del:	9.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1111	xxxx	13.5	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	F	*	B	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	9.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			930.7			xxxxxx		
ApproachLOS:	*			*			F			*		

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #22 Avenida Diablo/Citracado Parkway

****

Average Delay (sec/veh): 7.4 Worst Case Level Of Service: C[24.4]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	0	1		0	0	0	0	0		0	0	1	0	1		1	0	1	0	0	
Volume Module:																								
Base Vol:	153		0		102		0		0		0		0		276		181		161		168		0	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	153		0		102		0		0		0		0		276		181		161		168		0	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	170		0		113		0		0		0		0		307		201		179		187		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	170		0		113		0		0		0		0		307		201		179		187		0	
Critical Gap Module:																								
Critical Gp:	6.4	xxxx			6.2	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					4.1	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
FollowUpTim:	3.5	xxxx			3.3	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					2.2	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Capacity Module:																								
Cnflict Vol:	851	xxxx			307	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					508	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Potent Cap..	333	xxxx			738	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					1067	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Move Cap..	290	xxxx			738	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					1067	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Volume/Cap:	0.59	xxxx			0.15	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					0.17	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																								
Queue:	3.5	xxxx			0.5	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					0.6	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Stopped Del:	33.6	xxxx			10.8	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					9.1	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	D	*			B	*	*	*	*	*	*	*					A	*	*	*	*	*	*	*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*			*	*	*	*	*	*	*	*					*	*	*	*	*	*	*	*
ApproachDel:			24.4					xxxxxx					xxxxxx							xxxxxx				
ApproachLOS:			C					*					*							*				

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #23 Avenida Diablo/Hale Avenue

****

Average Delay (sec/veh): 54.8 Worst Case Level Of Service: F[278.8]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	1	0	0	1		0	1	0	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	0		0		0		59		0		178		625		250		0		0		151		62	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0		0		0		59		0		178		625		250		0		0		151		62	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0		0		0		66		0		198		694		278		0		0		168		69	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol..	0		0		0		66		0		198		694		278		0		0		168		69	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx			6.2		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx			3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				1834	xxxx			168		237	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Potent Cap.:	xxxx	xxxx	xxxxx				85	xxxx			882		1342	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Move Cap..	xxxx	xxxx	xxxxx				25	xxxx			882		1342	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Volume/Cap:	xxxx	xxxx	xxxx				2.67	xxxx			0.22		0.52	xxxx	xxxx	xxxx	xxxx	xxxx						
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx						0.9		3.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx						10.3		10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*						B		B	*	*	*	*	*						
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	25	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	1089	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	F	*	*	*	*	*	B	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			278.8			xxxxxx					xxxxxx							xxxxxx				
ApproachLOS:		*			F			*					*							*				

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.133
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 57.4
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24		0			0	24		7			0	0		0			7	24		7		
Lanes:	0	1	0	0	1		0	0	0	0	0		2	0	3	0	0		0	0	3	0	1	
Volume Module: >> Count Date: 12 Dec 2001 << PM																								
Base Vol:	228		0		414		0		0		0		822		1619		0		0		1498		683	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	228		0		414		0		0		0		822		1619		0		0		1498		683	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89		0.89	
PHF Volume:	256		0		465		0		0		0		924		1819		0		0		1683		767	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	256		0		465		0		0		0		924		1819		0		0		1683		767	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	256		0		465		0		0		0		924		1819		0		0		1683		767	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.93		1.00		0.83		1.00		1.00		1.00		0.90		0.89		1.00		1.00		0.89		0.83	
Lanes:	1.00		0.00		1.00		0.00		0.00		0.00		2.00		3.00		0.00		0.00		3.00		1.00	
Final Sat..	1773		0		1583		0		0		0		3432		5083		0		0		5083		1583	
Capacity Analysis Module:																								
Vol/Sat:	0.14		0.00		0.29		0.00		0.00		0.00		0.27		0.36		0.00		0.00		0.33		0.48	
Crit Moves:					****								****										****	
Green/Cycle:	0.26		0.00		0.26		0.00		0.00		0.00		0.24		0.67		0.00		0.00		0.43		0.43	
Volume/Cap:	0.56		0.00		1.13		0.00		0.00		0.00		1.13		0.54		0.00		0.00		0.77		1.13	
Delay/Veh:	40.0		0.0		130.3		0.0		0.0		0.0		120.6		10.6		0.0		0.0		31.1		111.6	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	40.0		0.0		130.3		0.0		0.0		0.0		120.6		10.6		0.0		0.0		31.1		111.6	
HCM2kAvg:	9		0		27		0		0		0		28		12		0		0		19		43	

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.114
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 87.5
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24		0			0	24		7			7	0		7			0	0		0		
Lanes:	1	0	1	0	1		0	1	0	1	0		2	0	3	0	1		2	0	3	1	1	
Volume Module: >> Count Date: 12 Dec 2001 << PM																								
Base Vol:	46		48		307		415		229		414		395		1673		43		276		933		462	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	46		48		307		415		229		414		395		1673		43		276		933		462	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	51		53		341		461		254		460		439		1859		48		307		1037		513	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	51		53		341		461		254		460		439		1859		48		307		1037		513	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol..	51		53		341		461		254		460		439		1859		48		307		1037		513	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.93		0.98		0.83		0.86		0.86		0.86		0.90		0.89		0.83		0.90		0.85		0.85	
Lanes:	1.00		1.00		1.00		0.79		0.43		0.78		2.00		3.00		1.00		2.00		3.34		1.66	
Final Sat..	1769		1862		1583		1281		707		1278		3432		5083		1583		3432		5383		2666	
Capacity Analysis Module:																								
Vol/Sat:	0.03		0.03		0.22		0.36		0.36		0.36		0.13		0.37		0.03		0.09		0.19		0.19	
Crit Moves:					****		****								****				****					
Green/Cycle:	0.20		0.20		0.20		0.32		0.32		0.32		0.16		0.33		0.33		0.08		0.24		0.24	
Volume/Cap:	0.14		0.14		1.08		1.12		1.12		1.12		0.79		1.12		0.09		1.12		0.79		0.79	
Delay/Veh:	39.7		39.7		120.8		109.4		109		109.4		56.0		105		28.2		147.3		44.8		44.8	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	39.7		39.7		120.8		109.4		109		109.4		56.0		105		28.2		147.3		44.8		44.8	
HCM2kAvg:	2		2		20		34		34		34		10		35		1		11		13		13	

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #26 Valley Park Way / Auto Park Way (NS / EW)

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.880
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 46.1
Optimal Cycle: 109 Level Of Service: D

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:		Include				Ovl				Include				Include		
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	2	0	3	0 1	2	0	3	0 1	2	0	1	1 0	2	0	1	1 0
Volume Module: >> Count Date: 9 Dec 2000 << PM																
Base Vol:	301	1345		45	140	1062		336	699	896		213	194	527		167
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	301	1345		45	140	1062		336	699	896		213	194	527		167
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	334	1494		50	156	1180		373	777	996		237	216	586		186
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	334	1494		50	156	1180		373	777	996		237	216	586		186
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	334	1494		50	156	1180		373	777	996		237	216	586		186
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.90	0.89		0.83	0.90	0.89		0.83	0.90	0.90		0.90	0.90	0.90		0.90
Lanes:	2.00	3.00		1.00	2.00	3.00		1.00	2.00	1.62		0.38	2.00	1.52		0.48
Final Sat..	3432	5083		1583	3432	5083		1583	3432	2775		660	3432	2590		821
Capacity Analysis Module:																
Vol/Sat:	0.10	0.29		0.03	0.05	0.23		0.24	0.23	0.36		0.36	0.06	0.23		0.23
Crit Moves:		****			****				****					****		
Green/Cycle:	0.12	0.33		0.33	0.06	0.27		0.53	0.26	0.43		0.43	0.08	0.25		0.25
Volume/Cap:	0.85	0.89		0.10	0.78	0.85		0.45	0.89	0.83		0.83	0.83	0.89		0.89
Delay/Veh:	67.4	44.1		27.8	73.0	46.1		17.7	53.9	33.9		33.9	73.7	54.0		54.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	67.4	44.1		27.8	73.0	46.1		17.7	53.9	33.9		33.9	73.7	54.0		54.0
HCM2kAvg:	9	21		1	5	16		8	18	22		22	6	17		17

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Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #27 Valley Park Way / West 9th Ave (NS / EW)

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.840
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 58.0
Optimal Cycle: 94 Level Of Service: E

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:		Include				Include				Include				Include		
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	3	0 1	1	0	2	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	21	1068		173	165	923		322	550	560		6	181	308		49
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	21	1068		173	165	923		322	550	560		6	181	308		49
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	23	1187		192	183	1026		358	611	622		7	201	342		54
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	23	1187		192	183	1026		358	611	622		7	201	342		54
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	23	1187		192	183	1026		358	611	622		7	201	342		54
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.89		0.83	0.93	0.86		0.86	0.93	0.93		0.93	0.93	0.91		0.91
Lanes:	1.00	3.00		1.00	1.00	2.22		0.78	1.00	1.98		0.02	1.00	1.73		0.27
Final Sat..	1769	5083		1583	1769	3622		1263	1769	3493		37	1769	2988		475
Capacity Analysis Module:																
Vol/Sat:	0.01	0.23		0.12	0.10	0.28		0.28	0.35	0.18		0.18	0.11	0.11		0.11
Crit Moves:	****					****			****					****		
Green/Cycle:	0.06	0.24		0.24	0.11	0.29		0.29	0.35	0.35		0.35	0.20	0.20		0.20
Volume/Cap:	0.23	0.97		0.50	0.97	0.98		0.98	0.98	0.51		0.51	0.57	0.57		0.57
Delay/Veh:	55.0	64.1		40.5	110.0	61.5		61.5	69.2	31.0		31.0	45.5	44.5		44.5
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	55.0	64.1		40.5	110.0	61.5		61.5	69.2	31.0		31.0	45.5	44.5		44.5
HCM2kAvg:	1	19		7	11	22		22	29	9		9	8	7		7

****

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #28 Valley Pkwy/11th Street

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.603
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 14.5
Optimal Cycle: 41 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	25	1256	9	106	806	89	41	16	97	29	24	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	1256	9	106	806	89	41	16	97	29	24	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	28	1396	10	118	896	99	46	18	108	32	27	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	1396	10	118	896	99	46	18	108	32	27	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	28	1396	10	118	896	99	46	18	108	32	27	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.87	0.87	0.95	0.91	0.91
Lanes:	1.00	1.99	0.01	1.00	2.00	1.00	1.00	0.14	0.86	1.00	0.38	0.62
Final Sat..	1805	3581	26	1805	3610	1615	1805	234	1421	1805	656	1067
Capacity Analysis Module:												
Vol/Sat:	0.02	0.39	0.39	0.07	0.25	0.06	0.03	0.08	0.08	0.02	0.04	0.04
Crit Moves:		****		****				****		****		
Green/Cycle:	0.04	0.65	0.65	0.11	0.71	0.71	0.06	0.13	0.13	0.03	0.10	0.10
Volume/Cap:	0.35	0.60	0.60	0.60	0.35	0.09	0.42	0.60	0.60	0.60	0.42	0.42
Delay/Veh:	49.1	10.7	10.7	47.8	5.7	4.5	48.0	46.3	46.3	65.8	44.4	44.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.1	10.7	10.7	47.8	5.7	4.5	48.0	46.3	46.3	65.8	44.4	44.4
HCM2kAvg:	1	13	13	5	5	1	2	5	5	2	3	3

****

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #29 Valley Parkway/Avenida Diablo

****

Average Delay (sec/veh): 295.4 Worst Case Level Of Service: F[1669.7]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L -	T -	R				L -	T -	R				L -	T -	R				L -	T -	R			
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1 0	1 0	1				1 0	1 0	1				0 1	0 0	1				0 1	0 0	1			
Volume Module:																								
Base Vol:	43	921	50				30	474	131				230	10	110				50	12	40			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	43	921	50				30	474	131				230	10	110				50	12	40			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90			
PHF Volume:	48	1023	56				33	527	146				256	11	122				56	13	44			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol..	48	1023	56				33	527	146				256	11	122				56	13	44			
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx				7.1	6.5	6.2				7.1	6.5	6.2			
FollowUpTim:	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx				3.5	4.0	3.3				3.5	4.0	3.3			
Capacity Module:																								
Cnflict Vol:	672	xxxx	xxxxx				1079	xxxx	xxxxx				1769	1768	527				1852	1858	1023			
Potent Cap..	928	xxxx	xxxxx				654	xxxx	xxxxx				66	85	555				58	74	289			
Move Cap..	928	xxxx	xxxxx				654	xxxx	xxxxx				44	76	555				37	67	289			
Volume/Cap:	0.05	xxxx	xxxx				0.05	xxxx	xxxx				5.85	0.15	0.22				1.51	0.20	0.15			
Level Of Service Module:																								
Queue:	0.2	xxxx	xxxxx				0.2	xxxx	xxxxx				xxxxx	xxxx	0.8				xxxxx	xxxx	0.5			
Stopped Del:	9.1	xxxx	xxxxx				10.8	xxxx	xxxxx				xxxxx	xxxx	13.3				xxxxx	xxxx	19.7			
LOS by Move:	A	*	*				B	*	*				*	*	B				*	-	C			
Movement:	LT -	LTR -	RT				LT -	LTR -	RT				LT -	LTR -	RT				LT -	LTR -	RT			
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				44	xxxx	xxxxx				40	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				31.0	xxxx	xxxxx				7.2	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				2429	xxxx	xxxxx				558.9	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				F	*	*				F	*	*			
ApproachDel:	xxxxxx						xxxxxx						1669.7						347.5					
ApproachLOS:	*						*						F						F					

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.810
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 42.9
Optimal Cycle: 84 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	1	0	1	1	0		1	0	1	1	0		1	0	1	0	1		1	0	1	0	1	
Volume Module: >> Count Date: 8 Jan 2002 << PM																								
Base Vol:	323	1025		26		62	588		103		70		8		351		11		7		43			
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
Initial Bse:	323	1025		26		62	588		103		70		8		351		11		7		43			
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
PHF Adj:	0.82	0.82		0.82		0.82	0.82		0.82		0.82		0.82		0.82		0.82		0.82		0.82			
PHF Volume:	394	1250		32		76	717		126		85		10		428		13		9		52			
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0		0			
Reduced Vol:	394	1250		32		76	717		126		85		10		428		13		9		52			
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
Final Vol..	394	1250		32		76	717		126		85		10		428		13		9		52			
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900		1900		1900		1900		1900		1900			
Adjustment:	0.95	0.95		0.95		0.95	0.93		0.93		0.95		1.00		0.85		0.95		1.00		0.85			
Lanes:	1.00	1.95		0.05		1.00	1.70		0.30		1.00		1.00		1.00		1.00		1.00		1.00			
Final Sat..	1805	3507		89		1805	3004		526		1805		1900		1615		1805		1900		1615			
Capacity Analysis Module:																								
Vol/Sat:	0.22	0.36		0.36		0.04	0.24		0.24		0.05		0.01		0.27		0.01		0.00		0.03			
Crit Moves:	****						****								****		****							
Green/Cycle:	0.25	0.46		0.46		0.07	0.28		0.28		0.08		0.31		0.31		0.06		0.28		0.28			
Volume/Cap:	0.86	0.78		0.78		0.56	0.86		0.86		0.57		0.02		0.86		0.13		0.02		0.11			
Delay/Veh:	57.5	29.9		29.9		58.8	48.7		48.7		58.1		28.8		52.8		54.2		30.9		31.9			
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
AdjDel/Veh:	57.5	29.9		29.9		58.8	48.7		48.7		58.1		28.8		52.8		54.2		30.9		31.9			
HCM2kAvg:	17	21		21		4	17		17		4		0		18		1		0		1			

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.861
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 42.0
Optimal Cycle: 91 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	20			7		7	20			0		0	0			0		20	0			20	
Lanes:	0	0	2	0	1		1	0	1	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0	780		282		351	363		0		0		0		0		228		0		494			
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
Initial Bse:	0	780		282		351	363		0		0		0		0		228		0		494			
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90			
PHF Volume:	0	867		313		390	403		0		0		0		0		253		0		549			
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0		0			
Reduced Vol:	0	867		313		390	403		0		0		0		0		253		0		549			
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
Final Vol..	0	867		313		390	403		0		0		0		0		253		0		549			
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900		1900		1900		1900		1900		1900			
Adjustment:	1.00	0.95		0.85		0.95	1.00		1.00		1.00		1.00		1.00		0.95		1.00		0.85			
Lanes:	0.00	2.00		1.00		1.00	1.00		0.00		0.00		0.00		0.00		1.00		0.00		1.00			
Final Sat..	0	3610		1615		1805	1900		0		0		0		0		1805		0		1615			
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.24		0.19		0.22	0.21		0.00		0.00		0.00		0.00		0.14		0.00		0.34			
Crit Moves:		****				****															****			
Green/Cycle:	0.00	0.28		0.28		0.25	0.53		0.00		0.00		0.00		0.00		0.39		0.00		0.39			
Volume/Cap:	0.00	0.86		0.70		0.86	0.40		0.00		0.00		0.00		0.00		0.36		0.00		0.86			
Delay/Veh:	0.0	48.7		43.4		58.2	17.1		0.0		0.0		0.0		0.0		25.9		0.0		44.7			
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00			
AdjDel/Veh:	0.0	48.7		43.4		58.2	17.1		0.0		0.0		0.0		0.0		25.9		0.0		44.7			
HCM2kAvg:	0	18		11		17	9		0		0		0		0		7		0		21			

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #32 Auto Park Way / West 9th Ave (NS / EW)

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.831
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: 91 Level Of Service: C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	7	24	7	7	24	7	0	24	7	7	24	7
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1	1 0	0 1	0
Volume Module: >> Count Date: 27 Nov 2001 << PM												
Base Vol:	161	870	494	26	901	22	19	180	771	155	129	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	870	494	26	901	22	19	180	771	155	129	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	181	978	555	29	1012	25	21	202	433	174	145	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	978	555	29	1012	25	21	202	433	174	145	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	181	978	555	29	1012	25	21	202	433	174	145	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.93	0.93	0.93	0.53	0.98	0.83	0.51	0.95	0.95
Lanes:	1.00	1.28	0.72	1.00	1.95	0.05	1.00	1.00	1.00	1.00	0.79	0.21
Final Sat..	1769	2135	1212	1769	3440	84	1013	1862	1583	965	1418	385
Capacity Analysis Module:												
Vol/Sat:	0.10	0.46	0.46	0.02	0.29	0.29	0.02	0.11	0.27	0.18	0.10	0.10
Crit Moves:		****		****					****			
Green/Cycle:	0.15	0.53	0.53	0.06	0.43	0.43	0.31	0.31	0.31	0.31	0.31	0.37
Volume/Cap:	0.68	0.87	0.87	0.28	0.68	0.68	0.07	0.34	0.87	0.57	0.32	0.27
Delay/Veh:	55.0	29.7	29.7	55.6	28.5	28.5	28.9	32.0	53.9	37.0	31.7	26.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.0	29.7	29.7	55.6	28.5	28.5	28.9	32.0	53.9	37.0	31.7	26.5
HCM2kAvg:	8	27	27	1	16	16	1	6	18	11	5	5

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Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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Intersection #33 I-15 SB / West 9th Ave (NS / EW)

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Cycle (sec): 120 Critical Vol./Cap. (X): 1.011
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.9
Optimal Cycle: 180 Level Of Service: C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	0 0	0 0	0	1 1	0 0	1	0 0	2 0	1	2 0	2 0	0
Volume Module: >> Count Date: 27 Nov 2001 << PM												
Base Vol:	0	0	0	323	0	146	0	1026	1062	191	1334	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	323	0	146	0	1026	1062	191	1334	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	359	0	162	0	1140	1180	212	1482	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	359	0	162	0	1140	1180	212	1482	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	359	0	162	0	1140	1180	212	1482	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.83	1.00	0.93	0.83	0.90	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	2.00	2.00	0.00
Final Sat..	0	0	0	3545	0	1583	0	3538	1583	3432	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.32	0.75	0.06	0.42	0.00
Crit Moves:						****			****	****		
Green/Cycle:	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.74	0.74	0.06	0.80	0.00
Volume/Cap:	0.00	0.00	0.00	1.00	0.00	1.01	0.00	0.44	1.01	1.01	0.52	0.00
Delay/Veh:	0.0	0.0	0.0	101.0	0.0	127.9	0.0	6.2	44.8	121.3	4.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	101.0	0.0	127.9	0.0	6.2	44.8	121.3	4.4	0.0
HCM2kAvg:	0	0	0	11	0	10	0	8	52	8	10	0

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Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave [NS/ EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.686
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.8
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	7	24			7		7	24			7		7	24			7		7	24			7	
Lanes:	1	1	0	0	1		0	0	0	0	0		2	0	2	0	0		0	0	2	0	1	
Volume Module: >> Count Date: 27 Nov 2001 << PM																								
Base Vol:	754		2		218		0		0		0		229	1120			0		0	772			377	
Growth Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	754		2		218		0		0		0		229	1120			0		0	772			377	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	838		2		242		0		0		0		254	1244			0		0	858			419	
Reduct Vol:	0		0		0		0		0		0		0	0			0		0	0			0	
Reduced Vol:	838		2		242		0		0		0		254	1244			0		0	858			419	
PCE Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol..	838		2		242		0		0		0		254	1244			0		0	858			419	
Saturation Flow Module:																								
Sat/Lane:	1900	1900			1900		1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	0.83	0.83			0.83		1.00	1.00			1.00		0.90	0.93			1.00		1.00	0.93			0.83	
Lanes:	1.99	0.01			1.00		0.00	0.00			0.00		2.00	2.00			0.00		0.00	2.00			1.00	
Final Sat..	3157		8		1583		0		0		0		3432	3538			0		0	3538			1583	
Capacity Analysis Module:																								
Vol/Sat:	0.27	0.27			0.15		0.00	0.00			0.00		0.07	0.35			0.00		0.00	0.24			0.26	
Crit Moves:	****													****					****					
Green/Cycle:	0.39	0.39			0.39		0.00	0.00			0.00		0.11	0.51			0.00		0.00	0.40			0.40	
Volume/Cap:	0.69	0.69			0.40		0.00	0.00			0.00		0.66	0.69			0.00		0.00	0.61			0.66	
Delay/Veh:	32.3	32.3			27.0		0.0	0.0			0.0		55.3	23.1			0.0		0.0	29.2			31.9	
User DelAdj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	32.3	32.3			27.0		0.0	0.0			0.0		55.3	23.1			0.0		0.0	29.2			31.9	
HCM2kAvg:	16	16			6		0	0			0		6	18			0		0	13			13	

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 1.017
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 43.9
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Split Phase						Split Phase					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0			0		0	0			0		0	0			0		0	0			0	
Lanes:	0	0	1	0	1		1	0	2	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0		814		345		489		934		0		0		0		0		178		0		216	
Growth Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	0		814		345		489		934		0		0		0		0		178		0		216	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90		0.90	0.90			0.90	
PHF Volume:	0		904		383		543		1038		0		0		0		0		198		0		240	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	0		904		383		543		1038		0		0		0		0		198		0		240	
PCE Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol..	0		904		383		543		1038		0		0		0		0		198		0		240	
Saturation Flow Module:																								
Sat/Lane:	1900	1900			1900		1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	1.00	1.00			0.85		0.95	0.95			1.00		1.00	1.00			1.00		0.95	1.00			0.85	
Lanes:	0.00	1.00			1.00		1.00	2.00			0.00		0.00	0.00			0.00		1.00	0.00			1.00	
Final Sat..	0	1900			1615		1805	3610			0		0		0		0		1805		0		1615	
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.48			0.24		0.30	0.29			0.00		0.00	0.00			0.00		0.11	0.00			0.15	
Crit Moves:		****					****																****	
Green/Cycle:	0.00	0.47			0.47		0.30	0.76			0.00		0.00	0.00			0.00		0.15	0.00			0.15	
Volume/Cap:	0.00	1.02			0.51		1.02	0.38			0.00		0.00	0.00			0.00		0.75	0.00			1.02	
Delay/Veh:	0.0	61.2			19.1		78.5	4.0			0.0		0.0	0.0			0.0		52.3	0.0			105.8	
User DelAdj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
AdjDel/Veh:	0.0	61.2			19.1		78.5	4.0			0.0		0.0	0.0			0.0		52.3	0.0			105.8	
HCM2kAvg:	0	37			8		25	5			0		0	0			0		8	0			12	

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.958
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 45.9
Optimal Cycle: 145 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	145	261	661	49	137	64	58	292	192	712	616	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	145	261	661	49	137	64	58	292	192	712	616	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	161	290	734	54	152	71	64	324	213	791	684	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	290	734	54	152	71	64	324	213	791	684	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	161	290	734	54	152	71	64	324	213	791	684	103
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat..	1805	3610	1615	1805	3610	1615	1805	3610	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.09	0.08	0.45	0.03	0.04	0.04	0.04	0.09	0.13	0.23	0.19	0.06
Crit Moves:			****	****					****	****		
Green/Cycle:	0.34	0.47	0.47	0.03	0.17	0.17	0.06	0.14	0.14	0.24	0.31	0.31
Volume/Cap:	0.26	0.17	0.96	0.96	0.25	0.26	0.60	0.65	0.96	0.96	0.60	0.20
Delay/Veh:	24.2	15.0	48.0	152.1	36.4	36.8	55.2	43.9	91.1	59.3	29.9	25.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.2	15.0	48.0	152.1	36.4	36.8	55.2	43.9	91.1	59.3	29.9	25.3
HCM2kAvg:	4	3	27	4	2	2	3	6	10	18	9	2

Harmony Grove Village
Option B: Baseline + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.831
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 37.7
Optimal Cycle: 85 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	2	1 0	2 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	480	181	895	85	232	43	248	689	197	370	735	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	480	181	895	85	232	43	248	689	197	370	735	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	533	201	994	94	258	48	276	766	219	411	817	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	533	201	994	94	258	48	276	766	219	411	817	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	533	201	994	94	258	48	276	766	219	411	817	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.75	0.95	0.95	0.85	0.92	0.95	0.85	0.92	0.91	0.85
Lanes:	1.00	2.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat..	1805	3610	2842	1805	3610	1615	3502	3610	1615	3502	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.30	0.06	0.35	0.05	0.07	0.03	0.08	0.21	0.14	0.12	0.16	0.03
Crit Moves:			****	****				****		****		
Green/Cycle:	0.39	0.42	0.42	0.06	0.09	0.09	0.13	0.26	0.26	0.14	0.26	0.26
Volume/Cap:	0.76	0.13	0.83	0.83	0.76	0.31	0.60	0.83	0.53	0.83	0.60	0.10
Delay/Veh:	31.2	17.8	30.9	84.3	53.7	43.5	43.0	41.7	33.4	53.2	32.8	27.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.2	17.8	30.9	84.3	53.7	43.5	43.0	41.7	33.4	53.2	32.8	27.9
HCM2kAvg:	16	2	16	5	6	2	5	14	6	9	8	1

Harmony Grove Village

Scenario Report

Scenario:	EX AM
Command:	Default Command
Volume:	EX AM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #1 Country Club Dr @ Entrance # 5

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Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 0	1 0	0	0 0	1 0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	17	0	0	108	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	17	0	0	108	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	17	0	0	108	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	0	0	0	0	17	0	0	108	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	0	0	0	0	0	0	0	17	0	0	108	0
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			0.0			0.0		
ApproachLOS:	*			*			A			A		

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 0 0 0			0 0 1 0 0			0 0 1 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	4	0	0	19	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	4	0	0	19	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	4	0	0	19	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	0	4	0	0	19	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	0	0	0	0	4	0	0	19	0
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			0.0			0.0		
ApproachLOS:	*			*			A			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.103
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 6.9
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 1! 0 1		
Volume Module: AM Peak												
Base Vol:	0	0	0	1	0	96	14	3	0	0	12	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	1	0	96	14	3	0	0	12	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	1	0	107	16	3	0	0	13	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	1	0	107	16	3	0	0	13	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	1	0	107	16	3	0	0	13	8
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.01	0.00	0.99	0.82	0.18	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	11	0	1039	663	142	0	0	0	1755
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.10	xxxx	0.10	0.02	0.02	xxxx	xxxx	xxxx	0.00
Crit Moves:				****			****					****
Delay/Veh:	0.0	0.0	0.0	6.8	0.0	6.8	7.5	7.5	0.0	0.0	0.0	6.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	6.8	0.0	6.8	7.5	7.5	0.0	0.0	0.0	6.8
LOS by Move:	*	*	*	A	*	A	A	A	*	*	*	A
ApproachDel:	xxxxxx			6.8			7.5			6.8		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			6.8			7.5			6.8		
LOS by Appr:	*			A			A			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****
Intersection #8 Harmony Grove/Village Road
****
Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.2]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	0	0	0	0	1	0	1	0	1!	0	1	0	0	0	0	0
Volume Module: AM Peak																				
Base Vol:	2	110		0		0	306		17		3		0		1		0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	2	110		0		0	306		17		3		0		1		0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	2	122		0		0	340		19		3		0		1		0		0	
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0	
Final Vol.:	2	122		0		0	340		19		3		0		1		0		0	
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4	xxxx		6.2	xxxxx	xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	xxxx		3.3	xxxxx	xxxx	xxxxx			
Capacity Module:																				
Cnflict Vol:	359	xxxx	xxxxx	xxxx	xxxx	xxxxx					476	xxxx		349	xxxx	xxxx	xxxxx			
Potent Cap.:	1211	xxxx	xxxxx	xxxx	xxxx	xxxxx					551	xxxx		698	xxxx	xxxx	xxxxx			
Move Cap.:	1211	xxxx	xxxxx	xxxx	xxxx	xxxxx					550	xxxx		698	xxxx	xxxx	xxxxx			
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx					0.01	xxxx		0.00	xxxx	xxxx	xxxx			
Level Of Service Module:																				
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx					0.0	xxxx		0.0	xxxxx	xxxx	xxxxx			
Stopped Del:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx					11.6	xxxx		10.2	xxxxx	xxxx	xxxxx			
LOS by Move:	A	*		*	*	*					B	*		B	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx		581	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx		0.0	xxxxx	xxxxx	xxxx	xxxxx			
Shrd StpDel:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx		11.2	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	A	*		*	*	*					*		B	*	*	*	*			
ApproachDel:	xxxxxx					xxxxxx					11.2				xxxxxx					
ApproachLOS:		*				*					B				*					

Harmony Grove Village

Scenario Report

Scenario:	EX PM
Command:	Default Command
Volume:	EX PM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 0	1 0	0	0 0	1 0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	111	0	0	34	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	111	0	0	34	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	111	0	0	34	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	0	111	0	0	34	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	0	0	0	0	111	0	0	34	0
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			0.0			0.0		
ApproachLOS:	*			*			A			A		

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	0 0	0	0 0	1 0	0	0 0	1 0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	22	0	0	8	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	22	0	0	8	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	22	0	0	8	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	0	22	0	0	8	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	0	0	0	0	22	0	0	8	0
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			0.0			0.0		
ApproachLOS:	*			*			A			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.147
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.7
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	0	0	0	0	1!	0	0	1	0	0	0	0	1!	0 1
Volume Module: PM Peak																
Base Vol:	0	0	0		9	0	28		98	13	0		0	6	2	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		9	0	28		98	13	0		0	6	2	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		10	0	31		109	14	0		0	7	2	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	0	0		10	0	31		109	14	0		0	7	2	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	0	0		10	0	31		109	14	0		0	7	2	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	0.00	0.00		0.24	0.00	0.76		0.88	0.12	0.00		0.00	1.00	1.00	
Final Sat..	0	0	0		225	0	700		739	98	0		0	0	1795	
Capacity Analysis Module:																
Vol/Sat:	xxxx	xxxx	xxxx		0.04	xxxx	0.04		0.15	0.15	xxxx		xxxx	xxxx	0.00	
Crit Moves:							****			****					****	
Delay/Veh:	0.0	0.0	0.0		6.9	0.0	6.9		8.0	8.0	0.0		0.0	0.0	6.7	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	0.0		6.9	0.0	6.9		8.0	8.0	0.0		0.0	0.0	6.7	
LOS by Move:	*	*	*		A	*	A		A	A	*		*	*	A	
ApproachDel:	xxxxxx					6.9				8.0				6.7		
Delay Adj:	xxxxx					1.00				1.00				1.00		
ApprAdjDel:	xxxxxx					6.9				8.0				6.7		
LOS by Appr:	*					A				A				A		

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Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[12.0]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	- T	- R			L	- T	- R			L	- T	- R			L	- T	- R		
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	0	0	0	0	1	0	1	0	1!	0	1	0	0	0	0	0
Volume Module: PM Peak																				
Base Vol:		1	430	0		0	90		7		18	0		4		0	0		0	
Growth Adj:	1.00	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:		1	430	0		0	90		7		18	0		4		0	0		0	
User Adj:	1.00	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90	0.90	0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:		1	478	0		0	100		8		20	0		4		0	0		0	
Reduct Vol:		0	0	0		0	0		0		0	0		0		0	0		0	
Final Vol..		1	478	0		0	100		8		20	0		4		0	0		0	
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx		xxxx	xxxxx				6.4	xxxx		6.2		xxxxx	xxxx		xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx		xxxx	xxxxx				3.5	xxxx		3.3		xxxxx	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	108	xxxx	xxxxx	xxxx		xxxx	xxxxx				584	xxxx		104		xxxx	xxxx		xxxxx	
Potent Cap.:	1496	xxxx	xxxxx	xxxx		xxxx	xxxxx				477	xxxx		956		xxxx	xxxx		xxxxx	
Move Cap.:	1496	xxxx	xxxxx	xxxx		xxxx	xxxxx				477	xxxx		956		xxxx	xxxx		xxxxx	
Volume/Cap:	0.00	xxxx	xxxx	xxxx		xxxx	xxxx				0.04	xxxx		0.00		xxxx	xxxx		xxxx	
Level Of Service Module:																				
Queue:	0.0	xxxx	xxxxx	xxxxx		xxxx	xxxxx				0.1	xxxx		0.0		xxxxx	xxxx		xxxxx	
Stopped Del:	7.4	xxxx	xxxxx	xxxxx		xxxx	xxxxx				12.7	xxxx		8.8		xxxxx	xxxx		xxxxx	
LOS by Move:	A	*	*	*		*	*				B	*		A		*	*		*	
Movement:	LT	- LTR	- RT	LT	-	LTR	- RT				LT	- LTR	- RT			LT	- LTR	- RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx		xxxx	xxxxx				xxxx	525	xxxxx			xxxx	xxxx		xxxxx	
SharedQueue:	0.0	xxxx	xxxxx	xxxxx		xxxx	xxxxx				xxxxx	0.1	xxxxx			xxxxx	xxxx		xxxxx	
Shrd StpDel:	7.4	xxxx	xxxxx	xxxxx		xxxx	xxxxx				xxxxx	12.0	xxxxx			xxxxx	xxxx		xxxxx	
Shared LOS:	A	*	*	*		*	*				*	B	*			*	*		*	
ApproachDel:	xxxxxx					xxxxxx					12.0					xxxxxx				
ApproachLOS:	*					*					B					*				

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Harmony Grove Village

Scenario Report

Scenario:	EX + P AM
Command:	Default Command
Volume:	E+P AM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0			1 0 0 0 0			0 0 1 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	88	0	0	0	286	0	0	276	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	88	0	0	0	286	0	0	276	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	88	0	0	0	286	0	0	276	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	88	0	0	0	286	0	0	276	54
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	97	0	0	0	286	0	0	276	54
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	589	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	483	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	483	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			9.1			0.0			0.0		
ApproachLOS:	*			B			A			A		

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 0 0 0			0 0 0 1 0			0 1 0 0 0		
Volume Module:												
Base Vol:	9	0	22	0	0	0	0	215	5	13	151	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	0	22	0	0	0	0	215	5	13	151	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	0	22	0	0	0	0	215	5	13	151	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	9	0	22	0	0	0	0	215	5	13	151	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	10	0	24	0	0	0	0	215	5	14	151	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	382	xxxx	217	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	220	xxxx	xxxxx
Potent Cap.:	637	xxxx	1074	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1347	xxxx	xxxxx
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap..	629	xxxx	1074	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1347	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	5.8	xxxx	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	891	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1347	xxxx	xxxxx
Shrd StpDel:	xxxxx	4.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.0	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	4.2			xxxxx			0.0			0.2		
ApproachLOS:	A			*			A			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.425
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.5
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 1! 0 1		
Volume Module:												
Base Vol:	0	0	0	6	0	152	113	214	0	0	144	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	6	0	152	113	214	0	0	144	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	6	0	152	113	214	0	0	144	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	6	0	152	113	214	0	0	144	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	6	0	152	113	214	0	0	144	16
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.04	0.00	0.96	0.35	0.65	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	29	0	732	266	503	0	0	0	1575
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.21	xxxx	0.21	0.43	0.43	xxxx	xxxx	xxxx	0.01
Crit Moves:				****			****					****
Delay/Veh:	0.0	0.0	0.0	8.4	0.0	8.4	10.8	10.8	0.0	0.0	0.0	8.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	8.4	0.0	8.4	10.8	10.8	0.0	0.0	0.0	8.0
LOS by Move:	*	*	*	A	*	A	B	B	*	*	*	A
ApproachDel:	xxxxxx			8.4			10.8			8.0		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			8.4			10.8			8.0		
LOS by Appr:	*			A			B			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 4.0 Worst Case Level Of Service: C[16.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0		1	0	1	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	2	210		0		0	371		162				236		0		1		0		0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00				1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	2	210		0		0	371		162				236		0		1		0		0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00				1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00				1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	2	210		0		0	371		162				236		0		1		0		0		0	
Reduct Vol:	0	0		0		0	0		0				0		0		0		0		0		0	
Final Vol..	2	210		0		0	371		162				236		0		1		0		0		0	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.4	xxxx		6.2	xxxxx	xxxx	xxxxx					
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5	xxxx		3.3	xxxxx	xxxx	xxxxx					
Capacity Module:																								
Cnflict Vol:	533	xxxx	xxxxx	xxxx	xxxx	xxxxx							666	xxxx		452	xxxx	xxxx	xxxxx					
Potent Cap..	1045	xxxx	xxxxx	xxxx	xxxx	xxxxx							428	xxxx		612	xxxx	xxxx	xxxxx					
Move Cap..	1045	xxxx	xxxxx	xxxx	xxxx	xxxxx							427	xxxx		612	xxxx	xxxx	xxxxx					
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx							0.55	xxxx		0.00	xxxx	xxxx	xxxx					
Level Of Service Module:																								
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx							1.1	xxxx		0.0	xxxxx	xxxx	xxxxx					
Stopped Del:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx							16.6	xxxx		10.9	xxxxx	xxxx	xxxxx					
LOS by Move:	A	*		*		*	*		*				C	*		B		*	*		*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx		428	xxxxx		xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx		1.1	xxxxx		xxxxx	xxxx	xxxxx				
Shrd StpDel:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx		16.6	xxxxx		xxxxx	xxxx	xxxxx				
Shared LOS:	A	*		*		*	*		*				*		C	*		*	*		*			
ApproachDel:	xxxxxx						xxxxxx								16.6				xxxxxx					
ApproachLOS:	*						*								C				*					

Harmony Grove Village

Scenario Report

Scenario:	EX + P PM
Command:	Default Command
Volume:	E+P PM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	1 0	0	0 0	0 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	0	0	66	0	0	0	310	0	0	384	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	66	0	0	0	310	0	0	384	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	66	0	0	0	310	0	0	384	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	66	0	0	0	310	0	0	384	116
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	0	0	0	73	0	0	0	310	0	0	384	116
Critical Gap Module:												
MoveUp Time:	xxxx	xxxx	xxxxx	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	752	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	388	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	388	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	11.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			11.2			0.0			0.0		
ApproachLOS:	*			C			A			A		

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1!	0 0	0 0	0	0 0	0 0	0	1 0	0 1	0	0 0
Volume Module:												
Base Vol:	7	0	16	0	0	0	0	178	12	29	282	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	0	16	0	0	0	0	178	12	29	282	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	0	16	0	0	0	0	178	12	29	282	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	7	0	16	0	0	0	0	178	12	29	282	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	8	0	18	0	0	0	0	178	12	32	282	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	495	xxxx	184	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	190	xxxx	xxxxx
Potent Cap.:	547	xxxx	1117	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx
Adj Cap:	0.97	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	532	xxxx	1117	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	6.9	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	837	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx
Shrd StpDel:	xxxxx	4.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.3	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	4.4			xxxxxx			0.0			0.3		
ApproachLOS:	A			*			A			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.464
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0 0	0 0	0		0 0	1! 0	0		0 1	0 0	0		0 0	1! 0	1	
Volume Module:																
Base Vol:	0	0	0		21	0	144		171	169	0		0	280	9	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		21	0	144		171	169	0		0	280	9	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	0	0		21	0	144		171	169	0		0	280	9	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	0	0		21	0	144		171	169	0		0	280	9	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	0	0		21	0	144		171	169	0		0	280	9	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	0.00	0.00		0.13	0.00	0.87		0.50	0.50	0.00		0.00	1.00	1.00	
Final Sat..	0	0	0		88	0	606		368	364	0		0	0	1557	
Capacity Analysis Module:																
Vol/Sat:	xxxx	xxxx	xxxx		0.24	xxxx	0.24		0.46	0.46	xxxx		xxxx	xxxx	0.01	
Crit Moves:							****		****						****	
Delay/Veh:	0.0	0.0	0.0		9.1	0.0	9.1		11.7	11.7	0.0		0.0	0.0	9.5	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	0.0		9.1	0.0	9.1		11.7	11.7	0.0		0.0	0.0	9.5	
LOS by Move:	*	*	*		A	*	A		B	B	*		*	*	A	
ApproachDel:	xxxxxx					9.1				11.7				9.5		
Delay Adj:	xxxxx					1.00				1.00				1.00		
ApprAdjDel:	xxxxxx					9.1				11.7				9.5		
LOS by Appr:	*					A				B				A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: C[21.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 1	0 0	0		0 0	0 1	0		1	0 1!	0		0 0	0 0	0	
Volume Module:																
Base Vol:	1	507	0		0	224	310		190	0	4		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1	507	0		0	224	310		190	0	4		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	1	507	0		0	224	310		190	0	4		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	1	507	0		0	224	310		190	0	4		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	534	xxxx	xxxxx		xxxx	xxxx	xxxxx		888	xxxx	379		xxxx	xxxx	xxxxx	
Potent Cap..	1044	xxxx	xxxxx		xxxx	xxxx	xxxxx		317	xxxx	672		xxxx	xxxx	xxxxx	
Move Cap.:	1044	xxxx	xxxxx		xxxx	xxxx	xxxxx		317	xxxx	672		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	xxxx	xxxx		xxxx	xxxx	xxxx		0.60	xxxx	0.01		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		1.2	xxxx	0.0		xxxxx	xxxx	xxxxx	
Stopped Del:	8.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx		21.2	xxxx	10.4		xxxxx	xxxx	xxxxx	
LOS by Move:	A	*	*		*	*	*		C	*	B		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	320	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	1.2	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	8.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	21.1	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*		*	*	*		*	C	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				21.0				xxxxxx			
ApproachLOS:	*				*				C				*			

Harmony Grove Village

Scenario Report

Scenario:	E+P+C AM
Command:	Default Command
Volume:	E+P+C AM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0		0		0	88		0		0	0		348		0	0		302		54
Growth Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
Initial Bse:	0		0		0	88		0		0	0		348		0	0		302		54
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Volume:	0		0		0	88		0		0	0		348		0	0		302		54
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol..	0		0		0	88		0		0	0		348		0	0		302		54
Adjusted Volume Module:																				
Grade:			0%					0%					0%					0%		
% Cycle/Cars:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
% Truck/Comb:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
PCE Adj:	1.10	1.10		1.10	1.10	1.10	1.10		1.10	1.10	1.10	1.00		1.00	1.10	1.10	1.00		1.00	1.00
Cycl/Car PCE:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
Trck/Cmb PCE:	xxxx		xxxx			xxxx		xxxx			xxxx		xxxx			xxxx		xxxx		
Adj Vol..	0		0		0	97		0		0	0		348		0	0		302		54
Critical Gap Module:																				
MoveUp Time:	xxxxx	xxxx	xxxxx			3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Critical Gp:	xxxxx	xxxx	xxxxx			6.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			677	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Potent Cap.:	xxxx	xxxx	xxxxx			429	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Adj Cap:	xxxx	xxxx	xxxxx			1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Move Cap..	xxxx	xxxx	xxxxx			429	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Level Of Service Module:																				
Stopped Del:	xxxxx	xxxx	xxxxx			10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*		*		*	C		*		*	*		*		*	*		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		*		*	*		*		*	*		*		*	*		*		*
ApproachDel:	xxxxxx					10.5					0.0					0.0				
ApproachLOS:	*					C					A					A				

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	9	0	22	0	0	0	0	215	5	13	151	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	0	22	0	0	0	0	215	5	13	151	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	0	22	0	0	0	0	215	5	13	151	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	9	0	22	0	0	0	0	215	5	13	151	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	10	0	24	0	0	0	0	215	5	14	151	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	382	xxxx	217	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	220	xxxx	xxxxx
Potent Cap.:	637	xxxx	1074	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1347	xxxx	xxxxx
Adj Cap:	0.99	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap..	629	xxxx	1074	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1347	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	5.8	xxxx	3.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	891	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1347	xxxx	xxxxx
Shrd StpDel:	xxxxx	4.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.0	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	4.2			xxxxxx			0.0			0.2		
ApproachLOS:	A			*			A			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.472
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.0
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	1
Volume Module:												
Base Vol:	0	0	0	6	0	176	142	214	0	0	144	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	6	0	176	142	214	0	0	144	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	6	0	176	142	214	0	0	144	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	6	0	176	142	214	0	0	144	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	6	0	176	142	214	0	0	144	16
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.03	0.00	0.97	0.40	0.60	0.00	0.00	1.00	1.00
Final Sat..	0	0	0	25	0	723	301	454	0	0	0	1534
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.24	xxxx	0.24	0.47	0.47	xxxx	xxxx	xxxx	0.01
Crit Moves:						****	****					****
Delay/Veh:	0.0	0.0	0.0	8.7	0.0	8.7	11.6	11.6	0.0	0.0	0.0	8.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	8.7	0.0	8.7	11.6	11.6	0.0	0.0	0.0	8.1
LOS by Move:	*	*	*	A	*	A	B	B	*	*	*	A
ApproachDel:	xxxxxx				8.7			11.6			8.1	
Delay Adj:	xxxxx				1.00			1.00			1.00	
ApprAdjDel:	xxxxxx				8.7			11.6			8.1	
LOS by Appr:	*				A			B			A	

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #8 Harmony Grove/Village Road

****

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: C[19.3]

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	1	0	1!	0 1	0	0	0	0 0
Volume Module:																
Base Vol:	2	285		0	0	405		162	236		0	1	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	2	285		0	0	405		162	236		0	1	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Volume:	2	285		0	0	405		162	236		0	1	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol.:	2	285		0	0	405		162	236		0	1	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4	xxxx		6.2	xxxxx	xxxx		xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	xxxx		3.3	xxxxx	xxxx		xxxxx	
Capacity Module:																
Cnflict Vol:	567	xxxx	xxxxx	xxxx	xxxx	xxxxx		775	xxxx		486	xxxx	xxxx		xxxxx	
Potent Cap.:	1015	xxxx	xxxxx	xxxx	xxxx	xxxxx		369	xxxx		585	xxxx	xxxx		xxxxx	
Move Cap.:	1015	xxxx	xxxxx	xxxx	xxxx	xxxxx		369	xxxx		585	xxxx	xxxx		xxxxx	
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx		0.64	xxxx		0.00	xxxx	xxxx		xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		1.4	xxxx		0.0	xxxxx	xxxx		xxxxx	
Stopped Del:	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx		19.3	xxxx		11.2	xxxxx	xxxx		xxxxx	
LOS by Move:	A	*	*	*	*	*		C	*		B	*	*		*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -		RT	LT -	LTR -		RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	369		xxxxx	xxxx	xxxx		xxxxx	
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	1.4		xxxxx	xxxxx	xxxx		xxxxx	
Shrd StpDel:	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	19.3		xxxxx	xxxxx	xxxx		xxxxx	
Shared LOS:	A	*	*	*	*	*		*	C		*	*	*		*	
ApproachDel:	xxxxxx			xxxxxx					19.3			xxxxxx				
ApproachLOS:		*			*				C				*			

Harmony Grove Village

Scenario Report

Scenario:	E+P+C PM
Command:	Default Command
Volume:	E+P+C PM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			1 0 0 0 0			0 0 1 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	66	0	0	0	349	0	0	480	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	66	0	0	0	349	0	0	480	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	66	0	0	0	349	0	0	480	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	66	0	0	0	349	0	0	480	116
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	0	0	0	73	0	0	0	349	0	0	480	116
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	887	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	324	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	324	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	13.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.9			0.0			0.0		
ApproachLOS:	*			C			A			A		

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Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1 1 0 0			0 0 0 0 0			0 0 0 1 0			0 1 0 0 0		
Volume Module:												
Base Vol:	7	0	16	0	0	0	0	178	12	29	282	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	0	16	0	0	0	0	178	12	29	282	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	0	16	0	0	0	0	178	12	29	282	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	7	0	16	0	0	0	0	178	12	29	282	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	8	0	18	0	0	0	0	178	12	32	282	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	495	xxxx	184	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	190	xxxx	xxxxx
Potent Cap..	547	xxxx	1117	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx
Adj Cap:	0.97	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	532	xxxx	1117	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	6.9	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	837	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx
Shrd StpDel:	xxxxx	4.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.3	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:	4.4			xxxxxx			0.0			0.3		
ApproachLOS:	A			*			A			A		

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Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.512
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.3
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	1
Volume Module:												
Base Vol:	0	0	0	21	0	229	185	169	0	0	280	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	229	185	169	0	0	280	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	21	0	229	185	169	0	0	280	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	21	0	229	185	169	0	0	280	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	21	0	229	185	169	0	0	280	9
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.08	0.00	0.92	0.52	0.48	0.00	0.00	1.00	1.00
Final Sat..	0	0	0	58	0	636	362	330	0	0	0	1453
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.36	xxxx	0.36	0.51	0.51	xxxx	xxxx	xxxx	0.01
Crit Moves:				****				****				****
Delay/Veh:	0.0	0.0	0.0	10.2	0.0	10.2	13.0	13.0	0.0	0.0	0.0	10.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.2	0.0	10.2	13.0	13.0	0.0	0.0	0.0	10.2
LOS by Move:	*	*	*	B	*	B	B	B	*	*	*	B
ApproachDel:	xxxxxx			10.2			13.0			10.2		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			10.2			13.0			10.2		
LOS by Appr:	*			B			B			B		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: E[36.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L -	T -	R				L -	T -	R				L -	T -	R				L -	T -	R			
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0		1	0	1!	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:		1	554		0		0	338		310		190		0		4		0		0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	
Initial Bse:		1	554		0		0	338		310		190		0		4		0		0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90	
PHF Volume:		1	616		0		0	376		344		211		0		4		0		0		0		0
Reduct Vol:		0	0		0		0	0		0		0		0		0		0		0		0		0
Final Vol..		1	616		0		0	376		344		211		0		4		0		0		0		0
Critical Gap Module:																								
Critical Gp:	4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx			6.4	xxxx		6.2		xxxxx	xxxx		xxxxx				
FollowUpTim:	2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx			3.5	xxxx		3.3		xxxxx	xxxx		xxxxx				
Capacity Module:																								
Cnflict Vol:	720	xxxx		xxxxx		xxxx	xxxx		xxxxx			1166	xxxx		548		xxxx	xxxx		xxxxx				
Potent Cap..	891	xxxx		xxxxx		xxxx	xxxx		xxxxx			216	xxxx		540		xxxx	xxxx		xxxxx				
Move Cap.:	891	xxxx		xxxxx		xxxx	xxxx		xxxxx			216	xxxx		540		xxxx	xxxx		xxxxx				
Volume/Cap:	0.00	xxxx		xxxx		xxxx	xxxx		xxxx			0.98	xxxx		0.01		xxxx	xxxx		xxxx				
Level Of Service Module:																								
Queue:	0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx			2.4	xxxx		0.0		xxxxx	xxxx		xxxxx				
Stopped Del:	9.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx			36.6	xxxx		11.7		xxxxx	xxxx		xxxxx				
LOS by Move:	A	*		*		*	*		*			E	*		B		*	*		*				
Movement:	LT -	LTR	-	RT			LT -	LTR	-	RT		LT -	LTR	-	RT		LT -	LTR	-	RT				
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		219		xxxxx		xxxx	xxxx		xxxxx				
SharedQueue:	0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		2.5		xxxxx		xxxxx	xxxx		xxxxx				
Shrd StpDel:	9.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		36.4		xxxxx		xxxxx	xxxx		xxxxx				
Shared LOS:	A	*		*		*	*		*		*		E		*		*	*		*				
ApproachDel:	xxxxxx						xxxxxx						36.2					xxxxxx						
ApproachLOS:	*						*						E					*						

APPENDIX J

OPTION C: INTERSECTION ANALYSIS WORKSHEETS

Harmony Grove Village
Option C: Existing + Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	32.2	0.606	C	32.2	0.606	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	E	65.6	1.085	E	65.6	1.085	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	D	50.4	0.927	D	50.4	0.927	+ 0.000 D/V
# 4 Citracado Pkwy./Vinevard Ave/C	F	668.5	0.000	F	668.5	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	8.5	0.292	A	8.5	0.292	+ 0.000 V/C
# 6 Country Club/Entrance # 3	B	10.6	0.000	B	10.6	0.000	+ 0.000 D/V
# 7 Countrv Club/ Village Road	B	12.3	0.000	B	12.3	0.000	+ 0.000 D/V
# 8 Harmonv Grove/Village Road	C	24.0	0.000	C	24.0	0.000	+ 0.000 D/V
# 9 Countrv Club/Entrance # 2	B	12.8	0.000	B	12.8	0.000	+ 0.000 D/V
# 10 COuntrv Club/Harmonv Grove	B	14.0	0.000	B	14.0	0.000	+ 0.000 D/V
# 11 Entrance #1 /Harmonv Grove	C	17.2	0.000	C	17.2	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	B	14.5	0.000	B	14.5	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vinevard St.	A	1.7	0.504	A	1.7	0.504	+ 0.000 D/V
# 14 Harmonv Grove Rd./Kauana Loa	B	13.0	0.000	B	13.0	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vinevard Ave	D	36.0	0.643	D	36.0	0.643	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	B	11.9	0.481	B	11.9	0.481	+ 0.000 V/C
# 17 Harmonv Grove Rd./Enterprise S	F	118.7	0.000	F	118.7	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	C	23.5	0.000	C	23.5	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Wav	C	28.0	0.626	C	28.0	0.626	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	C	16.4	0.000	C	16.4	0.000	+ 0.000 D/V
# 21 Harmonv Grove Rd./Hale Ave.	F	53.2	0.000	F	53.2	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	A	8.9	0.000	A	8.9	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	A	9.6	0.000	A	9.6	0.000	+ 0.000 D/V
# 24 I-15 NB/Vallev Pkwv	C	31.1	0.702	C	31.1	0.702	+ 0.000 D/V

Harmonv Grove Village
Option C: Existing + Project

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Vallev Pkwv	D	49.6	0.737	D	49.6	0.737	+ 0.000 D/V
# 26 Vallev Park Wav / Auto Park Wa	D	36.6	0.649	D	36.6	0.649	+ 0.000 D/V
# 27 Vallev Park Wav / West 9th Ave	D	35.4	0.690	D	35.4	0.690	+ 0.000 D/V
# 28 Vallev Pkwv/11th Street	B	11.2	0.411	B	11.2	0.411	+ 0.000 D/V
# 29 Vallev Parkway/Avenida Diablo	F	162.9	0.000	F	162.9	0.000	+ 0.000 D/V
# 30 Vallev Pkwv./Citracado Pkwv.	C	28.0	0.499	C	28.0	0.499	+ 0.000 D/V
# 31 Vallev Pkwv./Via Rancho Pkwv.	C	30.2	0.777	C	30.2	0.777	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	D	44.4	0.985	D	44.4	0.985	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	B	20.0	0.688	B	20.0	0.688	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	28.1	0.712	C	28.1	0.712	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	28.3	0.865	C	28.3	0.865	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	35.2	0.856	D	35.2	0.856	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	24.9	0.512	C	24.9	0.512	+ 0.000 D/V

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB INS / EWI

Cycle (sec): 120 Critical Vol./Cap. (X): 0.606
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 32.2
Optimal Cycle: 64 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	0	0		0	7	24		7
Lanes:	2	0	2	0 0	0	0	2	0 1	0	0	0	0 0	1	0	1!	0 1
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	458	273		0	0	377		135	0	0		0	455	8		147
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	458	273		0	0	377		135	0	0		0	455	8		147
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	509	303		0	0	419		150	0	0		0	506	9		163
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	509	303		0	0	419		150	0	0		0	506	9		163
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	509	303		0	0	419		150	0	0		0	506	9		163
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.71	0.73		1.00	1.00	0.93		0.83	1.00	1.00		1.00	0.71	0.71		0.71
Lanes:	2.00	2.00		0.00	0.00	2.00		1.00	0.00	0.00		0.00	1.74	0.02		1.24
Final Sat.:	2693	2776		0	0	3538		1583	0	0		0	2357	35		1681
Capacity Analysis Module:																
Vol/Sat:	0.19	0.11		0.00	0.00	0.12		0.09	0.00	0.00		0.00	0.21	0.25		0.10
Crit Moves:	****					****								****		
Green/Cycle:	0.31	0.51		0.00	0.00	0.20		0.20	0.00	0.00		0.00	0.41	0.41		0.41
Volume/Cap:	0.61	0.21		0.00	0.00	0.59		0.47	0.00	0.00		0.00	0.52	0.61		0.23
Delay/Veh:	36.5	16.2		0.0	0.0	44.9		43.5	0.0	0.0		0.0	26.5	28.5		22.8
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	36.5	16.2		0.0	0.0	44.9		43.5	0.0	0.0		0.0	26.5	28.5		22.8
HCM2kAvg:	9	3		0	0	8		5	0	0		0	9	11		3

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp INS / EWI

Cycle (sec): 100 Critical Vol./Cap. (X): 1.085
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 65.6
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24		7	7	24		0	7	24		7	0	0		0
Lanes:	0	0	2	0 1	2	0	2	0 0	0	1	0	1 0	0	0	0	0 0
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	0	558		356	130	829		0	105		1	683	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	558		356	130	829		0	105		1	683	0	0		0
User Adj:	1.00	1.00		0.50	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	620		198	144	921		0	117		1	759	0	0		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	620		198	144	921		0	117		1	759	0	0		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	0	620		198	144	921		0	117		1	759	0	0		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	0.73		0.65	0.90	0.93		1.00	0.55	0.55		0.55	1.00	1.00		1.00
Lanes:	0.00	2.00		1.00	2.00	2.00		0.00	0.99	0.01		1.00	0.00	0.00		0.00
Final Sat.:	0	2776		1242	3432	3538		0	1041	10		1051	0	0		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.22		0.16	0.04	0.26		0.00	0.11	0.11		0.72	0.00	0.00		0.00
Crit Moves:		****			****							****				
Green/Cycle:	0.00	0.24		0.24	0.07	0.31		0.00	0.60	0.60		0.60	0.00	0.00		0.00
Volume/Cap:	0.00	0.93		0.66	0.60	0.84		0.00	0.19	0.19		1.20	0.00	0.00		0.00
Delay/Veh:	0.0	56.9		39.9	49.4	38.1		0.0	9.0	9.0		124.6	0.0	0.0		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	56.9		39.9	49.4	38.1		0.0	9.0	9.0		124.6	0.0	0.0		0.0
HCM2kAvg:	0	13		7	3	16		0	2	2		47	0	0		0

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.927
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 50.4
Optimal Cycle: 138 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	1 0	2 0	1	2 0	1 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module: >> Count Date: 13 Dec 2001 << AM												
Base Vol:	156	528	40	438	948	142	200	363	336	90	316	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	528	40	438	948	142	200	363	336	90	316	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	173	587	44	487	1053	158	222	403	373	100	351	206
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	587	44	487	1053	158	222	403	373	100	351	206
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	173	587	44	487	1053	158	222	403	373	100	351	206
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.73	0.73	0.65	0.71	0.72	0.72	0.90	0.93	0.83	0.90	0.93	0.83
Lanes:	1.00	2.00	1.00	2.00	1.74	0.26	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat..	1388	2776	1242	2693	2369	355	3432	3538	1583	3432	3538	1583
Capacity Analysis Module:												
Vol/Sat:	0.12	0.21	0.04	0.18	0.44	0.44	0.06	0.11	0.24	0.03	0.10	0.13
Crit Moves:	****				****				****	****		
Green/Cycle:	0.13	0.32	0.32	0.27	0.46	0.46	0.07	0.25	0.25	0.06	0.23	0.23
Volume/Cap:	0.96	0.66	0.11	0.66	0.96	0.96	0.87	0.46	0.96	0.50	0.43	0.56
Delay/Veh:	106.0	36.9	28.8	40.8	47.1	47.1	80.6	38.8	79.0	56.8	39.8	42.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	106.0	36.9	28.8	40.8	47.1	47.1	80.6	38.8	79.0	56.8	39.8	42.9
HCM2kAvg:	10	10	1	9	27	27	7	7	18	3	6	7

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club (NS / EW)

Average Delay (sec/veh): 88.0 Worst Case Level Of Service: F[668.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	2 0	1	1 0	1 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module: >> Count Date: 11 Dec 2001 << AM												
Base Vol:	46	442	0	36	1067	213	232	0	40	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	442	0	36	1067	213	232	0	40	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	51	491	0	40	1186	237	258	0	44	0	0	0
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	51	491	0	40	1186	237	258	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1422	xxxx	xxxxx	491	xxxx	xxxxx	1613	xxxx	1186	xxxx	xxxx	xxxxx
Potent Cap..	479	xxxx	xxxxx	1072	xxxx	xxxxx	114	xxxx	230	xxxx	xxxx	xxxxx
Move Cap..	479	xxxx	xxxxx	1072	xxxx	xxxxx	102	xxxx	230	xxxx	xxxx	xxxxx
Volume/Cap:	0.11	xxxx	xxxx	0.04	xxxx	xxxx	2.52	xxxx	0.19	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	0.7	xxxxx	xxxx	xxxxx
Stopped Del:	13.4	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	24.4	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	A	*	*	*	*	C	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	102	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	23.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	779.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			668.5			xxxxxx		
ApproachLOS:	*			*			F			*		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.292
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.5
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Ignore				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1	0 1	0	1	0	0 0	0	0	0	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	0	36	16		55	166	0		0	0	0		10	0	48	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	36	16		55	166	0		0	0	0		10	0	48	
User Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.00		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	40	0		61	184	0		0	0	0		11	0	53	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	40	0		61	184	0		0	0	0		11	0	53	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	40	0		61	184	0		0	0	0		11	0	53	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	1.00	1.00		0.25	0.75	0.00		0.00	0.00	0.00		0.17	0.00	0.83	
Final Sat..	0	738	0		210	633	0		0	0	0		145	0	694	
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.05	xxxx		0.29	0.29	xxxx		xxxx	xxxx	xxxx		0.08	xxxx	0.08	
Crit Moves:		****				****							****			
Delay/Veh:	0.0	7.8	0.0		8.9	8.9	0.0		0.0	0.0	0.0		7.4	0.0	7.4	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	7.8	0.0		8.9	8.9	0.0		0.0	0.0	0.0		7.4	0.0	7.4	
LOS by Move:	-	A	*		A	A	*		*	*	*		A	*	A	
ApproachDel:		7.8				8.9				xxxxx				7.4		
Delay Adj:		1.00				1.00				xxxxx				1.00		
ApprAdjDel:		7.8				8.9				xxxxx				7.4		
LOS by Appr:		A				A				*				A		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club/Entrance # 3

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 0	0	1	0	0 0	0	0	0	0 0	0	0	0	0 1
Volume Module:																
Base Vol:	0	321	0		25	283	0		0	0	0		0	0	40	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	321	0		25	283	0		0	0	0		0	0	40	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	357	0		28	314	0		0	0	0		0	0	44	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	357	0		28	314	0		0	0	0		0	0	44	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	6.2	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	3.3	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		357	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	357	
Potent Cap.:	xxxx	xxxx	xxxxx		1213	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	692	
Move Cap..	xxxx	xxxx	xxxxx		1213	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	692	
Volume/Cap:	xxxx	xxxx	xxxx		0.02	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	0.06	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	0.2	
Stopped Del:	xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	10.6	
LOS by Move:	*	*	*		A	*	*		*	*	*		*	*	B	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		A	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				10.6			
ApproachLOS:	*				*				*				B			

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: B[12.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	1	1 0	1	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	151	211	0	176	0	0	0	0	132	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	151	211	0	176	0	0	0	0	132	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	168	234	0	196	0	0	0	0	147	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	168	234	0	196	0	0	0	0	147	0	0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	363	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	640	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	640	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.23	xxxx	xxxx

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.9	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.3		
ApproachLOS:	*			*			*			B		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 5.3 Worst Case Level Of Service: C[24.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 1	0	0	0 0	1	0 1	1 0	0	0 1	0 0	0	0 0
Volume Module: AM Peak												
Base Vol:	0	214	0	0	399	132	211	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	214	0	0	399	132	211	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	238	0	0	443	147	234	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	238	0	0	443	147	234	0	0	0	0	0

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	681	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	419	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	419	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.56	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	24.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	C	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			24.0			xxxxxx		
ApproachLOS:	*			*			C			*		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 4.8 Worst Case Level Of Service: B[12.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0	0 0	0 0	0 1	0	1 0	0	0 0	0 0	0 0	0
Volume Module:												
Base Vol:	2	96	0	0	143	140	225	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	96	0	0	143	140	225	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	96	0	0	143	140	225	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	2	96	0	0	143	140	225	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	283	xxxx	xxxxx	xxxx	xxxx	xxxxx	313	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	1291	xxxx	xxxxx	xxxx	xxxx	xxxxx	684	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	1291	xxxx	xxxxx	xxxx	xxxx	xxxxx	683	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.33	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			12.8			xxxxxx		
ApproachLOS:	*			*			B			*		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 COuntry Club/Harmony Grove

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: B[14.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	5	11	21	2	7	127	49	192	3	9	377	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	11	21	2	7	127	49	192	3	9	377	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	6	12	23	2	8	141	54	213	3	10	419	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	6	12	23	2	8	141	54	213	3	10	419	2
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	838	765	215	782	766	420	421	xxxx	xxxxx	217	xxxx	xxxxx
Potent Cap.:	288	336	830	314	335	638	1149	xxxx	xxxxx	1365	xxxx	xxxxx
Move Cap.:	211	317	830	284	317	638	1149	xxxx	xxxxx	1365	xxxx	xxxxx
Volume/Cap:	0.03	0.04	0.03	0.01	0.02	0.22	0.05	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	442	xxxxx	xxxx	596	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	14.0	xxxxx	xxxxx	13.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	*	*	*	*	*	*
ApproachDel:	14.0			13.1			xxxxxx			xxxxxx		
ApproachLOS:	B			B			*			*		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance #1 /Harmony Grove

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: C[17.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0	0	0				76	0	22				14	168	0				0	461	48			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	0	0				76	0	22				14	168	0				0	461	48			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90			
PHF Volume:	0	0	0				84	0	24				16	187	0				0	512	53			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				84	0	24				16	187	0				0	512	53			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				757	xxxx	539				566	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				378	xxxx	546				1016	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap..	xxxx	xxxx	xxxxx				374	xxxx	546				1016	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.23	xxxx	0.04				0.02	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*	*	-	*							A	*	*	*	*	*						
Movement:	LT - LTR - RT						LT - LTR - RT						LT - LTR - RT						LT - LTR - RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	403	xxxxx							xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.1	xxxxx							0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	17.2	xxxxx							8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	-	*	*	C	*							A	*	*	*	*	*						
ApproachDel:	xxxxxx				17.2					xxxxxx						xxxxxx								
ApproachLOS:	-				C					*						*								

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[14.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0	0	0				56	0	10				6	111	0				0	443	36			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	0	0				56	0	10				6	111	0				0	443	36			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90			
PHF Volume:	0	0	0				62	0	11				7	123	0				0	492	40			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				62	0	11				7	123	0				0	492	40			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				649	xxxx	512				532	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				438	xxxx	566				1046	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap..	xxxx	xxxx	xxxxx				435	xxxx	566				1046	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.14	xxxx	0.02				0.01	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*							A	*	-	*	*	*						
Movement:	LT - LTR - RT						LT - LTR - RT						LT - LTR - RT						LT - LTR - RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	451	xxxxx							xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx							0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	14.5	xxxxx							8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	-	*	*	B	*							A	*	*	*	*	*						
ApproachDel:	xxxxxx				14.5					xxxxxx						xxxxxx								
ApproachLOS:	-				B					*						*								

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.504
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 1.7
Optimal Cycle: 34 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	1	0 1	1	0	1	0 0
Volume Module:																
Base Vol:	9	0	4		0	0	0		0	775	6		3	688	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	9	0	4		0	0	0		0	775	6		3	688	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	10	0	4		0	0	0		0	861	7		3	764	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	10	0	4		0	0	0		0	861	7		3	764	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	10	0	4		0	0	0		0	861	7		3	764	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	0.85		1.00	1.00	1.00		1.00	1.00	0.85		0.32	1.00	1.00	
Lanes:	1.00	0.00	1.00		0.00	0.00	0.00		0.00	1.00	1.00		1.00	1.00	0.00	
Final Sat.:	1805	0	1615		0	0	0		0	1900	1615		606	1900	0	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.00	0.00		0.00	0.00	0.00		0.00	0.45	0.00		0.01	0.40	0.00	
Crit Moves:	****									****						
Green/Cycle:	0.01	0.00	0.01		0.00	0.00	0.00		0.00	0.90	0.90		0.90	0.90	0.00	
Volume/Cap:	0.50	0.00	0.25		0.00	0.00	0.00		0.00	0.50	0.00		0.01	0.45	0.00	
Delay/Veh:	68.4	0.0	56.3		0.0	0.0	0.0		0.0	1.2	0.5		0.5	1.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	68.4	0.0	56.3		0.0	0.0	0.0		0.0	1.2	0.5		0.5	1.0	0.0	
HCM2kAvg:	1	0	0		0	0	0		0	5	0		0	4	0	

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa (NS / EW)

Average Delay (sec/veh): 9.5 Worst Case Level Of Service: B[13.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	0	1 0	0	1	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << AM																
Base Vol:	14	0	411		0	0	0		0	68	13		518	38	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	14	0	411		0	0	0		0	68	13		518	38	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	16	0	457		0	0	0		0	76	14		576	42	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	16	0	457		0	0	0		0	76	14		576	42	0	
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx			
Capacity Module:																
Cnflict Vol:	1276	xxxx	83	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		90	xxxx	xxxxx			
Potent Cap.:	184	xxxx	977	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1505	xxxx	xxxxx			
Move Cap.:	102	xxxx	977	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1505	xxxx	xxxxx			
Volume/Cap:	0.15	xxxx	0.47	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.38	xxxx	xxxx			
Level Of Service Module:																
Queue:	0.5	xxxx	2.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		1.8	xxxx	xxxxx			
Stopped Del:	46.6	xxxx	11.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		8.9	xxxx	xxxxx			
LOS by Move:	E	*	B	*	*	*	*	*	*		A	*	*			
Movement:	LT -	LTR	- RT	LT -	LTR	- RT	LT -	LTR	- RT		LT -	LTR	- RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		1.8	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		8.9	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	*		A	*	*			
ApproachDel:	13.0			xxxxxx			xxxxxx				xxxxxx					
ApproachLOS:	B			*			*				*					

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.643
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 36.0
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	7		7	24	7		7	24	7		7	24	7	
Lanes:	1	0 1	0	1	1	0 1	0	1	1	0 1	1	0	1	0 2	0	1
Volume Module: >> Count Date: 11 Dec 2001 << AM																
Base Vol:	156	100	96		71	207	50		41	538	196		187	482	82	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	156	100	96		71	207	50		41	538	196		187	482	82	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	173	111	107		79	230	56		46	598	218		208	536	91	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	173	111	107		79	230	56		46	598	218		208	536	91	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	173	111	107		79	230	56		46	598	218		208	536	91	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.93	0.98	0.83		0.93	0.98	0.83		0.93	0.89	0.89		0.93	0.93	0.83	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.47	0.53		1.00	2.00	1.00	
Final Sat..	1769	1862	1583		1769	1862	1583		1769	2489	907		1769	3538	1583	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.06	0.07		0.04	0.12	0.04		0.03	0.24	0.24		0.12	0.15	0.06	
Crit Moves:	****					****				****			****			
Green/Cycle:	0.15	0.27	0.27		0.08	0.20	0.20		0.12	0.37	0.37		0.18	0.43	0.43	
Volume/Cap:	0.65	0.22	0.25		0.56	0.62	0.18		0.21	0.65	0.65		0.65	0.36	0.14	
Delay/Veh:	53.6	34.1	34.5		58.4	46.9	40.1		47.7	32.7	32.7		50.4	23.5	21.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	53.6	34.1	34.5		58.4	46.9	40.1		47.7	32.7	32.7		50.4	23.5	21.1	
HCM2kAvg:	7	3	3		4	8	2		2	13	13		8	7	2	

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.481
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 11.9
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	7		7	24	7		7	24	7		7	24	7	
Lanes:	1	0 1	0	1	1	0 1	0	1	1	0 1	0	1	1	0 1	0	1
Volume Module: >> Count Date: 28 Nov 2001 << AM																
Base Vol:	2	7	19		243	21	18		7	3	2		50	11	281	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	2	7	19		243	21	18		7	3	2		50	11	281	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	2	8	21		270	23	20		8	3	2		56	12	312	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	2	8	21		270	23	20		8	3	2		56	12	312	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	2	8	21		270	23	20		8	3	2		56	12	312	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Sat..	488	524	583		562	602	682		484	519	577		560	606	694	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.01	0.04		0.48	0.04	0.03		0.02	0.01	0.00		0.10	0.02	0.45	
Crit Moves:			****		****				****						****	
Delay/Veh:	9.6	9.1	8.5		14.2	8.6	7.8		9.7	9.1	8.4		9.5	8.5	11.5	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	9.6	9.1	8.5		14.2	8.6	7.8		9.7	9.1	8.4		9.5	8.5	11.5	
LOS by Move:	A	A	A		B	A	A		A	A	A		A	A	B	
ApproachDel:		8.8				13.3				9.3				11.1		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		8.8				13.3				9.3				11.1		
LOS by Appr:		A				B				A				B		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. (NS / EW)

Average Delay (sec/veh): 47.3 Worst Case Level Of Service: F(118.7)

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	0	1 0	0	1	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << AM																
Base Vol:	135	0	395		0	0	0		0	81	141		449	219	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	135	0	395		0	0	0		0	81	141		449	219	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	150	0	439		0	0	0		0	90	157		499	243	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	150	0	439		0	0	0		0	90	157		499	243	0	
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	xxxx	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1409	xxxx	168		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		247	xxxx	xxxxx	
Potent Cap..	153	xxxx	876		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		1319	xxxx	xxxxx	
Move Cap..	90	xxxx	876		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		1319	xxxx	xxxxx	
Volume/Cap:	1.67	xxxx	0.50		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		0.38	xxxx	xxxx	
Level Of Service Module:																
Queue:	12.2	xxxx	2.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		1.8	xxxx	xxxxx	
Stopped Del:	427.5	xxxx	13.2		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.4	xxxx	xxxxx	
LOS by Move:	F	*	B		*	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		1.8	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.4	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		A	*	*	
ApproachDel:	118.7				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	F				*				*				*			

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: C(23.5)

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	1	0	0	0 1	0	1	0	0 0	0	0	0	1 0
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	0	0	0		28	0	63		66	415	0		0	612	41	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		28	0	63		66	415	0		0	612	41	
User Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		34	0	77		81	507	0		0	748	50	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		34	0	77		81	507	0		0	748	50	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		1442	xxxx	773		798	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		147	xxxx	402		833	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap..	xxxx	xxxx	xxxxx		136	xxxx	402		833	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.25	xxxx	0.19		0.10	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		0.9	xxxx	0.7		0.3	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		40.2	xxxx	16.1		9.8	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		E	*	C		A	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.3	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.8	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		A	*	*		*	*	*	
ApproachDel:	xxxxxx				23.5				xxxxxx				xxxxxx			
ApproachLOS:	*				C				*				*			

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.626
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.0
Optimal Cycle: 52 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			7	0	7			7	24	0			0	24	7		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0	1	1	0	1	0	2	0	1
Volume Module: >> Count Date: 12 Dec 2001 << AM																				
Base Vol:	6	4		5		356	13	174			100	648		14		28	866		293	
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	6	4		5		356	13	174			100	648		14		28	866		293	
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90	0.90			0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	7	4		6		396	14	193			111	720		16		31	962		326	
Reduct Vol:	0	0		0		0	0	0			0	0		0		0	0		0	
Reduced Vol:	7	4		6		396	14	193			111	720		16		31	962		326	
PCE Adj:	1.00	1.00		1.00		1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	7	4		6		396	14	193			111	720		16		31	962		326	
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900	1900			1900	1900		1900		1900	1900		1900	
Adjustment:	0.87	0.87		0.87		0.93	0.84	0.84			0.93	0.93		0.93		0.93	0.93		0.83	
Lanes:	0.80	0.53		0.67		1.00	0.07	0.93			1.00	1.96		0.04		1.00	2.00		1.00	
Final Sat..	1317	878		1098		1769	111	1492			1769	3453		75		1769	3538		1583	
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.01		0.01		0.22	0.13	0.13			0.06	0.21		0.21		0.02	0.27		0.21	
Crit Moves:		****				****					****						****			
Green/Cycle:	0.01	0.01		0.01		0.36	0.36	0.36			0.10	0.49		0.49		0.04	0.43		0.43	
Volume/Cap:	0.63	0.63		0.63		0.63	0.36	0.36			0.63	0.42		0.42		0.42	0.63		0.47	
Delay/Veh:	98.1	98.1		98.1		33.9	28.9	28.9			58.7	19.6		19.6		60.0	27.2		24.7	
User DelAdj:	1.00	1.00		1.00		1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	98.1	98.1		98.1		33.9	28.9	28.9			58.7	19.6		19.6		60.0	27.2		24.7	
HCM2kAvg:	1	1		1		13	6	6			5	9		9		2	14		9	

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: C[16.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module: >> Count Date: 12 Dec 2001 <<																				
Base Vol..	0	276		59		6	367		0		0		0		0	65		0		5
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	276		59		6	367		0		0		0		0	65		0		5
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	307		66		7	408		0		0		0		0	72		0		6
Reduct Vol..	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol..	0	307		66		7	408		0		0		0		0	72		0		6
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	6.4		xxxx		6.2
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	3.5		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		372	xxxx		xxxxx		xxxx		xxxx		xxxxx	761		xxxx		339
Potent Cap..	xxxx	xxxx		xxxxx		1197	xxxx		xxxxx		xxxx		xxxx		xxxxx	376		xxxx		707
Move Cap..	xxxx	xxxx		xxxxx		1197	xxxx		xxxxx		xxxx		xxxx		xxxxx	375		xxxx		707
Volume/Cap:	xxxx	xxxx		xxxx		0.01	xxxx		xxxx		xxxx		xxxx		xxxx	0.19		xxxx		0.01
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx		xxxxx		xxxx		xxxxx	0.7		xxxx		0.0
Stopped Del:	xxxxx	xxxx		xxxxx		8.0	xxxx		xxxxx		xxxxx		xxxx		xxxxx	16.9		xxxx		10.1
LOS by Move:	*	*		*		A	*		*		*		*		*	C		*		B
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx		8.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		A	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					16.4				
ApproachLOS:	*					*					*					C				

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 20.1 Worst Case Level Of Service: F[53.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	1	0	0	0 1	0	0	0	0 0
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	183	120		0	0	57		420	244		0	178	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	183	120		0	0	57		420	244		0	178	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	203	133		0	0	63		467	271		0	198	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	203	133		0	0	63		467	271		0	198	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4	xxxx		6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	xxxx		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	530	xxxx	xxxxx	xxxx	xxxx	xxxxx		837	xxxx		297	xxxx	xxxx	xxxxx		
Potent Cap..	1048	xxxx	xxxxx	xxxx	xxxx	xxxxx		340	xxxx		747	xxxx	xxxx	xxxxx		
Move Cap..	1048	xxxx	xxxxx	xxxx	xxxx	xxxxx		282	xxxx		747	xxxx	xxxx	xxxxx		
Volume/Cap:	0.19	xxxx	xxxx	xxxx	xxxx	xxxx		0.96	xxxx		0.26	xxxx	xxxx	xxxx		
Level Of Service Module:																
Queue:	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx		9.4	xxxx		1.1	xxxxx	xxxx	xxxxx		
Stopped Del:	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx		83.5	xxxx		11.5	xxxxx	xxxx	xxxxx		
LOS by Move:	A	*	*	*	*	*		F	*		B	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT			LT - LTR - RT				LT - LTR - RT				
Shared Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		
SharedQueue:	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shrd StpDel:	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		
Shared LOS:	A	*	*	*	*	*		*	*	*		*	*	*		
ApproachDel:	xxxxxx			xxxxxx				53.2				xxxxxx				
ApproachLOS:	*			*				F				*				

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 7.0 Worst Case Level Of Service: A[8.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Yield Sign				Yield Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	0	1 0	1	0	1	0 0
Volume Module:																
Base Vol.	2		0	115	0		0	0	0		13	9	161		9	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	2		0	115	0		0	0	0		13	9	161		9	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	2		0	128	0		0	0	0		14	10	179		10	0
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Final Vol..	2		0	128	0		0	0	0		14	10	179		10	0
Critical Gap Module:																
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol.	387	xxxx		19	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		24	xxxx	xxxxx		
Potent Cap..	620	xxxx		1064	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1603	xxxx	xxxxx		
Move Cap..	567	xxxx		1064	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1603	xxxx	xxxxx		
Volume/Cap:	0.00	xxxx		0.12	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.11	xxxx	xxxx		
Level Of Service Module:																
Queue:	0.0	xxxx		0.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.4	xxxx	xxxxx		
Stopped Del:	11.4	xxxx		8.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.5	xxxx	xxxxx		
LOS by Move:	B	*		A	*	*	*	*	*	*		A	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:		8.9			xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:		A			*				*				*			

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 6.8 Worst Case Level Of Service: A[9.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	1	0	0 1	0	1	0	0 0	0	0	1	0 1
Volume Module:																
Base Vol:	0	0	0		58	0	144		123	3	0		0	17	79	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		58	0	144		123	3	0		0	17	79	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		64	0	160		137	3	0		0	19	88	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		64	0	160		137	3	0		0	19	88	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		296	xxxx	19		107	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap..	xxxx	xxxx	xxxxx		700	xxxx	1065		1497	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap..	xxxx	xxxx	xxxxx		647	xxxx	1065		1497	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.10	xxxx	0.15		0.09	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.5		0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		9.0		7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	-	*	*	*		A		A	*	*	*	*	*		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	647	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx	11.2	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	B	*	*	A	*	*	*	*	*	*	*	*	
ApproachDel:	xxxxxx			9.6			xxxxxx			xxxxxx						
ApproachLOS:	*			A			*			*						

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.702
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 31.1
Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	0		0	24	7		0	0	0		7	24	7	
Lanes:	0	1	0	0 1	0	0	0	0 0	2	0	3	0 0	0	0	2	0 1
Volume Module: >> Count Date: 12 Dec 2001 << AM																
Base Vol:	219	1	395		0	0	0		447	1042	0		0	1006	206	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	219	1	395		0	0	0		447	1042	0		0	1006	206	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.89	0.89	0.89		0.89	0.89	0.89		0.89	0.89	0.89		0.89	0.89	0.89	
PHF Volume:	246	1	444		0	0	0		502	1171	0		0	1130	231	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	246	1	444		0	0	0		502	1171	0		0	1130	231	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	246	1	444		0	0	0		502	1171	0		0	1130	231	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.83	0.83	0.83		1.00	1.00	1.00		0.90	0.89	1.00		1.00	0.89	0.83	
Lanes:	0.99	0.01	1.00		0.00	0.00	0.00		2.00	3.00	0.00		0.00	3.00	1.00	
Final Sat..	1576	7	1583		0	0	0		3432	5083	0		0	5083	1583	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.16	0.28		0.00	0.00	0.00		0.15	0.23	0.00		0.00	0.22	0.15	
Crit Moves:			****						****					****		
Green/Cycle:	0.40	0.40	0.40		0.00	0.00	0.00		0.21	0.53	0.00		0.00	0.32	0.32	
Volume/Cap:	0.39	0.39	0.70		0.00	0.00	0.00		0.70	0.44	0.00		0.00	0.70	0.46	
Delay/Veh:	26.0	26.0	33.6		0.0	0.0	0.0		47.2	17.7	0.0		0.0	37.4	33.5	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	26.0	26.0	33.6		0.0	0.0	0.0		47.2	17.7	0.0		0.0	37.4	33.5	
HCM2kAvg:	8	8	15		0	0	0		10	9	0		0	13	7	

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.737
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 49.6
Optimal Cycle: 64 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	7	0		7	0	0		0
Lanes:	1	0	1	0 1	0	1	0	1 0	2	0	3	0 1	2	0	3	1 1
Volume Module: >> Count Date: 12 Dec 2001 << AM																
Base Vol:	12	18		83	458	102		642	97	914		46	74	911		199
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	12	18		83	458	102		642	97	914		46	74	911		199
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	13	20		92	509	113		713	108	1016		51	82	1012		221
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	13	20		92	509	113		713	108	1016		51	82	1012		221
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	13	20		92	509	113		713	108	1016		51	82	1012		221
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.98		0.83	0.84	0.84		0.84	0.90	0.89		0.83	0.90	0.87		0.87
Lanes:	1.00	1.00		1.00	0.82	0.18		1.00	2.00	3.00		1.00	2.00	4.00		1.00
Final Sat..	1769	1862		1583	1306	291		1596	3432	5083		1583	3432	6595		1649
Capacity Analysis Module:																
Vol/Sat:	0.01	0.01		0.06	0.39	0.39		0.45	0.03	0.20		0.03	0.02	0.15		0.13
Crit Moves:		****						****		****			****			
Green/Cycle:	0.20	0.20		0.20	0.48	0.48		0.48	0.07	0.22		0.22	0.03	0.18		0.18
Volume/Cap:	0.04	0.05		0.29	0.81	0.81		0.92	0.47	0.92		0.15	0.92	0.88		0.77
Delay/Veh:	38.7	38.9		41.3	29.3	29.3		39.3	55.5	59.0		38.3	129.2	54.7		49.4
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	38.7	38.9		41.3	29.3	29.3		39.3	55.5	59.0		38.3	129.2	54.7		49.4
HCM2kAvg:	0	1		3	21	21		29	3	16		2	4	12		10

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.649
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 36.6
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Ovl				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	2	0	3	0 1	2	0	3	0 1	2	0	1	1 0	2	0	1	1 0
Volume Module: >> Count Date: 9 Dec 2000 << AM																
Base Vol:	203	847		105	157	972		408	300	440		297	183	535		46
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	203	847		105	157	972		408	300	440		297	183	535		46
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	226	941		117	174	1080		453	333	489		330	203	594		51
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	226	941		117	174	1080		453	333	489		330	203	594		51
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	226	941		117	174	1080		453	333	489		330	203	594		51
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.90	0.89		0.83	0.90	0.89		0.83	0.90	0.88		0.88	0.90	0.92		0.92
Lanes:	2.00	3.00		1.00	2.00	3.00		1.00	2.00	1.19		0.81	2.00	1.84		0.16
Final Sat..	3432	5083		1583	3432	5083		1583	3432	1985		1340	3432	3219		277
Capacity Analysis Module:																
Vol/Sat:	0.07	0.19		0.07	0.05	0.21		0.29	0.10	0.25		0.25	0.06	0.18		0.18
Crit Moves:	****					****				****			****			
Green/Cycle:	0.10	0.33		0.33	0.10	0.33		0.48	0.15	0.38		0.38	0.09	0.32		0.32
Volume/Cap:	0.65	0.56		0.22	0.52	0.65		0.59	0.63	0.65		0.65	0.65	0.58		0.58
Delay/Veh:	56.1	33.3		29.1	53.1	35.4		23.9	50.0	31.8		31.8	57.4	35.1		35.1
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	56.1	33.3		29.1	53.1	35.4		23.9	50.0	31.8		31.8	57.4	35.1		35.1
HCM2kAvg:	5	10		3	4	12		12	7	13		13	5	10		10

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.690
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.4
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	2	0	1	1	0	2	1	0	1	1	0	1	0	1
Volume Module: >> Count Date: 12 Dec 2001 << AM																
Base Vol:	9	675		115	121	1048		291	178	196		12	105	184		290
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	9	675		115	121	1048		291	178	196		12	105	184		290
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	10	750		128	134	1164		323	198	218		13	117	204		322
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	10	750		128	134	1164		323	198	218		13	117	204		322
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	10	750		128	134	1164		323	198	218		13	117	204		322
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.89		0.83	0.93	0.86		0.86	0.93	0.92		0.92	0.93	0.85		0.85
Lanes:	1.00	3.00		1.00	1.00	2.35		0.65	1.00	1.88		0.12	1.00	1.00		1.00
Final Sat..	1769	5083		1583	1769	3847		1068	1769	3304		202	1769	1606		1606
Capacity Analysis Module:																
Vol/Sat:	0.01	0.15		0.08	0.08	0.30		0.30	0.11	0.07		0.07	0.07	0.13		0.20
Crit Moves:	****					****			****							****
Green/Cycle:	0.06	0.34		0.34	0.13	0.41		0.41	0.15	0.32		0.32	0.11	0.27		0.27
Volume/Cap:	0.10	0.43		0.24	0.58	0.73		0.73	0.73	0.21		0.21	0.62	0.46		0.73
Delay/Veh:	53.9	30.6		28.5	53.0	30.9		30.9	58.2	29.7		29.7	57.7	36.5		43.3
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	53.9	30.6		28.5	53.0	30.9		30.9	58.2	29.7		29.7	57.7	36.5		43.3
HCM2kAvg:	0	7		3	6	16		16	9	3		3	5	7		12

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.411
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.2
Optimal Cycle: 39 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	1	0	1	1	0	1	2	0	1	1	0	1	1	0	1	0
Volume Module:																
Base Vol:	2	658		14	31	953		56	72	19		5	27	22		87
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	2	658		14	31	953		56	72	19		5	27	22		87
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	2	731		16	34	1059		62	80	21		6	30	24		97
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	2	731		16	34	1059		62	80	21		6	30	24		97
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	2	731		16	34	1059		62	80	21		6	30	24		97
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	0.95		0.95	0.95	0.95		0.85	0.95	0.97		0.97	0.95	0.88		0.88
Lanes:	1.00	1.96		0.04	1.00	2.00		1.00	1.00	0.79		0.21	1.00	0.20		0.80
Final Sat..	1805	3524		75	1805	3610		1615	1805	1458		384	1805	337		1335
Capacity Analysis Module:																
Vol/Sat:	0.00	0.21		0.21	0.02	0.29		0.04	0.04	0.01		0.01	0.02	0.07		0.07
Crit Moves:	****					****			****					****		
Green/Cycle:	0.00	0.66		0.66	0.06	0.71		0.71	0.11	0.13		0.13	0.15	0.18		0.18
Volume/Cap:	0.41	0.32		0.32	0.32	0.41		0.05	0.41	0.11		0.11	0.11	0.41		0.41
Delay/Veh:	93.7	7.6		7.6	46.7	5.9		4.3	43.1	38.4		38.4	36.8	37.5		37.5
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	93.7	7.6		7.6	46.7	5.9		4.3	43.1	38.4		38.4	36.8	37.5		37.5
HCM2kAvg:	0	5		5	1	7		1	3	1		1	1	4		4

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

```
*****************************************************************************
*
Intersection #29 Valley Parkway/Avenida Diablo
*****************************************************************************
*
Average Delay (sec/veh):       7.2   Worst Case Level Of Service:       F[162.9]
*****************************************************************************
*
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------
|
Control:       Uncontrolled     Uncontrolled     Stop Sign        Stop Sign
Rights:          Include          Include          Include          Include
Lanes:         1  0  1  0  1    1  0  1  0  1    0  1  0  0  1    0  1  0  0  1
------------|---------------||---------------||---------------||---------------
|
Volume Module:
Base Vol:       36  657   62   33  897   24   23    9   52   20    2   11
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    36  657   62   33  897   24   23    9   52   20    2   11
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90
PHF Volume:     40  730   69   37  997   27   26   10   58   22    2   12
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Final Vol..     40  730   69   37  997   27   26   10   58   22    2   12
------------|---------------||---------------||---------------||---------------
|
Critical Gap Module:
Critical Gp:   4.1 xxxx xxxxx  4.1 xxxx xxxxx  7.1  6.5  6.2  7.1  6.5  6.2
FollowUpTim:   2.2 xxxx xxxxx  2.2 xxxx xxxxx  3.5  4.0  3.3  3.5  4.0  3.3
------------|---------------||---------------||---------------||---------------
|
Capacity Module:
Cnflict Vol: 1023 xxxx xxxxx  799 xxxx xxxxx 1922 1949  997 1927 1907  730
Potent Cap..  686 xxxx xxxxx  833 xxxx xxxxx   51   65  299   51   69  426
Move Cap..    686 xxxx xxxxx  833 xxxx xxxxx   45   59  299   33   62  426
Volume/Cap:  0.06 xxxx  xxxx 0.04 xxxx  xxxx 0.57 0.17 0.19 0.67 0.04 0.03
------------|---------------||---------------||---------------||---------------
|
Level Of Service Module:
Queue:         0.2 xxxx xxxxx  0.1 xxxx xxxxx xxxxx xxxx  0.7 xxxxx xxxx  0.1
Stopped Del:  10.6 xxxx xxxxx  9.5 xxxx xxxxx xxxxx xxxx 19.9 xxxxx xxxx 13.7
LOS by Move:    B    *    *    A    *    *    *    *    C    *    *    B
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx   48 xxxx xxxxx   35 xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx  3.0 xxxx xxxxx  2.5 xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 190.0 xxxx xxxxx 237.4 xxxx xxxxx
Shared LOS:     *    *    *    *    *    *    F    *    *    F    *    *
ApproachDel:       xxxxxx          xxxxxx           84.7           162.9
ApproachLOS:          *               *              F              F
```


Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

```
*****************************************************************************
*
Intersection #30 Valley Pkwy./Citracado Pkwy.
*****************************************************************************
*
Cycle (sec):        120              Critical Vol./Cap. (X):          0.499
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):        28.0
Optimal Cycle:       74              Level Of Service:                   C
*****************************************************************************
*
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------
|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     7   24    7    7   24    7    7   24    7    7   24    7
Lanes:         1  0  1  1  0    1  0  1  1  0    1  0  1  0  1    1  0  1  0  1
------------|---------------||---------------||---------------||---------------
|
Volume Module: >> Count Date: 8 Jan 2002 << AM
Base Vol:       60  519   10   26 1050   49  108    6  230   34    8   71
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    60  519   10   26 1050   49  108    6  230   34    8   71
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90
PHF Volume:     67  577   11   29 1167   54  120    7  256   38    9   79
Reduct Vol.      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    67  577   11   29 1167   54  120    7  256   38    9   79
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol..     67  577   11   29 1167   54  120    7  256   38    9   79
------------|---------------||---------------||---------------||---------------
|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.95 0.95 0.95 0.95 0.94 0.94 0.95 1.00 0.85 0.95 1.00 0.85
Lanes:        1.00 1.96 0.04 1.00 1.91 0.09 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat..   1805 3531   68 1805 3425  160 1805 1900 1615 1805 1900 1615
------------|---------------||---------------||---------------||---------------
|
Capacity Analysis Module:
Vol/Sat:      0.04 0.16 0.16 0.02 0.34 0.34 0.07 0.00 0.16 0.02 0.00 0.05
Crit Moves:   ****              ****          ****              ****
Green/Cycle:  0.06 0.46 0.46 0.13 0.54 0.54 0.10 0.24 0.24 0.07 0.20 0.20
Volume/Cap:   0.63 0.35 0.35 0.12 0.63 0.63 0.63 0.01 0.67 0.30 0.02 0.24
Delay/Veh:    67.2 21.0 21.0 45.9 20.2 20.2 58.4 35.2 46.2 54.5 38.6 40.8
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   67.2 21.0 21.0 45.9 20.2 20.2 58.4 35.2 46.2 54.5 38.6 40.8
HCM2kAvg:       4    7    7    1   16   16    6    0   10    2    0    3
*****************************************************************************
*
```

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #31 Valley Pkwy./Via Rancho Pkwy.
*******************************************************************************
Cycle (sec):          120                Critical Vol./Cap. (X):          0.777
Loss Time (sec):        9 (Y+R =  4 sec) Average Delay (sec/veh):        30.2
Optimal Cycle:         66                Level Of Service:                  C
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   20    7    7   20    0    0    0    0   20    0   20
Lanes:        0  0  2  0  1    1  0  1  0  0    0  0  0  0  0    1  0  0  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:       0  325  182  414  959    0    0    0    0  257    0  200
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0  325  182  414  959    0    0    0    0  257    0  200
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     0.90 0.90 0.81 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.72
PHF Volume:     0  361  225  460 1066    0    0    0    0  286    0  278
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0  361  225  460 1066    0    0    0    0  286    0  278
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol..     0  361  225  460 1066    0    0    0    0  286    0  278
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 0.95 0.85 0.95 1.00 1.00 1.00 1.00 1.00 0.95 1.00 0.85
Lanes:       0.00 2.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 1.00 0.00 1.00
Final Sat..     0 3610 1615 1805 1900    0    0    0    0 1805    0 1615
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.10 0.14 0.25 0.56 0.00 0.00 0.00 0.00 0.16 0.00 0.17
Crit Moves:  ****                ****                                ****
Green/Cycle: 0.00 0.29 0.29 0.44 0.72 0.00 0.00 0.00 0.00 0.20 0.00 0.20
Volume/Cap:  0.00 0.35 0.49 0.58 0.78 0.00 0.00 0.00 0.00 0.78 0.00 0.85
Delay/Veh:    0.0 34.3 36.4 26.7 13.5  0.0  0.0  0.0  0.0 55.3  0.0 63.9
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0 34.3 36.4 26.7 13.5  0.0  0.0  0.0  0.0 55.3  0.0 63.9
HCM2kAvg:       0    5    7   14   26    0    0    0    0   12    0   12
*******************************************************************************
```


Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #32 Auto Park Way / West 9th Ave [NS / EW]
*******************************************************************************
Cycle (sec):          120                Critical Vol./Cap. (X):          0.985
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        44.4
Optimal Cycle:        180                Level Of Service:                  D
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Protected        Protected        Permitted        Permitted
Rights:           Include          Include          Include          Ovl
Min. Green:     7   24    7    7   24    7    0   24    7    7   24    7
Lanes:        1  0  1  1  0    1  0  1  1  0    1  0  1  0  1    1  0  0  1  0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 27 Nov 2001 << AM Peak
Base Vol:      45  586   86  408  684    4   25  271   71   27    6  586
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   45  586   86  408  684    4   25  271   71   27    6  586
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.50 1.00 1.00 1.00
PHF Adj:     0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90
PHF Volume:    50  651   96  453  760    4   28  301   39   30    7  651
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol.   50  651   96  453  760    4   28  301   39   30    7  651
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol..    50  651   96  453  760    4   28  301   39   30    7  651
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.93 0.91 0.91 0.93 0.93 0.93 0.11 0.98 0.83 0.45 0.83 0.83
Lanes:       1.00 1.74 0.26 1.00 1.99 0.01 1.00 1.00 1.00 1.00 0.01 0.99
Final Sat..  1769 3026  444 1769 3514   21  218 1862 1583  855   16 1570
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.22 0.22 0.26 0.22 0.22 0.13 0.16 0.02 0.04 0.41 0.41
Crit Moves:       ****      ****                                ****
Green/Cycle: 0.10 0.22 0.22 0.26 0.38 0.38 0.42 0.42 0.42 0.42 0.42 0.68
Volume/Cap:  0.28 0.98 0.98 0.98 0.57 0.57 0.30 0.38 0.06 0.08 0.98 0.61
Delay/Veh:  50.7 75.4 75.4 81.9 30.3 30.3 24.9 24.3 20.7 20.9 65.2 11.4
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 50.7 75.4 75.4 81.9 30.3 30.3 24.9 24.3 20.7 20.9 65.2 11.4
HCM2kAvg:      2   19   19   23   11   11    6    8    1    1   30   13
*******************************************************************************
```

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.688
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 20.0
Optimal Cycle: 67 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	0	0	0	0	0	1	1	0	0	1	0	0	2	0	1	2	0	2	0	0
Volume Module: >> Count Date: 27 Nov 2001 << AM																				
Base Vol:	0	0			0	85	22			17	0	612			714	248	1210			0
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	0	0			0	85	22			17	0	612			714	248	1210			0
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	0	0			0	94	24			19	0	680			793	276	1344			0
Reduct Vol:	0	0			0	0	0			0	0	0			0	0	0			0
Reduced Vol:	0	0			0	94	24			19	0	680			793	276	1344			0
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Final Vol..	0	0			0	94	24			19	0	680			793	276	1344			0
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900			1900
Adjustment:	1.00	1.00			1.00	0.83	0.83			0.83	1.00	0.93			0.83	0.90	0.93			1.00
Lanes:	0.00	0.00			0.00	1.59	0.41			1.00	0.00	2.00			1.00	2.00	2.00			0.00
Final Sat..	0	0			0	2515	651			1583	0	3538			1583	3432	3538			0
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00			0.00	0.04	0.04			0.01	0.00	0.19			0.50	0.08	0.38			0.00
Crit Moves:							****								****	****				
Green/Cycle:	0.00	0.00			0.00	0.20	0.20			0.20	0.00	0.60			0.60	0.10	0.70			0.00
Volume/Cap:	0.00	0.00			0.00	0.19	0.19			0.06	0.00	0.32			0.83	0.83	0.54			0.00
Delay/Veh:	0.0	0.0			0.0	40.0	40.0			38.9	0.0	11.8			25.2	69.3	9.0			0.0
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
AdjDel/Veh:	0.0	0.0			0.0	40.0	40.0			38.9	0.0	11.8			25.2	69.3	9.0			0.0
HCM2kAvg:	0	0			0	2	2			1	0	6			25	8	12			0

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave (NS/ EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.712
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.1
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	1	1	0	0	1	0	0	0	0	0	2	0	2	0	0	0	0	2	0	1
Volume Module: >> Count Date: 27 Nov 2001 << AM																				
Base Vol:	612	9			169	0	0			0	105	643			0	0	829			296
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	612	9			169	0	0			0	105	643			0	0	829			296
User Adj:	1.25	1.25			1.25	1.25	1.25			1.25	1.25	1.25			1.25	1.25	1.25			1.25
PHF Adj:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	850	13			235	0	0			0	146	893			0	0	1151			411
Reduct Vol.	0	0			0	0	0			0	0	0			0	0	0			0
Reduced Vol:	850	13			235	0	0			0	146	893			0	0	1151			411
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Final Vol..	850	13			235	0	0			0	146	893			0	0	1151			411
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900			1900
Adjustment:	0.83	0.83			0.83	1.00	1.00			1.00	0.90	0.93			1.00	1.00	0.93			0.83
Lanes:	1.97	0.03			1.00	0.00	0.00			0.00	2.00	2.00			0.00	0.00	2.00			1.00
Final Sat..	3120	46			1583	0	0			0	3432	3538			0	0	3538			1583
Capacity Analysis Module:																				
Vol/Sat:	0.27	0.27			0.15	0.00	0.00			0.00	0.04	0.25			0.00	0.00	0.33			0.26
Crit Moves:		****									****						****			
Green/Cycle:	0.38	0.38			0.38	0.00	0.00			0.00	0.06	0.52			0.00	0.00	0.46			0.46
Volume/Cap:	0.71	0.71			0.39	0.00	0.00			0.00	0.71	0.49			0.00	0.00	0.71			0.57
Delay/Veh:	33.4	33.4			27.2	0.0	0.0			0.0	66.5	18.9			0.0	0.0	27.7			24.9
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
AdjDel/Veh:	33.4	33.4			27.2	0.0	0.0			0.0	66.5	18.9			0.0	0.0	27.7			24.9
HCM2kAvg:	17	17			6	0	0			0	4	11			0	0	18			11

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.865
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 28.[illegible]
Optimal Cycle: 88 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	0	0	1	0	1	0	2	0	0	0	0	0	2	0	0	1
Volume Module:																
Base Vol:	0	703	183		180	962		0	0	0		0	555	0		386
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	703	183		180	962		0	0	0		0	555	0		386
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	781	203		200	1069		0	0	0		0	617	0		429
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	0	781	203		200	1069		0	0	0		0	617	0		429
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	781	203		200	1069		0	0	0		0	617	0		429
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00	0.85		0.95	0.95		1.00	1.00	1.00		1.00	0.92	1.00		0.85
Lanes:	0.00	1.00	1.00		1.00	2.00		0.00	0.00	0.00		0.00	2.00	0.00		1.00
Final Sat..	0	1900	1615		1805	3610		0	0	0		0	3502	0		1615
Capacity Analysis Module:																
Vol/Sat:	0.00	0.41	0.13		0.11	0.30		0.00	0.00	0.00		0.00	0.18	0.00		0.27
Crit Moves:		****			****											****
Green/Cycle:	0.00	0.48	0.48		0.13	0.60		0.00	0.00	0.00		0.00	0.31	0.00		0.31
Volume/Cap:	0.00	0.87	0.27		0.87	0.49		0.00	0.00	0.00		0.00	0.57	0.00		0.87
Delay/Veh:	0.0	32.2	15.9		69.9	11.4		0.0	0.0	0.0		0.0	29.9	0.0		47.4
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	32.2	15.9		69.9	11.4		0.0	0.0	0.0		0.0	29.9	0.0		47.4
HCM2kAvg:	0	24	4		9	9		0	0	0		0	9	0		15

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.856
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.2
Optimal Cycle: 93 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	0	2	1
Volume Module:																
Base Vol:	13	49	66		45	389		56	103	531		561	756	313		47
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	13	49	66		45	389		56	103	531		561	756	313		47
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	14	54	73		50	432		62	114	590		623	840	348		52
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	14	54	73		50	432		62	114	590		623	840	348		52
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	14	54	73		50	432		62	114	590		623	840	348		52
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	0.95	0.85		0.95	0.95		0.85	0.95	0.95		0.85	0.92	0.95		0.85
Lanes:	1.00	2.00	1.00		1.00	2.00		1.00	1.00	2.00		1.00	2.00	2.00		1.00
Final Sat..	1805	3610	1615		1805	3610		1615	1805	3610		1615	3502	3610		1615
Capacity Analysis Module:																
Vol/Sat:	0.01	0.02	0.05		0.03	0.12		0.04	0.06	0.16		0.39	0.24	0.10		0.03
Crit Moves:	****					****						****	****			
Green/Cycle:	0.01	0.09	0.09		0.06	0.14		0.14	0.29	0.45		0.45	0.28	0.44		0.44
Volume/Cap:	0.86	0.16	0.49		0.49	0.86		0.28	0.22	0.36		0.86	0.86	0.22		0.07
Delay/Veh:	198.0	42.0	45.6		49.4	55.6		39.1	27.1	18.2		34.4	41.6	17.4		16.2
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	198.0	42.0	45.6		49.4	55.6		39.1	27.1	18.2		34.4	41.6	17.4		16.2
HCM2kAvg:	2	1	3		2	9		2	2	6		20	16	2		1

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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*
Intersection #37 Via Rancho Parkway/I-15 NB Ramps
*
Cycle (sec):        100                 Critical Vol./Cap. (X):        0.512
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):        24.9
Optimal Cycle:       42                 Level Of Service:                 C
*
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------
|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0     0    0    0     0    0    0     0    0    0
Lanes:          1    0    2    0    2     1    0    2    0    1     2    0    2    0    1
------------|---------------||---------------||---------------||---------------
|
Volume Module:
Base Vol:     193   49  491     2   59   34    19  497  120   330 1041   49
Growth Adj:   1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:  193   49  491     2   59   34    19  497  120   330 1041   49
User Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:      0.90 0.90 0.90  0.90 0.90 0.90  0.90 0.90 0.90  0.90 0.90 0.90
PHF Volume:   214   54  546     2   66   38    21  552  133   367 1157   54
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  214   54  546     2   66   38    21  552  133   367 1157   54
PCE Adj:      1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol..   214   54  546     2   66   38    21  552  133   367 1157   54
------------|---------------||---------------||---------------||---------------
|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.95 0.95 0.75  0.95 0.95 0.85  0.92 0.95 0.85  0.92 0.91 0.85
Lanes:       1.00 2.00 2.00  1.00 2.00 1.00  2.00 2.00 1.00  2.00 3.00 1.00
Final Sat..  1805 3610 2842  1805 3610 1615  3502 3610 1615  3502 5187 1615
------------|---------------||---------------||---------------||---------------
|
Capacity Analysis Module:
Vol/Sat:     0.12 0.02 0.19  0.00 0.02 0.02  0.01 0.15 0.08  0.10 0.22 0.03
Crit Moves:            ****  ****       ****       ****
Green/Cycle: 0.32 0.37 0.37  0.00 0.06 0.06  0.01 0.30 0.30  0.20 0.49 0.49
Volume/Cap:  0.38 0.04 0.51  0.51 0.29 0.38  0.46 0.51 0.28  0.51 0.46 0.07
Delay/Veh:   27.0 19.9 24.6 127.1 45.5 47.4  55.9 29.5 27.1  36.0 16.9 13.5
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  27.0 19.9 24.6 127.1 45.5 47.4  55.9 29.5 27.1  36.0 16.9 13.5
HCM2kAvg:       5    1    7    0    1    2    1    7    3    6    8    1
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Harmony Grove Village
Option C: Existing + Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	C	34.5	0.827	C	34.5	0.827	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	F	99.4	1.333	F	99.4	1.333	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	F	91.3	1.130	F	91.3	1.130	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	853.1	0.000	F	853.1	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	8.7	0.306	A	8.7	0.306	+ 0.000 V/C
# 6 Country Club/Entrance # 3	B	10.3	0.000	B	10.3	0.000	+ 0.000 D/V
# 7 Country Club/ Village Road	C	16.2	0.000	C	16.2	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	D	25.9	0.000	D	25.9	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	B	13.8	0.000	B	13.8	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	C	21.1	0.000	C	21.1	0.000	+ 0.000 D/V
# 11 Entrance #1 /Harmony Grove	C	19.5	0.000	C	19.5	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	C	16.2	0.000	C	16.2	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	A	1.8	0.577	A	1.8	0.577	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	C	18.5	0.000	C	18.5	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	36.2	0.586	D	36.2	0.586	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	B	12.4	0.520	B	12.4	0.520	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	F	75.7	0.000	F	75.7	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	D	34.8	0.000	D	34.8	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	33.7	0.720	C	33.7	0.720	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	C	23.3	0.000	C	23.3	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	F	228.9	0.000	F	228.9	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	A	8.9	0.000	A	8.9	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	A	9.7	0.000	A	9.7	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	E	55.9	1.117	E	55.9	1.117	+ 0.000 D/V

Harmony Grove Village
Option C: Existing + Project

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	E	76.4	1.076	E	76.4	1.076	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	40.9	0.756	D	40.9	0.756	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	D	39.3	0.657	D	39.3	0.657	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	A	8.4	0.499	A	8.4	0.499	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	201.5	0.000	F	201.5	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	25.0	0.483	C	25.0	0.483	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	34.5	0.732	C	34.5	0.732	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	C	28.7	0.768	C	28.7	0.768	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	21.9	0.868	C	21.9	0.868	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	27.8	0.625	C	27.8	0.625	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	33.8	0.958	C	33.8	0.958	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	44.6	0.947	D	44.6	0.947	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	D	35.5	0.784	D	35.5	0.784	+ 0.000 D/V

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #1 Nordahl Rd. / SR-78 WB ?NS / EW?

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.827
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 34.5
Optimal Cycle: 79 Level Of Service: C

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	0		0	24		7	0	0	0		7	24		7
Lanes:	2	0	2	0 0	0	0	2	0 1	0	0	0	0 0	1	0	1!	0 1
Volume Module: >> Count Date: 13 Dec 2001 << PM																
Base Vol:	670	832	0		0	672	211		0	0	0		361	6	267	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	670	832	0		0	672	211		0	0	0		361	6	267	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	744	924	0		0	747	234		0	0	0		401	7	297	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	744	924	0		0	747	234		0	0	0		401	7	297	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	744	924	0		0	747	234		0	0	0		401	7	297	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.71	0.73	1.00		1.00	0.93	0.83		1.00	1.00	1.00		0.68	0.68	0.68	
Lanes:	2.00	2.00	0.00		0.00	2.00	1.00		0.00	0.00	0.00		1.56	0.02	1.42	
Final Sat..	2693	2776	0		0	3538	1583		0	0	0		2006	24	1818	
Capacity Analysis Module:																
Vol/Sat:	0.28	0.33	0.00		0.00	0.21	0.15		0.00	0.00	0.00		0.20	0.28	0.16	
Crit Moves:	****					****								****		
Green/Cycle:	0.33	0.59	0.00		0.00	0.26	0.26		0.00	0.00	0.00		0.34	0.34	0.34	
Volume/Cap:	0.83	0.56	0.00		0.00	0.83	0.58		0.00	0.00	0.00		0.60	0.83	0.49	
Delay/Veh:	43.1	15.6	0.0		0.0	48.5	41.2		0.0	0.0	0.0		34.0	43.4	31.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	43.1	15.6	0.0		0.0	48.5	41.2		0.0	0.0	0.0		34.0	43.4	31.9	
HCM2kAvg:	16	11	0		0	15	8		0	0	0		9	15	7	

****

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp (NS / EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.333
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 99.4
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Permitted					Permitted				
Rights:	Include					Include					Include					Include				
Min. Green:	0	24			7	7	24			0	7	24			7	0	0			0
Lanes:	0	0	2	0	1	2	0	2	0	0	0	1	0	1	0	0	0	0	0	0
Volume Module: >> Count Date: 13 Dec 2001 << PM																				
Base Vol:	0	1131		736		372	653			0	263		2	445		0	0			0
Growth Adj:	1.00	1.00		1.00		1.00	1.00			1.00	1.00		1.00	1.00		1.00	1.00			1.00
Initial Bse:	0	1131		736		372	653			0	263		2	445		0	0			0
User Adj:	1.00	1.00		1.00		1.00	1.00			1.00	1.00		1.00	1.00		1.00	1.00			1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90			0.90	0.90		0.90	0.90		0.90	0.90			0.90
PHF Volume:	0	1257		818		413	726			0	292		2	494		0	0			0
Reduct Vol:	0	0		0		0	0			0	0		0	0		0	0			0
Reduced Vol:	0	1257		818		413	726			0	292		2	494		0	0			0
PCE Adj:	1.00	1.00		1.00		1.00	1.00			1.00	1.00		1.00	1.00		1.00	1.00			1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00			1.00	1.00		1.00	1.00		1.00	1.00			1.00
Final Vol..	0	1257		818		413	726			0	292		2	494		0	0			0
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900			1900	1900		1900	1900		1900	1900			1900
Adjustment:	1.00	0.73		0.65		0.90	0.93			1.00	0.60		0.60	0.60		1.00	1.00			1.00
Lanes:	0.00	2.00		1.00		2.00	2.00			0.00	0.99		0.01	1.00		0.00	0.00			0.00
Final Sat..	0	2776		1242		3432	3538			0	1131		9	1139		0	0			0
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.45		0.66		0.12	0.21			0.00	0.26		0.26	0.43		0.00	0.00			0.00
Crit Moves:				****		****								****						
Green/Cycle:	0.00	0.49		0.49		0.09	0.58			0.00	0.33		0.33	0.33		0.00	0.00			0.00
Volume/Cap:	0.00	0.92		1.33		1.33	0.35			0.00	0.79		0.79	1.33		0.00	0.00			0.00
Delay/Veh:	0.0	33.2		186.0		215.7	11.0			0.0	35.1		35.1	194.8		0.0	0.0			0.0
User DelAdj:	1.00	1.00		1.00		1.00	1.00			1.00	1.00		1.00	1.00		1.00	1.00			1.00
AdjDel/Veh:	0.0	33.2		186.0		215.7	11.0			0.0	35.1		35.1	194.8		0.0	0.0			0.0
HCM2kAvg:	0	22		52		16	6			0	11		11	36		0	0			0

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.130
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 91.5
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	1	0	2	0	1	2	0	1	1	0	2	0	2	0	1	2	0	2	0	1
Volume Module: >> Count Date: 13 Dec 2001 << PM																				
Base Vol:	261	1062		73		236	523			238	311		643	278		57	533			552
Growth Adj:	1.00	1.00		1.00		1.00	1.00			1.00	1.00		1.00	1.00		1.00	1.00			1.00
Initial Bse:	261	1062		73		236	523			238	311		643	278		57	533			552
User Adj:	1.00	1.00		1.00		1.00	1.00			1.00	1.00		1.00	1.00		1.00	1.00			1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90			0.90	0.90		0.90	0.90		0.90	0.90			0.90
PHF Volume:	290	1180		81		262	581			264	346		714	309		63	592			613
Reduct Vol:	0	0		0		0	0			0	0		0	0		0	0			0
Reduced Vol:	290	1180		81		262	581			264	346		714	309		63	592			613
PCE Adj:	1.00	1.00		1.00		1.00	1.00			1.00	1.00		1.00	1.00		1.00	1.00			1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00			1.00	1.00		1.00	1.00		1.00	1.00			1.00
Final Vol..	290	1180		81		262	581			264	346		714	309		63	592			613
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900			1900	1900		1900	1900		1900	1900			1900
Adjustment:	0.73	0.73		0.65		0.71	0.70			0.70	0.90		0.93	0.83		0.90	0.93			0.83
Lanes:	1.00	2.00		1.00		2.00	1.37			0.63	2.00		2.00	1.00		2.00	2.00			1.00
Final Sat..	1388	2776		1242		2693	1818			827	3432		3538	1583		3432	3538			1583
Capacity Analysis Module:																				
Vol/Sat:	0.21	0.43		0.07		0.10	0.32			0.32	0.10		0.20	0.20		0.02	0.17			0.39
Crit Moves:	****						****				****									****
Green/Cycle:	0.18	0.38		0.38		0.09	0.28			0.28	0.09		0.34	0.34		0.10	0.34			0.34
Volume/Cap:	1.13	1.12		0.17		1.12	1.13			1.13	1.13		0.60	0.58		0.19	0.49			1.13
Delay/Veh:	144.6	103		24.8		148.4	118			117.8	145.8		34.1	34.6		50.1	31.4			119.0
User DelAdj:	1.00	1.00		1.00		1.00	1.00			1.00	1.00		1.00	1.00		1.00	1.00			1.00
AdjDel/Veh:	144.6	103		24.8		148.4	118			117.8	145.8		34.1	34.6		50.1	31.4			119.0
HCM2kAvg:	19	33		2		10	25			25	12		11	10		1	9			35

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club INS / EWI

Average Delay (sec/veh): 96.9 Worst Case Level Of Service: F[853.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	2	0 1	1	0	1	0 1	0	1	0	0 1	0	0	1!	0 0
Volume Module: >> Count Date: 11 Dec 2001 << PM																
Base Vol:	65	1110		5	39	658		241	210		1	60		1	0	12
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Initial Bse:	65	1110		5	39	658		241	210		1	60		1	0	12
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90		0.90	0.90	0.90
PHF Volume:	72	1233		6	43	731		268	233		1	67		1	0	13
Reduct Vol:	0	0		0	0	0		0	0		0	0		0	0	0
Final Vol..	72	1233		6	43	731		268	233		1	67		1	0	13
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx		7.1	6.5		6.2	7.1	xxxx		6.2
FollowUpTim:	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5	4.0		3.3	3.5	xxxx		3.3
Capacity Module:																
Cnflict Vol:	999	xxxx	xxxxx		1239	xxxx	xxxxx		1579	2201		731	2363	xxxx		617
Potent Cap..	693	xxxx	xxxxx		562	xxxx	xxxxx		88	45		422	24	xxxx		490
Move Cap..	693	xxxx	xxxxx		562	xxxx	xxxxx		75	37		422	17	xxxx		490
Volume/Cap:	0.10	xxxx	xxxx		0.08	xxxx	xxxx		0.13	0.03		0.16	0.06	xxxx		0.03
Level Of Service Module:																
Queue:	0.3	xxxx	xxxxx		0.2	xxxx	xxxxx	xxxxx	xxxx			0.6	xxxxx	xxxx	xxxxx	
Stopped Del:	10.8	xxxx	xxxxx		11.9	xxxx	xxxxx	xxxxx	xxxx			15.1	xxxxx	xxxx	xxxxx	
LOS by Move:	B	*	*		B	*	*	*	*			C	*	*	*	
Movement:	LT -	LTR	- RT		LT -	LTR	- RT		LT -	LTR	- RT		LT -	LTR	- RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		74	xxxx	xxxxx		xxxx	159	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		23.7	xxxx	xxxxx		xxxxx	0.3	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		1091	xxxx	xxxxx		xxxxx	29.9	xxxxx	
Shared LOS:	*	*	*		*	*	*		F	*		*	*	D	*	
ApproachDel:	xxxxxx				xxxxxx				853.1					29.9		
ApproachLOS:		*				*				F				D		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.306
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.7
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Ignore					Include					Include					Include				
Min. Green:	0	0			0	0	0			0	0	0			0	0	0			0
Lanes:	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	0	90			7	60	167			0	0	0	0		0	9	0			53
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00			1.00
Initial Bse:	0	90			7	60	167			0	0	0	0		0	9	0			53
User Adj:	1.00	1.00			0.00	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00			1.00
PHF Adj:	0.90	0.90			0.00	0.90	0.90			0.90	0.90	0.90	0.90		0.90	0.90	0.90			0.90
PHF Volume:	0	100			0	67	186			0	0	0	0		0	10	0			59
Reduct Vol:	0	0			0	0	0			0	0	0	0		0	0	0			0
Reduced Vol.	0	100			0	67	186			0	0	0	0		0	10	0			59
PCE Adj:	1.00	1.00			0.00	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00			0.00	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00			1.00
Final Vol..	0	100			0	67	186			0	0	0	0		0	10	0			59
Saturation Flow Module:																				
Adjustment:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00			1.00
Lanes:	0.00	1.00			1.00	0.26	0.74			0.00	0.00	0.00	0.00		0.00	0.15	0.00			0.85
Final Sat..	0	736			0	218	607			0	0	0	0		0	117	0			688
Capacity Analysis Module:																				
Vol/Sat:	xxxx	0.14		xxxx	0.31	0.31		xxxx	xxxx	xxxx	xxxx		xxxx	0.09	xxxx		0.09			
Crit Moves:		****				****								****						
Delay/Veh:	0.0	8.3		0.0	9.2	9.2		0.0	0.0	0.0	0.0		0.0	7.5	0.0		7.5			
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00			
AdjDel/Veh:	0.0	8.3		0.0	9.2	9.2		0.0	0.0	0.0	0.0		0.0	7.5	0.0		7.5			
LOS by Move:	*	A		*	A	A		*	*	*	*		*	A	*		A			
ApproachDel:		8.3				9.2				xxxxxx					7.5					
Delay Adj:		1.00				1.00				xxxxx					1.00					
ApprAdjDel:		8.3				9.2				xxxxxx					7.5					
LOS by Appr:		A				A				*					A					

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club/Entrance # 2

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	296		0		52	398		0		0	0		0		0	0		30	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0	296		0		52	398		0		0	0		0		0	0		30	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	0	329		0		58	442		0		0	0		0		0	0		33	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Final Vol..	0	329		0		58	442		0		0	0		0		0	0		33	

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		6.2						
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		3.3						

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx		329	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx		329						
Potent Cap.:	xxxx	xxxx	xxxxx		1242	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx		717						
Move Cap..	xxxx	xxxx	xxxxx		1242	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx		717						
Volume/Cap:	xxxx	xxxx	xxxx		0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.05						

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.1						
Stopped Del:	xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		10.3						
LOS by Move:	*	*	*		A	*	*	*	*	*	*	*		B						
Movement:	LT -	LTR -	RT		LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT							
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							
Shrd StpDel:	xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							
Shared LOS:	*	*	*		A	*	*	*	*	*	*	*	*							
ApproachDel:	xxxxxx				xxxxxx			xxxxxx				10.3								
ApproachLOS:	*				*			*				B								

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Average Delay (sec/veh): 5.7 Worst Case Level Of Service: C[16.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module:																				
Base Vol:	0	170		156		0	176		0		0	0		0		274	0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0	170		156		0	176		0		0	0		0		274	0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	0	189		173		0	196		0		0	0		0		304	0		0	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Final Vol..	0	189		173		0	196		0		0	0		0		304	0		0	

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		6.4						
FollowUpTim:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		3.5						

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx		384						
Potent Cap..	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx		622						
Move Cap..	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx		622						
Volume/Cap:	xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.49						

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		2.7						
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		16.2						
LOS by Move:	*	*	*		-	*	*	*	*	*	*	*		C						
Movement:	LT -	LTR -	RT		LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT							
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							
Shared LOS:	*	*	*		*	*	*	*	*	*	*	*	*							
ApproachDel:	xxxxxx				xxxxxx			xxxxxx				16.2								
ApproachLOS:	*				*			-				C								

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: D[25.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	1	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	0	510		0		0	239		274		156		0		0		0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0	510		0		0	239		274		156		0		0		0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0	567		0		0	266		304		173		0		0		0		0	
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0	
Final Vol..	0	567		0		0	266		304		173		0		0		0		0	

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	832	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	342	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	342	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.51	xxxx	xxxx	xxxx	xxxx	xxxx				

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	25.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	D	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			25.9			xxxxxx						
ApproachLOS:	*			*			D			*						

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: B[13.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0
Volume Module:																				
Base Vol:	0	130		0		0	106		292		166		0		0		0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0	130		0		0	106		292		166		0		0		0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90		0.90		0.90	
PHF Volume:	0	144		0		0	118		324		184		0		0		0		0	
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0	
Final Vol..	0	144		0		0	118		324		184		0		0		0		0	

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	424	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	590	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	590	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.31	xxxx	xxxx	xxxx	xxxx	xxxx				

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.8			xxxxxx						
ApproachLOS:	*			*			B			*						

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 COuntry Club/Harmony Grove

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: C[21.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	4	8	13		3	17	72		132	492	6		17	209	5	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	4	8	13		3	17	72		132	492	6		17	209	5	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	4	9	14		3	19	80		147	547	7		19	232	6	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	4	9	14		3	19	80		147	547	7		19	232	6	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1166	1119	550		1128	1119	235		238	xxxx	xxxxx		553	xxxx	xxxxx	
Potent Cap..	173	209	539		183	208	809		1341	xxxx	xxxxx		1027	xxxx	xxxxx	
Move Cap..	128	180	539		154	180	809		1341	xxxx	xxxxx		1027	xxxx	xxxxx	
Volume/Cap:	0.03	0.05	0.03		0.02	0.10	0.10		0.11	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.4	xxxx	xxxxx		0.1	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.0	xxxx	xxxxx		8.6	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	251	xxxxx		xxxx	654	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.4	xxxxx		xxxxx	0.9	xxxxx		xxxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	21.1	xxxxx		xxxxx	15.2	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	C	*		*	C	*		*	*	*		*	*	*	
ApproachDel:	21.1				15.2				xxxxxx				xxxxxx			
ApproachLOS:	C				C				*				*			

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance #1 /Harmony Grove

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: C[19.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	1	0	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0		56	0	17		29	573	0		0	187	98	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		56	0	17		29	573	0		0	187	98	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		62	0	19		32	637	0		0	208	109	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		62	0	19		32	637	0		0	208	109	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		963	xxxx	262		317	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		286	xxxx	781		1255	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap..	xxxx	xxxx	xxxxx		280	xxxx	781		1255	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.22	xxxx	0.02		0.03	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		7.9	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	329	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	1.0	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	19.5	xxxxx		7.9	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	C	*		A	*	*		*	*	*	
ApproachDel:	xxxxxx				19.5				xxxxxx				xxxxxx			
ApproachLOS:	*				C				*				*			

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[16.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0			41	0	7			15	546	0			0	128	73		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	0	0			41	0	7			15	546	0			0	128	73		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90		
PHF Volume:	0	0	0			46	0	8			17	607	0			0	142	81		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol..	0	0	0			46	0	8			17	607	0			0	142	81		
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			6.4	xxxx	6.2			4.1	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5	xxxx	3.3			2.2	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			823	xxxx	183			223	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx			346	xxxx	865			1357	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Move Cap..	xxxx	xxxx	xxxxx			343	xxxx	865			1357	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx			0.13	xxxx	0.01			0.01	xxxx	xxxx			xxxx	xxxx	xxxx		
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*					A	*	*	*	*	*				
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	376	xxxxx					xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx					0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	16.2	xxxxx					7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	C	*					A	*	*	*	*	*				
ApproachDel:	xxxxxx				16.2						xxxxxx					xxxxxx				
ApproachLOS:	*				C						*					*				

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.577
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 1.8
Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Permitted					Permitted				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	1	0	0	1		0	0	0	0	0	0	0	1	0	1	1	0	1	0	0
Volume Module: PM Peak																				
Base Vol.	6	0				0	0	0			0	892	12			6	765	0		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	6	0				0	0	0			0	892	12			6	765	0		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90		
PHF Volume:	7	0				0	0	0			0	991	13			7	850	0		
Reduct Vol.	0	0				0	0	0			0	0	0			0	0	0		
Reduced Vol:	7	0				0	0	0			0	991	13			7	850	0		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Final Vol..	7	0				0	0	0			0	991	13			7	850	0		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.95	1.00	0.85			1.00	1.00	1.00			1.00	1.00	0.85			0.28	1.00	1.00		
Lanes:	1.00	0.00	1.00			0.00	0.00	0.00			0.00	1.00	1.00			1.00	1.00	0.00		
Final Sat..	1805	0	1615			0	0	0			0	1900	1615			530	1900	0		
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00	0.00			0.00	0.00	0.00			0.00	0.52	0.01			0.01	0.45	0.00		
Crit Moves:	****											****								
Green/Cycle:	0.01	0.00	0.01			0.00	0.00	0.00			0.00	0.90	0.90			0.90	0.90	0.00		
Volume/Cap:	0.58	0.00	0.32			0.00	0.00	0.00			0.00	0.58	0.01			0.01	0.50	0.00		
Delay/Veh:	106.0	0.0	66.7			0.0	0.0	0.0			0.0	1.5	0.5			0.5	1.1	0.0		
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	106.0	0.0	66.7			0.0	0.0	0.0			0.0	1.5	0.5			0.5	1.1	0.0		
HCM2kAvg:	1	0	0			0	0	0			0	7	0			0	5	0		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa [NS / EW]

Average Delay (sec/veh): 12.7 Worst Case Level Of Service: C[18.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module: >> Count Date: 28 Nov 2001 << PM																				
Base Vol:	18	0	648			0	0	0			0	56	24			489	74	0		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	18	0	648			0	0	0			0	56	24			489	74	0		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90		
PHF Volume:	20	0	720			0	0	0			0	62	27			543	82	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	20	0	720			0	0	0			0	62	27			543	82	0		
Critical Gap Module:																				
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	1244	xxxx		76	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				89	xxxx	xxxxx				
Potent Cap.:	192	xxxx		986	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				1507	xxxx	xxxxx				
Move Cap.:	114	xxxx		986	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				1507	xxxx	xxxxx				
Volume/Cap:	0.18	xxxx		0.73	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx				0.36	xxxx	xxxx				
Level Of Service Module:																				
Queue:	0.6	xxxx		6.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				1.7	xxxx	xxxxx				
Stopped Del:	43.2	xxxx		17.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				8.7	xxxx	xxxxx				
LOS by Move:	E	*		C	*	*	*	*	*	*				A	*	*				
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			1.7	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			8.7	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			*	*	*			A	*	*		
ApproachDel:	18.5					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	C					*					*					*				

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.586
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 36.2
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24		7		7	24		7		7	24		7		7	24		7	
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0	1	1	0	1	0	2	0	1
Volume Module: >> Count Date: 11 Dec 2001 << AM																				
Base Vol:	225	211	193			104	92		62		80	709	103			114	478	134		
Growth Adj:	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	225	211	193			104	92		62		80	709	103			114	478	134		
User Adj:	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.90	0.90	0.90			0.90	0.90		0.90		0.90	0.90	0.90			0.90	0.90	0.90		
PHF Volume:	250	234	214			116	102		69		89	788	114			127	531	149		
Reduct Vol:	0	0	0			0	0		0		0	0	0			0	0	0		
Reduced Vol:	250	234	214			116	102		69		89	788	114			127	531	149		
PCE Adj:	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00	1.00			1.00	1.00	1.00		
Final Vol.:	250	234	214			116	102		69		89	788	114			127	531	149		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900		1900		1900	1900	1900			1900	1900	1900		
Adjustment:	0.93	0.98	0.83			0.93	0.98		0.83		0.93	0.91	0.91			0.93	0.93	0.83		
Lanes:	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.75	0.25			1.00	2.00	1.00		
Final Sat.:	1769	1862	1583			1769	1862		1583		1769	3030	440			1769	3538	1583		
Capacity Analysis Module:																				
Vol/Sat:	0.14	0.13	0.14			0.07	0.05		0.04		0.05	0.26	0.26			0.07	0.15	0.09		
Crit Moves:	****						****					****				****				
Green/Cycle:	0.21	0.31	0.31			0.10	0.20		0.20		0.11	0.38	0.38			0.11	0.38	0.38		
Volume/Cap:	0.68	0.41	0.44			0.65	0.27		0.22		0.45	0.68	0.68			0.68	0.40	0.25		
Delay/Veh:	48.6	33.3	33.8			60.0	41.0		40.5		51.6	32.1	32.1			61.1	27.3	25.7		
User DelAdj:	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	48.6	33.3	33.8			60.0	41.0		40.5		51.6	32.1	32.1			61.1	27.3	25.7		
HCM2kAvg:	10	7	6			5	3		2		4	14	14			6	7	4		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.520
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 12.4
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
Volume Module: >> Count Date: 28 Nov 2001 << PM																
Base Vol:	0	27	56		258	17	6		7	21	4		22	7	262	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	27	56		258	17	6		7	21	4		22	7	262	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	30	62		287	19	7		8	23	4		24	8	291	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	30	62		287	19	7		8	23	4		24	8	291	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	30	62		287	19	7		8	23	4		24	8	291	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Sat..	490	527	588		552	590	666		473	506	560		532	574	654	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.06	0.11		0.52	0.03	0.01		0.02	0.05	0.01		0.05	0.01	0.45	
Crit Moves:			****		****					****					****	
Delay/Veh:	9.6	9.4	9.0		15.2	8.7	7.9		9.8	9.5	8.6		9.5	8.7	11.8	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	9.6	9.4	9.0		15.2	8.7	7.9		9.8	9.5	8.6		9.5	8.7	11.8	
LOS by Move:	A	A	A		C	A	A		A	A	A		A	A	B	
ApproachDel:	9.1				14.7				9.5				11.5			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	9.1				14.7				9.5				11.5			
LOS by Appr:	A				B				A				B			

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. (NS / EW)

Average Delay (sec/veh): 33.5 Worst Case Level Of Service: F(75.7)

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0
Volume Module: >> Count Date: 28 Nov 2001 << PM																
Base Vol:	116	0	503		0	0	0		0	204	166		407	128	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	116	0	503		0	0	0		0	204	166		407	128	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	129	0	559		0	0	0		0	227	184		452	142	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	129	0	559		0	0	0		0	227	184		452	142	0	
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx			
Capacity Module:																
Cnflict Vol:	1366	xxxx	319	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		411	xxxx	xxxxx			
Potent Cap.:	162	xxxx	722	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1148	xxxx	xxxxx			
Move Cap..	95	xxxx	722	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1148	xxxx	xxxxx			
Volume/Cap:	1.36	xxxx	0.77	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.39	xxxx	xxxx			
Level Of Service Module:																
Queue:	9.4	xxxx	7.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		1.9	xxxx	xxxxx			
Stopped Del:	295.8	xxxx	24.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		10.2	xxxx	xxxxx			
LOS by Move:	F	*	C	*	*	*	*	*	*		B	*	*			
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		1.9	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		10.2	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	*		B	*	*			
ApproachDel:	75.7		xxxxxx		xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	F		*		*				*				*			

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: D[34.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	1	0	0	1	0	1	0	0	0	0	1	0
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	0	0	0		39	0	64		104	611	0		0	487	51	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		39	0	64		104	611	0		0	487	51	
User Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		48	0	78		127	747	0		0	595	62	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		48	0	78		127	747	0		0	595	62	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		1627	xxxx	626		658	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		113	xxxx	488		940	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap..	xxxx	xxxx	xxxxx		101	xxxx	488		940	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.47	xxxx	0.16		0.14	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		2.1	xxxx	0.6		0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx		69.3	xxxx	13.8		9.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		F	*	B		A	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*		*	*	*		A	*	*		*	*	*	
ApproachDel:	xxxxxx				34.8				xxxxxx				xxxxxx			
ApproachLOS:	*				D				*				*			

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.720
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.7
Optimal Cycle: 65 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		7	0	7		7	24	0		0	24	7	
Lanes:	0	1	0	1	0	0	1	0	1	0	1	1	0	1	0	2
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	28	12	28		386	9	176		209	1031	14		26	670	357	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	28	12	28		386	9	176		209	1031	14		26	670	357	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	31	13	31		429	10	196		232	1146	16		29	744	397	
Reduct Vol.	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	31	13	31		429	10	196		232	1146	16		29	744	397	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	31	13	31		429	10	196		232	1146	16		29	744	397	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.86	0.86	0.86		0.93	0.84	0.84		0.93	0.93	0.93		0.93	0.93	0.83	
Lanes:	0.83	0.35	0.82		1.00	0.05	0.95		1.00	1.97	0.03		1.00	2.00	1.00	
Final Sat..	1339	574	1339		1769	78	1518		1769	3483	47		1769	3538	1583	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.02	0.02		0.24	0.13	0.13		0.13	0.33	0.33		0.02	0.21	0.25	
Crit Moves:		****			****				****						****	
Green/Cycle:	0.03	0.03	0.03		0.34	0.34	0.34		0.18	0.51	0.51		0.03	0.35	0.35	
Volume/Cap:	0.72	0.72	0.72		0.72	0.38	0.38		0.72	0.65	0.65		0.65	0.60	0.72	
Delay/Veh:	78.9	78.9	78.9		39.1	30.7	30.7		53.8	22.7	22.7		87.2	33.1	38.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	78.9	78.9	78.9		39.1	30.7	30.7		53.8	22.7	22.7		87.2	33.1	38.6	
HCM2kAvg:	3	3	3		15	6	6		10	16	16		2	12	14	

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: C[23.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	1	0	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	0	433		79	5	334		0	0		0	0	113		0	12
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	433		79	5	334		0	0		0	0	113		0	12
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	0	481		88	6	371		0	0		0	0	126		0	13
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	0	481		88	6	371		0	0		0	0	126		0	13

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	569	xxxx	xxxxx	xxxx	xxxx	xxxxx	907	xxxx	525
Potent Cap..	xxxx	xxxx	xxxxx	1013	xxxx	xxxxx	xxxx	xxxx	xxxxx	309	xxxx	556
Move Cap..	xxxx	xxxx	xxxxx	1013	xxxx	xxxxx	xxxx	xxxx	xxxxx	307	xxxx	556
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.41	xxxx	0.02

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.9	xxxx	0.1
Stopped Del:	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	24.6	xxxx	11.6
LOS by Move:	*	*	*	A	*	*	*	*	*	C	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			23.3		
ApproachLOS:	*			*			*			C		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 108.1 Worst Case Level Of Service: F[228.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	1	0	0	0 1	0	0	0	0 0
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	187	91		0	0		83	350	432		0	190		0	0	0
Growth Adj:	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Initial Bse:	187	91		0	0		83	350	432		0	190		0	0	0
User Adj:	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90
PHF Volume:	208	101		0	0		92	389	480		0	211		0	0	0
Reduct Vol:	0	0		0	0		0	0	0		0	0		0	0	0
Final Vol..	208	101		0	0		92	389	480		0	211		0	0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	481	xxxx	xxxxx	xxxx	xxxx	xxxxx	803	xxxx	287	xxxx	xxxx	xxxxx
Potent Cap..	1092	xxxx	xxxxx	xxxx	xxxx	xxxxx	355	xxxx	757	xxxx	xxxx	xxxxx
Move Cap..	1092	xxxx	xxxxx	xxxx	xxxx	xxxxx	296	xxxx	757	xxxx	xxxx	xxxxx
Volume/Cap:	0.19	xxxx	xxxx	xxxx	xxxx	xxxx	1.62	xxxx	0.28	xxxx	xxxx	xxxx

Level Of Service Module:

Queue:	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	29.1	xxxx	1.1	xxxxx	xxxx	xxxxx
Stopped Del:	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	324.5	xxxx	11.6	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	F	*	B	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			228.9			xxxxxx		
ApproachLOS:	*			*			F			*		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 7.2 Worst Case Level Of Service: A[8.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Yield Sign				Yield Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0 0
Volume Module:																
Base Vol:	6	0	114		0	0		0	0	14		4	125	16		0
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	6	0	114		0	0		0	0	14		4	125	16		0
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	7	0	127		0	0		0	0	16		4	139	18		0
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Final Vol..	7	0	127		0	0		0	0	16		4	139	18		0
Critical Gap Module:																
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	313	xxxx		18	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		20	xxxx	xxxxx		
Potent Cap..	684	xxxx		1067	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1609	xxxx	xxxxx		
Move Cap..	638	xxxx		1067	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1609	xxxx	xxxxx		
Volume/Cap:	0.01	xxxx		0.12	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.09	xxxx	xxxx		
Level Of Service Module:																
Queue:	0.0	xxxx		0.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.3	xxxx	xxxxx		
Stopped Del:	10.7	xxxx		8.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.4	xxxx	xxxxx		
LOS by Move:	B	*		A	*	*	*	*	*	*		A	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	8.9				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	A				*				*				*			

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 6.5 Worst Case Level Of Service: A[9.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	1	0	0 1	0	1	0	0 0	0	0	1	0 1
Volume Module:																
Base Vol:	0	0		0	57		0	116	121	13		0	0	21		73
Growth Adj:	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	57		0	116	121	13		0	0	21		73
User Adj:	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	63		0	129	134	14		0	0	23		81
Reduct Vol:	0	0		0	0		0	0	0	0		0	0	0		0
Final Vol..	0	0		0	63		0	129	134	14		0	0	23		81
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	6.4	xxxx		6.2	4.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	3.5	xxxx		3.3	2.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	307	xxxx		23	104	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	690	xxxx		1059	1500	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	638	xxxx		1059	1500	xxxx		xxxxx	xxxx	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	0.10	xxxx		0.12	0.09	xxxx		xxxx	xxxx	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		0.4	0.3	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		8.9	7.6	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		A	A	*		*	*	*		*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx		xxxxx	638	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	0.3	xxxx		xxxxx	0.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	11.3	xxxx		xxxxx	7.6	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	B	*		*	A	*		*	*	*		*
ApproachDel:	xxxxxx				9.7				xxxxxx				xxxxxx			
ApproachLOS:	*				A				*				*			

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.117
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 55.9
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	0	0		0	7	24		7
Lanes:	0	1	0	0 1	0	0	0	0 0	2	0	3	0 0	0	0	3	0 1
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	162		0	414	0		0	0	812	1526		0	0	1429		683
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	162		0	414	0		0	0	812	1526		0	0	1429		683
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	180		0	460	0		0	0	902	1696		0	0	1588		759
Reduct Vol:	0		0	0	0		0	0	0	0		0	0	0		0
Reduced Vol:	180		0	460	0		0	0	902	1696		0	0	1588		759
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	180		0	460	0		0	0	902	1696		0	0	1588		759
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	1.00		0.83	1.00	1.00		1.00	0.90	0.89		1.00	1.00	0.89		0.83
Lanes:	1.00	0.00		1.00	0.00	0.00		0.00	2.00	3.00		0.00	0.00	3.00		1.00
Final Sat..	1773		0	1583	0		0	0	3432	5083		0	0	5083		1583
Capacity Analysis Module:																
Vol/Sat:	0.10	0.00		0.29	0.00	0.00		0.00	0.26	0.33		0.00	0.00	0.31		0.48
Crit Moves:				****					****							****
Green/Cycle:	0.26	0.00		0.26	0.00	0.00		0.00	0.24	0.66		0.00	0.00	0.43		0.43
Volume/Cap:	0.39	0.00		1.12	0.00	0.00		0.00	1.12	0.50		0.00	0.00	0.73		1.12
Delay/Veh:	37.1	0.0		124.4	0.0	0.0		0.0	114.7	10.2		0.0	0.0	29.7		105.5
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	37.1	0.0		124.4	0.0	0.0		0.0	114.7	10.2		0.0	0.0	29.7		105.5
HCM2kAvg:	6	0		26	0	0		0	27	10		0	0	17		41

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.076
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 76.4
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	7	0		7	0	0		0
Lanes:	1	0	1	0 1	0	1	0	1 0	2	0	3	0 1	2	0	3	1 1
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	46	48		307	415	229		374	105	1581		43	276	814		462
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	46	48		307	415	229		374	105	1581		43	276	814		462
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	51	53		341	461	254		416	117	1757		48	307	904		513
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol.	51	53		341	461	254		416	117	1757		48	307	904		513
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	51	53		341	461	254		416	117	1757		48	307	904		513
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.98		0.83	0.86	0.86		0.86	0.90	0.89		0.83	0.90	0.84		0.84
Lanes:	1.00	1.00		1.00	0.82	0.45		0.73	2.00	3.00		1.00	2.00	3.19		1.81
Final Sat..	1769	1862		1583	1336	737		1204	3432	5083		1583	3432	5113		2902
Capacity Analysis Module:																
Vol/Sat:	0.03	0.03		0.22	0.35	0.35		0.35	0.03	0.35		0.03	0.09	0.18		0.18
Crit Moves:				****	****					****			****			
Green/Cycle:	0.20	0.20		0.20	0.32	0.32		0.32	0.10	0.32		0.32	0.08	0.30		0.30
Volume/Cap:	0.14	0.14		1.08	1.08	1.08		1.08	0.34	1.08		0.09	1.08	0.58		0.58
Delay/Veh:	39.7	39.7		120.4	91.5	91.5		91.5	50.9	86.7		28.6	130.1	35.7		35.7
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	39.7	39.7		120.4	91.5	91.5		91.5	50.9	86.7		28.6	130.1	35.7		35.7
HCM2kAvg:	2	2		20	31	31		31	2	31		1	11	9		9

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.756
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 40.9
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Protected				Protected				Protected				Protected			
Rights:		Include				Ovl				Include				Include		
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	1	1	0	1
Volume Module: >> Count Date: 9 Dec 2000 << PM																
Base Vol:	301	1051		51	140	869		344	591	712		213	206	449		167
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	301	1051		51	140	869		344	591	712		213	206	449		167
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	334	1168		57	156	966		382	657	791		237	229	499		186
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	334	1168		57	156	966		382	657	791		237	229	499		186
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	334	1168		57	156	966		382	657	791		237	229	499		186
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.90	0.89	0.83		0.90	0.89	0.83		0.90	0.90	0.90		0.90	0.89	0.89	
Lanes:	2.00	3.00	1.00		2.00	3.00	1.00		2.00	1.54	0.46		2.00	1.46	0.54	
Final Sat..	3432	5083	1583		3432	5083	1583		3432	2631	787		3432	2473	920	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.23	0.04		0.05	0.19	0.24		0.19	0.30	0.30		0.07	0.20	0.20	
Crit Moves:	****					****			****					****		
Green/Cycle:	0.13	0.30	0.30		0.08	0.25	0.50		0.25	0.43	0.43		0.09	0.27	0.27	
Volume/Cap:	0.76	0.76	0.12		0.59	0.76	0.48		0.76	0.71	0.71		0.71	0.76	0.76	
Delay/Veh:	57.8	40.1	30.3		57.0	44.2	19.9		45.2	29.9	29.9		59.7	44.1	44.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	57.8	40.1	30.3		57.0	44.2	19.9		45.2	29.9	29.9		59.7	44.1	44.1	
HCM2kAvg:	8	14	1		4	13	9		13	16	16		6	13	13	

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.657
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 39.3
Optimal Cycle: 74 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Protected				Protected				Protected				Protected			
Rights:		Include				Include				Include				Include		
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	3	0	1	1	0	2	1	0	1	0	1	0	1	0
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	21	1031		164	165	852		203	300	331		6	167	180		49
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	21	1031		164	165	852		203	300	331		6	167	180		49
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	23	1146		182	183	947		226	333	368		7	186	200		54
Reduct Vol.	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	23	1146		182	183	947		226	333	368		7	186	200		54
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	23	1146		182	183	947		226	333	368		7	186	200		54
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.93	0.89	0.83		0.93	0.87	0.87		0.93	0.93	0.93		0.93	0.90	0.90	
Lanes:	1.00	3.00	1.00		1.00	2.42	0.58		1.00	1.96	0.04		1.00	1.57	0.43	
Final Sat..	1769	5083	1583		1769	3986	950		1769	3464	63		1769	2692	733	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.23	0.12		0.10	0.24	0.24		0.19	0.11	0.11		0.10	0.07	0.07	
Crit Moves:		****			****				****					****		
Green/Cycle:	0.09	0.30	0.30		0.14	0.36	0.36		0.25	0.30	0.30		0.16	0.20	0.20	
Volume/Cap:	0.15	0.74	0.38		0.74	0.66	0.66		0.74	0.36	0.36		0.67	0.37	0.37	
Delay/Veh:	51.0	39.4	33.3		60.7	33.5	33.5		47.4	33.2	33.2		53.9	41.8	41.8	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	51.0	39.4	33.3		60.7	33.5	33.5		47.4	33.2	33.2		53.9	41.8	41.8	
HCM2kAvg:	1	14	5		8	13	13		13	5	5		8	4	4	

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.499
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: 46 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	1	0	1	1	0	1	0	2	0	1	1	0	0	1	0	1	0	0	1	0
Volume Module:																				
Base Vol:	8	1202		8		97	712		106		53	13		1		29	16		36	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	8	1202		8		97	712		106		53	13		1		29	16		36	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	9	1336		9		108	791		118		59	14		1		32	18		40	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	9	1336		9		108	791		118		59	14		1		32	18		40	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	9	1336		9		108	791		118		59	14		1		32	18		40	
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	0.95	0.95		0.95		0.95	0.95		0.85		0.95	0.99		0.99		0.95	0.90		0.90	
Lanes:	1.00	1.99		0.01		1.00	2.00		1.00		1.00	0.93		0.07		1.00	0.31		0.69	
Final Sat..	1805	3583		24		1805	3610		1615		1805	1745		134		1805	524		1179	
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.37		0.37		0.06	0.22		0.07		0.03	0.01		0.01		0.02	0.03		0.03	
Crit Moves:		****				****					****						****			
Green/Cycle:	0.02	0.75		0.75		0.12	0.85		0.85		0.07	0.04		0.04		0.09	0.07		0.07	
Volume/Cap:	0.26	0.50		0.50		0.50	0.26		0.09		0.50	0.20		0.20		0.20	0.50		0.50	
Delay/Veh:	52.3	5.2		5.2		43.0	1.5		1.3		48.4	47.5		47.5		42.6	48.3		48.3	
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	52.3	5.2		5.2		43.0	1.5		1.3		48.4	47.5		47.5		42.6	48.3		48.3	
HCM2kAvg:	1	9		9		4	2		1		3	1		1		1	2		2	

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 8.1 Worst Case Level Of Service: F[201.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	1	0	1	1	0	1	0	1	0	1	0	0	1	0	1	0	0	1
Volume Module:																				
Base Vol.	65	1182		132		11	674		65		19	5		40		9	4		13	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	65	1182		132		11	674		65		19	5		40		9	4		13	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	72	1313		147		12	749		72		21	6		44		10	4		14	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Final Vol..	72	1313		147		12	749		72		21	6		44		10	4		14	
Critical Gap Module:																				
Critical Gp:	4.1	xxxx		xxxxx		4.1	xxxx		xxxxx		7.1	6.5		6.2		7.1	6.5		6.2	
FollowUpTim:	2.2	xxxx		xxxxx		2.2	xxxx		xxxxx		3.5	4.0		3.3		3.5	4.0		3.3	
Capacity Module:																				
Cnflict Vol.	821	xxxx		xxxxx		1460	xxxx		xxxxx		2314	2378		749		2292	2303		1313	
Potent Cap.:	817	xxxx		xxxxx		469	xxxx		xxxxx		27	35		415		28	39		195	
Move Cap..	817	xxxx		xxxxx		469	xxxx		xxxxx		21	31		415		20	35		195	
Volume/Cap:	0.09	xxxx		xxxx		0.03	xxxx		xxxx		1.02	0.18		0.11		0.51	0.13		0.07	
Level Of Service Module:																				
Queue:	0.3	xxxx		xxxxx		0.1	xxxx		xxxxx		xxxxx	xxxx		0.4		xxxxx	xxxx		0.2	
Stopped Del:	9.8	xxxx		xxxxx		12.9	xxxx		xxxxx		xxxxx	xxxx		14.7		xxxxx	xxxx		24.9	
LOS by Move:	A	*		*		B	*		*		*	*		B		*	*		C	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		22	xxxx		xxxxx		33	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		2.5	xxxx		xxxxx		1.9	xxxx		xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		512.8	xxxx		xxxxx		309.2	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		F	*		*		F	*		*	
ApproachDel.	xxxxxx					xxxxxx					201.5					167.0				
ApproachLOS:	*					*					F					F				

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Vallev Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.483
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 25.0
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	1	0	1	1	0	1	0	1	1	0	1	0	1	0	1	1	0	1	0	1
Volume Module: >> Count Date: 8 Jan 2002 << PM																				
Base Vol:	120	1105		26		62	621		103		70		8		99	11		7		43
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	120	1105		26		62	621		103		70		8		99	11		7		43
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	133	1228		29		69	690		114		78		9		110	12		8		48
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Reduced Vol:	133	1228		29		69	690		114		78		9		110	12		8		48
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	133	1228		29		69	690		114		78		9		110	12		8		48
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900		1900		1900	1900		1900		1900
Adjustment:	0.95	0.95		0.95		0.95	0.93		0.93		0.95		1.00		0.85	0.95		1.00		0.85
Lanes:	1.00	1.95		0.05		1.00	1.72		0.28		1.00		1.00		1.00	1.00		1.00		1.00
Final Sat..	1805	3516		83		1805	3031		503		1805		1900		1615	1805		1900		1615
Capacity Analysis Module:																				
Vol/Sat:	0.07	0.35		0.35		0.04	0.23		0.23		0.04		0.00		0.07	0.01		0.00		0.03
Crit Moves:		****				****					****							****		
Green/Cycle:	0.15	0.57		0.57		0.06	0.48		0.48		0.07		0.21		0.21	0.06		0.20		0.20
Volume/Cap:	0.48	0.61		0.61		0.61	0.48		0.48		0.61		0.02		0.33	0.11		0.02		0.15
Delay/Veh:	47.6	17.8		17.8		64.7	21.6		21.6		63.0		37.7		40.8	53.7		38.6		39.8
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	47.6	17.8		17.8		64.7	21.6		21.6		63.0		37.7		40.8	53.7		38.6		39.8
HCM2kAvg:	5	15		15		4	10		10		4		0		4	1		0		1

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Vallev Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.732
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 34.5
Optimal Cycle: 58 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	20			7	7	20			0	0	0			0	20	0			20
Lanes:	0	0	2	0	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module:																				
Base Vol:	0	765		276		254	346		0		0		0		0	214		0		414
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	765		276		254	346		0		0		0		0	214		0		414
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	850		307		282	384		0		0		0		0	238		0		460
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Reduced Vol:	0	850		307		282	384		0		0		0		0	238		0		460
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	0	850		307		282	384		0		0		0		0	238		0		460
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900		1900		1900	1900		1900		1900
Adjustment:	1.00	0.95		0.85		0.95	1.00		1.00		1.00		1.00		1.00	0.95		1.00		0.85
Lanes:	0.00	2.00		1.00		1.00	1.00		0.00		0.00		0.00		0.00	1.00		0.00		1.00
Final Sat..	0	3610		1615		1805	1900		0		0		0		0	1805		0		1615
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.24		0.19		0.16	0.20		0.00		0.00		0.00		0.00	0.13		0.00		0.28
Crit Moves:		****				****														****
Green/Cycle:	0.00	0.32		0.32		0.21	0.54		0.00		0.00		0.00		0.00	0.39		0.00		0.39
Volume/Cap:	0.00	0.73		0.59		0.73	0.38		0.00		0.00		0.00		0.00	0.34		0.00		0.73
Delay/Veh:	0.0	38.5		35.9		51.0	16.5		0.0		0.0		0.0		0.0	26.1		0.0		35.7
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	0.0	38.5		35.9		51.0	16.5		0.0		0.0		0.0		0.0	26.1		0.0		35.7
HCM2kAvg:	0	15		10		12	8		0		0		0		0	6		0		16

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #32 Auto Park Way / West 9th Ave INS / EWI

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.768
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.7
Optimal Cycle: 74 Level Of Service: C

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Ovl			
Min. Green:	7	24		7	7	24		7	0	24		7	7	24		7
Lanes:	1	0	1	1 0	1	0	1	1 0	1	0	1	0 1	1	0	0	1 0
Volume Module: >> Count Date: 27 Nov 2001 << PM Peak																
Base Vol:	91	837		494	14	741		22	19	26		683	155	49		33
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	91	837		494	14	741		22	19	26		683	155	49		33
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		0.50	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	101	930		549	16	823		24	21	29		379	172	54		37
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	101	930		549	16	823		24	21	29		379	172	54		37
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	101	930		549	16	823		24	21	29		379	172	54		37
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.88		0.88	0.93	0.93		0.93	0.67	0.98		0.83	0.73	0.92		0.92
Lanes:	1.00	1.26		0.74	1.00	1.94		0.06	1.00	1.00		1.00	1.00	0.60		0.40
Final Sat..	1769	2100		1240	1769	3422		102	1277	1862		1583	1385	1046		704
Capacity Analysis Module:																
Vol/Sat:	0.06	0.44		0.44	0.01	0.24		0.24	0.02	0.02		0.24	0.12	0.05		0.05
Crit Moves:		****			****							****				
Green/Cycle:	0.12	0.55		0.55	0.06	0.49		0.49	0.30	0.30		0.30	0.30	0.30		0.35
Volume/Cap:	0.48	0.81		0.81	0.15	0.49		0.49	0.06	0.05		0.81	0.42	0.18		0.15
Delay/Veh:	51.3	25.0		25.0	54.4	21.1		21.1	30.3	30.3		49.4	34.7	31.6		26.5
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	51.3	25.0		25.0	54.4	21.1		21.1	30.3	30.3		49.4	34.7	31.6		26.5
HCM2kAvg:	4	24		24	1	11		11	1	1		15	7	2		2

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Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #33 I-15 SB / West 9th Ave INS / EWI

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Cycle (sec): 120 Critical Vol./Cap. (X): 0.868
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 21.9
Optimal Cycle: 104 Level Of Service: C

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	0	0	0	0 0	1	1	0	0 1	0	0	2	0 1	2	0	2	0 0
Volume Module: >> Count Date: 27 Nov 2001 << PM																
Base Vol.	0	0		0	323	0		146	0	946		879	191	1178		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	323	0		146	0	946		879	191	1178		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	359	0		162	0	1051		977	212	1309		0
Reduct Vol.	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	0		0	359	0		162	0	1051		977	212	1309		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	0		0	359	0		162	0	1051		977	212	1309		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00		1.00	0.93	1.00		0.83	1.00	0.93		0.83	0.90	0.93		1.00
Lanes:	0.00	0.00		0.00	2.00	0.00		1.00	0.00	2.00		1.00	2.00	2.00		0.00
Final Sat..	0	0		0	3545	0		1583	0	3538		1583	3432	3538		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00		0.00	0.10	0.00		0.10	0.00	0.30		0.62	0.06	0.37		0.00
Crit Moves:								****				****	****			
Green/Cycle:	0.00	0.00		0.00	0.12	0.00		0.12	0.00	0.71		0.71	0.07	0.78		0.00
Volume/Cap:	0.00	0.00		0.00	0.86	0.00		0.87	0.00	0.42		0.87	0.87	0.47		0.00
Delay/Veh:	0.0	0.0		0.0	67.9	0.0		84.4	0.0	7.3		20.5	81.6	4.7		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	0.0		0.0	67.9	0.0		84.4	0.0	7.3		20.5	81.6	4.7		0.0
HCM2kAvg:	0	0		0	9	0		9	0	8		30	7	8		0

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Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave (NS/ EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.625
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.8
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	1	0	1	0	0	0	0	2	0	2	0	0	0	2	0 1
Volume Module: >> Count Date: 27 Nov 2001 << PM																
Base Vol:	636	2	218		0	0		0	229	1040		0	0	733		377
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	636	2	218		0	0		0	229	1040		0	0	733		377
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	707	2	242		0	0		0	254	1156		0	0	814		419
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	707	2	242		0	0		0	254	1156		0	0	814		419
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	707	2	242		0	0		0	254	1156		0	0	814		419
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.83	0.83	0.83		1.00	1.00		1.00	0.90	0.93		1.00	1.00	0.92		0.83
Lanes:	1.99	0.01	1.00		0.00	0.00		0.00	2.00	2.00		0.00	0.00	2.00		1.00
Final Sat..	3155	10	1583		0	0		0	3432	3538		0	0	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.22	0.22	0.15	0.00	0.00	0.00		0.07	0.33	0.00		0.00	0.23			0.26
Crit Moves:		****						****								****
Green/Cycle:	0.36	0.36	0.36	0.00	0.00	0.00		0.12	0.54	0.00		0.00	0.42			0.42
Volume/Cap:	0.63	0.63	0.43	0.00	0.00	0.00		0.63	0.60	0.00		0.00	0.54			0.63
Delay/Veh:	33.0	33.0	29.7	0.0	0.0	0.0		53.4	19.2	0.0		0.0	26.3			29.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00			1.00
AdjDel/Veh:	33.0	33.0	29.7	0.0	0.0	0.0		53.4	19.2	0.0		0.0	26.3			29.0
HCM2kAvg:	13	13	7	0	0	0		6	15	0		0	11			13

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.958
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 33.8
Optimal Cycle: 145 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	0	0	1	0 1	1	0	2	0 0	0	0	0	0 0	2	0	0	0 1
Volume Module:																
Base Vol:	0	814	331		436	934		0	0	0		0	168	0		185
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	814	331		436	934		0	0	0		0	168	0		185
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	904	368		484	1038		0	0	0		0	187	0		206
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	0	904	368		484	1038		0	0	0		0	187	0		206
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	904	368		484	1038		0	0	0		0	187	0		206
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00	0.85		0.95	0.95		1.00	1.00	1.00		1.00	0.92	1.00		0.85
Lanes:	0.00	1.00	1.00		1.00	2.00		0.00	0.00	0.00		0.00	2.00	0.00		1.00
Final Sat..	0	1900	1615		1805	3610		0	0	0		0	3502	0		1615
Capacity Analysis Module:																
Vol/Sat:	0.00	0.48	0.23		0.27	0.29		0.00	0.00	0.00		0.00	0.05	0.00		0.13
Crit Moves:		****			****											****
Green/Cycle:	0.00	0.50	0.50		0.28	0.78		0.00	0.00	0.00		0.00	0.13	0.00		0.13
Volume/Cap:	0.00	0.96	0.46		0.96	0.37		0.00	0.00	0.00		0.00	0.40	0.00		0.96
Delay/Veh:	0.0	43.9	16.8		64.9	3.6		0.0	0.0	0.0		0.0	40.3	0.0		92.4
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	43.9	16.8		64.9	3.6		0.0	0.0	0.0		0.0	40.3	0.0		92.4
HCM2kAvg:	0	33	7		21	5		0	0	0		0	3	0		10

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.947
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 44.6
Optimal Cycle: 137 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	0	1	2	0	2	0	1
Volume Module:																				
Base Vol:	68	261	661			49	137	64			58	222	181			705	569	93		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	68	261	661			49	137	64			58	222	181			705	569	93		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90		
PHF Volume:	76	290	734			54	152	71			64	247	201			783	632	103		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	76	290	734			54	152	71			64	247	201			783	632	103		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Final Vol..	76	290	734			54	152	71			64	247	201			783	632	103		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.95	0.95	0.85			0.95	0.95	0.85			0.95	0.95	0.85			0.92	0.95	0.85		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.00	1.00			2.00	2.00	1.00		
Final Sat..	1805	3610	1615			1805	3610	1615			1805	3610	1615			3502	3610	1615		
Capacity Analysis Module:																				
Vol/Sat:	0.04	0.08	0.45			0.03	0.04	0.04			0.04	0.07	0.12			0.22	0.18	0.06		
Crit Moves:			****			****							****			****				
Green/Cycle:	0.25	0.48	0.48			0.03	0.26	0.26			0.06	0.13	0.13			0.24	0.31	0.31		
Volume/Cap:	0.17	0.17	0.95			0.95	0.16	0.17			0.57	0.52	0.95			0.95	0.57	0.21		
Delay/Veh:	29.6	14.7	45.2			147.4	28.5	28.6			52.6	41.5	89.8			57.1	30.0	26.0		
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	29.6	14.7	45.2			147.4	28.5	28.6			52.6	41.5	89.8			57.1	30.0	26.0		
HCM2kAvg:	2	2	27			4	2	2			3	4	10			17	9	2		

Harmony Grove Village
Option C: Existing + Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.784
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.5
Optimal Cycle: 73 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	1	0	2	0	2	1	0	2	0	1	2	0	2	0	1	2	0	3	0	1
Volume Module:																				
Base Vol:	454	181	865			43	232	43			248	685	197			360	723	21		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	454	181	865			43	232	43			248	685	197			360	723	21		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90		
PHF Volume:	504	201	961			48	258	48			276	761	219			400	803	23		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol.	504	201	961			48	258	48			276	761	219			400	803	23		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Final Vol..	504	201	961			48	258	48			276	761	219			400	803	23		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.95	0.95	0.75			0.95	0.95	0.85			0.92	0.95	0.85			0.92	0.91	0.85		
Lanes:	1.00	2.00	2.00			1.00	2.00	1.00			2.00	2.00	1.00			2.00	3.00	1.00		
Final Sat..	1805	3610	2842			1805	3610	1615			3502	3610	1615			3502	5187	1615		
Capacity Analysis Module:																				
Vol/Sat:	0.28	0.06	0.34			0.03	0.07	0.03			0.08	0.21	0.14			0.11	0.15	0.01		
Crit Moves:			****			****						****				****				
Green/Cycle:	0.37	0.43	0.43			0.03	0.09	0.09			0.14	0.27	0.27			0.15	0.28	0.28		
Volume/Cap:	0.75	0.13	0.78			0.78	0.75	0.31			0.56	0.78	0.50			0.78	0.56	0.05		
Delay/Veh:	32.4	17.2	27.8			95.3	53.3	43.4			41.7	38.1	31.9			49.0	31.6	26.7		
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	32.4	17.2	27.8			95.3	53.3	43.4			41.7	38.1	31.9			49.0	31.6	26.7		
HCM2kAvg:	16	2	15			3	6	2			5	13	6			8	8	1		

Harmony Grove Village
Option C: Ex + P + CP

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Nordahl Rd. / SR-78 WB	D	37.2	0.805	D	37.2	0.805	+ 0.000 D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	F	304.9	1.800	F	304.9	1.800	+ 0.000 D/V
# 3 Nordahl Rd. / Mission Rd.	F	240.3	1.707	F	240.3	1.707	+ 0.000 D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 5 Country Club/Kauana Loa	A	9.2	0.371	A	9.2	0.371	+ 0.000 V/C
# 6 Country Club/Entrance # 3	B	11.1	0.000	B	11.1	0.000	+ 0.000 D/V
# 7 Country Club/ Village Road	B	13.1	0.000	B	13.1	0.000	+ 0.000 D/V
# 8 Harmony Grove/Village Road	D	32.7	0.000	D	32.7	0.000	+ 0.000 D/V
# 9 Country Club/Entrance # 2	C	15.9	0.000	C	15.9	0.000	+ 0.000 D/V
# 10 COuntry Club/Harmony Grove	C	19.4	0.000	C	19.4	0.000	+ 0.000 D/V
# 11 Entrance # 1/Harmony Grove	C	23.4	0.000	C	23.4	0.000	+ 0.000 D/V
# 12 Wilgen Road/Harmony Grove	C	18.9	0.000	C	18.9	0.000	+ 0.000 D/V
# 13 Citracado Pkwy./Vineyard St.	D	49.8	1.384	D	49.8	1.384	+ 0.000 D/V
# 14 Harmony Grove Rd./Kauana Loa	D	25.2	0.000	D	25.2	0.000	+ 0.000 D/V
# 15 Andreasen Dr./ Vineyard Ave	D	41.6	0.832	D	41.6	0.832	+ 0.000 D/V
# 16 Andreasen Dr./Enterprise St.	F	89.3	1.428	F	89.3	1.428	+ 0.000 V/C
# 17 Harmony Grove Rd./Enterprise S	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 18 Harmony Grove Rd./Howard Ave.	F	223.3	0.000	F	223.3	0.000	+ 0.000 D/V
# 19 Hale Ave. / Auto Park Way	C	28.5	0.766	C	28.5	0.766	+ 0.000 D/V
# 20 Hale Ave./11th Ave.	F	223.1	0.000	F	223.1	0.000	+ 0.000 D/V
# 21 Harmony Grove Rd./Hale Ave.	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000 D/V
# 22 Avenida Diablo/Citracado Parkw	A	9.4	0.000	A	9.4	0.000	+ 0.000 D/V
# 23 Avenida Diablo/Hale Avenue	B	10.7	0.000	B	10.7	0.000	+ 0.000 D/V
# 24 I-15 NB/Valley Pkwy	D	36.5	0.837	D	36.5	0.837	+ 0.000 D/V

Traffix 7.7.0715 (c) 2004 Dowling Assoc. Licensed to LLG, SAN DIEGO, CA

Harmony Grove Village
Option C: Ex + P + CP

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	E	60.0	0.806	E	60.0	0.806	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	39.0	0.800	D	39.0	0.800	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	D	45.9	0.887	D	45.9	0.887	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	B	14.7	0.467	B	14.7	0.467	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	319.5	0.000	F	319.5	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	33.6	0.578	C	33.6	0.578	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	C	34.7	0.868	C	34.7	0.868	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	E	72.9	1.155	E	72.9	1.155	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	22.8	0.750	C	22.8	0.750	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	28.0	0.678	C	28.0	0.678	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	C	32.0	0.913	C	32.0	0.913	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	53.9	0.995	D	53.9	0.995	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	C	25.8	0.535	C	25.8	0.535	+ 0.000 D/V

Traffix 7.7.0715 (c) 2004 Dowling Assoc. Licensed to LLG, SAN DIEGO, CA

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Nordahl Rd. / SR-78 WB (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.805
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 37.2
Optimal Cycle: 73 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	0	0		0	7	24		7
Lanes:	2	0	2	0 0	0	0	2	0 1	0	0	0	0 0	1	0	1!	0 1
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	586	332		0	0	563		135	0	0		0	649	8		147
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	586	332		0	0	563		135	0	0		0	649	8		147
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	651	369		0	0	626		150	0	0		0	721	9		163
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	651	369		0	0	626		150	0	0		0	721	9		163
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	651	369		0	0	626		150	0	0		0	721	9		163
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.71	0.73		1.00	1.00	0.93		0.83	1.00	1.00		1.00	0.73	0.73		0.73
Lanes:	2.00	2.00		0.00	0.00	2.00		1.00	0.00	0.00		0.00	1.80	0.02		1.18
Final Sat..	2693	2776		0	0	3538		1583	0	0		0	2489	27		1634
Capacity Analysis Module:																
Vol/Sat:	0.24	0.13		0.00	0.00	0.18		0.09	0.00	0.00		0.00	0.29	0.33		0.10
Crit Moves:	****					****								****		
Green/Cycle:	0.30	0.52		0.00	0.00	0.22		0.22	0.00	0.00		0.00	0.41	0.41		0.41
Volume/Cap:	0.81	0.26		0.00	0.00	0.81		0.43	0.00	0.00		0.00	0.72	0.81		0.25
Delay/Veh:	44.7	16.0		0.0	0.0	50.5		41.2	0.0	0.0		0.0	31.9	35.9		23.6
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	44.7	16.0		0.0	0.0	50.5		41.2	0.0	0.0		0.0	31.9	35.9		23.6
HCM2kAvg:	14	4		0	0	13		5	0	0		0	14	17		3

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp (NS / EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.800
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 304.9
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24		7	7	24		0	7	24		7	0	0		0
Lanes:	0 0	2	0	1	2	0	2	0 0	0	1	0	1 0	0 0	0	0	0
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	0	715		393	130	1209		0	105		1	1168	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	715		393	130	1209		0	105		1	1168	0	0		0
User Adj:	1.00	1.00		0.50	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	794		218	144	1343		0	117		1	1298	0	0		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	794		218	144	1343		0	117		1	1298	0	0		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	794		218	144	1343		0	117		1	1298	0	0		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	0.73		0.65	0.90	0.93		1.00	0.54	0.54		0.54	1.00	1.00		1.00
Lanes:	0.00	2.00		1.00	2.00	2.00		0.00	0.99	0.01		1.00	0.00	0.00		0.00
Final Sat..	0	2776		1242	3432	3538		0	1022	10		1031	0	0		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.29		0.18	0.04	0.38		0.00	0.11	0.11		1.26	0.00	0.00		0.00
Crit Moves:	****					****						****				
Green/Cycle:	0.00	0.19		0.19	0.05	0.24		0.00	0.67	0.67		0.67	0.00	0.00		0.00
Volume/Cap:	0.00	1.48		0.91	0.89	1.58		0.00	0.17	0.17		1.88	0.00	0.00		0.00
Delay/Veh:	0.0	268		74.8	88.6	306		0.0	6.2	6.2		416.7	0.0	0.0		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	268		74.8	88.6	306		0.0	6.2	6.2		416.7	0.0	0.0		0.0
HCM2kAvg:	0	30		10	5	52		0	2	2		132	0	0		0

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.707
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 240.3
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0 2	0	1	2	0 1	1	0	2	0 2	0	1	2	0 2	0	1
Volume Module: >> Count Date: 13 Dec 2001 << AM																
Base Vol:	239	737	40		438	1737	218		220	375	741		90	328	185	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	239	737	40		438	1737	218		220	375	741		90	328	185	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	266	819	44		487	1930	242		244	417	823		100	364	206	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	266	819	44		487	1930	242		244	417	823		100	364	206	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	266	819	44		487	1930	242		244	417	823		100	364	206	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.73	0.73	0.65		0.71	0.72	0.72		0.90	0.93	0.83		0.90	0.93	0.83	
Lanes:	1.00	2.00	1.00		2.00	1.78	0.22		2.00	2.00	1.00		2.00	2.00	1.00	
Final Sat..	1388	2776	1242		2693	2425	304		3432	3538	1583		3432	3538	1583	
Capacity Analysis Module:																
Vol/Sat:	0.19	0.29	0.04		0.18	0.80	0.80		0.07	0.12	0.52		0.03	0.10	0.13	
Crit Moves:	****					****					****		****			
Green/Cycle:	0.11	0.34	0.34		0.21	0.44	0.44		0.09	0.29	0.29		0.06	0.26	0.26	
Volume/Cap:	1.79	0.86	0.10		0.86	1.79	1.79		0.78	0.41	1.79		0.50	0.40	0.51	
Delay/Veh:	435.2	45.1	27.1		58.7	393	392.7		65.0	34.5	407.2		56.8	37.2	39.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	435.2	45.1	27.1		58.7	393	392.7		65.0	34.5	407.2		56.8	37.2	39.1	
HCM2kAvg:	27	17	1		12	98	98		7	6	75		3	6	7	

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club (NS / EW)

Average Delay (sec/veh): 2087.5 Worst Case Level Of Service: F[32057.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0 2	0	1	1	0 2	0	1	0	1 0	0	1	0	0 1!	0	0
Volume Module: >> Count Date: 11 Dec 2001 << AM																
Base Vol:	46	683	0		35	2276	252		304	0	40		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	46	683	0		35	2276	252		304	0	40		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	51	759	0		39	2529	280		338	0	44		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	51	759	0		39	2529	280		338	0	44		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx		6.8	xxxx	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5	xxxx	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	2809	xxxx	xxxxx		759	xxxx	xxxxx		3088	xxxx	1264		xxxx	xxxx	xxxxx	
Potent Cap..	135	xxxx	xxxxx		848	xxxx	xxxxx		9	xxxx	160		xxxx	xxxx	xxxxx	
Move Cap..	135	xxxx	xxxxx		848	xxxx	xxxxx		6	xxxx	160		xxxx	xxxx	xxxxx	
Volume/Cap:	0.38	xxxx	xxxx		0.05	xxxx	xxxx		53.90	xxxx	0.28		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	1.6	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx	1.1		xxxxx	xxxx	xxxxx	
Stopped Del:	47.1	xxxx	xxxxx		9.4	xxxx	xxxxx		xxxxx	xxxx	35.8		xxxxx	xxxx	xxxxx	
LOS by Move:	D	*	*		A	*	*		*	*	E		*	*	*	
Movement:	LT	- LTR	-	RT	LT	- LTR	-	RT	LT	- LTR	-	RT	LT	- LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		6	xxxx	xxxxx		xxxx	0	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		44.3	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		24955	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		F	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				F				*			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Country Club/Kauana Loa

Cycle (sec): 100 Critical Vol./Cap. (X): 0.371
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.2
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Ignore					Include					Include					Include				
Min. Green:	0	0		0		0		0		0	0		0		0	0		0		0
Lanes:	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	0	88		27		81	190		0		0		0		0	12		0		70
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	88		27		81	190		0		0		0		0	12		0		70
User Adj:	1.00	1.00		0.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.00		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	98		0		90	211		0		0		0		0	13		0		78
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Reduced Vol:	0	98		0		90	211		0		0		0		0	13		0		78
PCE Adj:	1.00	1.00		0.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00		0.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	0	98		0		90	211		0		0		0		0	13		0		78
Saturation Flow Module:																				
Adjustment:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Lanes:	0.00	1.00		1.00		0.30	0.70		0.00		0.00		0.00		0.00	0.15		0.00		0.85
Final Sat..	0	718		0		243	569		0		0		0		0	114		0		666
Capacity Analysis Module:																				
Vol/Sat:	xxxx	0.14		xxxx		0.37	0.37		xxxx		xxxx		xxxx		xxxx	0.12		xxxx		0.12
Crit Moves:		****					****									****				
Delay/Veh:	0.0	8.4		0.0		9.9	9.9		0.0		0.0		0.0		0.0	7.8		0.0		7.8
Delay Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	0.0	8.4		0.0		9.9	9.9		0.0		0.0		0.0		0.0	7.8		0.0		7.8
LOS by Move:	*	A		*		A	A		*		*		*		*	A		*		A
ApproachDel:		8.4					9.9					xxxxxx					7.8			
Delay Adj:		1.00					1.00					xxxxx					1.00			
ApprAdjDel:		8.4					9.9					xxxxxx					7.8			
LOS by Appr:		A					A					*					A			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club/Entrance # 3

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B(11.1)

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	383		0		25	309		0		0		0		0	0		0		40
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	383		0		25	309		0		0		0		0	0		0		40
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	426		0		28	343		0		0		0		0	0		0		44
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol..	0	426		0		28	343		0		0		0		0	0		0		44
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		6.2
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		426	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		426
Potent Cap.:	xxxx	xxxx		xxxxx		1145	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		633
Move Cap.:	xxxx	xxxx		xxxxx		1145	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		633
Volume/Cap:	xxxx	xxxx		xxxx		0.02	xxxx		xxxx		xxxx		xxxx		xxxx	xxxx		xxxx		0.07
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		0.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		0.2
Stopped Del:	xxxxx	xxxx		xxxxx		8.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		11.1
LOS by Move:	*	*		*		A	*		*		*		*		*	*		*		B
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT					LT - LTR - RT				
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		0.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		8.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shared LOS:	*	*		*		A	*		*		*		*		*	*		*		*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					11.1				
ApproachLOS:	*					*					*					B				

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****
*
Intersection #7 Country Club/ Village Road
****
*
Average Delay (sec/veh): 2.4 Worst Case Level Of Service: B[13.1]
****
*

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module:																				
Base Vol:	0	180	211			0	200		0		0		0		0	132		0		0
Growth Adj:	1.00	1.00	1.00			1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	180	211			0	200		0		0		0		0	132		0		0
User Adj:	1.00	1.00	1.00			1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90	0.90			0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	200	234			0	222		0		0		0		0	147		0		0
Reduct Vol:	0	0	0			0	0		0		0		0		0	0		0		0
Final Vol.:	0	200	234			0	222		0		0		0		0	147		0		0

Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx 6.4 xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx 3.5 xxxx xxxxx

Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx 422 xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx 592 xxxx xxxxx
Move Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx 592 xxxx xxxxx
Volume/Cap: xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx 0.25 xxxx xxxx

Level Of Service Module:
Queue: xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx 1.0 xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx 13.1 xxxx xxxxx
LOS by Move: * * * * * * * * * B * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS: * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx xxxxxx 13.1
ApproachLOS: * * * B

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****
*
Intersection #8 Harmony Grove/Village Road
****
*
Average Delay (sec/veh): 6.5 Worst Case Level Of Service: D[32.7]
****
*

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	1	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	0	289		0		0	433		132		211		0		0	0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	289		0		0	433		132		211		0		0	0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	321		0		0	481		147		234		0		0	0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol.:	0	321		0		0	481		147		234		0		0	0		0		0

Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 6.4 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 3.5 xxxx xxxxx xxxxx xxxx xxxxx

Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx xxxx xxxx xxxxx 802 xxxx xxxxx xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx 356 xxxx xxxxx xxxx xxxx xxxxx
Move Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx 356 xxxx xxxxx xxxx xxxx xxxxx
Volume/Cap: xxxx xxxx xxxx xxxx xxxx xxxx 0.66 xxxx xxxx xxxx xxxx xxxx

Level Of Service Module:
Queue: xxxxx xxxx xxxxx xxxxx xxxx xxxxx 4.5 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 32.7 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move: * * * * * * D * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS: * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx 32.7 xxxxxx
ApproachLOS: * * D *

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: C[15.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 0	0	0	0	1 0	1	0	0	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	158		0	0	169		140	225		0	0	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	158		0	0	169		140	225		0	0	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	176		0	0	188		156	250		0	0	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	0	176		0	0	188		156	250		0	0	0		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		441	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		577	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		577	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.43	xxxx	xxxx	xxxx	xxxx	xxxx			
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		15.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*		*	*		*		C	*		*	*		*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*		*	*		*		*	-		*	*		*	
ApproachDel:	xxxxxx				xxxxxx				15.9				xxxxxx			
ApproachLOS:		*				*			C					*		

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 COuntry Club/Harmony Grove

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: C[19.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	5	11		21	2		7	153	111		245	3	11		450	2
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	5	11		21	2		7	153	111		245	3	11		450	2
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	6	12		23	2		8	170	123		272	3	12		500	2
Reduct Vol:	0	0		0	0		0	0	0		0	0	0		0	0
Final Vol..	6	12		23	2		8	170	123		272	3	12		500	2
Critical Gap Module:																
Critical Gp:	7.1	6.5		6.2	7.1	6.5		6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0		3.3	3.5	4.0		3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1135	1047		274	1064	1048		501	502	xxxx	xxxxx		276	xxxx	xxxxx	
Potent Cap..	181	230		770	202	230		574	1073	xxxx	xxxxx		1299	xxxx	xxxxx	
Move Cap..	111	200		770	168	199		574	1073	xxxx	xxxxx		1299	xxxx	xxxxx	
Volume/Cap:	0.05	0.06		0.03	0.01	0.04		0.30	0.11	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.4	xxxx	xxxxx		0.0	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		8.8	xxxx	xxxxx		7.8	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*		A	*	*		A	*	*		
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	291	xxxxx	xxxx	517	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	1.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	19.4	xxxxx	xxxxx	15.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	C		*	C		*		*	*		*	*		*	
ApproachDel:		19.4			15.6				xxxxxx				xxxxxx			
ApproachLOS:		C			C				*				*			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: C[23.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	1	0	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0		76	0		22	14	286		0	0	548		48
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0	0		76	0		22	14	286		0	0	548		48
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0	0		84	0		24	16	318		0	0	609		53
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Final Vol.:	0	0	0		84	0		24	16	318		0	0	609		53

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx		6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx		3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx		984	xxxx		636	662	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		278	xxxx		482	936	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		274	xxxx		482	936	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.31	xxxx		0.05	0.02	xxxx	xxxx		xxxx	xxxx	xxxx	

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		8.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*		A	*	*	*	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	LT -	LTR -	RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	303	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.6	xxxxx		0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	23.4	xxxxx		8.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	*	C	*		A	*	*	*	*	*			
ApproachDel:	xxxxxx				23.4			xxxxxx			xxxxxx					
ApproachLOS:		*			C				*			*				

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: C[18.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	1	0	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0		56	0		10	6	233		0	0	541		36
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0	0		56	0		10	6	233		0	0	541		36
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0	0		62	0		11	7	259		0	0	601		40
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Final Vol.:	0	0	0		62	0		11	7	259		0	0	601		40

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx		6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx		3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx		893	xxxx		621	641	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		314	xxxx		491	953	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		313	xxxx		491	953	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.20	xxxx		0.02	0.01	xxxx	xxxx		xxxx	xxxx	xxxx	

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*		A	*	*	*	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT	LT -	LTR -	RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	331	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx		0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	18.9	xxxxx		8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	*	C	*		A	*	*	*	*	*			
ApproachDel:	xxxxxx				18.9			xxxxxx			xxxxxx					
ApproachLOS:		*			C				*			*				

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Cycle (sec): 100 Critical Vol./Cap. (X): 1.384
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 49.8
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	2 0	0	0	1	0 0	0	0	0	0 0	1	0	2	2 0	1	0	0
Volume Module: AM Peak																
Base Vol:	214	0	90		0	0		0	0	920	1093		494	729		0
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	214	0	90		0	0		0	0	920	1093		494	729		0
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90		0.90
PHF Volume:	238	0	100		0	0		0	0	1022	1214		549	810		0
Reduct Vol:	0	0	0		0	0		0	0	0	0		0	0		0
Reduced Vol:	238	0	100		0	0		0	0	1022	1214		549	810		0
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
Final Vol..	238	0	100		0	0		0	0	1022	1214		549	810		0
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900	1900		1900	1900		1900
Adjustment:	0.92	1.00	0.85		1.00	1.00		1.00	1.00	1.00	0.75		0.12	1.00		1.00
Lanes:	2.00	0.00	1.00		0.00	0.00		0.00	0.00	1.00	2.00		2.00	1.00		0.00
Final Sat..	3502	0	1615		0	0		0	0	1900	2842		461	1900		0
Capacity Analysis Module:																
Vol/Sat:	0.07	0.00	0.06		0.00	0.00		0.00	0.00	0.54	0.43		1.19	0.43		0.00
Crit Moves:	****												****			
Green/Cycle:	0.05	0.00	0.05		0.00	0.00		0.00	0.00	0.86	0.91		0.86	0.86		0.00
Volume/Cap:	1.38	0.00	1.26		0.00	0.00		0.00	0.00	0.62	0.47		1.38	0.50		0.00
Delay/Veh:	252.1	0.0	234.4		0.0	0.0		0.0	0.0	2.9	0.8		194.7	1.9		0.0
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
AdjDel/Veh:	252.1	0.0	234.4		0.0	0.0		0.0	0.0	2.9	0.8		194.7	1.9		0.0
HCM2kAvg:	10	0	8		0	0		0	0	10	4		141	6		0

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa (NS / EW)

Average Delay (sec/veh): 15.7 Worst Case Level Of Service: D[25.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1 0	0	0	1	0 0	0	0	0	0 0	0	1	0	0 1	0	0	0
Volume Module: >> Count Date: 28 Nov 2001 << AM Peak																
Base Vol:	28	0	635		0	0		0	0	97	20		607	44		0
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	28	0	635		0	0		0	0	97	20		607	44		0
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90		0.90	0.90		0.90
PHF Volume:	31	0	706		0	0		0	0	108	22		674	49		0
Reduct Vol:	0	0	0		0	0		0	0	0	0		0	0		0
Final Vol..	31	0	706		0	0		0	0	108	22		674	49		0
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx			
Capacity Module:																
Cnflict Vol:	1517	xxxx	119	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		130	xxxx	xxxxx			
Potent Cap..	131	xxxx	933	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1455	xxxx	xxxxx			
Move Cap..	92	xxxx	933	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1455	xxxx	xxxxx			
Volume/Cap:	0.60	xxxx	0.76	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.46	xxxx	xxxx			
Level Of Service Module:																
Queue:	2.4	xxxx	7.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.5	xxxx	xxxxx			
Stopped Del:	148.8	xxxx	19.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		9.6	xxxx	xxxxx			
LOS by Move:	F	*	C		*	*		*	*	*			A	*		*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		2.5	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.6	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*		*	*	*			A	*		*
ApproachDel:	25.2				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	D				*				*				*			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.832
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 41.6
Optimal Cycle: 91 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1 0	1	0	1	1 0	1	0	1	1 0	1	1	0	1 0	2	0	1
Volume Module: >> Count Date: 11 Dec 2001 << AM																
Base Vol:	185	112		113	71	277		50	41	586		339	279	749		82
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	185	112		113	71	277		50	41	586		339	279	749		82
User Adj:	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.98		0.98
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	201	122		123	77	302		54	45	638		369	304	816		89
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	201	122		123	77	302		54	45	638		369	304	816		89
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	201	122		123	77	302		54	45	638		369	304	816		89
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.98		0.83	0.93	0.98		0.83	0.93	0.88		0.88	0.93	0.93		0.83
Lanes:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.27		0.73	1.00	2.00		1.00
Final Sat..	1769	1862		1583	1769	1862		1583	1769	2118		1225	1769	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.11	0.07		0.08	0.04	0.16		0.03	0.03	0.30		0.30	0.17	0.23		0.06
Crit Moves:	****					****				****			****			
Green/Cycle:	0.14	0.26		0.26	0.08	0.20		0.20	0.11	0.36		0.36	0.20	0.45		0.45
Volume/Cap:	0.84	0.25		0.30	0.58	0.81		0.17	0.22	0.84		0.84	0.84	0.51		0.13
Delay/Veh:	72.7	35.4		36.0	59.6	58.3		40.0	48.9	40.6		40.6	61.5	23.9		19.3
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	72.7	35.4		36.0	59.6	58.3		40.0	48.9	40.6		40.6	61.5	23.9		19.3
HCM2kAvg:	10	4		4	4	13		2	2	19		19	14	11		2

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.428
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 89.3
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1 0	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0	1	0	1
Volume Module: >> Count Date: 28 Nov 2001 << AM																
Base Vol:	470	18		41	331	76		18	7	39		83	161	221		299
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	470	18		41	331	76		18	7	39		83	161	221		299
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	522	20		46	368	84		20	8	43		92	179	246		332
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	522	20		46	368	84		20	8	43		92	179	246		332
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	522	20		46	368	84		20	8	43		92	179	246		332
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Sat..	366	372		403	370	381		408	316	331		354	384	405		441
Capacity Analysis Module:																
Vol/Sat:	1.43	0.05		0.11	1.00	0.22		0.05	0.02	0.13		0.26	0.47	0.61		0.75
Crit Moves:	****				****							****				****
Delay/Veh:	233.9	12.6		12.4	77.4	14.5		11.7	14.0	14.8		15.8	19.8	24.0		31.4
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	233.9	12.6		12.4	77.4	14.5		11.7	14.0	14.8		15.8	19.8	24.0		31.4
LOS by Move:	F	B		B	F	B		B	B	B		C	C	C		D
ApproachDel:	209.2				63.4				15.4				26.3			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	209.2				63.4				15.4				26.3			
LOS by Appr:	F				F				C				D			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. (NS / EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 1	0	0	0	0 0	0	0	0	1 0	0	1	0	0 0
Volume Module: >> Count Date: 28 Nov 2001 << AM																
Base Vol:	154	0	508		0	0	0		0	184	229		727	798		0
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	154	0	508		0	0	0		0	184	229		727	798		0
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90
PHF Volume:	171	0	564		0	0	0		0	204	254		808	887		0
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Final Vol.:	171	0	564		0	0	0		0	204	254		808	887		0

Critical Gap Module:

Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	2834	xxxx	332	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	459	xxxx	xxxxx
Potent Cap..	19	xxxx	710	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1102	xxxx	xxxxx
Move Cap..	0	xxxx	710	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1102	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.80	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.73	xxxx	xxxx

Level Of Service Module:

Queue:	xxxxx	xxxx	8.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.9	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	26.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	16.6	xxxx	xxxxx
LOS by Move:	*	*	D	*	*	*	*	*	*	C	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.9	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	16.6	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	C	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 19.0 Worst Case Level Of Service: F[223.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	1	0	0	0 1	0	1	0	0 0	0	0	1!	0 0
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	0	0	0		28	0	160		91	617	0		40	1325		41
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	0	0	0		28	0	160		91	617	0		40	1325		41
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90
PHF Volume:	0	0	0		31	0	178		101	686	0		44	1472		46
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Final Vol..	0	0	0		31	0	178		101	686	0		44	1472		46

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	2472	xxxx	1495	1518	xxxx	xxxxx	686	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	34	xxxx	153	446	xxxx	xxxxx	917	xxxx	xxxxx
Move Cap..	xxxx	xxxx	xxxxx	26	xxxx	153	446	xxxx	xxxxx	917	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.18	xxxx	1.16	0.23	xxxx	xxxx	0.05	xxxx	xxxx

Level Of Service Module:

Queue:	xxxxx	xxxx	xxxxx	3.7	xxxx	9.9	0.9	xxxx	xxxxx	0.2	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	454.8	xxxx	182.8	15.4	xxxx	xxxxx	9.1	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	F	C	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	A	*	*	*	C	*	*	*	*	*
ApproachDel:	xxxxxx			223.3			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

```
Intersection #19 Hale Ave. / Auto Park Way (NS / EW)

Cycle (sec):          120          Critical Vol./Cap. (X):          0.766
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):     28.5
Optimal Cycle:         73          Level Of Service:                   C
```

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0			0	7	0			7	7	24			0	0	24			7
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0	1	1	0	1	0	2	0	1
Volume Module: >> Count Date: 12 Dec 2001 << AM																				
Base Vol:	6	4			5	356	13			221	108	713			14	28	1226			293
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	6	4			5	356	13			221	108	713			14	28	1226			293
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	0.89	0.89			0.89	0.89	0.89			0.89	0.89	0.89			0.89	0.89	0.89			0.89
PHF Volume:	7	4			6	400	15			248	121	801			16	31	1378			329
Reduct Vol:	0	0			0	0	0			0	0	0			0	0	0			0
Reduced Vol:	7	4			6	400	15			248	121	801			16	31	1378			329
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Final Vol..	7	4			6	400	15			248	121	801			16	31	1378			329
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900			1900
Adjustment:	0.87	0.87			0.87	0.93	0.84			0.84	0.93	0.93			0.93	0.93	0.93			0.83
Lanes:	0.80	0.53			0.67	1.00	0.06			0.94	1.00	1.96			0.04	1.00	2.00			1.00
Final Sat..	1317	878			1098	1769	89			1509	1769	3459			68	1769	3538			1583
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.01			0.01	0.23	0.16			0.16	0.07	0.23			0.23	0.02	0.39			0.21
Crit Moves:		****				****					****						****			
Green/Cycle:	0.01	0.01			0.01	0.30	0.30			0.30	0.09	0.56			0.56	0.04	0.51			0.51
Volume/Cap:	0.77	0.77			0.77	0.77	0.56			0.56	0.77	0.42			0.42	0.42	0.77			0.41
Delay/Veh:	150.3	150			150.3	45.2	37.2			37.2	73.2	15.6			15.6	59.7	25.8			18.6
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
AdjDel/Veh:	150.3	150			150.3	45.2	37.2			37.2	73.2	15.6			15.6	59.7	25.8			18.6
HCMLAvg:	1	1			1	16	9			9	6	9			9	2	21			7

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

```
Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh):     19.6   Worst Case Level Of Service:      F(223.1)
```

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module: >> Count Date: 12 Dec 2001 <<																				
Base Vol:	0	491			71	6	885			0	0	0			0	135	0			5
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	0	491			71	6	885			0	0	0			0	135	0			5
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			0.90
PHF Volume:	0	546			79	7	983			0	0	0			0	150	0			6
Reduct Vol:	0	0			0	0	0			0	0	0			0	0	0			0
Final Vol..	0	546			79	7	983			0	0	0			0	150	0			6
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx			xxxxx	4.1	xxxx			xxxxx	xxxxx	xxxx			xxxxx	6.4	xxxx			6.2
FollowUpTim:	xxxxx	xxxx			xxxxx	2.2	xxxx			xxxxx	xxxxx	xxxx			xxxxx	3.5	xxxx			3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx			xxxxx	624	xxxx			xxxxx	xxxx	xxxx			xxxxx	1582	xxxx			585
Potent Cap.:	xxxx	xxxx			xxxxx	967	xxxx			xxxxx	xxxx	xxxx			xxxxx	121	xxxx			515
Move Cap..	xxxx	xxxx			xxxxx	967	xxxx			xxxxx	xxxx	xxxx			xxxxx	120	xxxx			515
Volume/Cap:	xxxx	xxxx			xxxx	0.01	xxxx			xxxx	xxxx	xxxx			xxxx	1.25	xxxx			0.01
Level Of Service Module:																				
Queue:	xxxxx	xxxx			xxxxx	0.0	xxxx			xxxxx	xxxx	xxxx			xxxxx	9.6	xxxx			0.0
Stopped Del:	xxxxx	xxxx			xxxxx	8.8	xxxx			xxxxx	xxxx	xxxx			xxxxx	230.9	xxxx			12.1
LOS by Move:	*	*			*	A	*			*	*	*			*	F	*			B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx			xxxxx	0.0	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shrd StpDel:	xxxxx	xxxx			xxxxx	8.8	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shared LOS:	*	*			*	A	*			*	*	*			*	*	*			*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					223.1				
ApproachLOS:	*					*					*					F				

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 1443.0 Worst Case Level Of Service:
F[5354.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0	0	0	1	0	1	0	0	1	0	0	0	1
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	287	120	0	0	57	1032	434	0	230	0	0	310				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	287	120	0	0	57	1032	434	0	230	0	0	310				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90				
PHF Volume:	319	133	0	0	63	1147	482	0	256	0	0	344				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol..	319	133	0	0	63	1147	482	0	256	0	0	344				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.1	xxxx	6.2	xxxxx	xxxx	6.2				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	3.3				
Capacity Module:																
Cnflict Vol:	1210	xxxx	xxxxx	xxxx	xxxx	xxxxx	1580	xxxx	637	xxxx	xxxx	133				
Potent Cap..	584	xxxx	xxxxx	xxxx	xxxx	xxxxx	89	xxxx	481	xxxx	xxxx	921				
Move Cap..	584	xxxx	xxxxx	xxxx	xxxx	xxxxx	26	xxxx	481	xxxx	xxxx	921				
Volume/Cap:	0.55	xxxx	xxxx	xxxx	xxxx	xxxx	18.54	xxxx	0.53	xxxx	xxxx	0.37				
Level Of Service Module:																
Queue:	3.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	60.0	xxxx	3.1	xxxxx	xxxx	1.7				
Stopped Del.	18.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8182	xxxx	20.6	xxxxx	xxxx	11.2				
LOS by Move:	C	*	*	*	*	*	F	*	C	*	*	B				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	3.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	18.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	C	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			5354.7			11.2						
ApproachLOS:	*			*			F			B						

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 7.9 Worst Case Level Of Service: A[9.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Yield Sign				Yield Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0
Volume Module:																
Base Vol:	2	0	212		0	0	0		0	13	9		203	9	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	2	0	212		0	0	0		0	13	9		203	9	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	2	0	236		0	0	0		0	14	10		226	10	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	2	0	236		0	0	0		0	14	10		226	10	0	
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol.	481	xxxx	19	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	24	xxxx	xxxxx				
Potent Cap..	548	xxxx	1064	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1603	xxxx	xxxxx				
Move Cap..	489	xxxx	1064	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1603	xxxx	xxxxx				
Volume/Cap:	0.00	xxxx	0.22	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.14	xxxx	xxxx				
Level Of Service Module:																
Queue:	0.0	xxxx	0.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.5	xxxx	xxxxx				
Stopped Del:	12.4	xxxx	9.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx				
LOS by Move:	B	*	A	*	*	*	*	*	*	A	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	9.4			xxxxxx			xxxxxx			xxxxxx						
ApproachLOS:	A			*			*			*						

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 7.4 Worst Case Level Of Service: B[10.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Stop Sign					Stop Sign					Uncontrolled					
Rights:	Include					Include					Include					
Lanes:	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	
Volume Module:																
Base Vol:	0	0	0			68	0	186			220	3	0			
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			
Initial Bse:	0	0	0			68	0	186			220	3	0			
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			
PHF Volume:	0	0	0			76	0	207			244	3	0			
Reduct Vol:	0	0	0			0	0	0			0	0	0			
Final Vol..	0	0	0			76	0	207			244	3	0			
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx			6.4	xxxx	6.2			4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx			3.5	xxxx	3.3			2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx			511	xxxx	19			140	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx			526	xxxx	1065			1456	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx			447	xxxx	1065			1456	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx			0.17	xxxx	0.19			0.17	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx			0.7			0.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx			9.2			8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*			A			A	*	*	*	*	*
Movement:	LT - LTR - RT					LT - LTR - RT					LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx			447	xxxx	xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx			0.6	xxxx	xxxxx			0.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx			14.7	xxxx	xxxxx			8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*			B	*	*			A	*	*	*	*	*
ApproachDel:	xxxxxx					10.7					xxxxxx			xxxxxx		
ApproachLOS:	*					B					*			*		

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.837
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): 36.5
Optimal Cycle: 86 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Split Phase					Split Phase					Protected					
Rights:	Include					Include					Include					
Min. Green:	7	24	0			0	24	7			0	0	0			
Lanes:	0	1	0	0	1	0	0	0	0	0	2	0	3	0	0	
Volume Module: >> Count Date: 12 Dec 2001 << AM																
Base Vol:	534	1	395			0	0	0			461	1087	0			
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			
Initial Bse:	534	1	395			0	0	0			461	1087	0			
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90			0.90	0.90	0.90			0.90	0.90	0.90			
PHF Volume:	593	1	439			0	0	0			512	1208	0			
Reduct Vol:	0	0	0			0	0	0			0	0	0			
Reduced Vol:	593	1	439			0	0	0			512	1208	0			
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			
Final Vol..	593	1	439			0	0	0			512	1208	0			
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			
Adjustment:	0.83	0.83	0.83			1.00	1.00	1.00			0.90	0.89	1.00			
Lanes:	0.99	0.01	1.00			0.00	0.00	0.00			2.00	3.00	0.00			
Final Sat..	1580	3	1583			0	0	0			3432	5083	0			
Capacity Analysis Module:																
Vol/Sat:	0.38	0.38	0.28			0.00	0.00	0.00			0.15	0.24	0.00			
Crit Moves:		****									****					
Green/Cycle:	0.45	0.45	0.45			0.00	0.00	0.00			0.18	0.47	0.00			
Volume/Cap:	0.84	0.84	0.62			0.00	0.00	0.00			0.84	0.51	0.00			
Delay/Veh:	37.7	37.7	26.9			0.0	0.0	0.0			57.4	22.5	0.0			
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			
AdjDel/Veh:	37.7	37.7	26.9			0.0	0.0	0.0			57.4	22.5	0.0			
HCM2kAvg:	25	25	13			0	0	0			12	10	0			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.806
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 60.0
Optimal Cycle: 73 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24	0	0	0	24	7	7	0	7	0	0	0	0		
Lanes:	1	0	1	0	1	0	1	0	1	0	2	0	3	0	1	2	0	3	1	1
Volume Module: >> Count Date: 12 Dec 2001 << AM																
Base Vol:	12	18	83	458	102	656	176	953	46	74	1321	199				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	12	18	83	458	102	656	176	953	46	74	1321	199				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90				
PHF Volume:	13	20	92	509	113	729	196	1059	51	82	1468	221				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	13	20	92	509	113	729	196	1059	51	82	1468	221				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol..	13	20	92	509	113	729	196	1059	51	82	1468	221				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	0.93	0.98	0.83	0.84	0.84	0.84	0.90	0.89	0.83	0.90	0.87	0.87				
Lanes:	1.00	1.00	1.00	0.82	0.18	1.00	2.00	3.00	1.00	2.00	4.00	1.00				
Final Sat..	1769	1862	1583	1304	290	1595	3432	5083	1583	3432	6642	1661				
Capacity Analysis Module:																
Vol/Sat:	0.01	0.01	0.06	0.39	0.39	0.46	0.06	0.21	0.03	0.02	0.22	0.13				
Crit Moves:		****				****	****				****					
Green/Cycle:	0.20	0.20	0.20	0.45	0.45	0.45	0.06	0.25	0.25	0.03	0.22	0.22				
Volume/Cap:	0.04	0.05	0.29	0.87	0.87	1.02	0.98	0.84	0.13	0.84	1.02	0.61				
Delay/Veh:	38.7	38.9	41.3	35.3	35.3	62.1	113.1	48.3	35.3	103.2	73.4	42.8				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	38.7	38.9	41.3	35.3	35.3	62.1	113.1	48.3	35.3	103.2	73.4	42.8				
HCM2kAvg:	0	1	3	24	24	35	7	15	1	3	19	8				

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.800
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 39.0
Optimal Cycle: 82 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Ovl				Include				Include			
Min. Green:	7	24	7		7	24	7		7	24	7		7	24	7	
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	1	1	0	2	0	1	1	0
Volume Module: >> Count Date: 9 Dec 2000 << AM																
Base Vol:	203	959	105	157	1244	569	325	475	297	183	734	46				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	203	959	105	157	1244	569	325	475	297	183	734	46				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89				
PHF Volume:	228	1078	118	176	1398	639	365	534	334	206	825	52				
Reduct Vol.	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	228	1078	118	176	1398	639	365	534	334	206	825	52				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Vol..	228	1078	118	176	1398	639	365	534	334	206	825	52				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	0.90	0.89	0.83	0.90	0.89	0.83	0.90	0.88	0.88	0.90	0.92	0.92				
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	1.23	0.77	2.00	1.88	0.12				
Final Sat..	3432	5083	1583	3432	5083	1583	3432	2051	1282	3432	3299	207				
Capacity Analysis Module:																
Vol/Sat:	0.07	0.21	0.07	0.05	0.27	0.40	0.11	0.26	0.26	0.06	0.25	0.25				
Crit Moves:	****					****	****				****					
Green/Cycle:	0.08	0.36	0.36	0.10	0.37	0.50	0.13	0.36	0.36	0.08	0.31	0.31				
Volume/Cap:	0.80	0.59	0.21	0.52	0.74	0.80	0.80	0.72	0.72	0.72	0.80	0.80				
Delay/Veh:	68.8	32.1	27.0	53.0	34.3	30.5	60.2	35.2	35.2	62.2	42.1	42.1				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	68.8	32.1	27.0	53.0	34.3	30.5	60.2	35.2	35.2	62.2	42.1	42.1				
HCM2kAvg:	6	11	3	4	16	21	9	15	15	5	17	17				

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave INS / EWI

Cycle (sec): 120 Critical Vol./Cap. (X): 0.887
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 45.9
Optimal Cycle: 113 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	3	0 1	1	0	2	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module: >> Count Date: 12 Dec 2001 << AM																
Base Vol:	9	695		117	121	1059		551	270	297		12	106	435		290
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	9	695		117	121	1059		551	270	297		12	106	435		290
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	10	772		130	134	1177		612	300	330		13	118	483		322
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	10	772		130	134	1177		612	300	330		13	118	483		322
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	10	772		130	134	1177		612	300	330		13	118	483		322
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.83	0.93	0.85	0.85	0.93	0.93	0.93	0.93	0.88	0.88				
Lanes:	1.00	3.00	1.00	1.00	2.00	1.00	1.00	1.92	0.08	1.00	1.20	0.80				
Final Sat..	1769	5083	1583	1769	3216	1608	1769	3380	137	1769	1995	1330				
Capacity Analysis Module:																
Vol/Sat:	0.01	0.15	0.08	0.08	0.37	0.38	0.17	0.10	0.10	0.07	0.24	0.24				
Crit Moves:	****					****	****				****					
Green/Cycle:	0.06	0.34	0.34	0.13	0.40	0.40	0.18	0.33	0.33	0.11	0.26	0.26				
Volume/Cap:	0.10	0.45	0.25	0.60	0.90	0.94	0.94	0.30	0.30	0.61	0.94	0.94				
Delay/Veh:	53.9	31.5	29.1	53.8	40.0	44.4	83.8	30.2	30.2	56.6	61.9	61.9				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	53.9	31.5	29.1	53.8	40.0	44.4	83.8	30.2	30.2	56.6	61.9	61.9				
HCM2kAvg:	0	8	2	6	24	26	16	5	5	5	19	19				

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.467
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.7
Optimal Cycle: 43 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	1	0	1	1 0	1	0	2	0 1	1	0	0	1 0	1	0	0	1 0
Volume Module:																
Base Vol:	72	664		14	34	957		60	82	23		17	28	24		93
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	72	664		14	34	957		60	82	23		17	28	24		93
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	80	738		16	38	1063		67	91	26		19	31	27		103
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol.	80	738		16	38	1063		67	91	26		19	31	27		103
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	80	738		16	38	1063		67	91	26		19	31	27		103
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.94	0.94	0.95	0.88	0.88				
Lanes:	1.00	1.96	0.04	1.00	2.00	1.00	1.00	0.58	0.42	1.00	0.21	0.79				
Final Sat..	1805	3525	74	1805	3610	1615	1805	1023	756	1805	343	1331				
Capacity Analysis Module:																
Vol/Sat:	0.04	0.21	0.21	0.02	0.29	0.04	0.05	0.02	0.02	0.02	0.08	0.08				
Crit Moves:	****				****		****				****					
Green/Cycle:	0.09	0.66	0.66	0.07	0.63	0.63	0.11	0.16	0.16	0.11	0.17	0.17				
Volume/Cap:	0.47	0.32	0.32	0.32	0.47	0.07	0.47	0.15	0.15	0.15	0.47	0.47				
Delay/Veh:	44.9	7.4	7.4	46.1	9.8	7.1	43.7	36.2	36.2	40.5	38.9	38.9				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	44.9	7.4	7.4	46.1	9.8	7.1	43.7	36.2	36.2	40.5	38.9	38.9				
HCM2kAvg:	3	5	5	1	9	1	3	1	1	1	4	4				

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 12.1 Worst Case Level Of Service: F[319.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	1	0 1	1	0	1	0 1	0	1	0	0 1	0	1	0	0 1
Volume Module:																
Base Vol:	67	733		62	33	914		24	23		9	62	20		2	11
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	67	733		62	33	914		24	23		9	62	20		2	11
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	74	814		69	37	1016		27	26		10	69	22		2	12
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	74	814		69	37	1016		27	26		10	69	22		2	12
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx		7.1		6.5	6.2	7.1		6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5		4.0	3.3	3.5		4.0	3.3
Capacity Module:																
Cnflict Vol:	1042	xxxx	xxxxx		883	xxxx	xxxxx		2094		2121	1016	2105		2079	814
Potent Cap..	675	xxxx	xxxxx		774	xxxx	xxxxx		39		51	292	38		54	381
Move Cap..	675	xxxx	xxxxx		774	xxxx	xxxxx		32		43	292	21		46	381
Volume/Cap:	0.11	xxxx	xxxx		0.05	xxxx	xxxx		0.80		0.23	0.24	1.05		0.05	0.03
Level Of Service Module:																
Queue:	0.4	xxxx	xxxxx		0.1	xxxx	xxxxx	xxxxx xxxx				0.9	xxxxx	xxxx		0.1
Stopped Del:	11.0	xxxx	xxxxx		9.9	xxxx	xxxxx	xxxxx xxxx				21.1	xxxxx	xxxx		14.8
LOS by Move:	B	*	*		A	*	*	*	*		C		*	*		B
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		34	xxxx	xxxxx		22	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		2.7	xxxx	xxxxx		2.2	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		337.3	xxxx	xxxxx		471.9	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		F	*			F	*		*
ApproachDel:	xxxxxx				xxxxxx				128.8				319.5			
ApproachLOS:	*				*				F				F			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.578
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.6
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	1	1 0	1	0	1	1 0	1	0	1	0 1	1	0	1	0 1
Volume Module: >> Count Date: 8 Jan 2002 << AM																
Base Vol:	159	608		10	27	1084		49	108		6	259	34		8	71
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	159	608		10	27	1084		49	108		6	259	34		8	71
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	177	676		11	30	1204		54	120		7	288	38		9	79
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	177	676		11	30	1204		54	120		7	288	38		9	79
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Vol..	177	676		11	30	1204		54	120		7	288	38		9	79
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900		1900	1900	1900		1900	1900
Adjustment:	0.95	0.95		0.95	0.95	0.94		0.94	0.95		1.00	0.85	0.95		1.00	0.85
Lanes:	1.00	1.97		0.03	1.00	1.91		0.09	1.00		1.00	1.00	1.00		1.00	1.00
Final Sat..	1805	3544		58	1805	3433		155	1805		1900	1615	1805		1900	1615
Capacity Analysis Module:																
Vol/Sat:	0.10	0.19		0.19	0.02	0.35		0.35	0.07		0.00	0.18	0.02		0.00	0.05
Crit Moves:	****					****			****						****	
Green/Cycle:	0.13	0.47		0.47	0.14	0.48		0.48	0.09		0.22	0.22	0.07		0.20	0.20
Volume/Cap:	0.74	0.40		0.40	0.12	0.74		0.74	0.74		0.02	0.79	0.32		0.02	0.24
Delay/Veh:	61.3	20.8		20.8	45.6	27.0		27.0	69.2		36.2	55.2	55.1		38.6	40.8
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	61.3	20.8		20.8	45.6	27.0		27.0	69.2		36.2	55.2	55.1		38.6	40.8
HCM2kAvg:	8	8		8	1	19		19	6		0	12	2		0	3

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.868
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 34.7
Optimal Cycle: 94 Level Of Service: C

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Protected					Protected					Protected					Protected
Rights:	Include					Include					Include					Include
Min. Green:	0	20		7		7	20		0		0	0		0		20
Lanes:	0	0	2	0	1	1	0	1	0	0	0	0	0	0	0	1
Volume Module:																
Base Vol:	0	338		193		449	970		0		0	0		0		263
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	338		193		449	970		0		0	0		0		263
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.81		0.90	0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	376		238		499	1078		0		0	0		0		292
Reduct Vol:	0	0		0		0	0		0		0	0		0		0
Reduced Vol:	0	376		238		499	1078		0		0	0		0		292
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	0	376		238		499	1078		0		0	0		0		292
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900
Adjustment:	1.00	0.95		0.85		0.95	1.00		1.00		1.00	1.00		1.00		0.95
Lanes:	0.00	2.00		1.00		1.00	1.00		0.00		0.00	0.00		0.00		1.00
Final Sat..	0	3610		1615		1805	1900		0		0	0		0		1805
Capacity Analysis Module:																
Vol/Sat:	0.00	0.10		0.15		0.28	0.57		0.00		0.00	0.00		0.00		0.16
Crit Moves:	****						****									
Green/Cycle:	0.00	0.25		0.25		0.41	0.65		0.00		0.00	0.00		0.00		0.27
Volume/Cap:	0.00	0.42		0.60		0.68	0.87		0.00		0.00	0.00		0.00		0.60
Delay/Veh:	0.0	38.4		42.6		31.6	23.4		0.0		0.0	0.0		0.0		40.0
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	0.0	38.4		42.6		31.6	23.4		0.0		0.0	0.0		0.0		40.0
HCM2kAvg:	0	6		8		16	34		0		0	0		0		10

****

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

****

Intersection #32 Auto Park Way / West 9th Ave (NS / EW)

****

Cycle (sec): 120 Critical Vol./Cap. (X): 1.155
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 72.9
Optimal Cycle: 180 Level Of Service: E

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Protected					Protected					Permitted					Permitted
Rights:	Include					Include					Include					Ovl
Min. Green:	7	24		7		7	24		7		0	24		7		7
Lanes:	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0	0
Volume Module: >> Count Date: 27 Nov 2001 << AM Peak																
Base Vol:	141	750		86		410	713		4		25	319		130		27
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	141	750		86		410	713		4		25	319		130		27
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		0.50		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	157	833		96		456	792		4		28	354		72		30
Reduct Vol:	0	0		0		0	0		0		0	0		0		0
Reduced Vol:	157	833		96		456	792		4		28	354		72		30
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	157	833		96		456	792		4		28	354		72		30
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900
Adjustment:	0.93	0.92		0.92		0.93	0.93		0.93		0.07	0.98		0.83		0.41
Lanes:	1.00	1.79		0.21		1.00	1.99		0.01		1.00	1.00		1.00		1.00
Final Sat..	1769	3126		358		1769	3515		20		140	1862		1583		784
Capacity Analysis Module:																
Vol/Sat:	0.09	0.27		0.27		0.26	0.23		0.23		0.20	0.19		0.05		0.04
Crit Moves:		****				****										
Green/Cycle:	0.13	0.23		0.23		0.22	0.33		0.33		0.45	0.45		0.45		0.45
Volume/Cap:	0.69	1.16		1.16		1.16	0.69		0.69		0.45	0.43		0.10		0.09
Delay/Veh:	58.9	130		129.9		141.5	37.0		37.0		28.0	23.1		19.2		19.2
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	58.9	130		129.9		141.5	37.0		37.0		28.0	23.1		19.2		19.2
HCM2kAvg:	7	28		28		29	14		14		9	9		2		1

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Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.750
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 22.8
Optimal Cycle: 70 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	0	0	0	0	0	1	1	0	0	1	0	0	2	0	1	2	0	2	0	0

Volume Module: >> Count Date: 27 Nov 2001 << AM

Base Vol:	0	0	0	85	22	17	0	643	793	248	1497	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	85	22	17	0	643	793	248	1497	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	94	24	19	0	714	881	276	1663	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	94	24	19	0	714	881	276	1663	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	94	24	19	0	714	881	276	1663	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.83	0.83	0.83	1.00	0.93	0.83	0.90	0.93	1.00
Lanes:	0.00	0.00	0.00	1.59	0.41	1.00	0.00	2.00	1.00	2.00	2.00	0.00
Final Sat..	0	0	0	2515	651	1583	0	3538	1583	3432	3538	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.04	0.04	0.01	0.00	0.20	0.56	0.08	0.47	0.00
Crit Moves:					****				****	****		
Green/Cycle:	0.00	0.00	0.00	0.20	0.20	0.20	0.00	0.61	0.61	0.09	0.70	0.00
Volume/Cap:	0.00	0.00	0.00	0.19	0.19	0.06	0.00	0.33	0.91	0.91	0.67	0.00
Delay/Veh:	0.0	0.0	0.0	40.0	40.0	38.9	0.0	11.4	32.7	83.9	10.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	40.0	40.0	38.9	0.0	11.4	32.7	83.9	10.9	0.0
HCM2kAvg:	0	0	0	2	2	1	0	6	32	8	18	0

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave (NS/ EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.678
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.0
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	1	1	0	0	1	0	0	0	0	0	2	0	2	0	0	0	0	2	0	1

Volume Module: >> Count Date: 27 Nov 2001 << AM

Base Vol:	812	9	169	0	0	0	105	673	0	0	917	296
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	812	9	169	0	0	0	105	673	0	0	917	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	902	10	188	0	0	0	117	748	0	0	1019	329
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	902	10	188	0	0	0	117	748	0	0	1019	329
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	902	10	188	0	0	0	117	748	0	0	1019	329

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.83	0.83	1.00	1.00	1.00	0.90	0.93	1.00	1.00	0.93	0.83
Lanes:	1.98	0.02	1.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat..	3131	35	1583	0	0	0	3432	3538	0	0	3538	1583

Capacity Analysis Module:

Vol/Sat:	0.29	0.29	0.12	0.00	0.00	0.00	0.03	0.21	0.00	0.00	0.29	0.21
Crit Moves:	****						****				****	
Green/Cycle:	0.42	0.42	0.42	0.00	0.00	0.00	0.06	0.48	0.00	0.00	0.42	0.42
Volume/Cap:	0.68	0.68	0.28	0.00	0.00	0.00	0.58	0.44	0.00	0.00	0.68	0.49
Delay/Veh:	29.8	29.8	23.1	0.0	0.0	0.0	59.4	20.8	0.0	0.0	29.6	26.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.8	29.8	23.1	0.0	0.0	0.0	59.4	20.8	0.0	0.0	29.6	26.0
HCM2kAvg:	17	17	5	0	0	0	2	9	0	0	16	9

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 0.913
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 32.0
Optimal Cycle: 110 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1	0 1	1	0	2	0 0	0	0	0	0 0	2	0	0	0 1
Volume Module:																
Base Vol:	0	703	191		205	962	0		0	0	0		567	0	426	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	703	191		205	962	0		0	0	0		567	0	426	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	781	212		228	1069	0		0	0	0		630	0	473	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	781	212		228	1069	0		0	0	0		630	0	473	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	781	212		228	1069	0		0	0	0		630	0	473	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	1.00	0.85		0.95	0.95	1.00		1.00	1.00	1.00		0.92	1.00	0.85	
Lanes:	0.00	1.00	1.00		1.00	2.00	0.00		0.00	0.00	0.00		2.00	0.00	1.00	
Final Sat..	0	1900	1615		1805	3610	0		0	0	0		3502	0	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.41	0.13		0.13	0.30	0.00		0.00	0.00	0.00		0.18	0.00	0.29	
Crit Moves:		****			****										****	
Green/Cycle:	0.00	0.45	0.45		0.14	0.59	0.00		0.00	0.00	0.00		0.32	0.00	0.32	
Volume/Cap:	0.00	0.91	0.29		0.91	0.50	0.00		0.00	0.00	0.00		0.56	0.00	0.91	
Delay/Veh:	0.0	39.6	17.6		77.0	12.2	0.0		0.0	0.0	0.0		28.7	0.0	53.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	39.6	17.6		77.0	12.2	0.0		0.0	0.0	0.0		28.7	0.0	53.1	
HCM2kAvg:	0	26	4		11	10	0		0	0	0		9	0	18	

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.995
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 53.9
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	0 1	2	0	2	0 1
Volume Module:																
Base Vol:	188	49	66		45	389	56		103	543	576		768	390	47	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	188	49	66		45	389	56		103	543	576		768	390	47	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	209	54	73		50	432	62		114	603	640		853	433	52	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	209	54	73		50	432	62		114	603	640		853	433	52	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	209	54	73		50	432	62		114	603	640		853	433	52	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.85		0.95	0.95	0.85		0.95	0.95	0.85		0.92	0.95	0.85	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.00	1.00		2.00	2.00	1.00	
Final Sat..	1805	3610	1615		1805	3610	1615		1805	3610	1615		3502	3610	1615	
Capacity Analysis Module:																
Vol/Sat:	0.12	0.02	0.05		0.03	0.12	0.04		0.06	0.17	0.40		0.24	0.12	0.03	
Crit Moves:	****					****					****		****			
Green/Cycle:	0.12	0.15	0.15		0.09	0.12	0.12		0.22	0.40	0.40		0.24	0.42	0.42	
Volume/Cap:	0.99	0.10	0.31		0.31	0.99	0.32		0.29	0.42	0.99		0.99	0.29	0.08	
Delay/Veh:	104.7	37.0	38.9		43.7	85.7	41.2		32.7	21.9	64.1		67.1	19.2	17.4	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	104.7	37.0	38.9		43.7	85.7	41.2		32.7	21.9	64.1		67.1	19.2	17.4	
HCM2kAvg:	11	1	2		2	11	2		3	7	26		20	4	1	

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 | Critical Vol./Cap. (X): 0.535
Loss Time (sec): 12 (Y+R = 4 sec) | Average Delay (sec/veh): 25.8
Optimal Cycle: 43 | Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	0 2	1	0	2	0 1	2	0	2	0 1	2	0	3	0 1
Volume Module:																
Base Vol:	200	49	505		20	59	34		19	497	120		342	1053	83	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	200	49	505		20	59	34		19	497	120		342	1053	83	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	222	54	561		22	66	38		21	552	133		380	1170	92	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	222	54	561		22	66	38		21	552	133		380	1170	92	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	222	54	561		22	66	38		21	552	133		380	1170	92	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.75		0.95	0.95	0.85		0.92	0.95	0.85		0.92	0.91	0.85	
Lanes:	1.00	2.00	2.00		1.00	2.00	1.00		2.00	2.00	1.00		2.00	3.00	1.00	
Final Sat.:	1805	3610	2842		1805	3610	1615		3502	3610	1615		3502	5187	1615	
Capacity Analysis Module:																
Vol/Sat:	0.12	0.02	0.20		0.01	0.02	0.02		0.01	0.15	0.08		0.11	0.23	0.06	
Crit Moves:			****		****					****			****			
Green/Cycle:	0.33	0.37	0.37		0.02	0.06	0.06		0.01	0.29	0.29		0.20	0.48	0.48	
Volume/Cap:	0.37	0.04	0.54		0.54	0.29	0.37		0.47	0.54	0.29		0.54	0.47	0.12	
Delay/Veh:	26.1	20.2	25.4		61.3	45.5	47.3		56.8	30.7	28.2		36.5	17.9	14.7	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	26.1	20.2	25.4		61.3	45.5	47.3		56.8	30.7	28.2		36.5	17.9	14.7	
HCM2kAvg:	6	1	7		2	1	2		1	8	3		6	8	2	

Harmony Grove Village
Option C: Ex + P + CP

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in V/C	
# 1 Nordahl Rd. / SR-78 WB	E	61.7	1.090	E	61.7	1.090	+ 0.000	D/V
# 2 Nordahl Rd. / SR-78 EB Ramp	F	243.0	1.720	F	243.0	1.720	+ 0.000	D/V
# 3 Nordahl Rd. / Mission Rd.	F	229.9	1.651	F	229.9	1.651	+ 0.000	D/V
# 4 Citracado Pkwy./Vineyard Ave/C	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000	D/V
# 5 Country Club/Kauana Loa	B	10.4	0.481	B	10.4	0.481	+ 0.000	V/C
# 6 Country Club/Entrance # 3	B	10.6	0.000	B	10.6	0.000	+ 0.000	D/V
# 7 Country Club/ Village Road	C	20.1	0.000	C	20.1	0.000	+ 0.000	D/V
# 8 Harmony Grove/Village Road	E	40.2	0.000	E	40.2	0.000	+ 0.000	D/V
# 9 Country Club/Entrance # 2	C	17.0	0.000	C	17.0	0.000	+ 0.000	D/V
# 10 COuntry Club/Harmony Grove	D	33.7	0.000	D	33.7	0.000	+ 0.000	D/V
# 11 Entrance # 1/Harmony Grove	D	31.4	0.000	D	31.4	0.000	+ 0.000	D/V
# 12 Wilgen Road/Harmony Grove	C	24.4	0.000	C	24.4	0.000	+ 0.000	D/V
# 13 Citracado Pkwy./Vineyard St.	D	38.5	0.957	D	38.5	0.957	+ 0.000	D/V
# 14 Harmony Grove Rd./Kauana Loa	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000	D/V
# 15 Andreasen Dr./ Vineyard Ave	D	47.2	0.797	D	47.2	0.797	+ 0.000	D/V
# 16 Andreasen Dr./Enterprise St.	F	70.6	1.228	F	70.6	1.228	+ 0.000	V/C
# 17 Harmony Grove Rd./Enterprise S	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000	D/V
# 18 Harmony Grove Rd./Howard Ave.	F	368.5	0.000	F	368.5	0.000	+ 0.000	D/V
# 19 Hale Ave. / Auto Park Way	D	35.4	0.798	D	35.4	0.798	+ 0.000	D/V
# 20 Hale Ave./11th Ave.	F	409.7	0.000	F	409.7	0.000	+ 0.000	D/V
# 21 Harmony Grove Rd./Hale Ave.	F	OVRFL	0.000	F	OVRFL	0.000	+ 0.000	D/V
# 22 Avenida Diablo/Citracado Parkw	A	9.2	0.000	A	9.2	0.000	+ 0.000	D/V
# 23 Avenida Diablo/Hale Avenue	B	10.5	0.000	B	10.5	0.000	+ 0.000	D/V
# 24 I-15 NB/Valley Pkwy	E	57.3	1.130	E	57.3	1.130	+ 0.000	D/V

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Harmony Grove Village
Option C: Ex + P + CP

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 I-15 SB/Valley Pkwy	F	87.7	1.115	F	87.7	1.115	+ 0.000 D/V
# 26 Valley Park Way / Auto Park Wa	D	46.2	0.883	D	46.2	0.883	+ 0.000 D/V
# 27 Valley Park Way / West 9th Ave	E	57.3	0.887	E	57.3	0.887	+ 0.000 D/V
# 28 Valley Pkwy/11th Street	B	11.0	0.517	B	11.0	0.517	+ 0.000 D/V
# 29 Valley Parkway/Avenida Diablo	F	284.3	0.000	F	284.3	0.000	+ 0.000 D/V
# 30 Valley Pkwy./Citracado Pkwy.	C	27.1	0.498	C	27.1	0.498	+ 0.000 D/V
# 31 Valley Pkwy./Via Rancho Pkwy.	D	38.9	0.817	D	38.9	0.817	+ 0.000 D/V
# 32 Auto Park Way / West 9th Ave	C	33.9	0.825	C	33.9	0.825	+ 0.000 D/V
# 33 I-15 SB / West 9th Ave	C	33.3	1.016	C	33.3	1.016	+ 0.000 D/V
# 34 I-15 NB / West 9th Ave	C	30.0	0.691	C	30.0	0.691	+ 0.000 D/V
# 35 San Elijo/Rancho Santa Fe	D	43.1	1.017	D	43.1	1.017	+ 0.000 D/V
# 36 Via Rancho Parkway/I-15 SB Ram	D	45.6	0.956	D	45.6	0.956	+ 0.000 D/V
# 37 Via Rancho Parkway/I-15 NB Ram	D	37.6	0.830	D	37.6	0.830	+ 0.000 D/V

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

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*******************************************************************************
Intersection #1 Nordahl Rd. / SR-78 WB (NS / EW)
*******************************************************************************
Cycle (sec):          120                Critical Vol./Cap. (X):          1.090
Loss Time (sec):        9 (Y+R =  4 sec) Average Delay (sec/veh):         61.7
Optimal Cycle:        180                Level Of Service:                   E
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:        L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:      7   24    0      0   24    7      0    0    0      7   24    7
Lanes:         2  0  2  0  0    0  0  2  0  1    0  0  0  0  0    1  0  1 1  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 13 Dec 2001 << PM
Base Vol:     1135 1014    0      0  757  211      0    0    0    427    6  267
Growth Adj:   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Initial Bse:  1135 1014    0      0  757  211      0    0    0    427    6  267
User Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Adj:      0.90 0.90 0.90   0.90 0.90 0.90   0.90 0.90 0.90   0.90 0.90 0.90
PHF Volume:   1261 1127    0      0  841  234      0    0    0    474    7  297
Reduct Vol:      0    0    0      0    0    0      0    0    0      0    0    0
Reduced Vol:  1261 1127    0      0  841  234      0    0    0    474    7  297
PCE Adj:      1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Final Vol..   1261 1127    0      0  841  234      0    0    0    474    7  297
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900   1900 1900 1900   1900 1900 1900   1900 1900 1900
Adjustment:   0.71 0.73 1.00   1.00 0.93 0.83   1.00 1.00 1.00   0.68 0.68 0.68
Lanes:        2.00 2.00 0.00   0.00 2.00 1.00   0.00 0.00 0.00   1.60 0.02 1.38
Final Sat..   2693 2776    0      0 3538 1583      0    0    0   2085   22 1791
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:      0.47 0.41 0.00   0.00 0.24 0.15   0.00 0.00 0.00   0.23 0.30 0.17
Crit Moves:   ****                     ****                                ****
Green/Cycle:  0.43 0.65 0.00   0.00 0.22 0.22   0.00 0.00 0.00   0.28 0.28 0.28
Volume/Cap:   1.09 0.63 0.00   0.00 1.09 0.68   0.00 0.00 0.00   0.82 1.09 0.60
Delay/Veh:    88.6 13.2  0.0    0.0  106 48.4    0.0  0.0  0.0   46.4  104 38.4
User DelAdj:  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
AdjDel/Veh:   88.6 13.2  0.0    0.0  106 48.4    0.0  0.0  0.0   46.4  104 38.4
HCM2kAvg:       35   13    0      0   24    9      0    0    0     13   24    8
*******************************************************************************
```

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Nordahl Rd. / SR-78 EB Ramp [NS / EW]

Cycle (sec): 100 Critical Vol./Cap. (X): 1.720
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 243.0
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	24		7	7	24		0	7	24		7	0	0		0
Lanes:	0	0	2	0 1	2	0	2	0 0	0	1	0	1 0	0	0	0	0 0
Volume Module: >> Count Date: 13 Dec 2001 << PM																
Base Vol:	0	1761		914	372	804		0	263		2	627	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Initial Bse:	0	1761		914	372	804		0	263		2	627	0	0		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90		0.90
PHF Volume:	0	1957		1016	413	893		0	292		2	697	0	0		0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0	0		0
Reduced Vol:	0	1957		1016	413	893		0	292		2	697	0	0		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Final Vol..	0	1957		1016	413	893		0	292		2	697	0	0		0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900		1900	1900	1900	1900		1900
Adjustment:	1.00	0.73		0.65	0.90	0.93		1.00	0.59		0.59	0.59	1.00	1.00		1.00
Lanes:	0.00	2.00		1.00	2.00	2.00		0.00	0.99		0.01	1.00	0.00	0.00		0.00
Final Sat..	0	2776		1242	3432	3538		0	1103		8	1112	0	0		0
Capacity Analysis Module:																
Vol/Sat:	0.00	0.70		0.82	0.12	0.25		0.00	0.26		0.26	0.63	0.00	0.00		0.00
Crit Moves:				****	****							****				
Green/Cycle:	0.00	0.48		0.48	0.07	0.55		0.00	0.36		0.36	0.36	0.00	0.00		0.00
Volume/Cap:	0.00	1.48		1.72	1.72	0.46		0.00	0.73		0.73	1.72	0.00	0.00		0.00
Delay/Veh:	0.0	247		357.1	387.3	14.0		0.0	29.5		29.5	362.9	0.0	0.0		0.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	247		357.1	387.3	14.0		0.0	29.5		29.5	362.9	0.0	0.0		0.0
HCM2kAvg:	0	70		84	19	8		0	10		10	65	0	0		0

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Nordahl Rd. / Mission Rd. [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 1.651
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 229.9
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	0	2	0 1	2	0	1	1 0	2	0	2	0 1	2	0	2	0 1
Volume Module: >> Count Date: 13 Dec 2001 << PM																
Base Vol:	649	1813		73	236	835		258	387	645		387	57	535		552
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	649	1813		73	236	835		258	387	645		387	57	535		552
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	721	2014		81	262	928		287	430	717		430	63	594		613
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	721	2014		81	262	928		287	430	717		430	63	594		613
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	721	2014		81	262	928		287	430	717		430	63	594		613
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.73	0.73		0.65	0.71	0.70		0.70	0.90	0.93		0.83	0.90	0.93		0.83
Lanes:	1.00	2.00		1.00	2.00	1.53		0.47	2.00	2.00		1.00	2.00	2.00		1.00
Final Sat..	1388	2776		1242	2693	2047		632	3432	3538		1583	3432	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.52	0.73		0.07	0.10	0.45		0.45	0.13	0.20		0.27	0.02	0.17		0.39
Crit Moves:	****					****			****							****
Green/Cycle:	0.31	0.52		0.52	0.07	0.27		0.27	0.08	0.26		0.26	0.05	0.23		0.23
Volume/Cap:	1.65	1.40		0.13	1.40	1.65		1.65	1.65	0.79		1.06	0.34	0.72		1.65
Delay/Veh:	344.1	212		14.9	263.3	342		342.4	364.9	46.5		106.9	55.7	45.2		350.6
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	344.1	212		14.9	263.3	342		342.4	364.9	46.5		106.9	55.7	45.2		350.6
HCM2kAvg:	65	73		2	12	53		53	21	14		23	2	11		53

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

```
*
Intersection #4 Citracado Pkwy./Vineyard Ave/Country Club (NS / EW)
*
Average Delay (sec/veh):   1065.7   Worst Case Level Of Service:
F(13236.1)
*
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:       L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
----------------|---------------||---------------||---------------||---------------
|
Control:        Uncontrolled     Uncontrolled     Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:          1  0  2  0  1    1  0  2  0  1    0  1  0  0  1    0  0  1! 0  0
----------------|---------------||---------------||---------------||---------------
|
Volume Module: >> Count Date: 11 Dec 2001 << PM
Base Vol:       65 2252    5    39  981  353   263    1   60    1    0   12
Growth Adj:   1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    65 2252    5    39  981  353   263    1   60    1    0   12
User Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      0.90 0.90 0.90  0.90 0.90 0.90  0.90 0.90 0.90 0.90 0.90 0.90
PHF Volume:     72 2502    6    43 1090  392   292    1   67    1    0   13
Reduct Vol:      0    0    0     0    0    0     0    0    0    0    0    0
Final Vol..     72 2502    6    43 1090  392   292    1   67    1    0   13
----------------|---------------||---------------||---------------||---------------
|
Critical Gap Module:
Critical Gp:   4.1 xxxx xxxxx   4.1 xxxx xxxxx   7.5  6.5   6.9  7.5 xxxx   6.9
FollowUpTim:   2.2 xxxx xxxxx   2.2 xxxx xxxxx   3.5  4.0   3.3  3.5 xxxx   3.3
----------------|---------------||---------------||---------------||---------------
|
Capacity Module:
Cnflict Vol: 1482 xxxx xxxxx  2508 xxxx xxxxx  2572 3829   545  3279 xxxx  1251
Potent Cap..  450 xxxx xxxxx   178 xxxx xxxxx    13    4   482     4 xxxx   164
Move Cap..    450 xxxx xxxxx   178 xxxx xxxxx     8    2   482     1 xxxx   164
Volume/Cap:  0.16 xxxx  xxxx  0.24 xxxx  xxxx 34.69 0.47  0.14  0.78 xxxx  0.08
----------------|---------------||---------------||---------------||---------------
|
Level Of Service Module:
Queue:        0.6 xxxx xxxxx   0.9 xxxx xxxxx xxxxx xxxx   0.5 xxxxx xxxx xxxxx
Stopped Del: 14.5 xxxx xxxxx  31.6 xxxx xxxxx xxxxx xxxx  13.7 xxxxx xxxx xxxxx
LOS by Move:   B    *    *     D    *    *     *    *     B     *    *    *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx    8 xxxx xxxxx  xxxx   17 xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 38.5 xxxx xxxxx xxxxx  2.2 xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 16241 xxxx xxxxx xxxxx  479 xxxxx
Shared LOS:    *    *    *     *    *    *     F    *    *     *    F    *
ApproachDel:   xxxxxx          xxxxxx          xxxxxx          478.6
ApproachLOS:     *               *               F               F
```


Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

```
*
Intersection #5 Country Club/Kauana Loa
*
Cycle (sec):        100                 Critical Vol./Cap. (X):        0.481
Loss Time (sec):      0 (Y+R =  4 sec) Average Delay (sec/veh):        10.4
Optimal Cycle:        0                 Level Of Service:                 B
*
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:       L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
----------------|---------------||---------------||---------------||---------------
|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Ignore           Include          Include          Include
Min. Green:      0    0    0     0    0    0     0    0    0     0    0    0
Lanes:        0  0  1  0  1     0  1  0  0  0     0  0  0  0  0     0  0  1! 0  0
----------------|---------------||---------------||---------------||---------------
|
Volume Module:
Base Vol:        0  126    9    90  253    0     0    0    0    20    0   81
Growth Adj:   1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:     0  126    9    90  253    0     0    0    0    20    0   81
User Adj:     1.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:      0.90 0.90 0.00  0.90 0.90 0.90  0.90 0.90 0.90  0.90 0.90 0.90
PHF Volume:      0  140    0   100  281    0     0    0    0    22    0   90
Reduct Vol:      0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:     0  140    0   100  281    0     0    0    0    22    0   90
PCE Adj:      1.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:      1.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol..      0  140    0   100  281    0     0    0    0    22    0   90
----------------|---------------||---------------||---------------||---------------
|
Saturation Flow Module:
Adjustment:   1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:        0.00 1.00 1.00  0.26 0.74 0.00  0.00 0.00 0.00  0.20 0.00 0.80
Final Sat..      0  696    0   208  584    0     0    0    0   143    0  577
----------------|---------------||---------------||---------------||---------------
|
Capacity Analysis Module:
Vol/Sat:      xxxx 0.20  xxxx  0.48 0.48  xxxx  xxxx xxxx  xxxx  0.16 xxxx  0.16
Crit Moves:          ****                ****                      ****
Delay/Veh:     0.0  9.0   0.0  11.5 11.5   0.0   0.0  0.0   0.0   8.4  0.0   8.4
Delay Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:    0.0  9.0   0.0  11.5 11.5   0.0   0.0  0.0   0.0   8.4  0.0   8.4
LOS by Move:    *    A     *     B    B     *     *    *     *     A    -     A
ApproachDel:        9.0              11.5            xxxxxx              8.4
Delay Adj:         1.00              1.00             xxxxx             1.00
ApprAdjDel.         9.0              11.5            xxxxxx              8.4
LOS by Appr:         A                B                 *                 A
*
```

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Country Club/Entrance # 2

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[10.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 0	0	1	0	0 0	0	0	0	0 0	0	0	0	0 1
Volume Module:																
Base Vol:	0	335		0	52	494		0	0		0	0	0		0	30
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	335		0	52	494		0	0		0	0	0		0	30
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	0	372		0	58	549		0	0		0	0	0		0	33
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	0	372		0	58	549		0	0		0	0	0		0	33
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	4.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		6.2
FollowUpTim:	xxxxx	xxxx		xxxxx	2.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		3.3
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	372	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		372
Potent Cap.:	xxxx	xxxx		xxxxx	1197	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		678
Move Cap..	xxxx	xxxx		xxxxx	1197	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		678
Volume/Cap:	xxxx	xxxx		xxxx	0.05	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		0.05
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	0.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		0.2
Stopped Del:	xxxxx	xxxx		xxxxx	8.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		10.6
LOS by Move:	*	*		*	A	*		*	*	*		*	*	*		B
Movement:	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	0.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	8.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	A	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				10.6			
ApproachLOS:	*				*				*				B			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Average Delay (sec/veh): 6.2 Worst Case Level Of Service: C[20.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 1	1	0	1	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0	184		156	0	261		0	0		0	0	274		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	184		156	0	261		0	0		0	0	274		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	0	204		173	0	290		0	0		0	0	304		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	0	204		173	0	290		0	0		0	0	304		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	6.4	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	3.5	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	494	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	538	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	538	xxxx		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	0.57	xxxx		xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	3.5	xxxx		xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	20.1	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		*	*	*		*	C	*		*
Movement:	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT	LT -	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				20.1			
ApproachLOS:	*				*				*				C			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 4.7 Worst Case Level Of Service: E[40.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	1	0 0	0	0	1	0 1	1	0	0	0 1	0	0	0	0 0
Volume Module:																
Base Vol:	0	557		0	0	353		274	156		0	0	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	557		0	0	353		274	156		0	0	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	0	619		0	0	392		304	173		0	0	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	0	619		0	0	392		304	173		0	0	0		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	6.4		xxxx	xxxxx	xxxxx		xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	3.5		xxxx	xxxxx	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	1011		xxxx	xxxxx	xxxx		xxxx	xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	268		xxxx	xxxxx	xxxx		xxxx	xxxxx
Move Cap..	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	268		xxxx	xxxxx	xxxx		xxxx	xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	0.65		xxxx	xxxx	xxxx		xxxx	xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	4.1		xxxx	xxxxx	xxxxx		xxxx	xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	40.2		xxxx	xxxxx	xxxxx		xxxx	xxxxx
LOS by Move:	*	*		*	*	*		*	E		*	*	*		*	*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				40.2				xxxxxx			
ApproachLOS:	*				*				E				*			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Country Club/Entrance # 2

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: C[17.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0 0	0	0	0	1 0	1	0	0	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	169		0	0	202		292	166		0	0	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	169		0	0	202		292	166		0	0	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90
PHF Volume:	0	188		0	0	224		324	184		0	0	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol..	0	188		0	0	224		324	184		0	0	0		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	6.4		xxxx	xxxxx	xxxxx		xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	3.5		xxxx	xxxxx	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	574		xxxx	xxxxx	xxxx		xxxx	xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	483		xxxx	xxxxx	xxxx		xxxx	xxxxx
Move Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	483		xxxx	xxxxx	xxxx		xxxx	xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	0.38		xxxx	xxxx	xxxx		xxxx	xxxx
Level Of Service Module:																
Queue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	1.8		xxxx	xxxxx	xxxxx		xxxx	xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	17.0		xxxx	xxxxx	xxxxx		xxxx	xxxxx
LOS by Move:	*	*		*	*	*		*	C		*	*	*		*	*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				17.0				xxxxxx			
ApproachLOS:	*				*				C				*			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Country Club/Harmony Grove

Average Delay (sec/veh): 4.8 Worst Case Level Of Service: D[33.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	4	8	13		3	17	168		171	568		6	24	277		5
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	4	8	13		3	17	168		171	568		6	24	277		5
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	4	9	14		3	19	187		190	631		7	27	308		6
Reduct Vol:	0	0	0		0	0	0		0	0		0	0	0		0
Final Vol..	4	9	14		3	19	187		190	631		7	27	308		6
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1481	1381	634		1390	1382	311		313	xxxx	xxxxx		638	xxxx	xxxxx	
Potent Cap..	105	145	482		121	145	734		1258	xxxx	xxxxx		956	xxxx	xxxxx	
Move Cap...	59	117	482		94	117	734		1258	xxxx	xxxxx		956	xxxx	xxxxx	
Volume/Cap:	0.08	0.08	0.03		0.04	0.16	0.25		0.15	xxxx	xxxx		0.03	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.5	xxxx	xxxxx		0.1	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.4	xxxx	xxxxx		8.9	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	153	xxxxx		xxxx	464	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.6	xxxxx		xxxxx	2.3	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	33.7	xxxxx		xxxxx	19.0	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	D	*		*	C	*		*	*	*		*	*	*	
ApproachDel:	33.7				19.0				xxxxxx				xxxxxx			
ApproachLOS:	D				C				*				*			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Entrance # 1/Harmony Grove

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: D[31.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	1	0	0 0	0	0	0	1 0
Volume Module:																
Base Vol.	0	0	0		56	0	17		29	679		0	0	365		98
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		56	0	17		29	679		0	0	365		98
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		62	0	19		32	754		0	0	406		109
Reduct Vol:	0	0	0		0	0	0		0	0		0	0	0		0
Final Vol..	0	0	0		62	0	19		32	754		0	0	406		109
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		1279	xxxx	460		514	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap..	xxxx	xxxx	xxxxx		185	xxxx	605		1061	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap..	xxxx	xxxx	xxxxx		181	xxxx	605		1061	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.34	xxxx	0.03		0.03	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	216	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	1.6	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	31.4	xxxxx		8.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	D	*		A	*	*		*	*	*	
ApproachDel:	xxxxxx				31.4				xxxxxx				xxxxxx			
ApproachLOS:	*				D				*				*			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Wilgen Road/Harmony Grove

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[24.4]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	0	0	1!	0	0	1	0	0	0	0	1	0
Volume Module:																
Base Vol:	0	0	0		41	0	7		15	667	0		0	312	73	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		41	0	7		15	667	0		0	312	73	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		46	0	8		17	741	0		0	347	81	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		46	0	8		17	741	0		0	347	81	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		1162	xxxx	387		428	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx		218	xxxx	665		1142	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx		215	xxxx	665		1142	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx		0.21	xxxx	0.01		0.01	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*			A	*	*	*	*	*		
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	239	xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx			0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	24.4	xxxxx			8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	*	C	*			A	*	*	*	*	*		
ApproachDel:	xxxxxx				24.4				xxxxxx				xxxxxx			
ApproachLOS:	*				C				*				*			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Citracado Pkwy./Vineyard St.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.957
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 38.5
Optimal Cycle: 144 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	2	0	0	0	1	0	0	0	0	0	0	0	2	0	1	0
Volume Module: PM Peak																
Base Vol:	1025	0	464		0	0	0		0	933	295		121	910	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1025	0	464		0	0	0		0	933	295		121	910	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	1139	0	516		0	0	0		0	1037	328		134	1011	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	1139	0	516		0	0	0		0	1037	328		134	1011	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	1139	0	516		0	0	0		0	1037	328		134	1011	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.92	1.00	0.85		1.00	1.00	1.00		1.00	1.00	0.75		0.46	1.00	1.00	
Lanes:	2.00	0.00	1.00		0.00	0.00	0.00		0.00	1.00	2.00		2.00	1.00	0.00	
Final Sat.:	3502	0	1615		0	0	0		0	1900	2842		1732	1900	0	
Capacity Analysis Module:																
Vol/Sat:	0.33	0.00	0.32		0.00	0.00	0.00		0.00	0.55	0.12		0.08	0.53	0.00	
Crit Moves:	****									****						
Green/Cycle:	0.34	0.00	0.34		0.00	0.00	0.00		0.00	0.57	0.91		0.57	0.57	0.00	
Volume/Cap:	0.96	0.00	0.94		0.00	0.00	0.00		0.00	0.96	0.13		0.14	0.93	0.00	
Delay/Veh:	49.1	0.0	56.3		0.0	0.0	0.0		0.0	38.2	0.5		10.1	33.9	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	49.1	0.0	56.3		0.0	0.0	0.0		0.0	38.2	0.5		10.1	33.9	0.0	
HCM2kAvg:	23	0	20		0	0	0		0	36	1		2	33	0	

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Harmony Grove Rd./Kauana Loa (NS / EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Volume Module: >> Count Date: 28 Nov 2001 << PM Peak																				
Base Vol:	26		0		743	0		0		0	0		63		42	796		102		0
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	26		0		743	0		0		0	0		63		42	796		102		0
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	29		0		826	0		0		0	0		70		47	884		113		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol..	29		0		826	0		0		0	0		70		47	884		113		0
Critical Gap Module:																				
Critical Gp:	6.4	xxxx			6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx			3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																				
Cnflict Vol:	1976	xxxx			93	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				117	xxxx	xxxxx			
Potent Cap..	68	xxxx			964	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				1472	xxxx	xxxxx			
Move Cap..	0	xxxx			964	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				1472	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx			0.86	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx				0.60	xxxx	xxxx			
Level Of Service Module:																				
Queue:	xxxxx	xxxx			11.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				4.3	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx			26.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				11.1	xxxx	xxxxx			
LOS by Move:	*	*			D	*	*	*	*	*	*				B	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			4.3	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			11.1	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			*	*	*			B	*	*		
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	F					*					*					*				

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Andreasen Dr./ Vineyard Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.797
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 47.2
Optimal Cycle: 81 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7		24		7	7		24		7	7		24		7	7		24		7
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0	1	1	0	1	0	2	0	1
Volume Module: >> Count Date: 11 Dec 2001 << AM																				
Base Vol:	368		277		281	104		109		62	80		962		132	136		541		134
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	368		277		281	104		109		62	80		962		132	136		541		134
User Adj:	0.98		0.98		0.98	0.98		0.98		0.98	0.98		0.98		0.98	0.98		0.98		0.98
PHF Adj:	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	401		302		306	113		119		68	87		1048		144	148		589		146
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	401		302		306	113		119		68	87		1048		144	148		589		146
PCE Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	401		302		306	113		119		68	87		1048		144	148		589		146
Saturation Flow Module:																				
Sat/Lane:	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900		1900
Adjustment:	0.93		0.98		0.83	0.93		0.98		0.83	0.93		0.91		0.91	0.93		0.93		0.83
Lanes:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.76		0.24	1.00		2.00		1.00
Final Sat..	1769		1862		1583	1769		1862		1583	1769		3055		419	1769		3538		1583
Capacity Analysis Module:																				
Vol/Sat:	0.23		0.16		0.19	0.06		0.06		0.04	0.05		0.34		0.34	0.08		0.17		0.09
Crit Moves:	****							****					****			****				
Green/Cycle:	0.24		0.34		0.34	0.11		0.20		0.20	0.10		0.37		0.37	0.09		0.35		0.35
Volume/Cap:	0.93		0.48		0.58	0.60		0.32		0.21	0.48		0.93		0.93	0.93		0.47		0.26
Delay/Veh:	71.8		32.2		34.4	56.2		41.5		40.4	52.7		49.0		49.0	106.1		30.2		27.8
User DelAdj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	71.8		32.2		34.4	56.2		41.5		40.4	52.7		49.0		49.0	106.1		30.2		27.8
HCM2kAvg:	19		9		10	5		4		2	4		25		25	9		8		4

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #16 Andreasen Dr./Enterprise St. (NS / EW)

```
Cycle (sec):          120                Critical Vol./Cap. (X):          1.228
Loss Time (sec):       12 (Y+R =  4 sec) Average Delay (sec/veh):        70.6
Optimal Cycle:          0                Level Of Service:                  F
```

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1
Volume Module: >> Count Date: 28 Nov 2001 << PM																				
Base Vol:	113	82		167		276	28		6		7	219		443		44	57		350	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	113	82		167		276	28		6		7	219		443		44	57		350	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	126	91		186		307	31		7		8	243		492		49	63		389	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	126	91		186		307	31		7		8	243		492		49	63		389	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	126	91		186		307	31		7		8	243		492		49	63		389	
Saturation Flow Module:																				
Adjustment:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Lanes:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Sat..	326	340		367		333	343		367		344	368		401		334	351		389	
Capacity Analysis Module:																				
Vol/Sat:	0.39	0.27		0.51		0.92	0.09		0.02		0.02	0.66		1.23		0.15	0.18		1.00	
Crit Moves:				****		****								****					****	
Delay/Veh:	20.0	16.7		21.5		64.4	14.0		12.5		13.1	28.9		149.6		14.9	14.8		76.7	
Delay Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	20.0	16.7		21.5		64.4	14.0		12.5		13.1	28.9		149.6		14.9	14.8		76.7	
LOS by Move:	C	C		C		F	B		B		B	D		F		B	B		F	
ApproachDel:		19.9					58.9					108.7					62.8			
Delay Adj:		1.00					1.00					1.00					1.00			
ApprAdjDel:		19.9					58.9					108.7					62.8			
LOS by Appr:		C					F					F					F			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Harmony Grove Rd./Enterprise St. (NS / EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	1	0	0	0	0	0	0	0	1	0		0	1	0	0	0
Volume Module: >> Count Date: 28 Nov 2001 << PM																				
Base Vol:	210		0		791		0		0		0		0	754		184	585		260	0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:	210		0		791		0		0		0		0	754		184	585		260	0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	0.90
PHF Volume:	233		0		879		0		0		0		0	838		204	650		289	0
Reduct Vol:	0		0		0		0		0		0		0	0		0	0		0	0
Final Vol..	233		0		879		0		0		0		0	838		204	650		289	0
Critical Gap Module:																				
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	2529	xxxx		940	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				1042	xxxx	xxxxx				
Potent Cap..	30	xxxx		320	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				667	xxxx	xxxxx				
Move Cap..	0	xxxx		320	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				667	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx		2.75	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx				0.97	xxxx	xxxx				
Level Of Service Module:																				
Queue:	xxxxx	xxxx		74.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				14.6	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx		820.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				53.5	xxxx	xxxxx				
LOS by Move:	*	*		F	*	*	*	*	*	*				F	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT					LT - LTR - RT						
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				14.6	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				53.5	xxxx	xxxxx				
Shared LOS:	*	*		*	*	*	*	*	*	*				F	*	*				
ApproachDel:	xxxxxx				xxxxxx				xxxxxx					xxxxxx						
ApproachLOS:	F				*				*					*						

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Harmony Grove Rd./Howard Ave.

Average Delay (sec/veh): 21.1 Worst Case Level Of Service: F[368.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	1	0	0	0 1	0	1	0	0 0	0	0	0	1 0
Volume Module: >> Count Date: 12 Dec 2001 <<																
Base Vol:	0	0	0		39	0		96	196	1361		0	0	716		51
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0	0		39	0		96	196	1361		0	0	716		51
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0	0		43	0		107	218	1512		0	0	796		57
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Final Vol.:	0	0	0		43	0		107	218	1512		0	0	796		57
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx		6.2	4.1	xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx		3.3	2.2	xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		2772	xxxx		824	852	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		22	xxxx		376	795	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		16	xxxx		376	795	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		2.65	xxxx		0.28	0.27	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		6.1	xxxx		1.1	1.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx		1230	xxxx		18.3	11.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		F	*		C	B	*	*	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx		xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx		xxxxx	1.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx		xxxxx	11.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*		*	B	*	*		*	*	*	
ApproachDel:	xxxxxx				368.5				xxxxxx				xxxxxx			
ApproachLOS:	*				F				*				*			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Hale Ave. / Auto Park Way (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.798
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.4
Optimal Cycle: 81 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		7	0		7	7	24		0	0	24		7
Lanes:	0	1	0	1 0	1	0	0	1 0	1	0	1	1 0	1	0	2	0 1
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	28	12	28		386	9		187	253	1372		14	26	755		357
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	28	12	28		386	9		187	253	1372		14	26	755		357
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	31	13	31		429	10		208	281	1524		16	29	839		397
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	31	13	31		429	10		208	281	1524		16	29	839		397
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	31	13	31		429	10		208	281	1524		16	29	839		397
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.86	0.86	0.86		0.93	0.84		0.84	0.93	0.93		0.93	0.93	0.93		0.83
Lanes:	0.83	0.35	0.82		1.00	0.05		0.95	1.00	1.98		0.02	1.00	2.00		1.00
Final Sat.:	1339	574	1339		1769	73		1522	1769	3499		36	1769	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.02	0.02	0.02		0.24	0.14		0.14	0.16	0.44		0.44	0.02	0.24		0.25
Crit Moves:		****			****					****			****			
Green/Cycle:	0.03	0.03	0.03		0.30	0.30		0.30	0.22	0.55		0.55	0.02	0.35		0.35
Volume/Cap:	0.80	0.80	0.80		0.80	0.45		0.45	0.72	0.80		0.80	0.80	0.68		0.72
Delay/Veh:	94.1	94.1	94.1		46.5	34.3		34.3	49.9	24.3		24.3	131.9	35.2		38.9
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	94.1	94.1	94.1		46.5	34.3		34.3	49.9	24.3		24.3	131.9	35.2		38.9
HCM2kAvg:	3	3	3		17	7		7	11	24		24	3	14		14

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Hale Ave./11th Ave.

Average Delay (sec/veh): 31.4 Worst Case Level Of Service: F[409.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module: >> Count Date: 12 Dec 2001 <<																				
Base Vol:	0	936		145		5	626		0		0	0		0		130		0		12
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00
Initial Bse:	0	936		145		5	626		0		0	0		0		130		0		12
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90
PHF Volume:	0	1040		161		6	696		0		0	0		0		144		0		13
Reduct Vol:	0	0		0		0	0		0		0	0		0		0		0		0
Final Vol..	0	1040		161		6	696		0		0	0		0		144		0		13
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		6.4	xxxx		6.2	
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		3.5	xxxx		3.3	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		1201	xxxx		xxxxx		xxxx	xxxx		xxxxx		1827	xxxx		1121	
Potent Cap.:	xxxx	xxxx		xxxxx		588	xxxx		xxxxx		xxxx	xxxx		xxxxx		85	xxxx		253	
Move Cap..	xxxx	xxxx		xxxxx		588	xxxx		xxxxx		xxxx	xxxx		xxxxx		85	xxxx		253	
Volume/Cap:	xxxx	xxxx		xxxx		0.01	xxxx		xxxx		xxxx	xxxx		xxxx		1.70	xxxx		0.05	
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		12.0	xxxx		0.2	
Stopped Del:	xxxxx	xxxx		xxxxx		11.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		445.7	xxxx		20.0	
LOS by Move:	*	*		*		B	*		*		*	*		*		F	*		C	
Movement:	LT -	LTR -		RT		LT -	LTR -		RT		LT -	LTR -		RT		LT -	LTR -		RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx		11.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		B	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					409.7				
ApproachLOS:	*					*					*					F				

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Harmony Grove Rd./Hale Ave.

Average Delay (sec/veh): 1171.1 Worst Case Level Of Service: F[2114.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module: >> Count Date: 12 Dec 2001 <<																				
Base Vol.	246	91		0		0	83		664		1023		0		320		0		0	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00
Initial Bse:	246	91		0		0	83		664		1023		0		320		0		0	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90
PHF Volume:	273	101		0		0	92		738		1137		0		356		0		0	
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0	
Final Vol..	273	101		0		0	92		738		1137		0		356		0		0	
Critical Gap Module:																				
Critical Gp:	4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		6.4	xxxx		6.2	xxxxx		xxxx		xxxxx	
FollowUpTim:	2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		3.5	xxxx		3.3	xxxxx		xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	830	xxxx		xxxxx		xxxx	xxxx		xxxxx		1109	xxxx		461	xxxx		xxxx		xxxxx	
Potent Cap..	811	xxxx		xxxxx		xxxx	xxxx		xxxxx		234	xxxx		605	xxxx		xxxx		xxxxx	
Move Cap..	811	xxxx		xxxxx		xxxx	xxxx		xxxxx		162	xxxx		605	xxxx		xxxx		xxxxx	
Volume/Cap:	0.34	xxxx		xxxx		xxxx	xxxx		xxxx		7.04	xxxx		0.59	xxxx		xxxx		xxxx	
Level Of Service Module:																				
Queue:	1.5	xxxx		xxxxx		xxxxx	xxxx		xxxxx		125.3	xxxx		3.8	xxxxx		xxxx		xxxxx	
Stopped Del:	11.7	xxxx		xxxxx		xxxxx	xxxx		xxxxx		2770	xxxx		19.1	xxxxx		xxxx		xxxxx	
LOS by Move:	B	*		*		*	*		*		F	*		C	*		*		*	
Movement:	LT -	LTR -		RT		LT -	LTR -		RT		LT -	LTR -		RT		LT -	LTR -		RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	1.5	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	11.7	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	B	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel.	xxxxxx					xxxxxx					2114.2					xxxxxx				
ApproachLOS:	*					*					F					*				

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Avenida Diablo/Citracado Parkway

Average Delay (sec/veh): 7.6 Worst Case Level Of Service: A[9.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Yield Sign				Yield Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0
Volume Module:																
Base Vol:	6	0	161		0	0	0		0	14	4		226	16	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	6	0	161		0	0	0		0	14	4		226	16	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	7	0	179		0	0	0		0	16	4		251	18	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	7	0	179		0	0	0		0	16	4		251	18	0	
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx			
Capacity Module:																
Cnflict Vol:	538	xxxx	18	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		20	xxxx	xxxxx			
Potent Cap..	508	xxxx	1067	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1609	xxxx	xxxxx			
Move Cap..	447	xxxx	1067	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1609	xxxx	xxxxx			
Volume/Cap:	0.01	xxxx	0.17	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.16	xxxx	xxxx			
Level Of Service Module:																
Queue:	0.0	xxxx	0.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.6	xxxx	xxxxx			
Stopped Del:	13.2	xxxx	9.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.7	xxxx	xxxxx			
LOS by Move:	B	*	A		*	*	*	*	*	*	A	*	*			
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	9.2				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	A				*				*				*			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Avenida Diablo/Hale Avenue

Average Delay (sec/veh): 7.6 Worst Case Level Of Service: B[10.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	0	1	0	1	0	1	0	0	0	0	1	0
Volume Module:																
Base Vol:	0	0	0		86	0	217		168	13	0		0	21	85	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		86	0	217		168	13	0		0	21	85	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	0	0		96	0	241		187	14	0		0	23	94	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		96	0	241		187	14	0		0	23	94	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		411	xxxx	23		118	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx		601	xxxx	1059		1483	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap..	xxxx	xxxx	xxxxx		536	xxxx	1059		1483	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx		0.18	xxxx	0.23		0.13	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	0.9		0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	9.4		7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*	A		A	*	*	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		536	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		0.6	xxxx	xxxxx		0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx		13.2	xxxx	xxxxx		7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*		B	*	*		A	*	*	*	*	*		
ApproachDel:	xxxxxx				10.5				xxxxxx				xxxxxx			
ApproachLOS:	*				B				*				*			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 I-15 NB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.130
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): 57.3
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	0	0		0	7	24		7
Lanes:	0	1	0	0 1	0	0	0	0 0	2	0	3	0 0	0	0	3	0 1
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	228	0	414		0	0		0	821	1623		0	0	1498		683
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	228	0	414		0	0		0	821	1623		0	0	1498		683
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	253	0	460		0	0		0	912	1803		0	0	1664		759
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	253	0	460		0	0		0	912	1803		0	0	1664		759
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	253	0	460		0	0		0	912	1803		0	0	1664		759
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	1.00	0.83		1.00	1.00		1.00	0.90	0.89		1.00	1.00	0.89		0.83
Lanes:	1.00	0.00	1.00		0.00	0.00		0.00	2.00	3.00		0.00	0.00	2.00		1.00
Final Sat..	1773	0	1583		0	0		0	3432	5083		0	0	5083		1583
Capacity Analysis Module:																
Vol/Sat:	0.14	0.00	0.29		0.00	0.00		0.00	0.27	0.35		0.00	0.00	0.33		0.48
Crit Moves:			****						****							****
Green/Cycle:	0.26	0.00	0.26		0.00	0.00		0.00	0.24	0.66		0.00	0.00	0.42		0.42
Volume/Cap:	0.56	0.00	1.13		0.00	0.00		0.00	1.13	0.54		0.00	0.00	0.77		1.13
Delay/Veh:	40.1	0.0	129.6		0.0	0.0		0.0	119.8	11.0		0.0	0.0	31.3		110.9
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	40.1	0.0	129.6		0.0	0.0		0.0	119.8	11.0		0.0	0.0	31.3		110.9
HCM2kAvg:	9	0	27		0	0		0	28	12		0	0	19		42

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 I-15 SB/Valley Pkwy (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.115
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 87.7
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		0	0	24		7	7	0		7	0	0		0
Lanes:	1	0	1	0 1	0	1	0	1 0	2	0	3	0 1	2	0	3	1 1
Volume Module: >> Count Date: 12 Dec 2001 << PM																
Base Vol:	46	48	307		415	229		414	397	1676		43	276	934		462
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	46	48	307		415	229		414	397	1676		43	276	934		462
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	51	53	341		461	254		460	441	1862		48	307	1038		513
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	51	53	341		461	254		460	441	1862		48	307	1038		513
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	51	53	341		461	254		460	441	1862		48	307	1038		513
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.93	0.98	0.83		0.86	0.86		0.86	0.90	0.89		0.83	0.90	0.85		0.85
Lanes:	1.00	1.00	1.00		0.79	0.43		0.78	2.00	3.00		1.00	2.00	2.35		1.65
Final Sat..	1769	1862	1583		1281	707		1278	3432	5083		1583	3432	5385		2664
Capacity Analysis Module:																
Vol/Sat:	0.03	0.03	0.22		0.36	0.36		0.36	0.13	0.37		0.03	0.09	0.19		0.19
Crit Moves:					****	****				****			****			
Green/Cycle:	0.20	0.20	0.20		0.32	0.32		0.32	0.16	0.33		0.33	0.08	0.24		0.24
Volume/Cap:	0.14	0.14	1.08		1.13	1.13		1.13	0.79	1.13		0.09	1.13	0.79		0.79
Delay/Veh:	39.7	39.7	120.8		109.7	110		109.7	56.0	105		28.2	147.7	44.9		44.9
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	39.7	39.7	120.8		109.7	110		109.7	56.0	105		28.2	147.7	44.9		44.9
HCM2kAvg:	2	2	20		34	34		34	10	35		1	11	13		13

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Valley Park Way / Auto Park Way [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.883
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 46.2
Optimal Cycle: 111 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Ovl					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	2	0	2	0	1	2	0	2	0	1	2	0	1	1	0	2	0	1	1	0
Volume Module: >> Count Date: 9 Dec 2000 << PM																				
Base Vol:	301	1316		51		140	1020		377		722	900		213		206	534		167	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	301	1316		51		140	1020		377		722	900		213		206	534		167	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	334	1462		57		156	1133		419		802	1000		237		229	593		186	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	334	1462		57		156	1133		419		802	1000		237		229	593		186	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	334	1462		57		156	1133		419		802	1000		237		229	593		186	
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	0.90	0.89		0.83		0.90	0.89		0.83		0.90	0.90		0.90		0.90	0.90		0.90	
Lanes:	2.00	3.00		1.00		2.00	3.00		1.00		2.00	1.62		0.38		2.00	1.52		0.48	
Final Sat..	3432	5083		1583		3432	5083		1583		3432	2778		657		3432	2598		812	
Capacity Analysis Module:																				
Vol/Sat:	0.10	0.29		0.04		0.05	0.22		0.26		0.23	0.36		0.36		0.07	0.23		0.23	
Crit Moves:		****				****					****						****			
Green/Cycle:	0.12	0.32		0.32		0.06	0.27		0.53		0.26	0.44		0.44		0.08	0.26		0.26	
Volume/Cap:	0.84	0.89		0.11		0.78	0.84		0.50		0.89	0.82		0.82		0.82	0.89		0.89	
Delay/Veh:	66.7	45.1		28.6		73.0	46.6		18.7		53.6	33.4		33.4		71.9	54.3		54.3	
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	66.7	45.1		28.6		73.0	46.6		18.7		53.6	33.4		33.4		71.9	54.3		54.3	
HCM2kAvg:	9	20		1		5	16		10		18	22		22		7	17		17	

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Valley Park Way / West 9th Ave [NS / EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.887
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 57.3
Optimal Cycle: 113 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	1	0	3	0	1	1	0	2	1	0	1	0	1	1	0	1	0	1	1	0
Volume Module: >> Count Date: 12 Dec 2001 << PM Peak																				
Base Vol:	21	1043		165		165	877		328		552	572		6		170	326		49	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	21	1043		165		165	877		328		552	572		6		170	326		49	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	23	1159		183		183	974		364		613	636		7		189	362		54	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	23	1159		183		183	974		364		613	636		7		189	362		54	
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol..	23	1159		183		183	974		364		613	636		7		189	362		54	
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	0.93	0.89		0.83		0.93	0.86		0.86		0.93	0.93		0.93		0.93	0.91		0.91	
Lanes:	1.00	3.00		1.00		1.00	2.18		0.82		1.00	1.98		0.02		1.00	1.74		0.26	
Final Sat..	1769	5083		1583		1769	3548		1327		1769	3498		37		1769	3014		453	
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.23		0.12		0.10	0.27		0.27		0.35	0.18		0.18		0.11	0.12		0.12	
Crit Moves:		****				****					****						****			
Green/Cycle:	0.06	0.24		0.24		0.11	0.28		0.28		0.36	0.36		0.36		0.19	0.20		0.20	
Volume/Cap:	0.22	0.97		0.49		0.97	0.97		0.97		0.97	0.50		0.50		0.55	0.60		0.60	
Delay/Veh:	54.8	64.4		40.7		109.6	60.7		60.7		66.0	30.0		30.0		45.5	45.1		45.1	
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	54.8	64.4		40.7		109.6	60.7		60.7		66.0	30.0		30.0		45.5	45.1		45.1	
HCM2kAvg:	1	19		6		11	21		21		29	9		9		7	8		8	

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Valley Pkwy/11th Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.517
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.0
Optimal Cycle: 47 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	1	0	1	1 0	1	0	2	0 1	1	0	0	1 0	1	0	0	1 0
Volume Module:																
Base Vol:	25	1206		9	106	720		118	59	16		67	29	24		39
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	25	1206		9	106	720		118	59	16		67	29	24		39
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	28	1340		10	118	800		131	66	18		74	32	27		43
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	28	1340		10	118	800		131	66	18		74	32	27		43
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	28	1340		10	118	800		131	66	18		74	32	27		43
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85		0.95	0.88	0.88		0.95	0.91	0.91		0.91
Lanes:	1.00	1.99	0.01	1.00	2.00	1.00		1.00	0.19	0.81		1.00	0.38	0.62		
Final Sat..	1805	3580	27	1805	3610	1615		1805	322	1348		1805	656	1067		
Capacity Analysis Module:																
Vol/Sat:	0.02	0.37	0.37	0.07	0.22	0.08		0.04	0.06	0.06		0.02	0.04	0.04		
Crit Moves:		****		****				****					****			
Green/Cycle:	0.06	0.72	0.72	0.13	0.80	0.80		0.07	0.11	0.11		0.04	0.08	0.08		
Volume/Cap:	0.28	0.52	0.52	0.52	0.28	0.10		0.52	0.49	0.49		0.49	0.52	0.52		
Delay/Veh:	46.8	6.2	6.2	42.9	2.7	2.3		48.5	43.7	43.7		52.9	47.7	47.7		
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		
AdjDel/Veh:	46.8	6.2	6.2	42.9	2.7	2.3		48.5	43.7	43.7		52.9	47.7	47.7		
HCM2kAvg:	1	9	9	4	2	1		2	2	2		2	2	2		

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Valley Parkway/Avenida Diablo

Average Delay (sec/veh): 11.7 Worst Case Level Of Service: F[284.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	1	0 1	1	0	1	0 1	0	1	0	0 1	0	1	0	0 1
Volume Module:																
Base Vol:	78	1203		132	11	748		65	19	5		70	9	4		13
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	78	1203		132	11	748		65	19	5		70	9	4		13
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	87	1337		147	12	831		72	21	6		78	10	4		14
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	87	1337		147	12	831		72	21	6		78	10	4		14
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx		7.1	6.5		6.2	7.1	6.5		6.2
FollowUpTim:	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5	4.0		3.3	3.5	4.0		3.3
Capacity Module:																
Cnflict Vol:	903	xxxx	xxxxx		1483	xxxx	xxxxx		2448	2512		831	2443	2438		1337
Potent Cap..	761	xxxx	xxxxx		459	xxxx	xxxxx		22	29		373	22	32		189
Move Cap..	761	xxxx	xxxxx		459	xxxx	xxxxx		16	25		373	13	28		189
Volume/Cap:	0.11	xxxx	xxxx		0.03	xxxx	xxxx		1.35	0.22		0.21	0.78	0.16		0.08
Level Of Service Module:																
Queue:	0.4	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxxx	xxxx		0.8	xxxxx	xxxx		0.2
Stopped Del:	10.3	xxxx	xxxxx		13.0	xxxx	xxxxx		xxxxx	xxxx		17.2	xxxxx	xxxx		25.6
LOS by Move:	B	-		*	B	*		*	*	*		C	*	*		D
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap..	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		17	xxxx	xxxxx		15	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		3.8	xxxx	xxxxx		2.3	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		753.7	xxxx	xxxxx		543.0	xxxx	xxxxx	
Shared LOS:	*	*		*	*	*		*	F	*		*	F	*		*
ApproachDel:	xxxxxx				xxxxxx				205.3				284.3			
ApproachLOS:		*				*			F				F			

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 Valley Pkwy./Citracado Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.498
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.1
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	24			7	7	24			7	7	24			7	7	24			7
Lanes:	1	0	1	1	0	1	0	1	1	0	1	0	1	0	1	1	0	1	0	1
Volume Module: >> Count Date: 8 Jan 2002 << PM																				
Base Vol:	156	1150			26	62	709			103	70		8		194	11		7		43
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	156	1150			26	62	709			103	70		8		194	11		7		43
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90			0.90	0.90	0.90			0.90	0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	173	1278			29	69	788			114	78		9		216	12		8		48
Reduct Vol:	0	0			0	0	0			0	0		0		0	0		0		0
Reduced Vol:	173	1278			29	69	788			114	78		9		216	12		8		48
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	173	1278			29	69	788			114	78		9		216	12		8		48
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900		1900		1900	1900		1900		1900
Adjustment:	0.95	0.95			0.95	0.95	0.93			0.93	0.95		1.00		0.85	0.95		1.00		0.85
Lanes:	1.00	1.96			0.04	1.00	1.75			0.25	1.00		1.00		1.00	1.00		1.00		1.00
Final Sat..	1805	3520			80	1805	3092			449	1805		1900		1615	1805		1900		1615
Capacity Analysis Module:																				
Vol/Sat:	0.10	0.36			0.36	0.04	0.25			0.25	0.04		0.00		0.13	0.01		0.00		0.03
Crit Moves:		****				****					****							****		
Green/Cycle:	0.17	0.57			0.57	0.06	0.46			0.46	0.07		0.21		0.21	0.06		0.20		0.20
Volume/Cap:	0.55	0.63			0.63	0.63	0.55			0.55	0.63		0.02		0.64	0.11		0.02		0.15
Delay/Veh:	47.6	17.9			17.9	66.8	24.0			24.0	64.9		37.9		47.7	53.8		38.6		39.8
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	47.6	17.9			17.9	66.8	24.0			24.0	64.9		37.9		47.7	53.8		38.6		39.8
HCM2kAvg:	7	16			16	4	12			12	4		0		8	1		0		1

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Valley Pkwy./Via Rancho Pkwy.

Cycle (sec): 120 Critical Vol./Cap. (X): 0.817
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 38.9
Optimal Cycle: 76 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	20			7	7	20			0	0	0			0	20	0			20
Lanes:	0	0	2	0	1	1	0	1	0	0	0	0	0	0	1	1	0	0	0	1
Volume Module: PM Peak																				
Base Vol:	0	780			282	332	363			0	0		0		0	228		0		453
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	780			282	332	363			0	0		0		0	228		0		453
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90			0.90	0.90	0.90			0.90	0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	867			313	369	403			0	0		0		0	253		0		503
Reduct Vol:	0	0			0	0	0			0	0		0		0	0		0		0
Reduced Vol:	0	867			313	369	403			0	0		0		0	253		0		503
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
Final Vol..	0	867			313	369	403			0	0		0		0	253		0		503
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900		1900		1900	1900		1900		1900
Adjustment:	1.00	0.95			0.85	0.95	1.00			1.00	1.00		1.00		1.00	0.95		1.00		0.85
Lanes:	0.00	2.00			1.00	1.00	1.00			0.00	0.00		0.00		0.00	1.00		0.00		1.00
Final Sat..	0	3610			1615	1805	1900			0	0		0		0	1805		0		1615
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.24			0.19	0.20	0.21			0.00	0.00		0.00		0.00	0.14		0.00		0.31
Crit Moves:		****				****														****
Green/Cycle:	0.00	0.29			0.29	0.25	0.54			0.00	0.00		0.00		0.00	0.38		0.00		0.38
Volume/Cap:	0.00	0.82			0.66	0.82	0.39			0.00	0.00		0.00		0.00	0.37		0.00		0.82
Delay/Veh:	0.0	44.5			40.6	53.5	16.1			0.0	0.0		0.0		0.0	27.1		0.0		41.8
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	0.0	44.5			40.6	53.5	16.1			0.0	0.0		0.0		0.0	27.1		0.0		41.8
HCM2kAvg:	0	17			11	16	8			0	0		0		0	7		0		19

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 Auto Park Way / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.825
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.9
Optimal Cycle: 89 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	7	24	7	7	24	7	0	24	7	7	24	7
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	1 0	0	1 0
Volume Module: >> Count Date: 27 Nov 2001 << PM Peak												
Base Vol:	168	876	494	26	905	22	19	180	774	155	129	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	876	494	26	905	22	19	180	774	155	129	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	187	973	549	29	1006	24	21	200	430	172	143	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	187	973	549	29	1006	24	21	200	430	172	143	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	187	973	549	29	1006	24	21	200	430	172	143	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.93	0.93	0.93	0.54	0.98	0.83	0.51	0.95	0.95
Lanes:	1.00	1.28	0.72	1.00	1.95	0.05	1.00	1.00	1.00	1.00	0.79	0.21
Final Sat..	1769	2140	1207	1769	3440	84	1019	1862	1583	970	1418	385
Capacity Analysis Module:												
Vol/Sat:	0.11	0.45	0.45	0.02	0.29	0.29	0.02	0.11	0.27	0.18	0.10	0.10
Crit Moves:		****		****					****			
Green/Cycle:	0.16	0.53	0.53	0.06	0.43	0.43	0.31	0.31	0.31	0.31	0.31	0.37
Volume/Cap:	0.68	0.86	0.86	0.28	0.68	0.68	0.07	0.34	0.86	0.56	0.32	0.27
Delay/Veh:	54.6	29.3	29.3	55.6	28.8	28.8	28.9	31.9	53.1	36.7	31.7	26.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.6	29.3	29.3	55.6	28.8	28.8	28.9	31.9	53.1	36.7	31.7	26.5
HCM2kAvg:	8	27	27	1	16	16	1	6	18	10	5	5

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 I-15 SB / West 9th Ave (NS / EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 1.016
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.0
Optimal Cycle: 180 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	24	7	7	24	7	7	24	7	7	24	7
Lanes:	0 0	0	0 0	1 1	0	0 1	0 0	2	0 1	2 0	2	0 0
Volume Module: >> Count Date: 27 Nov 2001 << PM												
Base Vol:	0	0	0	323	0	146	0	1026	1068	191	1347	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	323	0	146	0	1026	1068	191	1347	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	359	0	162	0	1140	1187	212	1497	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	359	0	162	0	1140	1187	212	1497	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	0	0	359	0	162	0	1140	1187	212	1497	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.83	1.00	0.93	0.83	0.90	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	2.00	2.00	0.00
Final Sat..	0	0	0	3545	0	1583	0	3538	1583	3432	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.32	0.75	0.06	0.42	0.00
Crit Moves:						****			****	****		
Green/Cycle:	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.74	0.74	0.06	0.80	0.00
Volume/Cap:	0.00	0.00	0.00	1.00	0.00	1.02	0.00	0.44	1.02	1.02	0.53	0.00
Delay/Veh:	0.0	0.0	0.0	102.3	0.0	129.3	0.0	6.2	46.0	122.7	4.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	102.3	0.0	129.3	0.0	6.2	46.0	122.7	4.4	0.0
HCM2kAvg:	0	0	0	11	0	10	0	8	53	8	10	0

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 I-15 NB / West 9th Ave [NS/ EW]

Cycle (sec): 120 Critical Vol./Cap. (X): 0.691
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.0
Optimal Cycle: 67 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	7	24		7	7	24		7	7	24		7	7	24		7
Lanes:	1	1	0	0 1	0	0	0	0 0	2	0	2	0 0	0	0	2	0 1
Volume Module: >> Count Date: 27 Nov 2001 << PM																
Base Vol:	767	2	218		0	0		0	229	1120		0	0	772		377
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	767	2	218		0	0		0	229	1120		0	0	772		377
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	852	2	242		0	0		0	254	1244		0	0	858		419
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol:	852	2	242		0	0		0	254	1244		0	0	858		419
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	852	2	242		0	0		0	254	1244		0	0	858		419
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.83	0.83	0.83		1.00	1.00		1.00	0.90	0.93		1.00	1.00	0.93		0.83
Lanes:	1.99	0.01	1.00		0.00	0.00		0.00	2.00	2.00		0.00	0.00	2.00		1.00
Final Sat..	3157	8	1583		0	0		0	3432	3538		0	0	3538		1583
Capacity Analysis Module:																
Vol/Sat:	0.27	0.27	0.15		0.00	0.00		0.00	0.07	0.35		0.00	0.00	0.24		0.26
Crit Moves:		****								****			****			
Green/Cycle:	0.39	0.39	0.39		0.00	0.00		0.00	0.11	0.51		0.00	0.00	0.40		0.40
Volume/Cap:	0.69	0.69	0.39		0.00	0.00		0.00	0.67	0.69		0.00	0.00	0.61		0.67
Delay/Veh:	32.2	32.2	26.7		0.0	0.0		0.0	55.6	23.5		0.0	0.0	29.5		32.3
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	32.2	32.2	26.7		0.0	0.0		0.0	55.6	23.5		0.0	0.0	29.5		32.3
HCM2kAvg:	16	16	6		0	0		0	6	18		0	0	13		13

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 San Elijo/Rancho Santa Fe

Cycle (sec): 100 Critical Vol./Cap. (X): 1.017
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 43.1
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	0	0	1	0 1	1	0	2	0 0	0	0	0	0 0	2	0	0	0 1
Volume Module:																
Base Vol:	0	814	345		489	934		0	0	0		0	178	0		216
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	814	345		489	934		0	0	0		0	178	0		216
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	904	383		543	1038		0	0	0		0	198	0		240
Reduct Vol:	0	0	0		0	0		0	0	0		0	0	0		0
Reduced Vol.:	0	904	383		543	1038		0	0	0		0	198	0		240
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol.:	0	904	383		543	1038		0	0	0		0	198	0		240
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00	0.85		0.95	0.95		1.00	1.00	1.00		1.00	0.92	1.00		0.85
Lanes:	0.00	1.00	1.00		1.00	2.00		0.00	0.00	0.00		0.00	2.00	0.00		1.00
Final Sat..	0	1900	1615		1805	3610		0	0	0		0	3502	0		1615
Capacity Analysis Module:																
Vol/Sat:	0.00	0.48	0.24		0.30	0.29		0.00	0.00	0.00		0.00	0.06	0.00		0.15
Crit Moves:		****			****											****
Green/Cycle:	0.00	0.47	0.47		0.30	0.76		0.00	0.00	0.00		0.00	0.15	0.00		0.15
Volume/Cap:	0.00	1.02	0.51		1.02	0.38		0.00	0.00	0.00		0.00	0.39	0.00		1.02
Delay/Veh:	0.0	61.2	19.1		78.5	4.0		0.0	0.0	0.0		0.0	39.1	0.0		105.8
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	61.2	19.1		78.5	4.0		0.0	0.0	0.0		0.0	39.1	0.0		105.8
HCM2kAvg:	0	37	8		25	5		0	0	0		0	3	0		12

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Via Rancho Parkway/I-15 SB Ramps

Cycle (sec): 100 | Critical Vol./Cap. (X): 0.956
Loss Time (sec): 12 (Y+R = 4 sec) | Average Delay (sec/veh): 45.6
Optimal Cycle: 143 | Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	0	2	0
Volume Module:																
Base Vol:	145	261		661	49	137		64	58	288		189	712	606		93
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	145	261		661	49	137		64	58	288		189	712	606		93
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	161	290		734	54	152		71	64	320		210	791	673		103
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	161	290		734	54	152		71	64	320		210	791	673		103
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	161	290		734	54	152		71	64	320		210	791	673		103
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	0.95		0.85	0.95	0.95		0.85	0.95	0.95		0.85	0.92	0.95		0.85
Lanes:	1.00	2.00		1.00	1.00	2.00		1.00	1.00	2.00		1.00	2.00	2.00		1.00
Final Sat..	1805	3610		1615	1805	3610		1615	1805	3610		1615	3502	3610		1615
Capacity Analysis Module:																
Vol/Sat:	0.09	0.08		0.45	0.03	0.04		0.04	0.04	0.09		0.13	0.23	0.19		0.06
Crit Moves:				****	****							****	****			
Green/Cycle:	0.34	0.48		0.48	0.03	0.17		0.17	0.06	0.14		0.14	0.24	0.31		0.31
Volume/Cap:	0.26	0.17		0.96	0.96	0.25		0.26	0.60	0.65		0.96	0.96	0.60		0.20
Delay/Veh:	24.2	15.0		47.4	151.1	36.4		36.8	54.6	44.1		91.0	58.8	29.9		25.4
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	24.2	15.0		47.4	151.1	36.4		36.8	54.6	44.1		91.0	58.8	29.9		25.4
HCM2kAvg:	4	2		27	4	2		2	2	6		10	18	9		2

Harmony Grove Village
Option C: Ex + P + CP

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Via Rancho Parkway/I-15 NB Ramps

Cycle (sec): 100 | Critical Vol./Cap. (X): 0.830
Loss Time (sec): 12 (Y+R = 4 sec) | Average Delay (sec/veh): 37.6
Optimal Cycle: 85 | Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	1	0	2	0	2	1	0	2	0	1	2	0	2	0	1	0
Volume Module:																
Base Vol:	475	181		895	85	232		43	248	685		197	370	730		42
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	475	181		895	85	232		43	248	685		197	370	730		42
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	528	201		994	94	258		48	276	761		219	411	811		47
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	528	201		994	94	258		48	276	761		219	411	811		47
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	528	201		994	94	258		48	276	761		219	411	811		47
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	0.95		0.75	0.95	0.95		0.85	0.92	0.95		0.85	0.92	0.91		0.85
Lanes:	1.00	2.00		2.00	1.00	2.00		1.00	2.00	2.00		1.00	2.00	2.00		1.00
Final Sat..	1805	3610		2842	1805	3610		1615	3502	3610		1615	3502	5187		1615
Capacity Analysis Module:																
Vol/Sat:	0.29	0.06		0.35	0.05	0.07		0.03	0.08	0.21		0.14	0.12	0.16		0.03
Crit Moves:				****	****					****			****			
Green/Cycle:	0.39	0.42		0.42	0.06	0.10		0.10	0.13	0.25		0.25	0.14	0.26		0.26
Volume/Cap:	0.75	0.13		0.83	0.83	0.75		0.31	0.59	0.83		0.53	0.83	0.59		0.11
Delay/Veh:	30.9	17.8		30.7	84.0	53.0		43.3	42.9	41.7		33.6	53.0	32.9		28.1
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	30.9	17.8		30.7	84.0	53.0		43.3	42.9	41.7		33.6	53.0	32.9		28.1
HCM2kAvg:	16	2		16	5	6		2	5	14		6	9	8		1

Harmony Grove Village

Scenario Report

Scenario:	EX AM
Command:	Default Command
Volume:	EX AM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	1	0
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	17	0		0	108	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	17	0		0	108	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	0	0		0	0	0		0	17	0		0	108	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		0	0	0		0	17	0		0	108	0	
Adjusted Volume Module:																
Grade:	0%				0%				0%				0%			
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.00	1.00		1.10	1.00	1.00	
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol..	0	0	0		0	0	0		0	17	0		0	108	0	
Critical Gap Module:																
MoveUp Time:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Adj Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap..	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Level Of Service Module:																
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx				xxxxxx				0.0				0.0			
ApproachLOS:	*				*				A				A			

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #3
*******************************************************************************
Average Delay (sec/veh):      0.0          Worst Case Level Of Service:      A
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign        Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:         0  0  0  0  0    0  0  0  0  0    0  0  1  0  0    0  0  1  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0     0     0    0     0     0    0     4     0    0    19     0
Growth Adj:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Initial Bse:   0     0     0    0     0     0    0     4     0    0    19     0
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Volume:    0     0     0    0     0     0    0     4     0    0    19     0
Reduct Vol:    0     0     0    0     0     0    0     0     0    0     0     0
Final Vol..    0     0     0    0     0     0    0     4     0    0    19     0
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:      1.10  1.10  1.10 1.10  1.10  1.10 1.10  1.00  1.00 1.10  1.00  1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol..      0     0     0    0     0     0    0     4     0    0    19     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Conflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap..   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *     *     *    *     *     *    *     *     *    *     *     *
Movement:    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:    *     *     *    *     *     *    *     *     *    *     *     *
ApproachDel:   xxxxxx          xxxxxx          0.0              0.0
ApproachLOS:     *              *               A                A
```


Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #7 Country Club/ Village Road
*******************************************************************************
Cycle (sec):        100          Critical Vol./Cap. (X):          0.103
Loss Time (sec):      0 (Y+R =  4 sec) Average Delay (sec/veh):       6.9
Optimal Cycle:        0          Level Of Service:                    A
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:         0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  1! 0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: AM Peak
Base Vol:      0     0     0    1     0    96   14     3     0    0    12     7
Growth Adj:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Initial Bse:   0     0     0    1     0    96   14     3     0    0    12     7
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:     0.90  0.90  0.90 0.90  0.90  0.90 0.90  0.90  0.90 0.90  0.90  0.90
PHF Volume:    0     0     0    1     0   107   16     3     0    0    13     8
Reduct Vol:    0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:   0     0     0    1     0   107   16     3     0    0    13     8
PCE Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Final Vol..    0     0     0    1     0   107   16     3     0    0    13     8
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:       0.00  0.00  0.00 0.01  0.00  0.99 0.82  0.18  0.00 0.00  1.00  1.00
Final Sat..    0     0     0   11     0  1039  663   142     0    0     0  1755
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     xxxx xxxx  xxxx  0.10 xxxx  0.10  0.02  0.02  xxxx xxxx xxxx  0.00
Crit Moves:                   ****                ****                     ****
Delay/Veh:     0.0  0.0   0.0  6.8  0.0   6.8   7.5   7.5   0.0  0.0  0.0   6.8
Delay Adj:   1.00  1.00  1.00 1.00  1.00  1.00  1.00  1.00  1.00 1.00  1.00  1.00
AdjDel/Veh:    0.0  0.0   0.0  6.8  0.0   6.8   7.5   7.5   0.0  0.0  0.0   6.8
LOS by Move:   *     *     *    A     *     A     A     A     *    *     *     A
ApproachDel:   xxxxxx            6.8              7.5              6.8
Delay Adj:     xxxxx             1.00             1.00             1.00
ApprAdjDel:    xxxxxx            6.8              7.5              6.8
LOS by Appr:                     A                A                A
*******************************************************************************
```

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #8 Harmony Grove/Village Road

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.2]

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 1	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0
Volume Module: AM Peak																
Base Vol:	2	110	0		0	306	17		3	0	1		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	2	110	0		0	306	17		3	0	1		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	2	122	0		0	340	19		3	0	1		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	2	122	0		0	340	19		3	0	1		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	359	xxxx	xxxxx	xxxx	xxxx	xxxxx			476	xxxx		349	xxxx	xxxx	xxxxx	
Potent Cap.:	1211	xxxx	xxxxx	xxxx	xxxx	xxxxx			551	xxxx		698	xxxx	xxxx	xxxxx	
Move Cap.:	1211	xxxx	xxxxx	xxxx	xxxx	xxxxx			550	xxxx		698	xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx			0.01	xxxx		0.00	xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.0	xxxx		0.0	xxxxx	xxxx	xxxxx	
Stopped Del:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			11.6	xxxx		10.2	xxxxx	xxxx	xxxxx	
LOS by Move:	A	*	*		*	*	*		B	*		B	*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	581	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	0.0	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	8.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	11.2	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*		*	*	*		*	B	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx					11.2			xxxxxx			
ApproachLOS:	*				*					B			*			

Harmony Grove Village

Scenario Report

Scenario:	EX PM
Command:	Default Command
Volume:	EX PM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	1!	0 0	0	0	1	0 0	0	0	1	0 0
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	111	0		0	34	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	111	0		0	34	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	0	0		0	0	0		0	111	0		0	34	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		0	0	0		0	111	0		0	34	0	
Adjusted Volume Module:																
Grade:	0%				0%				0%				0%			
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.00	1.00		1.10	1.00	1.00	
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol..	0	0	0		0	0	0		0	111	0		0	34	0	

Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx

Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Adj Cap: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Move Cap.. xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx

Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move: * * * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS: * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx 0.0 0.0
ApproachLOS: * * A A

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	0	0	0	0 0	0	0	1	0 0	0	0	1	0 0
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	22	0		0	8	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	22	0		0	8	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	0	0		0	0	0		0	22	0		0	8	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol..	0	0	0		0	0	0		0	22	0		0	8	0	
Adjusted Volume Module:																
Grade:	0%				0%				0%				0%			
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.00	1.00		1.10	1.00	1.00	
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol..	0	0	0		0	0	0		0	22	0		0	8	0	

Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx

Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Adj Cap: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Move Cap.. xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx

Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move: * * * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS: * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx 0.0 0.0
ApproachLOS: * * A A

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.147
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.7
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0		0	0	0		0	0	0		0
Lanes:	0	0	0	0	0	0	1!	0	0	1	0	0	0	0	1!	0 1
Volume Module: PM Peak																
Base Vol:	0	0		0	9	0		28	98	13		0	0	6		2
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	9	0		28	98	13		0	0	6		2
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:	0	0		0	10	0		31	109	14		0	0	7		2
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	0		0	10	0		31	109	14		0	0	7		2
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	0		0	10	0		31	109	14		0	0	7		2
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	0.00	0.00		0.00	0.24	0.00		0.76	0.88	0.12		0.00	0.00	1.00		1.00
Final Sat..	0	0		0	225	0		700	739	98		0	0	0		1795
Capacity Analysis Module:																
Vol/Sat:	xxxx	xxxx		xxxx	0.04	xxxx		0.04	0.15	0.15		xxxx	xxxx	xxxx		0.00
Crit Moves:								****		****						****
Delay/Veh:	0.0	0.0		0.0	6.9	0.0		6.9	8.0	8.0		0.0	0.0	0.0		6.7
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	0.0		0.0	6.9	0.0		6.9	8.0	8.0		0.0	0.0	0.0		6.7
LOS by Move:	*	*		*	A	*		A	A	A		*	*	*		A
ApproachDel:	xxxxxx					6.9				8.0				6.7		
Delay Adj:	xxxxxx					1.00				1.00				1.00		
ApprAdjDel:	xxxxxx					6.9				8.0				6.7		
LOS by Appr:		*				A				A				A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[12.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0	0	0	0	1	0	1	0	1	0	0	0	0
Volume Module: PM Peak																
Base Vol:		1	430		0	0	90	7	18	0		4	0	0		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:		1	430		0	0	90	7	18	0		4	0	0		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:		1	478		0	0	100	8	20	0		4	0	0		0
Reduct Vol:		0	0		0	0	0		0	0		0	0	0		0
Final Vol..		1	478		0	0	100	8	20	0		4	0	0		0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	108	xxxx	xxxxx	xxxx	xxxx	xxxxx			584	xxxx		104	xxxx	xxxx	xxxxx	
Potent Cap.:	1496	xxxx	xxxxx	xxxx	xxxx	xxxxx			477	xxxx		956	xxxx	xxxx	xxxxx	
Move Cap..	1496	xxxx	xxxxx	xxxx	xxxx	xxxxx			477	xxxx		956	xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx			0.04	xxxx		0.00	xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.1	xxxx		0.0	xxxxx	xxxx	xxxxx	
Stopped Del:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx			12.7	xxxx		8.8	xxxxx	xxxx	xxxxx	
LOS by Move:	A	*		*	*	*		*	B	*		A	*	*		*
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	525	xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.1	xxxxx	xxxxx	xxxx	xxxx	xxxxx		
Shrd StpDel:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx			12.0	xxxxx	xxxxx	xxxx	xxxx	xxxxx		
Shared LOS:	A	*		*	*	*		*	B	*		*	*	*		*
ApproachDel:	xxxxxx				xxxxxx				12.0				xxxxxx			
ApproachLOS:		*				*			B				*			

Harmony Grove Village

Scenario Report

Scenario:	EX + P AM
Command:	Default Command
Volume:	E+P AM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

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Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0	0	88	0	0	0	286	0	0	0	276	0	0	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	88	0	0	0	286	0	0	0	276	0	0	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	88	0	0	0	286	0	0	0	276	0	0	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	0	88	0	0	0	286	0	0	0	276	0	0	54
Adjusted Volume Module:																
Grade:	0%				0%				0%				0%			
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.00	1.00		1.10	1.00	1.00	
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol..	0	0	0		97	0	0		0	286	0		0	276	54	
Critical Gap Module:																
MoveUp Time:	xxxxx	xxxx	xxxxx		3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxxx	
Critical Gp:	xxxxx	xxxx	xxxxx		6.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		589	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		483	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxxx	
Adj Cap:	xxxx	xxxx	xxxxx		1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		483	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxxx	
Level Of Service Module:																
Stopped Del:	xxxxx	xxxx	xxxxx		9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		B	*	*	*	*	*	*	*	*	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				9.1				0.0				0.0			
ApproachLOS:	*				B				A				A			

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Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #3
*******************************************************************************
Average Delay (sec/veh):      0.4           Worst Case Level Of Service:     A
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:       L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
----------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:          0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
----------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       9    0   22      0    0    0      0  215    5     13  151    0
Growth Adj:  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Initial Bse:    9    0   22      0    0    0      0  215    5     13  151    0
User Adj:    1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Volume:     9    0   22      0    0    0      0  215    5     13  151    0
Reduct Vol:     0    0    0      0    0    0      0    0    0      0    0    0
Final Vol..     9    0   22      0    0    0      0  215    5     13  151    0
----------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10 1.10   1.10 1.10 1.10   1.10 1.00 1.00   1.10 1.00 1.00
Cycl/Car PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol..      10    0   24      0    0    0      0  215    5     14  151    0
----------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  6.5 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.0 xxxx xxxxx
----------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  382 xxxx   217  xxxx xxxx xxxxx  xxxx xxxx xxxxx   220 xxxx xxxxx
Potent Cap.:  637 xxxx  1074  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1347 xxxx xxxxx
Adj Cap:     0.99 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap..    629 xxxx  1074  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1347 xxxx xxxxx
----------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:  5.8 xxxx   3.4 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.7 xxxx xxxxx
LOS by Move:    *    *     *     *    *    *     *    *    *     A    *    *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.:  xxxx  891 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1347 xxxx xxxxx
Shrd StpDel:xxxxx  4.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.0 xxxx xxxxx
Shared LOS:     *    A     *     *    *    *     *    *    *     A    *    *
ApproachDel:        4.2            xxxxxx            0.0            0.2
ApproachLOS:         A              *              A              A
```


Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #7 Country Club/ Village Road
*******************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):          0.425
Loss Time (sec):      0 (Y+R =  4 sec) Average Delay (sec/veh):          9.5
Optimal Cycle:        0              Level Of Service:                    A
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:       L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
----------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0      0    0    0      0    0    0      0    0    0
Lanes:          0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  1! 0  1
----------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0      6    0  152    113  214    0      0  144   16
Growth Adj:  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Initial Bse:    0    0    0      6    0  152    113  214    0      0  144   16
User Adj:    1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Volume:     0    0    0      6    0  152    113  214    0      0  144   16
Reduct Vol:     0    0    0      0    0    0      0    0    0      0    0    0
Reduced Vol:    0    0    0      6    0  152    113  214    0      0  144   16
PCE Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Final Vol..     0    0    0      6    0  152    113  214    0      0  144   16
----------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Lanes:       0.00 0.00 0.00   0.04 0.00 0.96   0.35 0.65 0.00   0.00 1.00 1.00
Final Sat..     0    0    0     29    0  732    266  503    0      0    0 1575
----------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     xxxx xxxx xxxx  0.21 xxxx  0.21   0.43 0.43 xxxx   xxxx xxxx  0.01
Crit Moves:                  ****                ****                      ****
Delay/Veh:    0.0  0.0  0.0   8.4  0.0  8.4   10.8 10.8  0.0    0.0  0.0  8.0
Delay Adj:   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   8.4  0.0  8.4   10.8 10.8  0.0    0.0  0.0  8.0
LOS by Move:    *    *    *     A    *    A     B    B    *      *    *    A
ApproachDel:   xxxxxx              8.4              10.8              8.0
Delay Adj:     xxxxx              1.00              1.00             1.00
ApprAdjDel:    xxxxxx              8.4              10.8              8.0
LOS by Appr:        *               A                B                A
*******************************************************************************
```

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****
Intersection #8 Harmony Grove/Village Road
****
Average Delay (sec/veh): 4.0 Worst Case Level Of Service: C[16.6]
****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T		R	L	- T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0	0	0	0	1	0	1	0	1	0	0	0	0
Volume Module:																
Base Vol:	2	210	0		0	371	162		236	0		1	0		0	0
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	2	210	0		0	371	162		236	0		1	0		0	0
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	2	210	0		0	371	162		236	0		1	0		0	0
Reduct Vol:	0	0	0		0	0	0		0	0		0	0		0	0
Final Vol..	2	210	0		0	371	162		236	0		1	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	533	xxxx	xxxxx	xxxx	xxxx	xxxxx			666	xxxx		452	xxxx	xxxx	xxxxx	
Potent Cap..	1045	xxxx	xxxxx	xxxx	xxxx	xxxxx			428	xxxx		612	xxxx	xxxx	xxxxx	
Move Cap..	1045	xxxx	xxxxx	xxxx	xxxx	xxxxx			427	xxxx		612	xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx			0.55	xxxx		0.00	xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			1.1	xxxx		0.0	xxxxx	xxxx	xxxxx	
Stopped Del:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx			16.6	xxxx		10.9	xxxxx	xxxx	xxxxx	
LOS by Move:	A	*	*		*	*	*		C	*		B	*	*	*	
Movement:	LT -	LTR	- RT		LT -	LTR	- RT		LT -	LTR	- RT		LT -	LTR	- RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	428	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	1.1	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	8.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	16.6	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*		*	*	*		*	C	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx					16.6			xxxxxx			
ApproachLOS:		*				*				C				*		

Harmony Grove Village

Scenario Report

Scenario:	EX + P PM
Command:	Default Command
Volume:	B+P PM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0
Volume Module:																
Base Vol:	0	0		0	66	0		0	0	310		0	0	384		116
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	66	0		0	0	310		0	0	384		116
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0	0		0	66	0		0	0	310		0	0	384		116
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol.:	0	0		0	66	0		0	0	310		0	0	384		116
Adjusted Volume Module:																
Grade:		0%				0%				0%				0%		
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.00		1.00	1.10	1.00		1.00
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol..	0	0		0	73	0		0	0	310		0	0	384		116
Critical Gap Module:																
MoveUp Time:	xxxxx	xxxx		xxxxx	3.4	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Critical Gp:	xxxxx	xxxx		xxxxx	6.5	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	752	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	388	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Adj Cap:	xxxx	xxxx		xxxxx	1.00	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap..	xxxx	xxxx		xxxxx	388	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Level Of Service Module:																
Stopped Del:	xxxxx	xxxx		xxxxx	11.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	C	*		*	*	*		*	*	*		*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				11.2				0.0				0.0			
ApproachLOS:	*				C				A				A			

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0
Volume Module:																
Base Vol:	7	0		16	0	0		0	0	178		12	29	282		0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	7	0		16	0	0		0	0	178		12	29	282		0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	7	0		16	0	0		0	0	178		12	29	282		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol..	7	0		16	0	0		0	0	178		12	29	282		0
Adjusted Volume Module:																
Grade:		0%				0%				0%				0%		
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.00		1.00	1.10	1.00		1.00
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol..	8	0		18	0	0		0	0	178		12	32	282		0
Critical Gap Module:																
MoveUp Time:	3.4	xxxx		2.6	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	2.1	xxxx		xxxxx
Critical Gp:	6.5	xxxx		5.5	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	5.0	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	495	xxxx		184	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	190	xxxx		xxxxx
Potent Cap..	547	xxxx		1117	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	1392	xxxx		xxxxx
Adj Cap:	0.97	xxxx		1.00	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	1.00	xxxx		xxxxx
Move Cap..	532	xxxx		1117	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	1392	xxxx		xxxxx
Level Of Service Module:																
Stopped Del:	6.9	xxxx		3.3	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	2.6	xxxx		xxxxx
LOS by Move:	*	*		*	*	*		*	*	*		*	A	*		*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	837		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	1392	xxxx		xxxxx
Shrd StpDel:	xxxxx	4.4		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	3.3	xxxx		xxxxx
Shared LOS:	*	A		*	*	*		*	*	*		*	A	*		*
ApproachDel:		4.4			xxxxxx				0.0				0.3			
ApproachLOS:		A			*				A				A			

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.464
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	0	0	0	0	0	0	1!	0	0	1	0	0	0	0	1!	0 1
Volume Module:																
Base Vol:	0	0		0	21	0	144		171	169		0	0	280		9
Growth Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	0		0	21	0	144		171	169		0	0	280		9
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0	0		0	21	0	144		171	169		0	0	280		9
Reduct Vol:	0	0		0	0	0	0		0	0		0	0	0		0
Reduced Vol:	0	0		0	21	0	144		171	169		0	0	280		9
PCE Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
Final Vol..	0	0		0	21	0	144		171	169		0	0	280		9
Saturation Flow Module:																
Adjustment:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	0.00	0.00		0.00	0.13	0.00	0.87		0.50	0.50		0.00	0.00	1.00		1.00
Final Sat..	0	0		0	88	0	606		368	364		0	0	0		1557
Capacity Analysis Module:																
Vol/Sat:	xxxx	xxxx		xxxx	0.24	xxxx	0.24		0.46	0.46		xxxx	xxxx	xxxx		0.01
Crit Moves:							****		****							****
Delay/Veh:	0.0	0.0		0.0	9.1	0.0	9.1		11.7	11.7		0.0	0.0	0.0		9.5
Delay Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	0.0		0.0	9.1	0.0	9.1		11.7	11.7		0.0	0.0	0.0		9.5
LOS by Move:	*	*		*	A	*	A		B	B		*	*	*		A
ApproachDel:	xxxxxx					9.1				11.7				9.5		
Delay Adj:	xxxxx					1.00				1.00				1.00		
ApprAdjDel:	xxxxxx					9.1				11.7				9.5		
LOS by Appr:	*					A				B				A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: C[21.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0	0	0	0	1	0	1	0	1	0	0	0	0
Volume Module:																
Base Vol:	1	507		0	0	224	310		190		0	4	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	1	507		0	0	224	310		190		0	4	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	1	507		0	0	224	310		190		0	4	0		0	0
Reduct Vol:	0	0		0	0	0	0		0		0	0	0		0	0
Final Vol..	1	507		0	0	224	310		190		0	4	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	534	xxxx	xxxxx	xxxx	xxxx	xxxxx			888	xxxx		379	xxxx	xxxx	xxxxx	
Potent Cap.:	1044	xxxx	xxxxx	xxxx	xxxx	xxxxx			317	xxxx		672	xxxx	xxxx	xxxxx	
Move Cap.:	1044	xxxx	xxxxx	xxxx	xxxx	xxxxx			317	xxxx		672	xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx			0.60	xxxx		0.01	xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			1.2	xxxx		0.0	xxxxx	xxxx	xxxxx	
Stopped Del:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx			21.2	xxxx		10.4	xxxxx	xxxx	xxxxx	
LOS by Move:	A	*		*	*	*			C	*		B	*	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	320		xxxxx	xxxxx	xxxx	xxxxx	
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	1.2		xxxxx	xxxxx	xxxx	xxxxx	
Shrd StpDel:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	21.1		xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	A	*		*	*	*			*	C		*	*	*	*	
ApproachDel:	xxxxxx				xxxxxx					21.0			xxxxxx			
ApproachLOS:	*				*					C			*			

Harmony Grove Village

Scenario Report

Scenario:	E+P+C AM
Command:	Default Command
Volume:	E+P+C AM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

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Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #1 Country Club Dr @ Entrance # 5
*******************************************************************************
Average Delay (sec/veh):       1.3           Worst Case Level Of Service:       C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  0  0  0    1  0  0  0  0    0  0  1  0  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0     0     0    88     0     0     0   348     0     0   302    54
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   0     0     0    88     0     0     0   348     0     0   302    54
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    0     0     0    88     0     0     0   348     0     0   302    54
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:    0     0     0    88     0     0     0   348     0     0   302    54
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:      1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Comb PCE:  xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol..      0     0     0    97     0     0     0   348     0     0   302    54
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx   3.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx   6.5 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   677 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   429 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx xxxxx  1.00 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   429 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx  10.5 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *     *     *     C     *     *     *     *     *     *     *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:    *     *     *     *     *     *     *     *     *     *     *     *
ApproachDel:     xxxxxx            10.5             0.0              0.0
ApproachLOS:       *                C                A                A
```

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Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #3
*******************************************************************************
Average Delay (sec/veh):          0.4          Worst Case Level Of Service:     A
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------||---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:         0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
------------||---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       9    0   22    0    0    0    0  215    5   13  151    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    9    0   22    0    0    0    0  215    5   13  151    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     9    0   22    0    0    0    0  215    5   13  151    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Final Vol..     9    0   22    0    0    0    0  215    5   13  151    0
------------||---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:     1.10 1.10 1.10    1.10 1.10 1.10    1.10 1.00 1.00    1.10 1.00 1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol..      10    0   24    0    0    0    0  215    5   14  151    0
------------||---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  6.5 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.0 xxxx xxxxx
------------||---------------||---------------||---------------||---------------|
Capacity Module:
Conflict Vol:  382 xxxx   217  xxxx xxxx xxxxx  xxxx xxxx xxxxx   220 xxxx xxxxx
Potent Cap..   637 xxxx  1074  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1347 xxxx xxxxx
Adj Cap:      0.99 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap..     629 xxxx  1074  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1347 xxxx xxxxx
------------||---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:  5.8 xxxx   3.4 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.7 xxxx xxxxx
LOS by Move:   *    *    *    *    *    *    *    *    *    A    *    *
Movement:     LT   LTR - RT   LT - LTR   RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.:  xxxx  891 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1347 xxxx xxxxx
Shrd StpDel:xxxxx  4.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.0 xxxx xxxxx
Shared LOS:    *    A    *    *    *    *    *    *    *    A    *    *
ApproachDel:        4.2            xxxxxx            0.0            0.2
ApproachLOS:         A                *              A              A
```


Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

```
*******************************************************************************
Intersection #7 Country Club/ Village Road
*******************************************************************************
Cycle (sec):        100          Critical Vol./Cap. (X):          0.472
Loss Time (sec):      0 (Y+R = 4 sec) Average Delay (sec/veh):     10.0
Optimal Cycle:        0          Level Of Service:                   B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------||---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:       0    0    0    0    0    0    0    0    0    0    0    0
Lanes:         0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  1! 0  1
------------||---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    6    0  176  142  214    0    0  144   16
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    6    0  176  142  214    0    0  144   16
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    6    0  176  142  214    0    0  144   16
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    6    0  176  142  214    0    0  144   16
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol..     0    0    0    6    0  176  142  214    0    0  144   16
------------||---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:       0.00 0.00 0.00 0.03 0.00 0.97 0.40 0.60 0.00 0.00 1.00 1.00
Final Sat..     0    0    0   25    0  723  301  454    0    0    0 1534
------------||---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     xxxx xxxx xxxx 0.24 xxxx 0.24 0.47 0.47 xxxx xxxx xxxx 0.01
Crit Moves:                          ****  ****                     ****
Delay/Veh:    0.0  0.0  0.0  8.7  0.0  8.7 11.6 11.6  0.0  0.0  0.0  8.1
Delay Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  8.7  0.0  8.7 11.6 11.6  0.0  0.0  0.0  8.1
LOS by Move:   *    *    *    A    *    A    B    B    *    *    *    A
ApproachDel:       xxxxxx            8.7            11.6            8.1
Delay Adj:         xxxxx            1.00            1.00           1.00
ApprAdjDel:        xxxxxx            8.7            11.6            8.1
LOS by Appr:         *                A              B              A
*******************************************************************************
```

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: C[19.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0	0	0	0	1	0	1	0	1	0	0	0	0
Volume Module:																
Base Vol:	2	285		0	0	405	162		236		0	1		0	0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Initial Bse:	2	285		0	0	405	162		236		0	1		0	0	0
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
PHF Volume:	2	285		0	0	405	162		236		0	1		0	0	0
Reduct Vol:	0	0		0	0	0	0		0		0	0		0	0	0
Final Vol..	2	285		0	0	405	162		236		0	1		0	0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	567	xxxx	xxxxx	xxxx	xxxx	xxxxx			775	xxxx		486	xxxx	xxxx	xxxxx	
Potent Cap..	1015	xxxx	xxxxx	xxxx	xxxx	xxxxx			369	xxxx		585	xxxx	xxxx	xxxxx	
Move Cap..	1015	xxxx	xxxxx	xxxx	xxxx	xxxxx			369	xxxx		585	xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx			0.64	xxxx		0.00	xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			1.4	xxxx		0.0	xxxxx	xxxx	xxxxx	
Stopped Del:	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx			19.3	xxxx		11.2	xxxxx	xxxx	xxxxx	
LOS by Move:	A	*	*	*	*	*			C	*		B	*	*	*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	RT	LT	- LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	369	xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	1.4	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	19.3	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	A	*	*	*	*	*			*	C	*	*	*	*		
ApproachDel:	xxxxxx			xxxxxx					19.3			xxxxxx				
ApproachLOS:	*			*					C			*				

Harmony Grove Village

Scenario Report

Scenario:	E+P+C PM
Command:	Default Command
Volume:	E+P+C PM
Geometry:	EX AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Country Club Dr @ Entrance # 5

Average Delay (sec/vehicle): 1.0 Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			1 0 0 0 0			0 0 1 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	66	0	0	0	349	0	0	480	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	66	0	0	0	349	0	0	480	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	66	0	0	0	349	0	0	480	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	0	0	0	66	0	0	0	349	0	0	480	116

Adjusted Volume Module:

Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	0	0	0	73	0	0	0	349	0	0	480	116

Critical Gap Module:

MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	xxxx	xxxx	xxxxx	887	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	324	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	324	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx

Level Of Service Module:

Stopped Del:	xxxxx	xxxx	xxxxx	13.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.9			0.0			0.0		
ApproachLOS:	*			C			A			A		

Harmony Grove Village

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3

Average Delay (sec/vehicle): 0.4 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 0 0 0			0 0 0 1 0			0 1 0 0 0		
Volume Module:												
Base Vol:	7	0	16	0	0	0	0	178	12	29	282	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	0	16	0	0	0	0	178	12	29	282	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	0	16	0	0	0	0	178	12	29	282	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol..	7	0	16	0	0	0	0	178	12	29	282	0

Adjusted Volume Module:

Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol..	8	0	18	0	0	0	0	178	12	32	282	0

Critical Gap Module:

MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	495	xxxx	184	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	190	xxxx	xxxxx
Potent Cap..	547	xxxx	1117	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx
Adj Cap:	0.97	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	532	xxxx	1117	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx

Level Of Service Module:

Stopped Del:	6.9	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	837	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1392	xxxx	xxxxx
Shrd StpDel:	xxxxx	4.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.3	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:		4.4		xxxxxx			0.0			0.3		
ApproachLOS:		A		*			A			A		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #7 Country Club/ Village Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.512
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.3
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0		0	0	0		0	0	0		0
Lanes:	0	0	0	0	0	0	1!	0	0	1	0	0	0	0	1!	0 1
Volume Module:																
Base Vol:	0	0	0		21	0	229		185	169		0	0	280		9
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		21	0	229		185	169		0	0	280		9
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	0	0		21	0	229		185	169		0	0	280		9
Reduct Vol:	0	0	0		0	0	0		0	0		0	0	0		0
Reduced Vol:	0	0	0		21	0	229		185	169		0	0	280		9
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol..	0	0	0		21	0	229		185	169		0	0	280		9
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	0.00	0.00		0.08	0.00	0.92		0.52	0.48	0.00		0.00	1.00	1.00	
Final Sat..	0	0	0		58	0	636		362	330		0	0	0	1453	
Capacity Analysis Module:																
Vol/Sat:	xxxx	xxxx	xxxx		0.36	xxxx	0.36		0.51	0.51	xxxx		xxxx	xxxx	0.01	
Crit Moves:					****					****					****	
Delay/Veh:	0.0	0.0	0.0		10.2	0.0	10.2		13.0	13.0	0.0		0.0	0.0	10.2	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	0.0		10.2	0.0	10.2		13.0	13.0	0.0		0.0	0.0	10.2	
LOS by Move:	*	*	*		B	*	B		B	B	*		*	*	B	
ApproachDel:	xxxxxx					10.2				13.0				10.2		
Delay Adj:	xxxxxx					1.00				1.00				1.00		
ApprAdjDel:	xxxxxx					10.2				13.0				10.2		
LOS by Appr:	*					B				B				B		

Harmony Grove Village

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Harmony Grove/Village Road

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: E[36.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0	0	0	0	1	0	1	1!	0	1	0	0	0
Volume Module:																
Base Vol:		1	554	0		0	338	310	190		0	4		0	0	0
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:		1	554	0		0	338	310	190		0	4		0	0	0
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:		1	616	0		0	376	344	211		0	4		0	0	0
Reduct Vol:		0	0	0		0	0	0	0		0	0		0	0	0
Final Vol..		1	616	0		0	376	344	211		0	4		0	0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	720	xxxx	xxxxx	xxxx	xxxx	xxxxx			1166	xxxx		548	xxxx	xxxx	xxxxx	
Potent Cap.:	891	xxxx	xxxxx	xxxx	xxxx	xxxxx			216	xxxx		540	xxxx	xxxx	xxxxx	
Move Cap.:	891	xxxx	xxxxx	xxxx	xxxx	xxxxx			216	xxxx		540	xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx			0.98	xxxx		0.01	xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			2.4	xxxx		0.0	xxxxx	xxxx	xxxxx	
Stopped Del:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			36.6	xxxx		11.7	xxxxx	xxxx	xxxxx	
LOS by Move:	A	*	*		*	*	*		E	*		B	*	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	219	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	2.5	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	9.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	36.4	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*		*	*	*		*	E			*	*	*	
ApproachDel:	xxxxxx				xxxxxx					36.2				xxxxxx		
ApproachLOS:	*				*					E				*		

APPENDIX K

YEAR 2030 FORECAST VOLUME PLOTS

SANDAG
Cities/County
Transportation Forecast
Harmony Grove Modeling

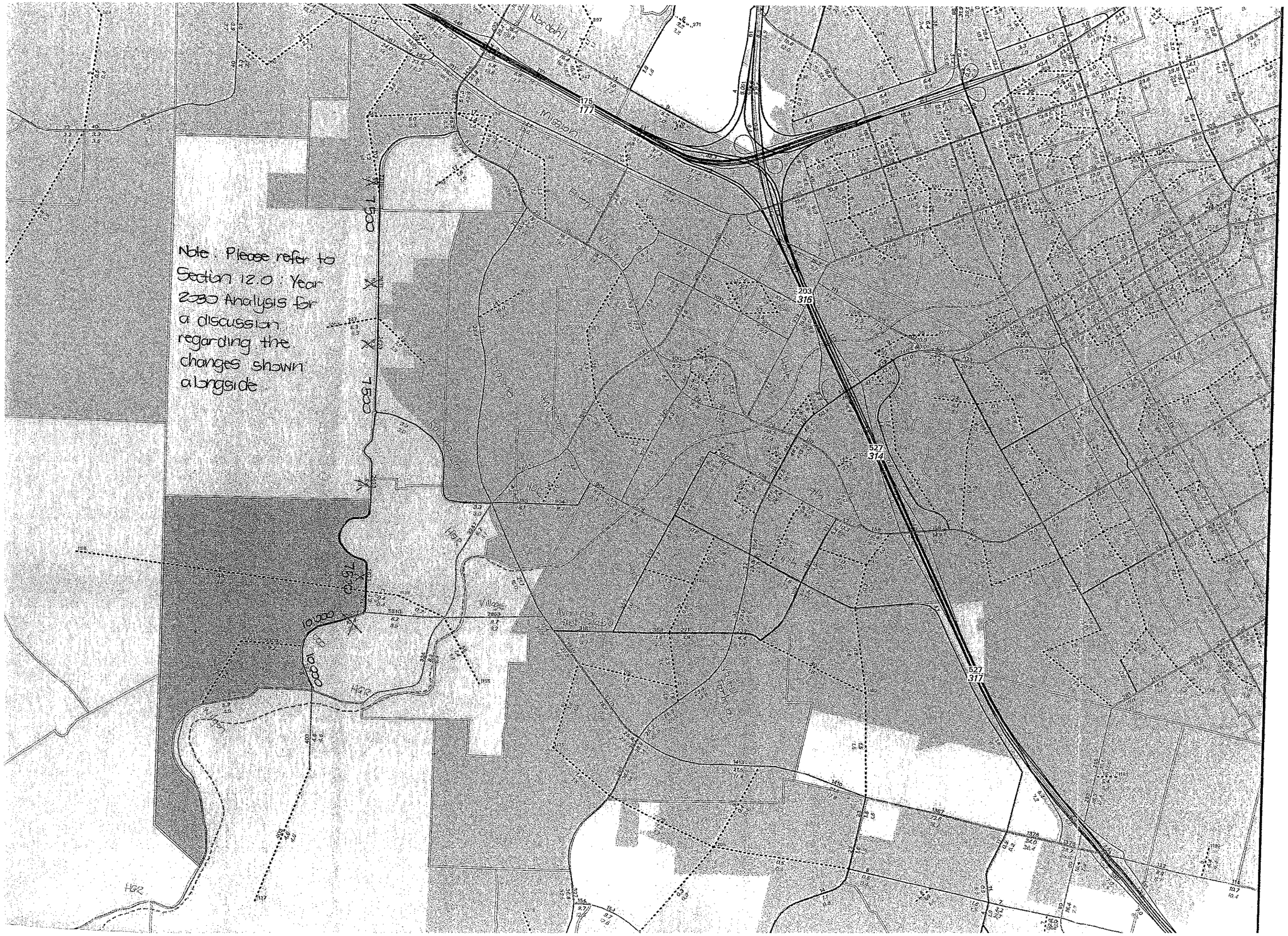
2030 Alt 2
Select Zone Assignment
of TAZ 1142

W/o SC 1395

TABLE 12-1 IN TEXT

Functional Classifications:

- Freeway
- Prime Arterial
- Major
- Collector
- Local Collector


Note: Please refer to Section 12.0: Year 2030 Analysis for a discussion regarding the changes shown alongside
7500
7500
7500
10,000
10,000
175
177
203
316
527
314
527
317
Nordahl
Mission
Village
HGR
HGR
HGR

SANDAG
Cities/County
Transportation Forecast
Harmony Grove Modeling

2030 Alt 1
Select Zone Assignment
of TAZ 1142

County
C.F.

Functional Classifications:

- Freeway
- Prime Arterial
- Major
- Collector
- Local Collector
- Rural Collector
- Local
- Freeway Ramp
- Ramp

please refer
to section 12.0
for discussion
regarding changes
shown

680U

43
178

APPENDIX L

COUNTY OF SAN DIEGO GENERAL PLAN 2020 LAND USE ASSUMPTIONS

John A. Boarman

From: Barling, Aaron [Aaron.Barling@sdcounty.ca.gov]
Sent: Monday, November 07, 2005 3:41 PM
To: jasonh@nuwi.com
Cc: John A. Boarman; Locke, Dahvia; Holler, Ivan; Ross, Gary
Subject: Unit/Population counts - Harmony Grove

futurepop GP2020 draft June 20... futurepop Existing GP.xls

Jason

The attached spreadsheets represent estimated future units only.
Our GIS staff is working on the existing units
I am sending a copy of this email to Mike Calandra as a heads-up (and to compare modeling results).
The 3 areas are based on TAZ's 1003 (area 1), 1039 (area 2), and 1187 (area 3).
Areas 1 and 2 are the estimated units forecasted within the unincorporated area for the correlated TAZ's. Area 3 is the portion of the TAZ in the unincorporated area, but outside of your project area. I know you wanted this modeled more from curiosity than for SANDAG's purposes. Therefore, areas 1 and 2 will be the only areas sent to SANDAG for modeling purposes
Tomorrow I will send the totals (existing + future units) to SANDAG. I will CC everyone who receives this email, and a couple other people who deal with land use modeling at SANDAG, when this data is sent
I apologize for the delay

Aaron Barling
County of San Diego, Department of Planning and Land Use
(858) 694-3714 or aaron barling@sdcounty ca gov
<<futurepop GP2020 draft June 2005.xls>> <<futurepop Existing GP xls>>

TAZ 1003

June 2005 Draft Land Use

Proposed Land Use	Future Houses	Acres	Future Population
PUBLIC/SEMI-PUBLIC AND PRESERVE LANDS	0	3.1	0
SEMI-RURAL RESIDENTIAL (SR-2) 1 DU/2 AC	87	371.5	264
SEMI-RURAL RESIDENTIAL (SR-1) 1 DU/AC	11	38.7	32
Totals	98	413.3	296

North County Metro
Vacancy Rate 4%
Persons/Household 3 146

200 DU EXISTING

Existing General Plan

General Plan Designation	Future Houses	Acres	Future Population	2000 Pop
ESTATE RESIDENTIAL 1 DU/2-4 ACRES	44	101 4	134	
RESIDENTIAL 1 DU/1-2-4 ACRES	65	311.9	195	
Total	**109**	413.3	329	219

North County Metro
Vacancy Rate 4%
Persons/Household 3.146

Year 2000	
POP	UNITS
Area 1: 219	69.612206
Area 2: 157	49.904641
Area 3: 47	14.939606

Existing General Plan

General Plan Designation	Future Houses	Acres	Future Population	2000 Pop
RESIDENTIAL 2 DU/ACRE	19	29.4	58	
RESIDENTIAL 1 DU/1-2-4 ACRES	20	86.7	59	
Total	**39**	116.1	117	157

North County Metro
Vacancy Rate 4%
Persons/Household 3.146

2000 Units	Total Pop	**Total units**
49	274	**88**

Existing General Plan

General Plan Designation	Future Houses	Acres	Future Population	2000 Pop
IMPACT SENSITIVE 1 DU/20 ACRES	12	97.5	36	
MULTIPLE RURAL USE 1 DU/4-8-20 ACRES	42	257.4	126	
Total	**54**	354.9	162	47

North County Metro
Vacancy Rate 4%
Persons/Household 3.146

2000 Units	Total Pop	**Total units**
14	209	**68**

2000 Units	Total Pop	**Total units**
69	548	178

1039

June 2005 Draft Land Use

Proposed Land Use	Future Houses	Acres	Future Population
SEMI-RURAL RESIDENTIAL (SR-2) 1 DU/2 AC	12	84.5	37
VILLAGE RESIDENTIAL (VR-2) 2 DU/AC	23	31.6	70
Totals	**35**	116.1	107

North County Metro
Vacancy Rate 4%
Persons/Household 3.146

1185

June 2005 Draft Land Use

Proposed Land Use	Future Houses	Acres	Future Population
SEMI-RURAL RESIDENTIAL (SR-10) 1 DU/10 AC	0	0.7	0
RURAL LANDS (RL-20) 1 DU/20 AC	9	209.1	26
SEMI-RURAL RESIDENTIAL (SR-2) 1 DU/2 AC	23	69.9	69
SEMI-RURAL RESIDENTIAL (SR-4) 1 DU/4 AC	13	75.3	40
Totals	**45**	354.9	134

North County Metro
Vacancy Rate 4%
Persons/Household 3.146

1003

Existing General Plan

General Plan Designation	Future Houses	Acres	Future Population
ESTATE RESIDENTIAL 1 DU/2-4 ACRES	44	101.4	134
RESIDENTIAL 1 DU/1-2-4 ACRES	65	311.9	195
Total	**109**	413.3	329

North County Metro
Vacancy Rate 4%
Persons/Household 3.146

1039

Existing General Plan

General Plan Designation	Future Houses	Acres	Future Population
RESIDENTIAL 2 DU/ACRE	19	29.4	58
RESIDENTIAL 1 DU/1-2-4 ACRES	20	86.7	59
Total	**39**	116.1	117

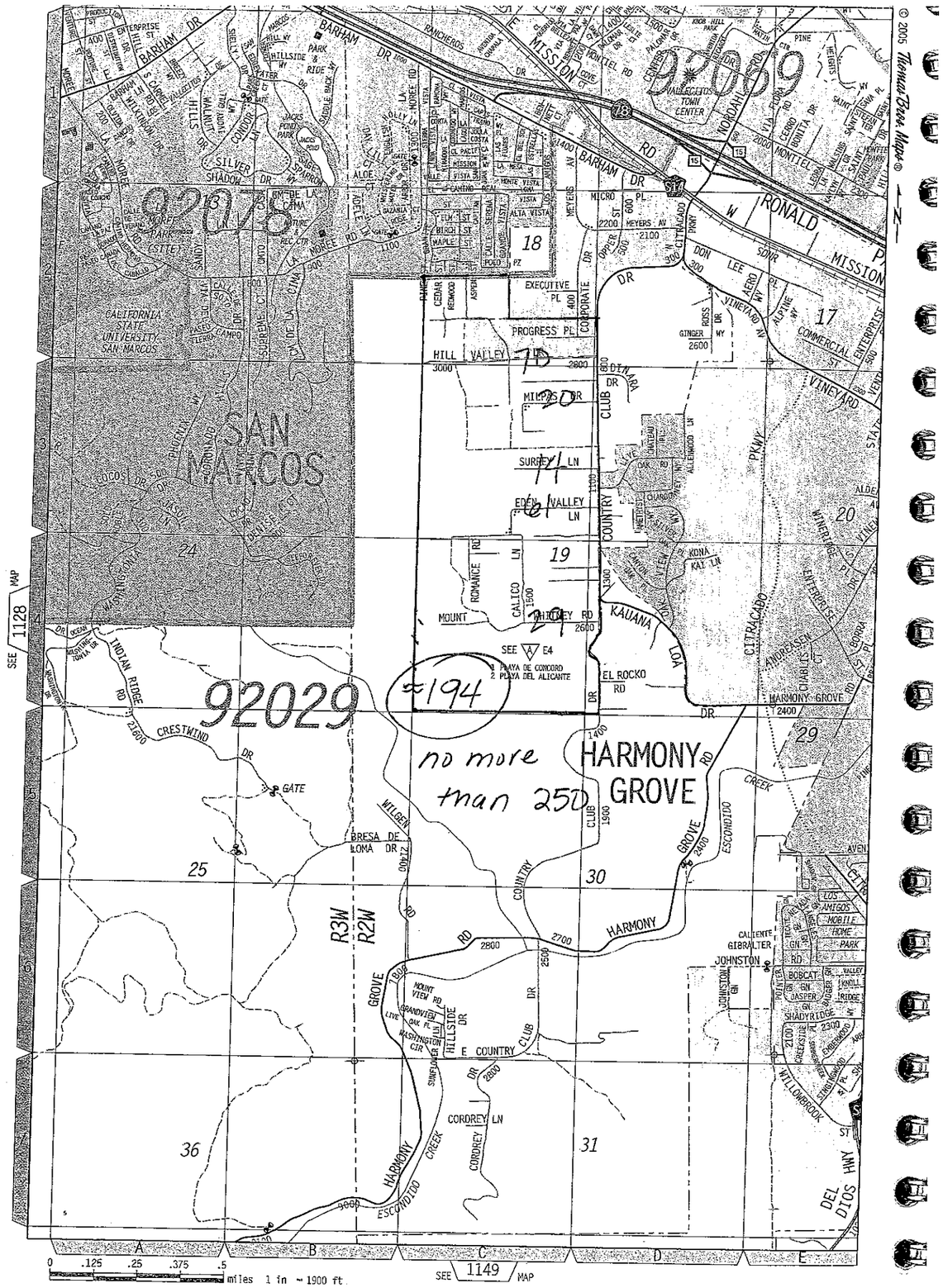
North County Metro
Vacancy Rate 4%
Persons/Household 3.146

1185

Existing General Plan

General Plan Designation	Future Houses	Acres	Future Population
IMPACT SENSITIVE 1 DU/20 ACRES	12	97 5	36
MULTIPLE RURAL USE 1 DU/4-8-20 ACRES	42	257.4	126
Total	**54**	354.9	162

North County Metro
Vacancy Rate 4%
Persons/Household 3.146



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APPENDIX L1

GP 2020 MODEL INFORMATION

DRAFT

SAN DIEGUITO

CE Road Segment	Preliminary Road Network Options	Basis for Preliminary Classification
Elfin Forest / Harmony Grove Area		
1 **Elfin Forest Road (SC 1380)** Segment: Questhaven Road to Community Boundary Existing Condition: 2 lanes Current Classification: Collector Road (4 lanes)	**Downgrade Classification** *Southern Portion* 2.2E Light Collector (2 lanes) *Northern Portion* 2.2C Light Collector with Intermittent Turn Lane (2+ lanes) OR	• *Road Capacity* – A 2 and 2+-lane road classification will operate at LOS A-D • *Community Preference* – Downgrade has strong community support • *Minimize Environmental Impacts* – Existing classification would impact steep slopes, and biologically sensitive lands • *Community Character*– A 2 and 2+ lane road is consistent with the local rural character and limited development potential
2A **Harmony Grove Road (SC 1370)** Segment: Questhaven to Country Club Drive Existing Condition: 2 lanes Current Classification: Collector Road (4 lanes)	**Downgrade Classification** 2.2E Light Collector (2 lanes) OR ***Note:*** Traffic modeling under review with DPW / Regulatory staff	• *Road Capacity* – A 2-lane road classification will operate at LOS A-D • *Community Preference* – Downgrade has strong community support • *Minimize Environmental Impacts* – Existing classification would impact steep slopes, and biologically sensitive lands • *Support Land Use Goals* – Classification is consistent with local rural character and limited development potential

DRAFT

CE Road Segment	Preliminary Road Network Options	Basis for Preliminary Classification
2B Harmony Grove Road (SC 1370) Segment: Country Club Drive to Planning Area boundary Existing Condition: 2 lanes Current Classification: Collector Road (4 lanes)	**Downgrade Classification** 2.2B Light Collector with Continuous Turn Lane (2+ lanes) OR ***Note:*** Traffic modeling under review with DPW / Regulatory staff	• *Road Capacity* – A 2+-lane road classification will operate at LOS A-D • *Community Preference* – Downgrade has strong community support • *Minimize Environmental Impacts* – Existing classification would impact biologically sensitive lands • *Support Land Use Goals* – A 2+ lane road is consistent with the local rural character and proposed project
3A Country Club Drive (SC 1375) Segment: North of Harmony Grove Road Existing Condition: 2 lanes Current Classification: Collector Road (4 lanes)	**Remove from CE Network** Retain as Local Public Road OR **Downgrade Classification** 2.2B Light Collector with Continuous Turn Lane (2+ lanes) OR ***Note:*** Traffic modeling under review with DPW / Regulatory staff	• *Road Capacity* – Initial test results show a 2-lane road classification will operate sufficiently • *Community Preference* – Community supports removal of this road from the CE • *Support Land Use Goals* – Supports low density residential

DRAFT

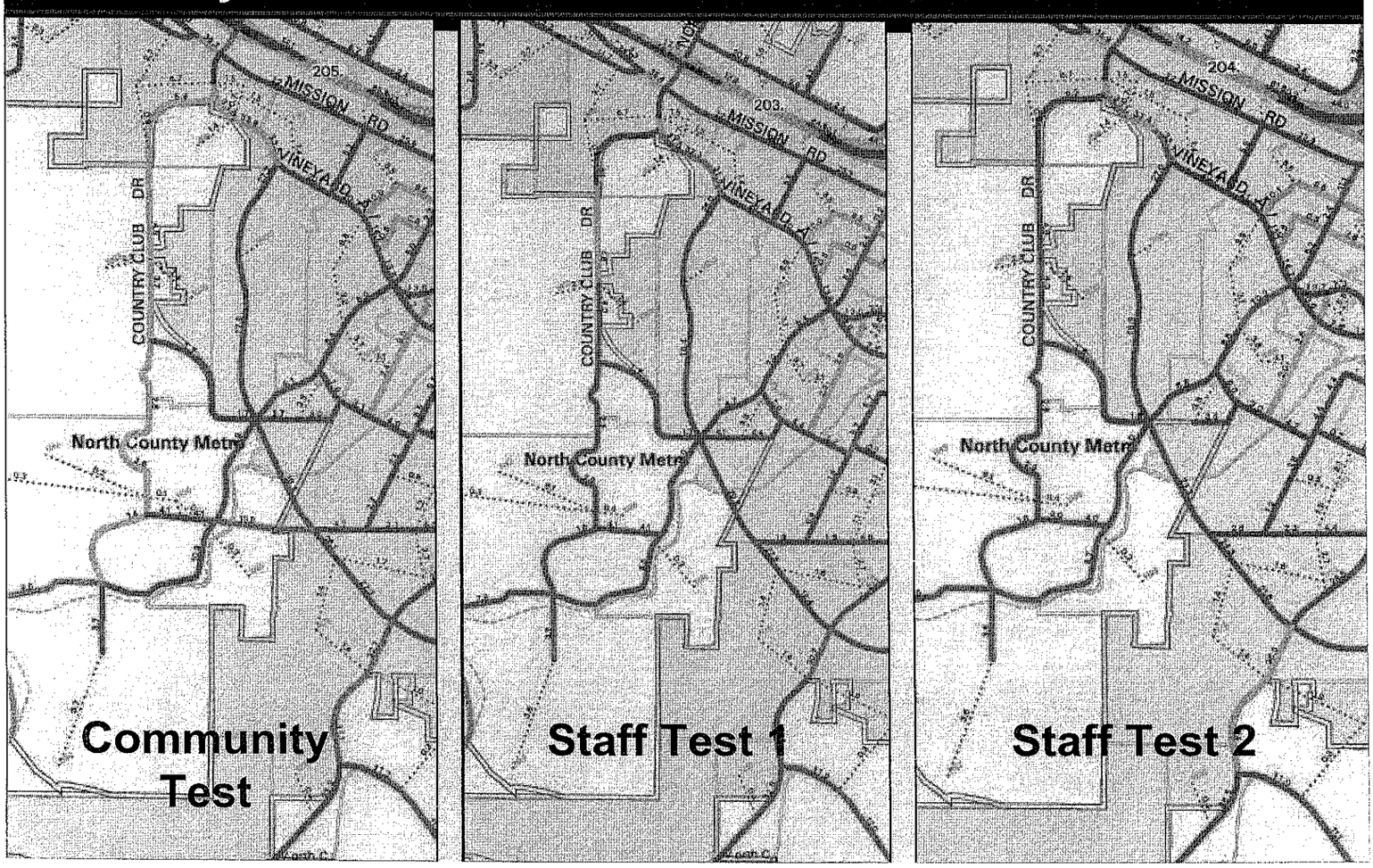
CE Road Segment	Preliminary Road Network Options	Basis for Preliminary Classification
3B Country Club Drive (SC 1375) Segment: South of Harmony Grove Road Existing Condition: 2 lanes Current Classification: Collector Road (4 lanes)	**Remove from CE Network** Retain as Local Public Road OR **Downgrade Classification** 2.2B Light Collector with Continuous Turn Lane (2+ lanes) OR ***Note:*** Traffic modeling under review with DPW / Regulatory staff	• *Road Capacity* – Initial test results show a 2-lane road classification will operate sufficiently • *Minimize Environmental Impacts* – Existing classification would impact biologically sensitive conservation lands • *Support Land Use Goals* – Supports low density residential
3C SC 1375 Segment: Unbuilt Segment intended to connect to Del Dios Highway Existing Condition: 2 lanes Current Classification: Collector Road (4 lanes)	**Remove from CE Network**	• *Community Preference* – Community supports removal of this road from the CE • *Support Land Use Goals/ Minimize Environmental Impacts* – Unbuilt portion was planned to traverse sensitive MSCP land and could further exacerbate the traffic on Del Dios Highway.

DRAFT

CE Road Segment	Preliminary Road Network Options	Basis for Preliminary Classification
4 **Village Road** Segment: Entire Road Existing Condition: Unbuilt Current Classification: N/A	**New CE Road** 2.1C Community Collector with Intermittent Turn Lanes (2+ lanes) OR 2.1A Community Collector with Raised Median (2+ lanes) ***Note: Raised median could enhance community character***	• *Road Capacity* – A 2+ lane road is sufficient to meet forecast traffic on most portions of this road • *Connectivity* – Can improve capacity in more congested locations by connecting directly to Citracado Parkway in Escondido
5 **Citracado Parkway** Segment: Within Planning Area boundary Existing Condition: Unbuilt Current Classification: N/A	**New CE Road Connection** 4.1 Major Road Series (4+ lanes) ***Note: In conjunction with planned City of Escondido improvements***	• *Road Capacity* – A 4+ lane road is sufficient to meet forecast traffic on this road • *Connectivity* – will improve connectivity to regional thoroughfares

NETWORK TESTED

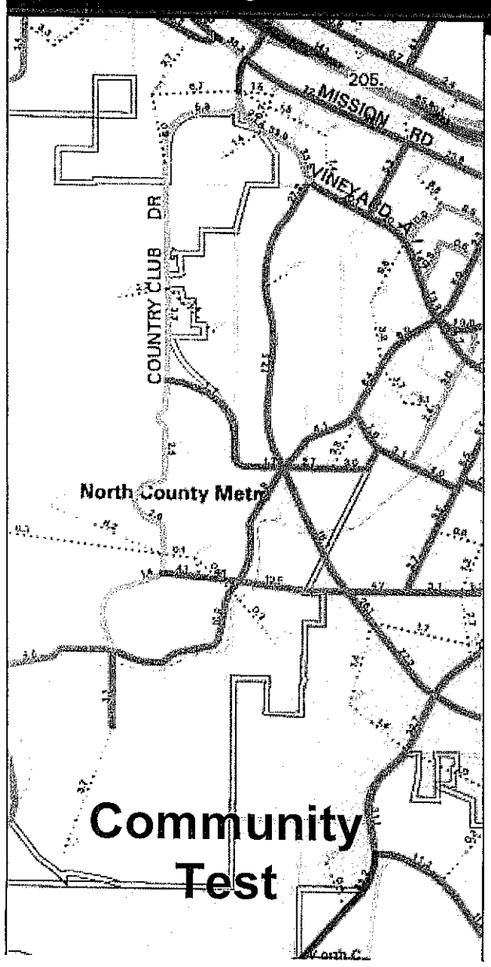
Harmony Grove LOS



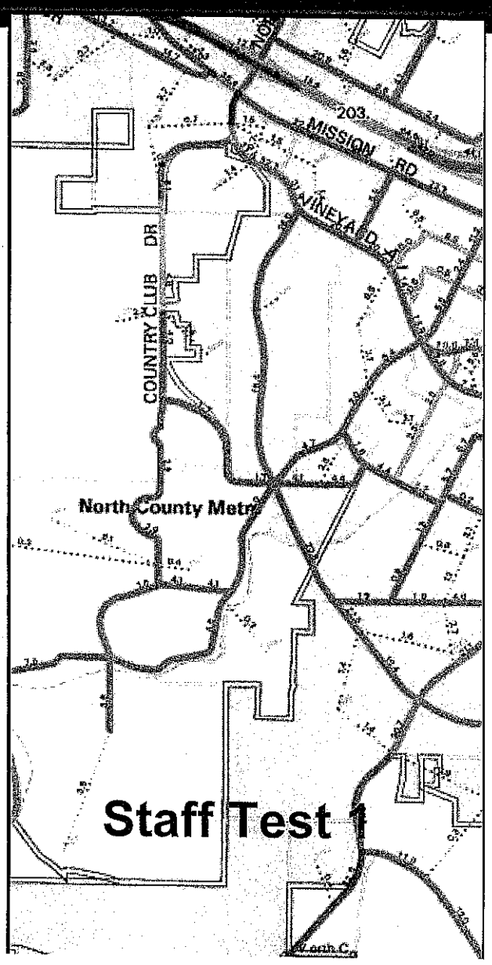
NETWORK TESTED

Harmony Grove LOS

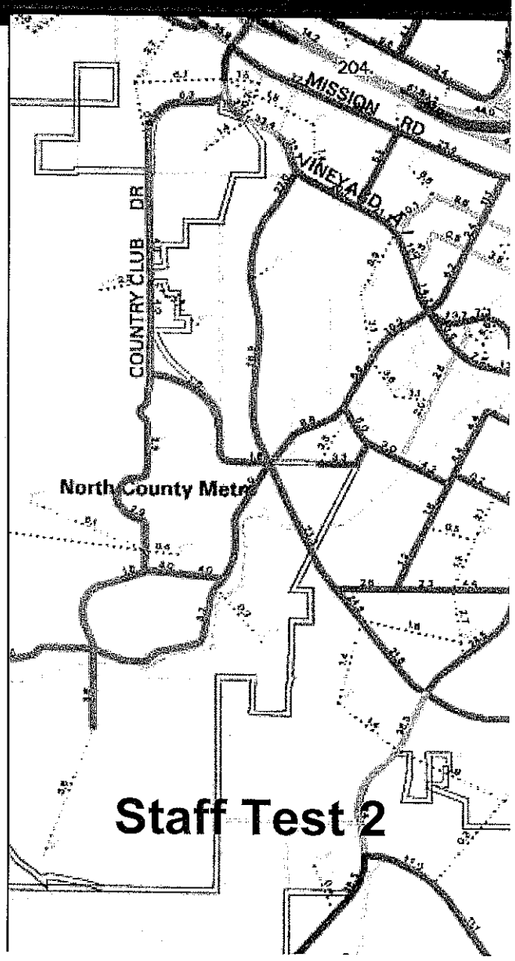
GENERAL PLAN 2020



Community Test

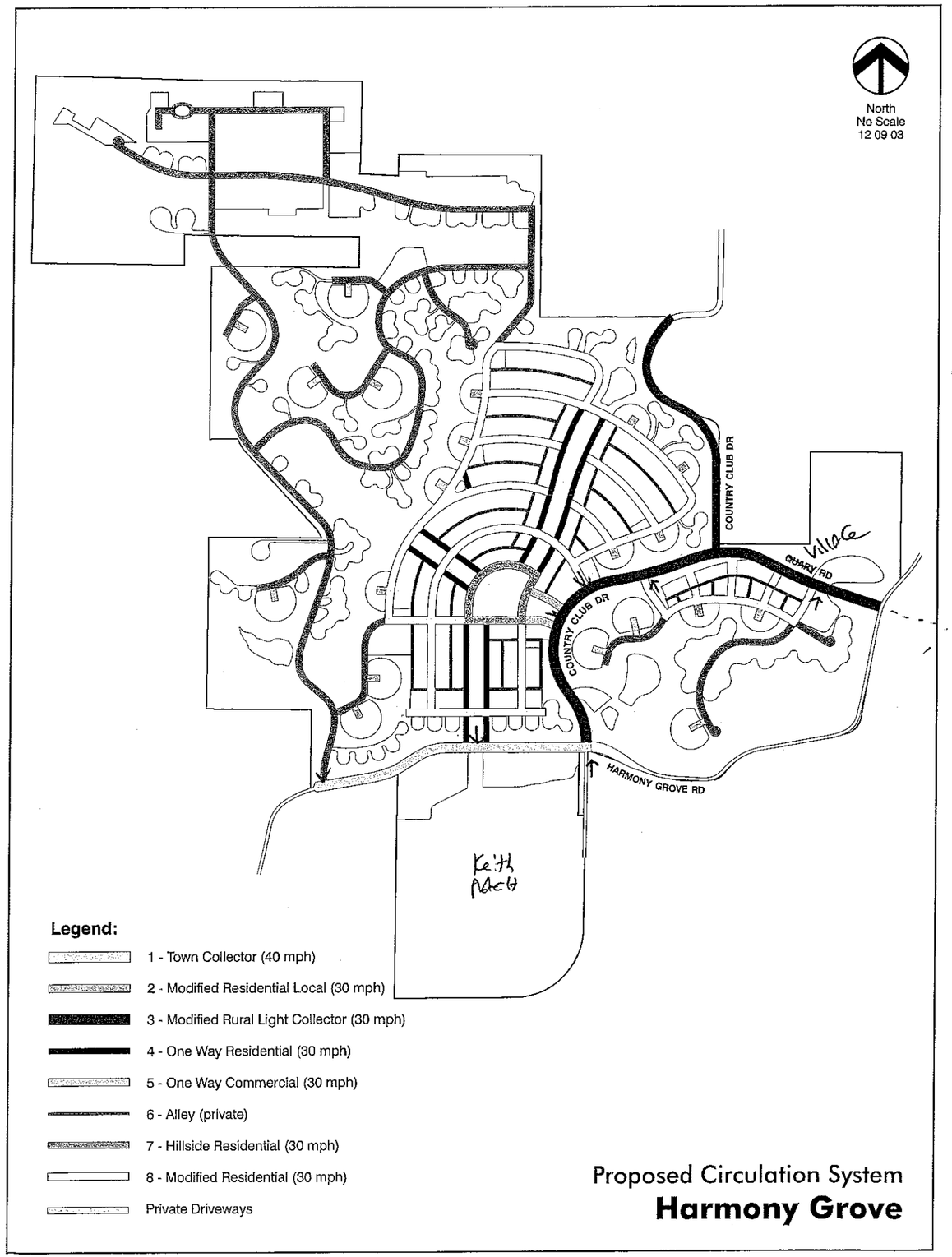


Staff Test 1



Staff Test 2

APPENDIX M
INTERNAL CIRCULATION DISCUSSION



Proposed Circulation System

Harmony Grove

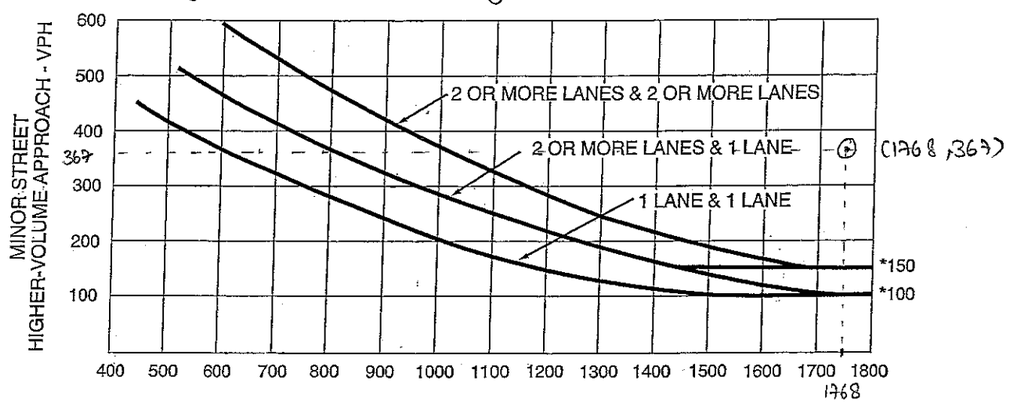
APPENDIX N

SIGNAL WARRANT ANALYSES

Option A

Figure 4C-3. Warrant 3, Peak Hour

Harmony Grove Rd/ Village Road.

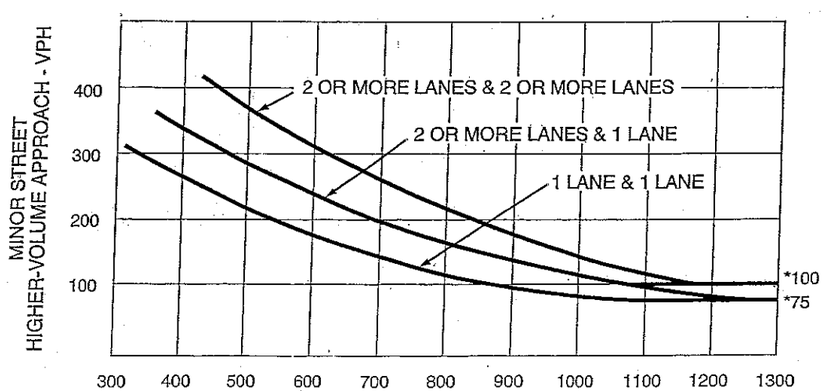


MAJOR STREET—TOTAL OF BOTH APPROACHES—
VEHICLES PER HOUR (VPH)

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)



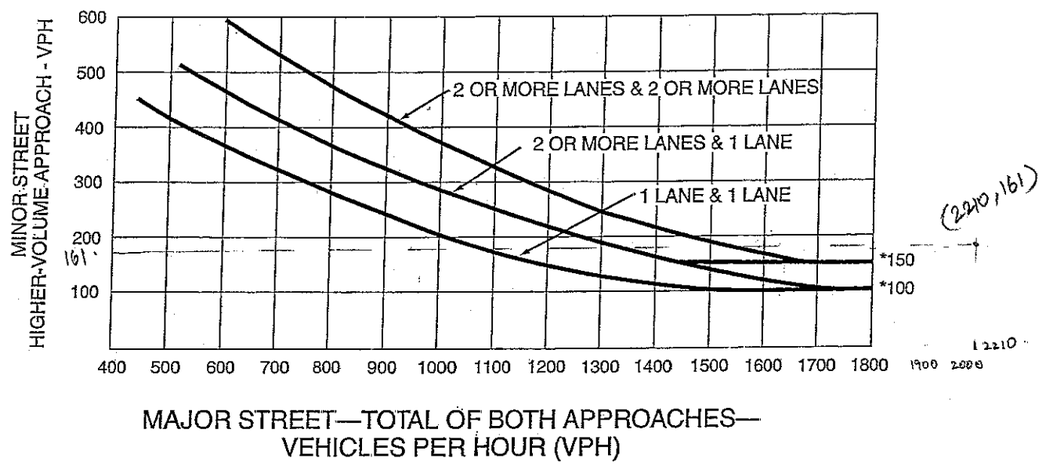
MAJOR STREET—TOTAL OF BOTH APPROACHES—
VEHICLES PER HOUR (VPH)

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Option A

Harmony Grove Road / Kauna Loa Dr

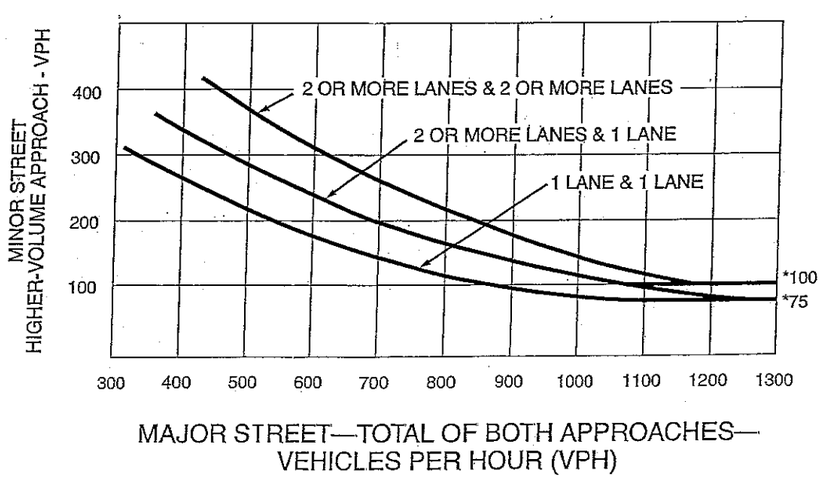
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

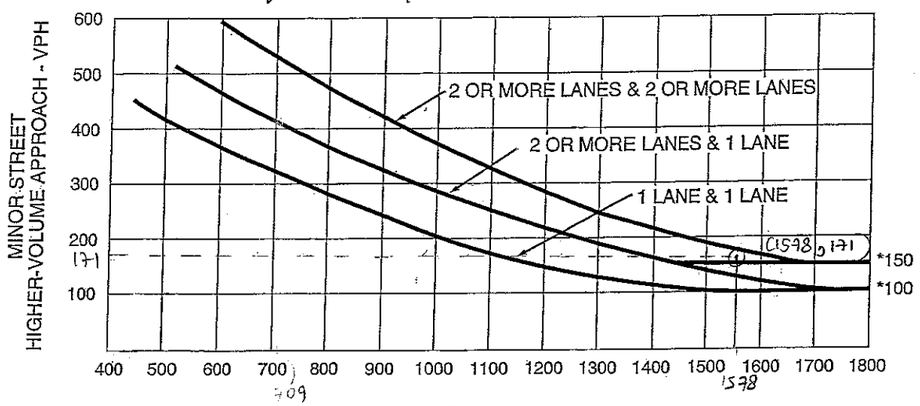
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour

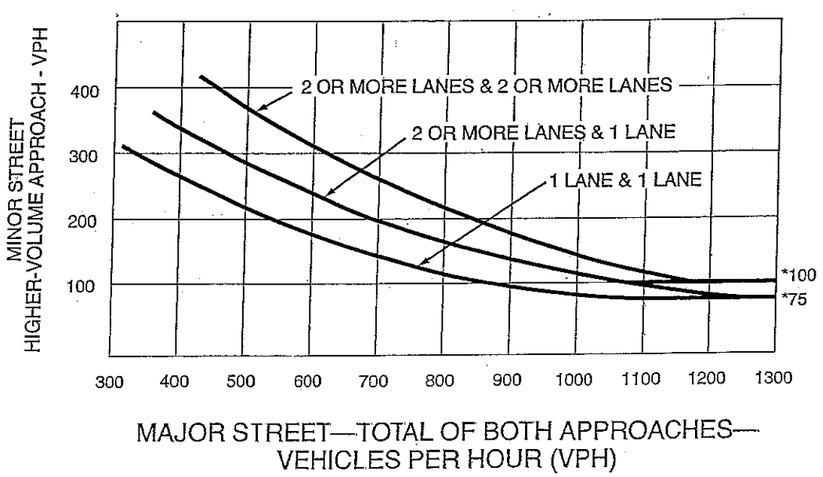
Harmony Grove / Entrance #1



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

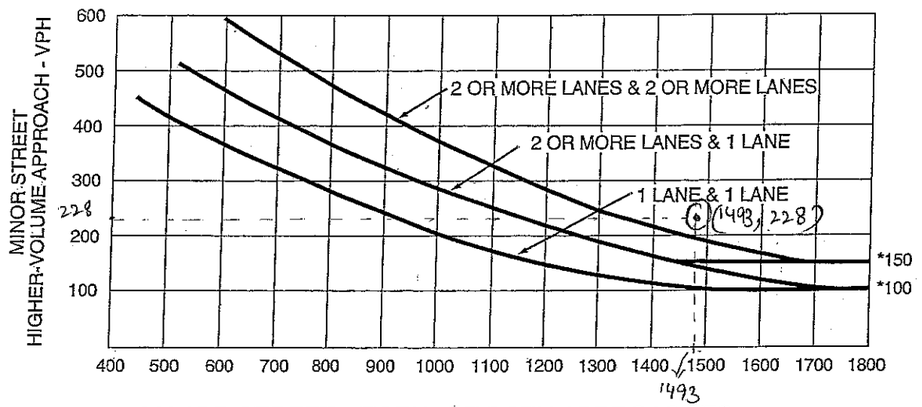
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour

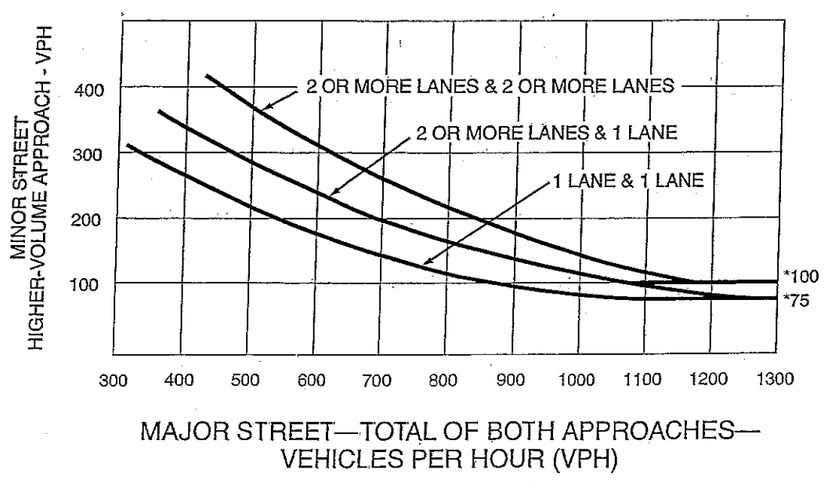
Harmony Grove Dr / Country Club Drive



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

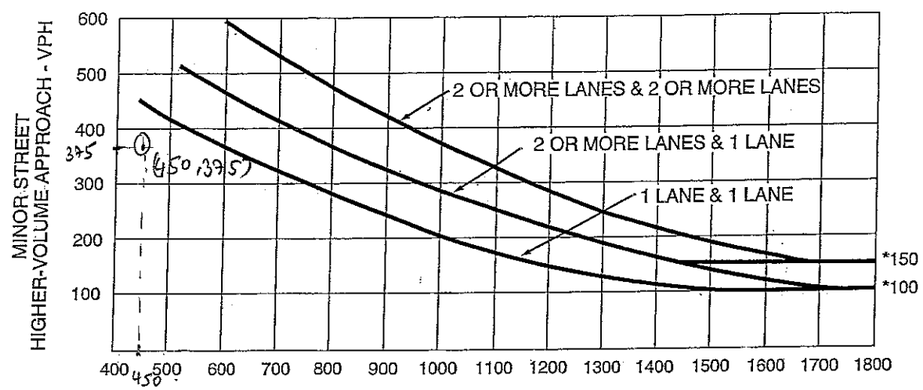
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour

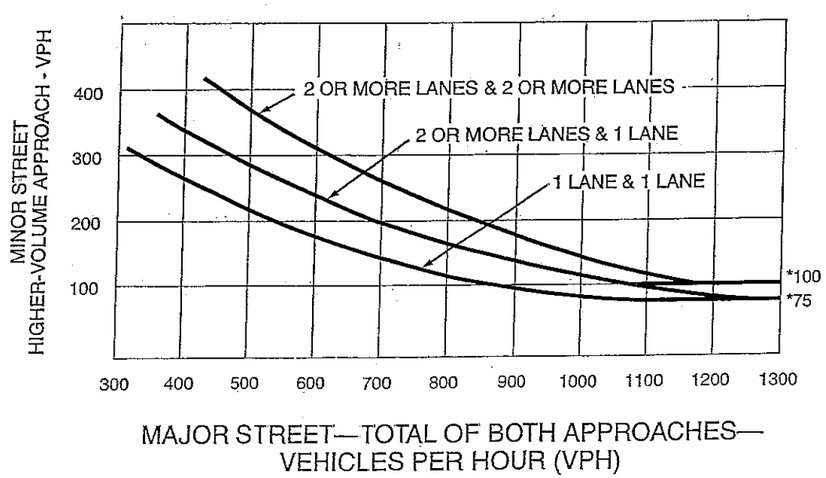
Hale Avenue / Avendia Del Diablo.



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)

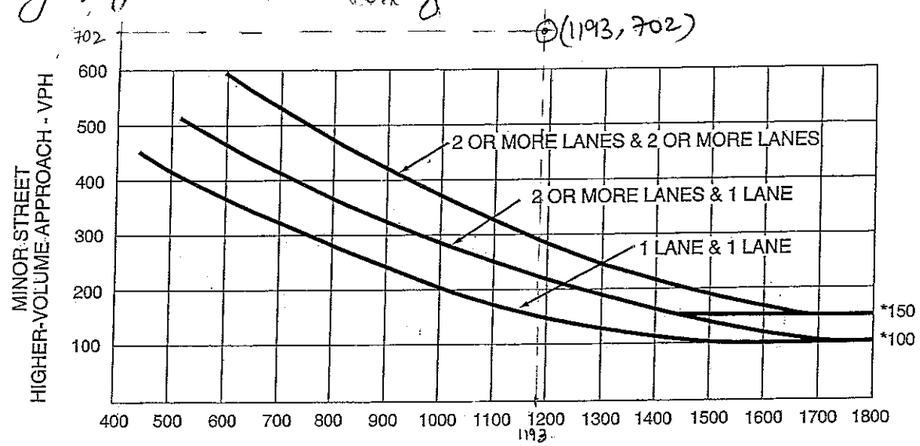


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Option B

Harmony Grove + Village Road

Figure 4C-3. Warrant 3, Peak Hour

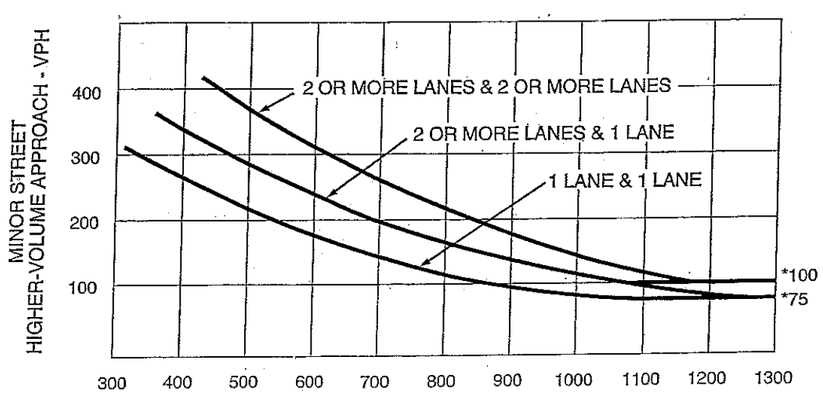


MAJOR STREET—TOTAL OF BOTH APPROACHES—
VEHICLES PER HOUR (VPH)

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)

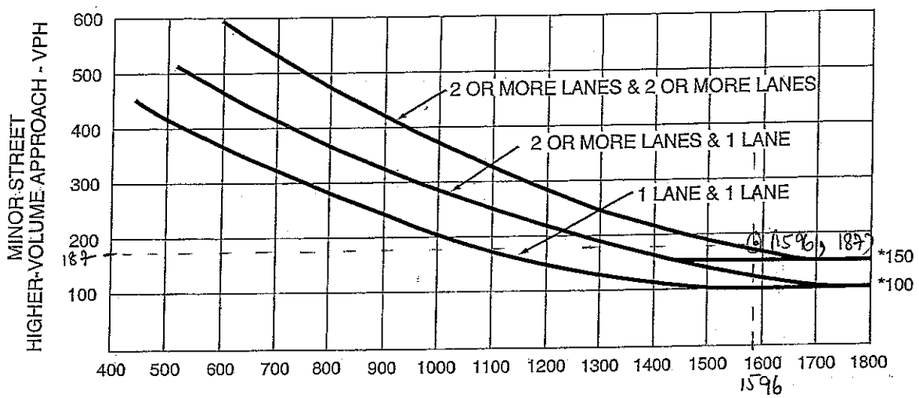


MAJOR STREET—TOTAL OF BOTH APPROACHES—
VEHICLES PER HOUR (VPH)

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour

Harmony Grove Rd & Entrance #1

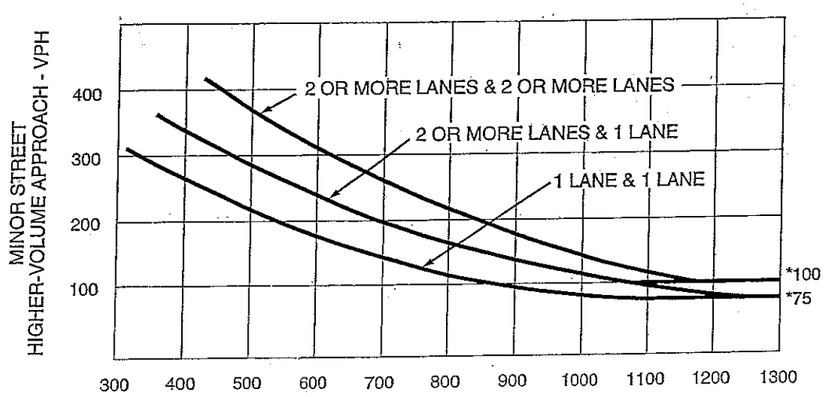


MAJOR STREET—TOTAL OF BOTH APPROACHES—
VEHICLES PER HOUR (VPH)

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)



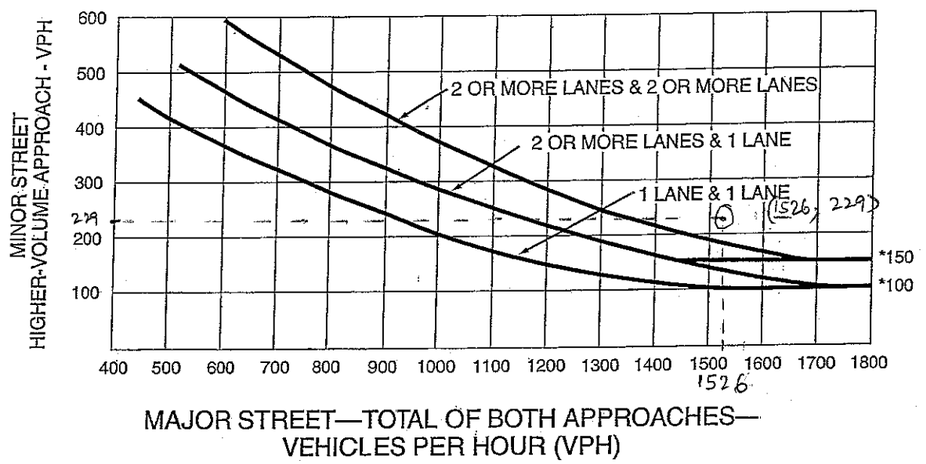
MAJOR STREET—TOTAL OF BOTH APPROACHES—
VEHICLES PER HOUR (VPH)

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Harmony Grove Rd / Country club Drive

Option B

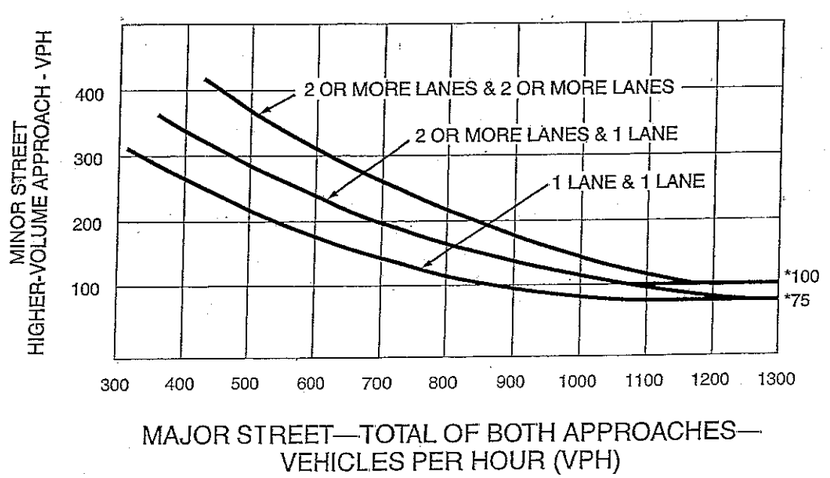
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour

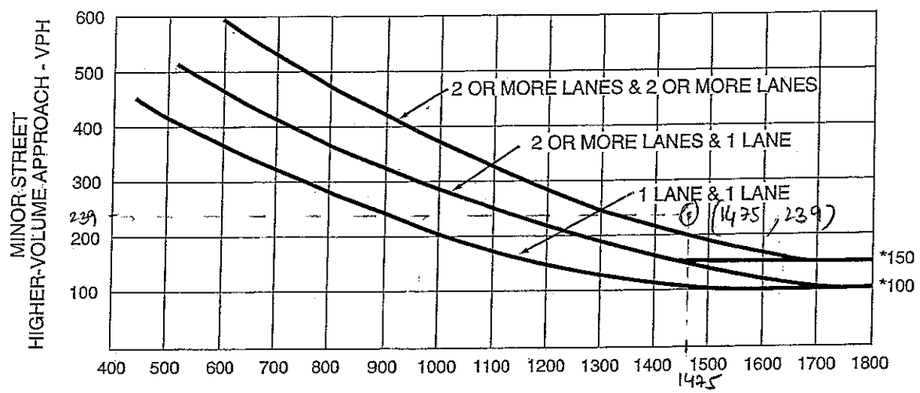


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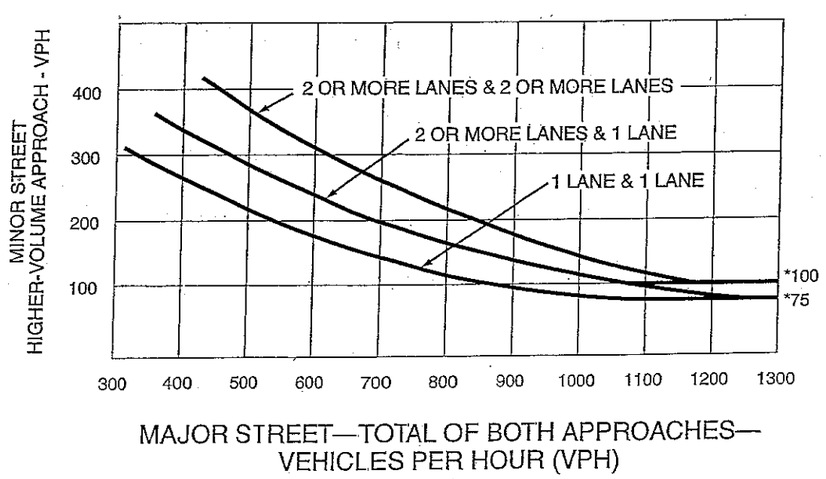
Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

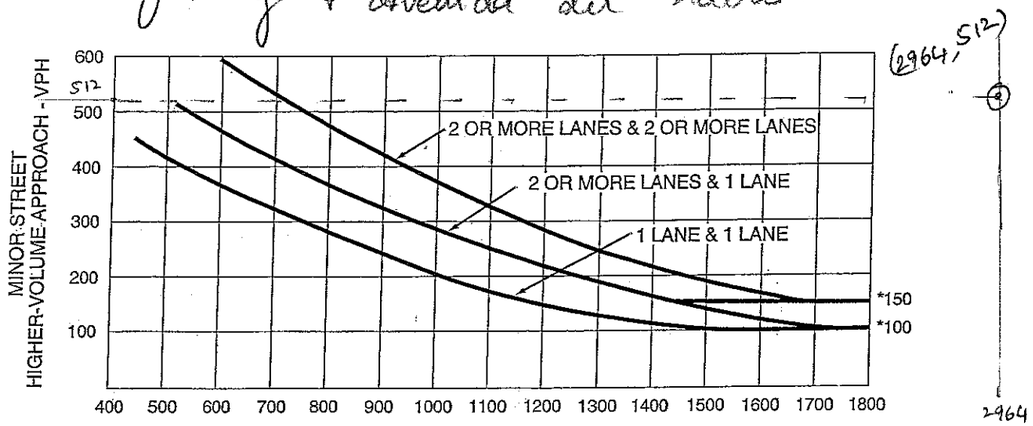
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour

Valley Pkwy + Avenida del Diablo



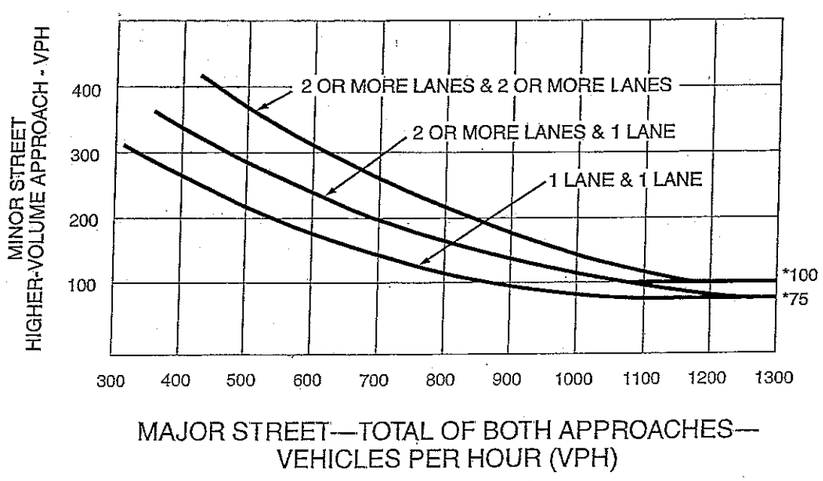
(2964, 512)

2964

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)

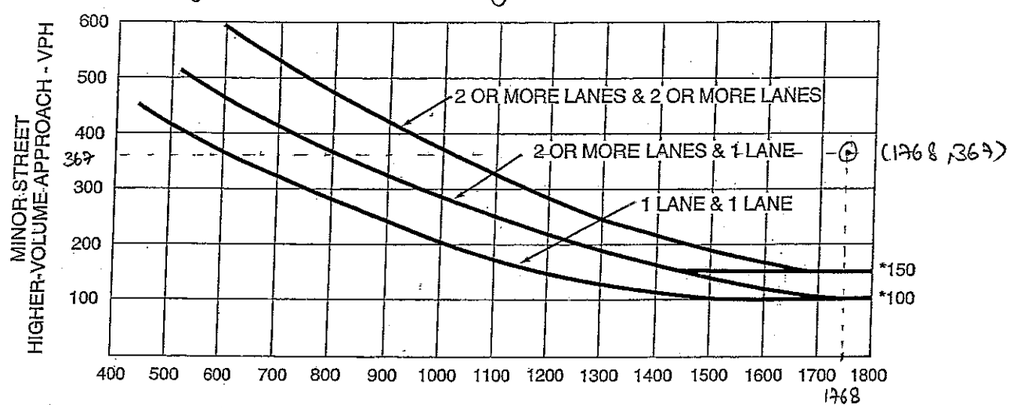


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Option C

Figure 4C-3. Warrant 3, Peak Hour

Harmony Grove Rd/ Village Road.

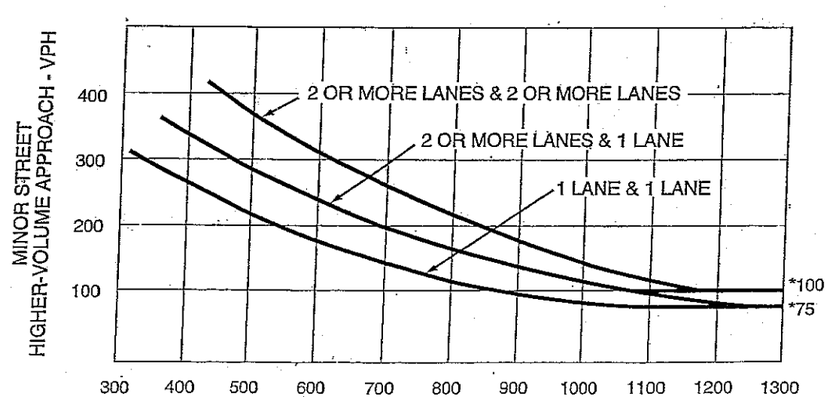


MAJOR STREET—TOTAL OF BOTH APPROACHES—
VEHICLES PER HOUR (VPH)

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)

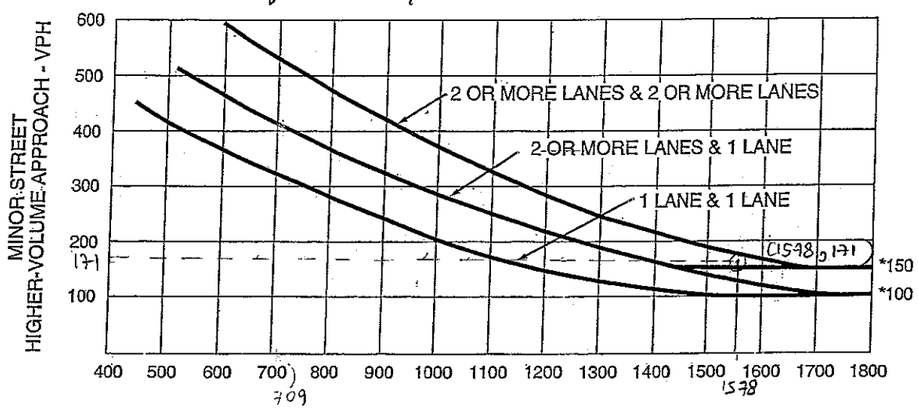


MAJOR STREET—TOTAL OF BOTH APPROACHES—
VEHICLES PER HOUR (VPH)

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour

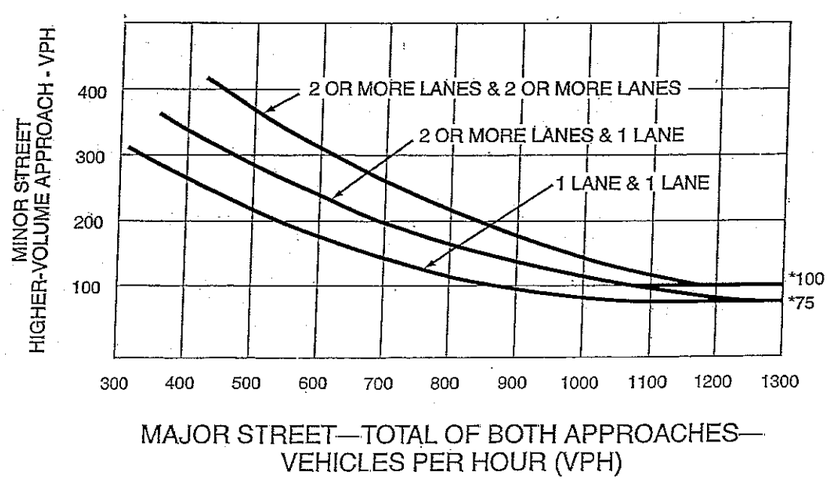
Harmony Grove / Entrance #1



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

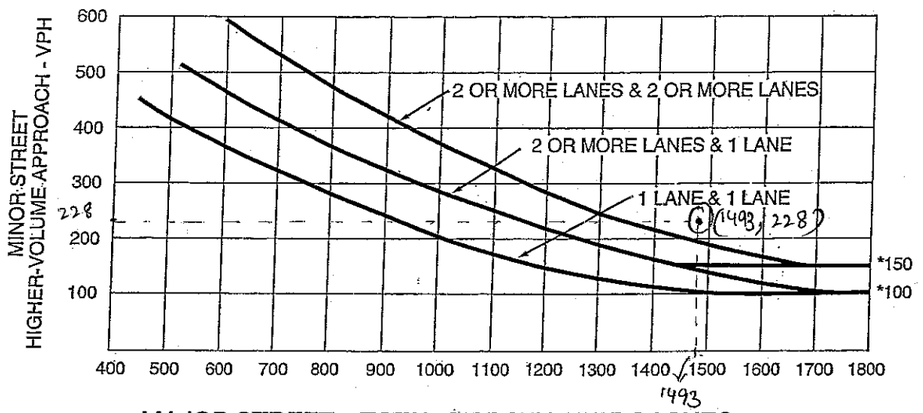
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour

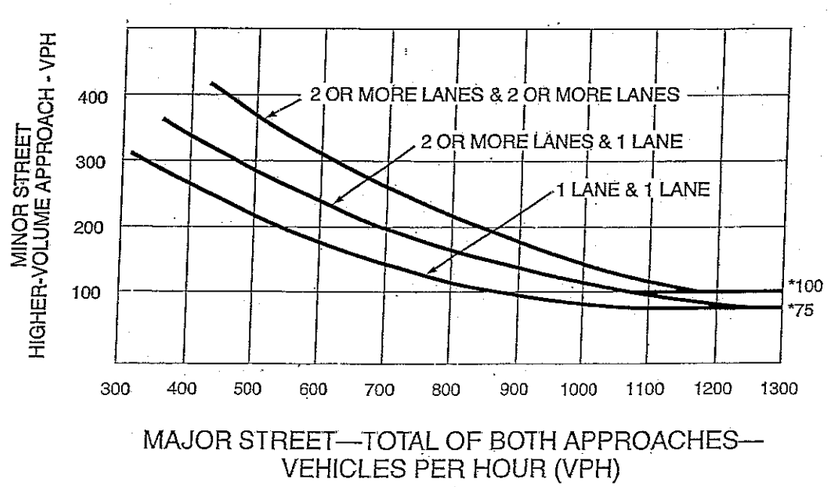
Harmony Grove Dr / Country Club Drive



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

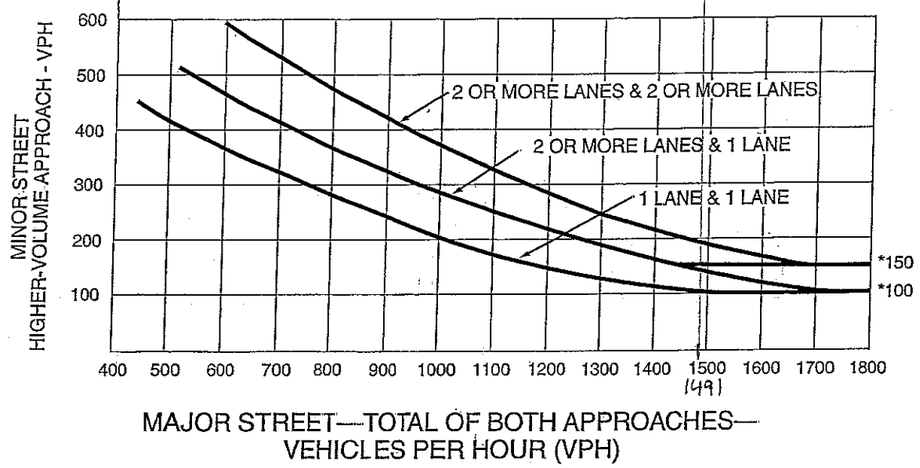
Hale Avenue / Harmony Grove Road

C

1044

(1491 / 1044)

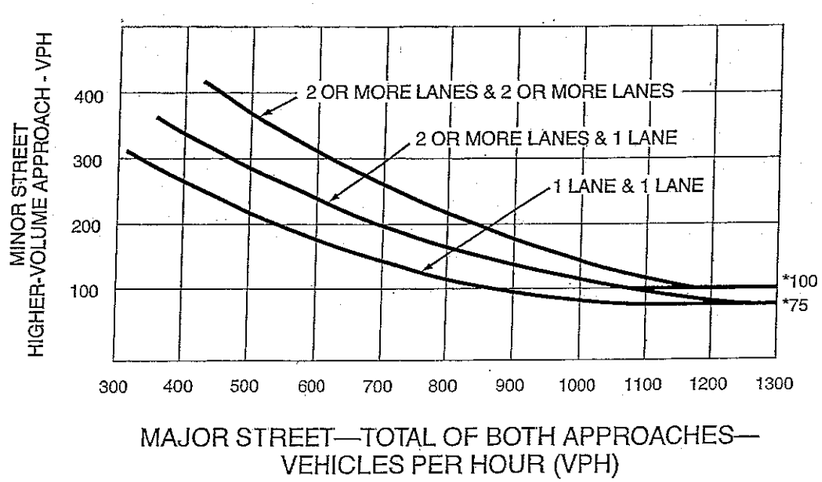
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume of a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h OR ABOVE 40 mph ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

APPENDIX O

SC1375 2030 Volume

Appendix O

ndaries:

Select Zone Boundaries

Zone Boundaries

recasted Volumes:

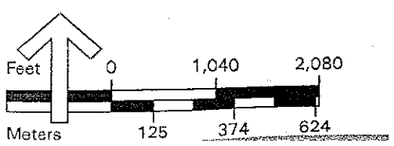
Unadjusted Forecasted Volume

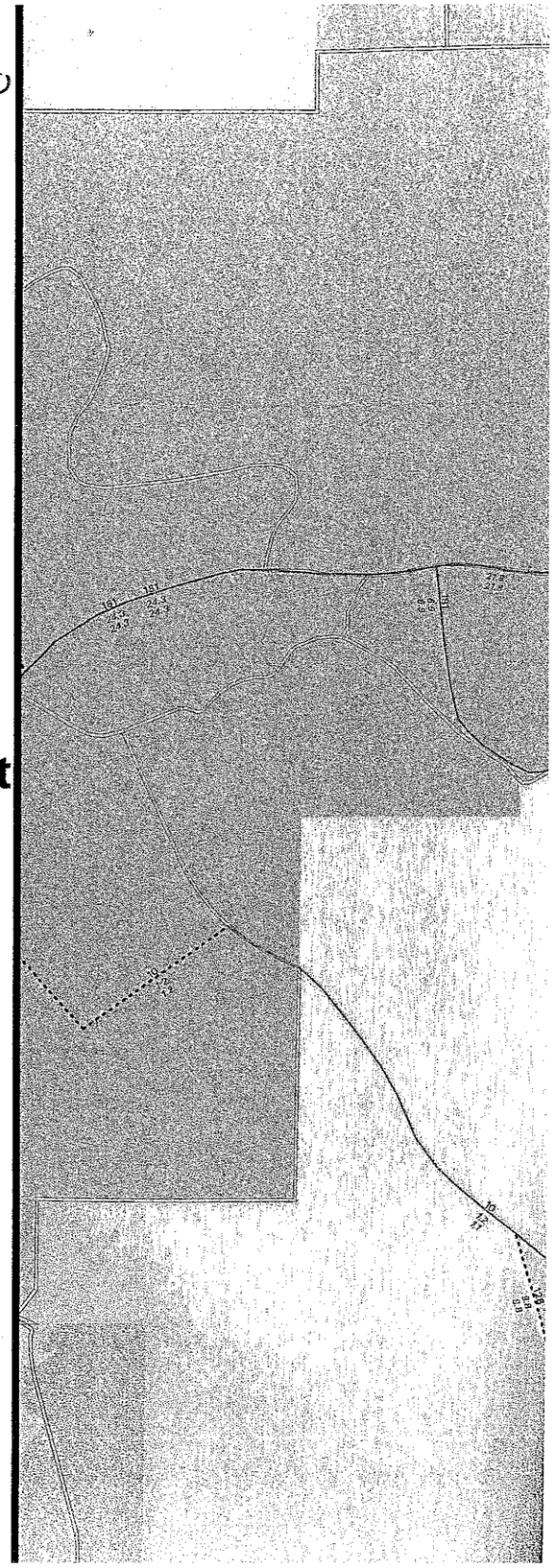
Whole TAZ 4253 Volume

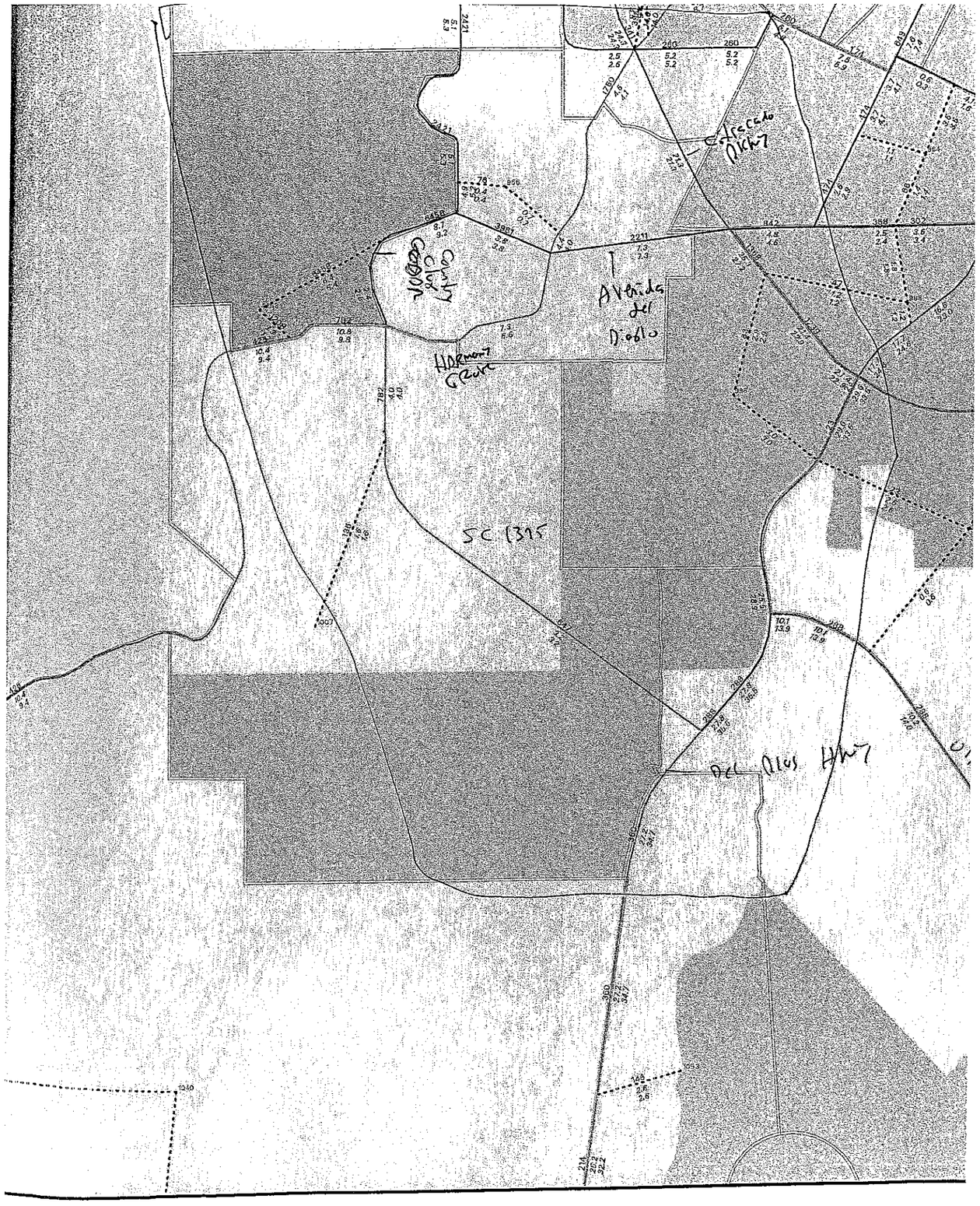
SANDAG
Cities/County
Transportation Forecast
2030 RTP
Year 2030

Harmony Grove Area
Select Zone Analysis
TAZs 4253

Alt3
w/ SC 1375






Avenida del Diablo
Harmony Grove
SC 1375
Del Dios Hwy

APPENDIX P

CALCULATION SHEETS FOR UNITS THRESHOLDS

Option A
Harmany Grove Village

		ADT		Thresholds	Intersection AM	PM
9290	6110	1590	>1		121	152
		2590	100		201	252
		3590	200		281	352
		4590	300		361	452
		5590	400		441	552
		6590	500		521	652
		7590	600		601	752

Segment

Trips	%	Project Trips	Units
300	25%	1,200	>1
200	20%	1,000	>1
3100	47%	6,596	501
740	24%	3,083	149
740	27%	2,741	115
300	37%	811	>1
1950	37%	5,270	368
770	28%	2,750	116
680	28%	2,429	84
200	3%	6,667	508
1170	15%	7,800	621
680	15%	4,533	294
200	11%	1,818	23
300	8%	3,750	216
100	15%	667	>1
100	4%	2,500	91

Intersections

Project Trips		%	Trips	Units
80	PM	25%	20	>1
130	PM	27%	35	>1
540	PM	14%	76	388
10	AM	11%	1	>1
540	PM	25%	135	388
410	PM	20%	82	258
90	PM	70%	63	>1
100	AM	11%	11	>1

Freeways

70	PM	15%	467
90	AM	12%	750

Option B
Harmany Grove Village

ADT

9290	6110	1590	>1
		2590	100
		3590	200
		4590	300
		5590	400
		6590	500
		7590	600

Thresholds

Intersections

AM	PM
121	152
201	252
281	352
361	452
441	552
521	652
601	752

Segment

Trips	%	Project Trips	Units
300	14%	2,143	55
200	10%	2,000	41
740	24%	3,083	149
740	27%	2,741	115
300	8%	3,750	216
200	18%	1,111	>1
300	11%	2,727	114
300	14%	2,143	55
680	15%	4,533	294
1810	23%	7,870	628
200	13%	1,538	>1
300	15%	2,000	41
100	17%	588	>1
100	4%	2,500	91

Intersections

Project Trips		%	Trips	Units
80	PM	24%	19	>1
140	PM	27%	38	>1
871	PM	14%	122	719
590	PM	27%	159	438
123	AM	18%	22	3
146	PM	18%	26	>1
93	PM	23%	21	>1

Freeways

70	PM	15%	467
90	AM	12%	750

Option C
Harmany Grove Village

ADT

9290	6110	1590	>1
		2590	100
		3590	200
		4590	300
		5590	400
		6590	500
		7590	600

Thresholds

Intersections

AM	PM
121	152
201	252
281	352
361	452
441	552
521	652
601	752

Segment

Trips	%	Project Trips	Units
740	24%	3,083	149
740	27%	2,741	115
300	15%	2,000	41
680	9%	7,556	597
200	27%	741	>1
300	15%	2,000	41
300	15%	2,000	41
680	17%	4,000	241
200	11%	1,818	23
300	8%	3,750	216
100	15%	667	>1
100	4%	2,500	91

Intersections

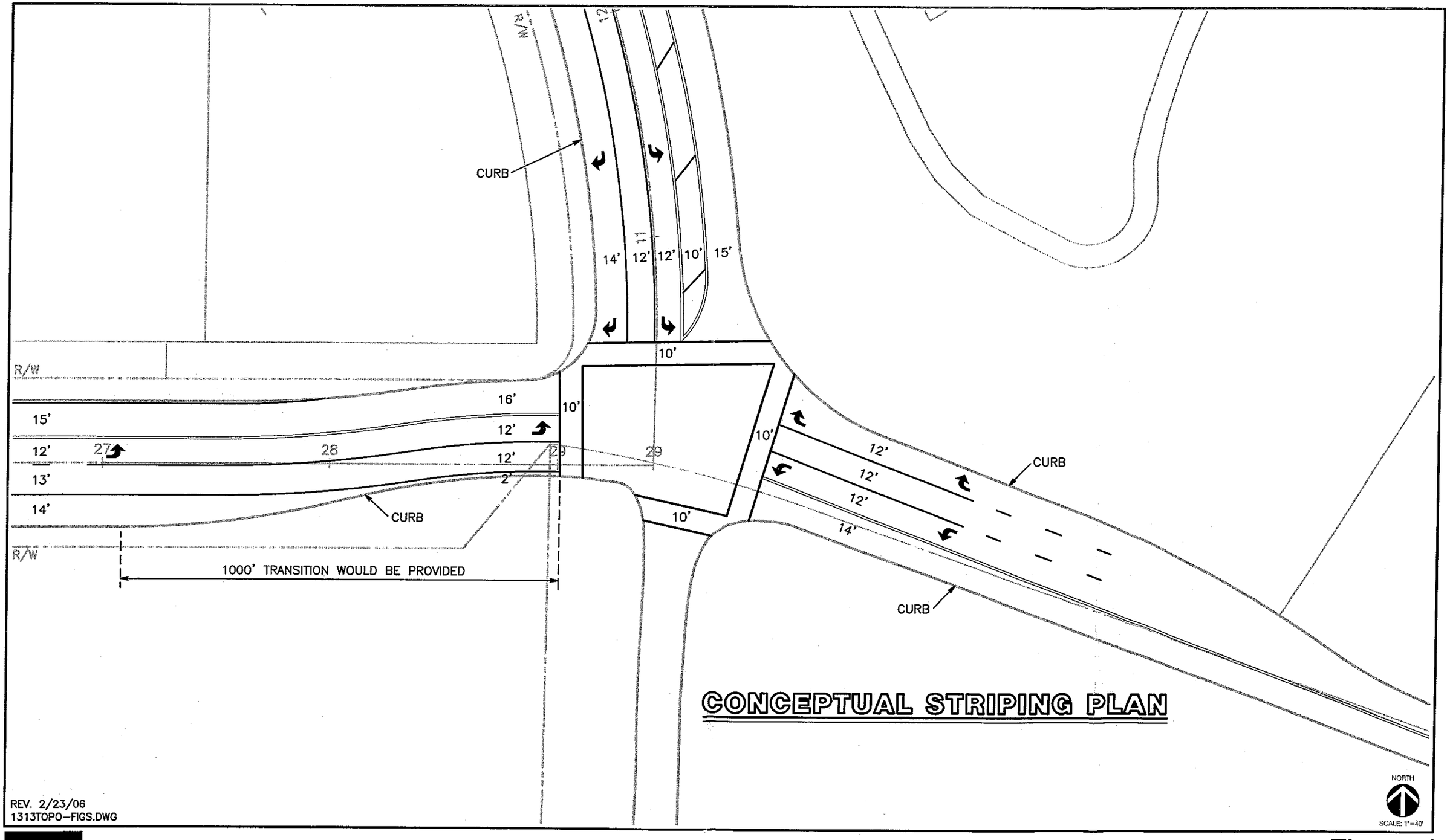
Project Trips		%	Trips	Units
80	PM	24%	19	>1
140	PM	27%	38	>1
800	PM	14%	112	648
	AM	11%	0	>1
270	PM	70%	189	118
730	PM	20%	146	578
100	PM	47%	47	>1
210	PM	27%	57	58

Freeways

70	PM	15%	467
90	AM	12%	750

APPENDIX Q

CONCEPTUAL STRIPING PLANS

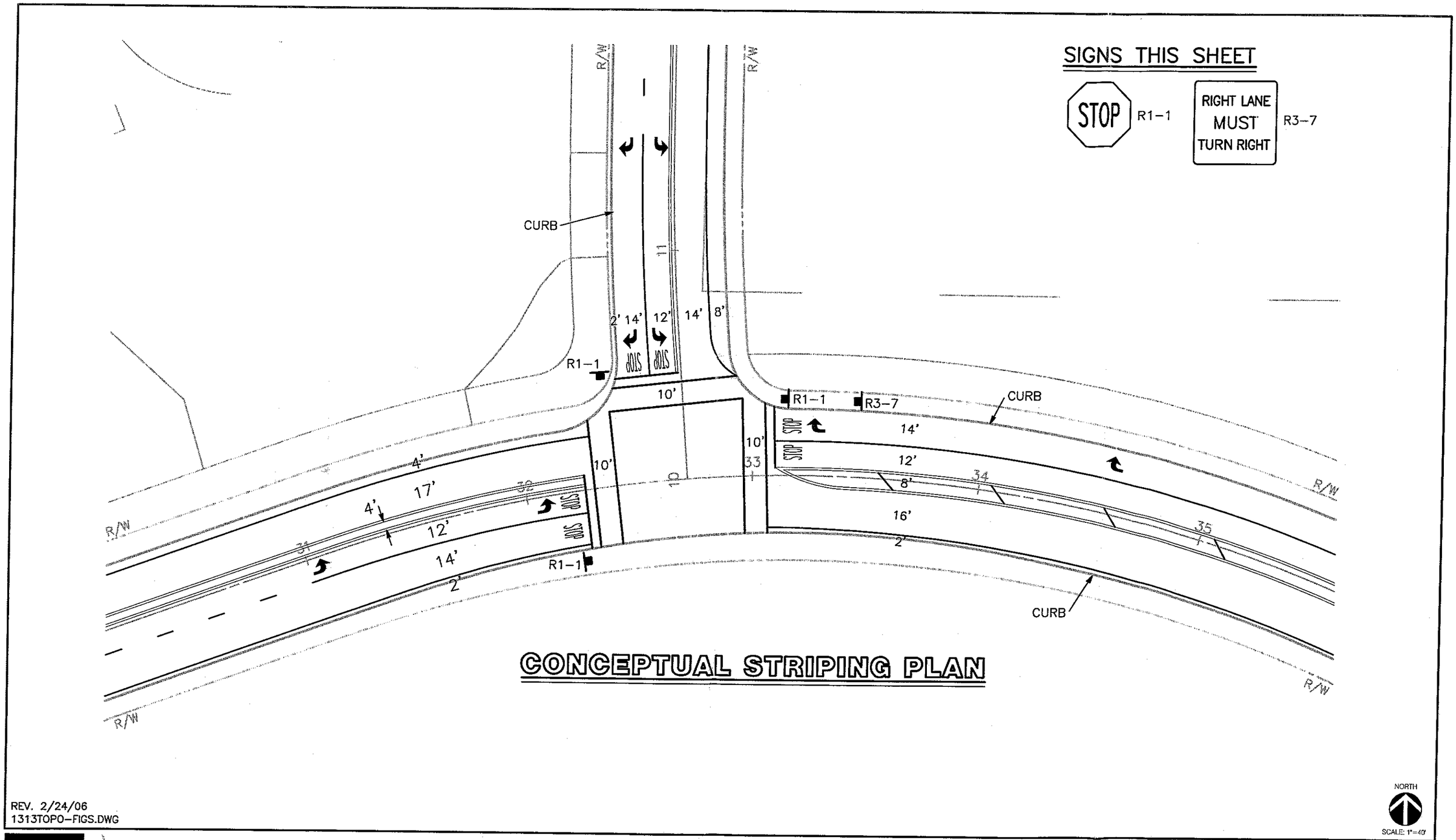


LINSCOTT LAW & GREENSPAN engineers

Figure 1

Country Club Drive and Harmony Grove Road

Harmony Grove Village



REV. 2/24/06
1313TOPO-FIGS.DWG

LINSCOTT LAW & GREENSPAN
engineers

Figure 2

Country Club Drive and Village Road

Harmony Grove Village