February 06, 20006

FOURTH VERSION

ACOUSTICAL ANALYSIS

SWEETWATER ROAD PROJECT

COUNTY OF SAN DIEGO

Prepared by:

Gordon Bricken
President

/mmb

Prepared for:

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S U M M A R Y

This analysis has been completed to determine the exterior and interior noise exposure and the potential mitigation measures for the proposed project on Sweetwater Road in the County of San Diego. A list of findings is given in the following summary. Details are discussed in the body of the report.
The noise models were developed for a mirror image of the project site and do not materially affects the results that were generated by the Sound 32 program.

A. NOISE CONTROL BY BARRIER DESIGN

Calculations indicate that the ground level exterior noise level will slightly exceed 60 dBA CNEL in the patios. Wall heights greater than those used in the report calculations do not significantly alter the resulting exterior noise levels. This is due to an intrinsic limit in the Sound32 program in addressing multiple independent barriers along any line to a receptor for any source. The barriers used to compute the noise levels were as follows:

SR25 Wall. - This is the wall that runs north and south and is programmed from Station 153 to the north termination at Station 156.40

SR25 Berm. - This is the extension of the barrier from Station 156.40 to Station 157.40.

Sweetwater MHP wall. - This is the wall on the east side of Sweetwater Road running in front of the Mobile Home Park and ending at Station 155.40.

Sweetwater Site Berm. – This is the berm in front of the site running from Station 155.40 to Station 156.15.

Sweetwater Wall North of the Site. - This is the wall on the east side of Sweetwater Road running from Station 156.40 to Station 157.40.

South Side of Bldg 1 Units 1-7. - This is the south side of the building approximated by a 20 foot free standing wall.

North Side Bldg 1 Units 1-7. - This is the north side of the building approximated by a 20 foot free standing wall.

South MHP P/L Wall. - This is the six foot wall running east and west along the south common property line.

Unit 1 Wall. - This is the six foot wall along the west side of the patio and parallel to Sweetwater Road

B. NOISE CONTROL BARRIER CONSTRUCTION MATERIALS

The required noise control barriers may be constructed using one of the following materials:

(1) Masonry block
(2) Stucco on wood frame
(3) 3/4" plywood
(4) 1/4" glass or 1/2" LEXAN
(5) Earth Berm
(6) Any combination of these materials or any material rated 3.5 pounds per square foot surface weight or greater.

Each completed noise control barrier must present a solid face from top-to-bottom. Cut outs and openings are not permitted except for drain holes.

Balconies B8-B14 will have 42 inch high, solid railing and balconies B15, B16, and B17 will have 60 inch solid railing (refer to Appendix D Exhibit 2). As indicated in Section 5 public open spaces are below 60 dBA CNEL and meet the requirements of the County of San Diego. Note that the two open spaces together have an area of more than 1,200 square feet, which is more than the required 1,000 square feet.

C. INTERIOR NOISE CONTROL

The interior levels of 45 dBA CNEL can be met. Window Sound Transmission Class ratings as high as STC 24 will be required.

1.0 INTRODUCTION

This report presents the results of a revised noise impact and design study of the proposed project located in the County of San Diego east of State Route 125.

Included in this report is a discussion of the expected exterior community noise environment and the recommendations for control of noise in the exterior and interior areas.

A vicinity map showing the general location of the construction site is presented on Exhibit 1 -- Site Location Map. The site is located on the East side of Sweetwater Road north of Blossom Lane. The site is also across from State Route (SR) 125. The site plan is shown on Exhibit 2.

The physical characteristics of the site are displayed in a series of photos as follows:

1. Exhibit 3 is a view of the existing site. It slopes upward from Sweetwater Road. There is a berm in the foreground along with a portion of the wall.

2. Exhibit 4 is a view taken from the project site behind the berm. Sweetwater Road is not visible from this point. The sound wall along SR 125 is seen in the background. The freeway is elevated above Sweetwater Road from Jamacha Road to a point north of the project site about 1,000 feet. The wall extends north (right in the picture) to just beyond the private access road to the Aqua Dulce Terrace homes to the north of the project site. North of the wall termination is a berm that extends north alongside the freeway. The freeway wall is seven feet high and the berm is five feet high relative to the freeway grade.

3. Exhibit 5 shows the wall sections north and south of the site. Walls or berms are all along Sweetwater Road. The walls are of the same block as the freeway sound wall. It is reported that these walls and berms were erected in conjunction with the freeway construction. The height of the walls north and south of the project site is about six feet from sidewalk grade. It appears that the berm across the site is about seven feet high.

4. Exhibit 6 shows a composite photo of the vacant project site, Aqua Dulce Terrace and Terrace Estates, which is the mobile home park on the south side of the project.

2.0 APPLICABLE NOISE CRITERIA

The County of San Diego's Noise Element Policy 4b outlines the requirements to be applied to the project, which are as follows:

Part 3

If the acoustical study shows that noise levels at any noise sensitive area will exceed CNEL equal to 60 decibels, the project should not be approved unless the following findings are made:

A. Modifications to the development have been or will be made which reduce the exterior noise levels below CNEL equal to 60 decibels, or

B. If with the current noise abatement technology, it is infeasible to reduce the exterior CNEL to 60 decibels, then modifications to the development have been or will be made which reduce the interior level below CNEL equal to 45 decibels, and

C. If finding "B" above is made, a further finding is made that there are specifically identified overriding social or economic considerations which warrant approval of the development without modification as described in "A" above.

The Building Code requires that interior noise levels in multifamily projects not exceed 45 dBA CNEL.

3.0 MEASURED NOISE LEVELS

A measurement was conducted at a single location on the site for a period of one hour commencing at 2:00 P.M. and ending at 3:00 P.M. on Wednesday, May 4, 2005. The measurements are used to calibrate the Caltrans Sound32 model as outlined in Caltrans Protocol N-3100. Caltrans Protocol N-3320 allows a sampling time to vary from 10 to 30 minutes depending on the traffic volume. A sampling period of one hour was used just to be conservative. The measurement point was located exactly where the middle of the west yard of Unit 1 is located as shown on Exhibit 2. The measurement was conducted using an Ono-Sokki Model LA1250 Integrating Sound Level Meter. The meter was in calibration and field calibration was conducted at the start and finish of the measurement.

Since machine counts for the freeway are not feasible, manual hand counts were taken by observation from the over-crossing at Troy Street at the same time that the hour-long measurement was being conducted. The one-hour traffic data set is given in Table 1. At the end of the hour, the average noise level was 60.7 dBA Leq.

TABLE 1

OBSERVED TWO WAY TRAFFIC DATA

ROADWAY	AUTOS	MEDIUM TRUCKS	HEAVY TRUCKS
State Route 125	8,046	174	276
Sweetwater Road	888	54	12

Exhibit 7 shows a portion of the chart run during the measurement. The sound levels are almost constant, being mainly set by the freeway.

The purpose of the measurements is to allow for the calibration of the Caltrans Sound32 Highway Noise Model. The model was set up using the physical parameters described on the sections provided by the client, which are contained in Appendix 1. The calculations are contained in Appendix 2. The results are given in Table 2. To avoid confusion the various existing barrier descriptions are added to the Appendix sheets.

TABLE 2

COMPARISON OF CALCULATED AND MEASURED AVERAGE NOISE LEVELS

POSITION	MEASURED	CALCULATED	DIFFERENCE
1	60.7	65.0	4.3

The calculated value is higher than the measured value so the raw data will be adjusted when the CNEL calculations are addressed in the report.

4.0 CNEL FOR THE VACANT SITE

Several types of data must be provided to calculate the CNEL values. This includes traffic mixes, speeds and distribution of traffic by time of day. State Route 125 was opened in late 2003. The only data prior to that was for Sweetwater Road, which would not apply after the freeway, opened. Caltrans has not yet published traffic volumes or traffic mixes for State Route 125. SANDAG does not publish 2005 traffic forecasts. However, Mr. Bill McFarlane, of the SANDAG Transportation Modeling and Analysis Section, provided an estimate of the traffic volumes. Other parameters are based on information previously provided by the County for similar roadways. The freeway traffic mix was based on the values observed during the measurements. The Sweetwater traffic mix is based on data supplied by the County. The County also supplied the Day/Night mix. The data is given in Tables 3 and 4 on the following page.

TABLE 3

TRAFFIC PARAMETERS (1)

ROADWAY	AUTOS	MEDIUM TRUCKS	HEAVY TRUCKS
State Route 125	94.7%	2.0%	3.2%
Sweetwater Road	93.7%	4.5%	1.8%

(1) Day carries 87 percent of the traffic and Night carries 13 percent of the traffic.

TABLE 4

EXISTING TRAFFIC VOLUMES

ROADWAY	VOLUMES
State Route 125	118,000
Sweetwater Road	18,100

The Sound32 program does not compute CNEL directly. To arrive at a CNEL value for SR 125, it is necessary to employ the Caltrans Protocol N-2231. This protocol involves the following equation:

$$CNEL = Leq(h)pk + 10Log(10)[4.17/P] + 10Log(10)[D + 10N] \quad (1)$$

where Leq(h)pk = Peak Hour Leq
P = Peak Hour Percentage of ADT
D = Day fraction of ADT
N = Night fraction of ADT

In this calculation, P = 10, D = 0.87, and N = 0.13. Equation 1 reduces to:

$$CNEL = Leq(h)pk \quad 3.8 + 3.4 = Leq(h)pk - 0.4 \quad (2)$$

The CNEL is nearly equal to the peak hour Leq assuming the peak hour volume is 10 percent of the ADT. The same method can be employed for Sweetwater Road with the same result. The result of the method and the distributions of Table 3 yield the list in Table 5 that is inserted into the Sound 32 program.

TABLE 5

EXISTING TRAFFIC DISTRIBUTION (1)

ROADWAY	AUTOS	MEDIUM TRUCKS	HEAVY TRUCKS
State Route 125	11,174	236	328
Sweetwater Road	1,696	82	33

(1) SR 125 will be split into two lanes

In addition, both the 4.3 dBA correction from Table 2 plus the 0.4 dBA corrections from Equation 2 are employed as a total 4.7 dBA adjustment in the K-Factor in the program. Knowing the parameters for the conversion, the Caltrans Sound32 model can be set up based on single calculation. The model was employed using the Plan sets contained in Appendix 1. The speeds for the freeway were taken as 65 miles per hour since this is the limitation of the model. Sweetwater Road was modeled at 55 miles per hour.

The calculations for the existing condition are contained in Appendix 3. The result at the measurement point, the future back yard of Unit 1, would be 62.4 dBA CNEL.

The future CNEL levels are based on the SANDAG 2030 forecast data listed on the graphic contained in Appendix 4. The volumes are given in Table 6.

TABLE 6

2030 TRAFFIC VOLUMES

ROADWAY	VOLUMES
State Route 125	171,000
Sweetwater Road	21,100

Using the same procedure as used in the existing calculations the volumes employed for the future are those listed in Table 7.

TABLE 7

2030 TRAFFIC VOLUMES (1)

ROADWAY	AUTOS	MEDIUM TRUCKS	HEAVY TRUCKS
State Route 125	16,192	478	546
Sweetwater Road	1,977	95	38

(1) SR 125 will be split into two lanes.

The calculations, contained in Appendix 5 yield a noise level of 63.7 dBA CNEL at the measurement point.

5.0 CNEL LEVELS ON PROJECT

The calculations were carried out for 20 points as shown on Exhibit 8. The 20 points are at the rear and front of every unit. The rear areas are patios that would be required to meet the 60 dBA CNEL requirement if it were feasible. The other locations are intended to provide a profile of the noise levels everywhere on the site.

The initial calculations were for the ground level height at five feet above the pad and second floor height at 15 feet above the pad for the vacant

site. These calculations are attached in Appendices 6 and 7. The results are listed in Tables 8 and 9 on the following page.

TABLE 8

VACANT SITE FUTURE NOISE LEVELS AT 20 LOCATIONS AT GROUND LEVEL

LOCATION	CNEL
1	63.7
2	63.2
3	63.3
4	63.1
5	62.9
6	62.6
7	62.6
8	62.4
9	62.6
10	62.7
11	62.8
12	62.7
13	62.5
14	62.5
15	62.1
16	62.2
17	62.3
18	61.4
19	61.4
20	61.3

TABLE 9

VACANT SITE FUTURE NOISE LEVELS AT 20 LOCATIONS AT SECOND FLOOR LEVEL

LOCATION	CNEL
1	66.0
2	65.1
3	65.0
4	64.7
5	64.4
6	63.7
7	63.5
8	66.2
9	64.7
10	64.4
11	64.3
12	64.0
13	63.6
14	63.5
15	63.1
16	62.9
17	63.2
18	62.1
19	62.2
20	62.1

The ground floor exterior levels are in the range of 61.3 to 63.7 dBA CNEL. This means that the future conditions of the vacant site at ground level never reach 65 dBA CNEL. The second floor levels for the vacant site range from 62.1 to 66.2 dBA CNEL that is only slightly higher than 65 dBA CNEL. The 60 dBA CNEL point is at 660 feet from freeway centerline at ground level and 710 feet at the second floor level.

The physical model used to calculate for the vacant site noise levels were modified by installing the building and wall structures. The buildings are all two stories as can be seen on Exhibit 9. The peaks of the roofs are 24 feet eight inches and the eave 19 feet.

The Sound32 program does not model bulk barriers. It is necessary to categorize a barrier by the most relevant wall section. The buildings were modeled using the front and back walls as 20 foot high barriers, rather than just the eave or peak roof heights since the roof would contribute some noise reduction. Thus, the barriers used for the calculations in addition to those that were used on the vacant site are as follows:

1. The south wall of the building with Units 1 through 7 at 20 feet high.

2. The north wall of the building with Units 1 through 7 at 20 feet high.

3. The east-west wall common to the project site and the Mobile Home Park taken at six feet high.

4. The short wall on the west side of the Unit 1 patio taken at six feet high.

Calculations at the 20 ground floor locations are contained in Appendix 8 and the results given in Table 10(6) on the following page. The results for the 20, second floor locations are contained in Appendix 9 and the results given in Table 11.

TABLE 10

BUILT SITE FUTURE NOISE LEVELS AT 20 LOCATIONS AT GROUND LEVEL

LOCATION	CNEL
1	60.9
2	61.2
3	61.4
4	61.3
5	61.2
6	60.8
7	61.3
8	61.0
9	61.0
10	61.0
11	61.2
12	61.1
13	60.8
14	60.8
15	60.9
16	61.4
17	61.5
18	49.1
19	49.1
20	49.1

TABLE 11

BUILT SITE FUTURE NOISE LEVELS AT
20 LOCATIONS AT SECOND FLOOR LEVEL

LOCATION	CNEL
1	64.3
2	63.6
3	63.8
4	63.5
5	63.3
6	62.6
7	62.8
8	66.3
9	64.5
10	64.0
11	64.0
12	63.7
13	63.2
14	63.1
15	62.7
16	62.9
17	59.2
18	58.1
19	56.7
20	52.1

The results for the built site typically show about a two (2) dBA reduction from the vacant site. Actual reductions are most likely greater because of the fundamental limit on barrier calculation within the Sound 32 program. The program cannot calculate two parallel barriers. Thus, the independent reductions contributed by each barrier are reduced to the single barrier that provides the highest noise reduction.

Further calculation for private open spaces (balconies) after consideration of railing, and public open spaces (play lot and barbeque pit) are carried in Attachment D. the results given in Tables 5,6,9, and 11 of this attachment indicates a range from 55.4 to 59.7 dBA CNEL for balconies, 58.2 dBA CNEL for the play lot (location 21) and 54.5 dBA CNEL for the barbeque pit (Location 22).

6.0 MITIGATION MEASURES

6.1 EXTERIOR

While the calculations indicate that the CNEL levels in the patios are slightly higher than 60 dBA CNEL, it is likely the actual values are less than 60 dBA CNEL owing to the intrinsic limitation of the Sound32 model in calculating multiple barriers. Ideally, raising the freeway

barrier would address the matter but that is not possible. No additional exterior mitigation is required as long as all the walls are constructed.

The required noise control barriers may be constructed using one of the following materials:

(1) Masonry block
(2) Stucco on wood frame
(3) 3/4" plywood
(4) 1/4" glass or 1/2" LEXAN
(5) Earth Berm
(6) Any combination of these materials or any material rated 3.5 pounds per square foot surface weight or greater.

Each completed noise control barrier must present a solid face from top-to-bottom. Cutouts and openings are not permitted except for drain holes.

Balconies B8 - B14 will have 42 inch high, solid railing and balconies B15, B16, and B17 will have 60 inch solid railing (refer to Appendix D Exhibit 2). As indicated in Section 5 public open spaces are below 60 dBA CNEL and meet the requirements of the County of San Diego. Note that the two open spaces together have an area of more than 1,200 square feet, which is more than the required 1,000 square feet.

6.2 INTERIOR

The County's exposure criteria require that the interior noise environment, attributable to outside transportation sources, be limited to 45 dBA CNEL. Analysis and recommendations for control of outdoor-to-indoor noise intrusion are presented in this section.

The exterior-to-interior noise reduction expected for the planned construction was based on a detailed analysis of sample rooms and units planned for the development. Calculations of the expected typical noise reduction performance were performed for sample rooms. The analysis was based on the typical spectra expected for the primary sources of community noise impact, the typical octave-band transmission loss for each element in the planned building shell, the relative square footage of each element of the planned building shell, the expected typical interior surface treatment, and the acoustical absorption coefficient for each interior surface treatment. Corrections for the "A" Weighted room absorption factors are also included.

Each component of the building shell (e.g. exterior wall, windows, doors, etc.) provides a different amount of transmission loss for each "A" Weighted octave-band of community noise. With the knowledge of the building shell components and their individual octave band transmission loss values for the noise sources, calculations of the composite building shell transmission loss can be made for each room.

The floor plans and elevations were not provided. The basic construction of the building will be that shown in Table 12.

TABLE 12

BASIC BUILDING SHELL CHARACTERISTICS

PANEL	CONSTRUCTION
Exterior Wall	Stucco, 2" x 4" studs, R-13 Fiberglass insulation, drywall
Windows	Double pane
Sliding Glass Door	Double pane
Roof	Tile over sheathing, fiberglass insulation, drywall
Floor	Carpeted

The design noise reductions are given in Table 13

TABLE 13

NOISE REDUCTION REQUIREMENTS

LOCATION	FIRST FLOOR	SECOND FLOOR
1	15.9	19.3
2	16.2	18.3
3	16.4	18.8
4	16.3	18.5
5	16.2	18.3
6	15.8	17.6
7	16.3	17.8
8	16.0	21.3
9	16.0	19.5
10	16.0	19.0
11	16.2	19.0
12	16.1	18.7
13	15.8	18.2
14	15.8	18.1
15	15.9	17.7
16	16.4	17.9
17	16.5	14.7
18	4.1	13.1
19	4.1	11.7
20	4.1	7.1

Calculations, contained in Appendix 10, were carried out for a representative floor plan. The results are given in Table 14. Note that the Sound Transmission Class (STC) rating was used as the variable since noise

reductions in the range required will be controlled by the window transmission loss.

TABLE 14

ROOM NOISE REDUCTION VALUES (1)

PLAN	ROOM	WINDOW STC VALUE						
		24	26	28	30	32	34	36
All	Living/Dining	23	24	26	28	30	32	33
	Bedroom	23	25	26	28	30	31	32

Inspection of Table 13 indicates that all the noise reduction requirements would be met with windows rated STC 24.

EXHIBIT 1
SITE LOCATION MAP

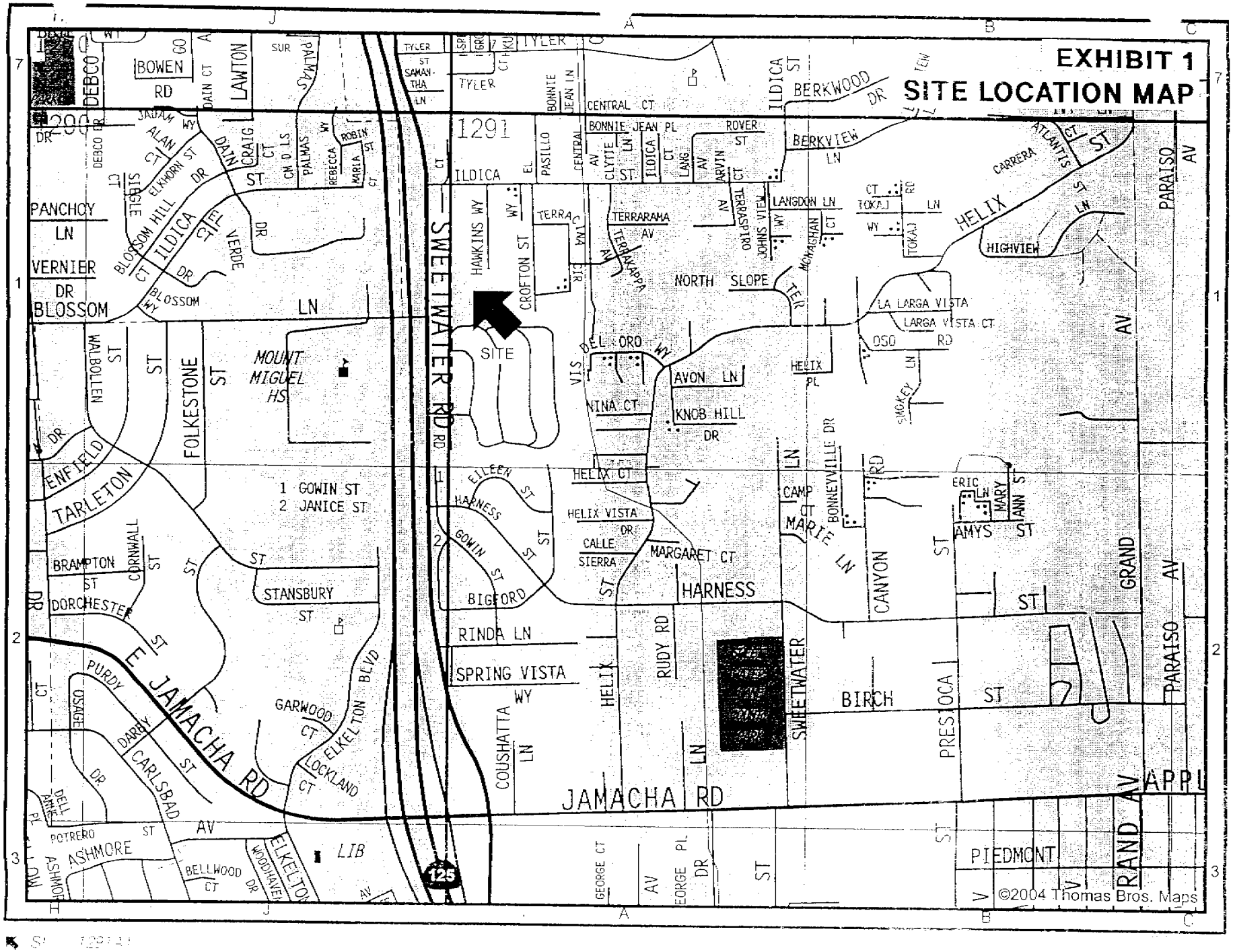
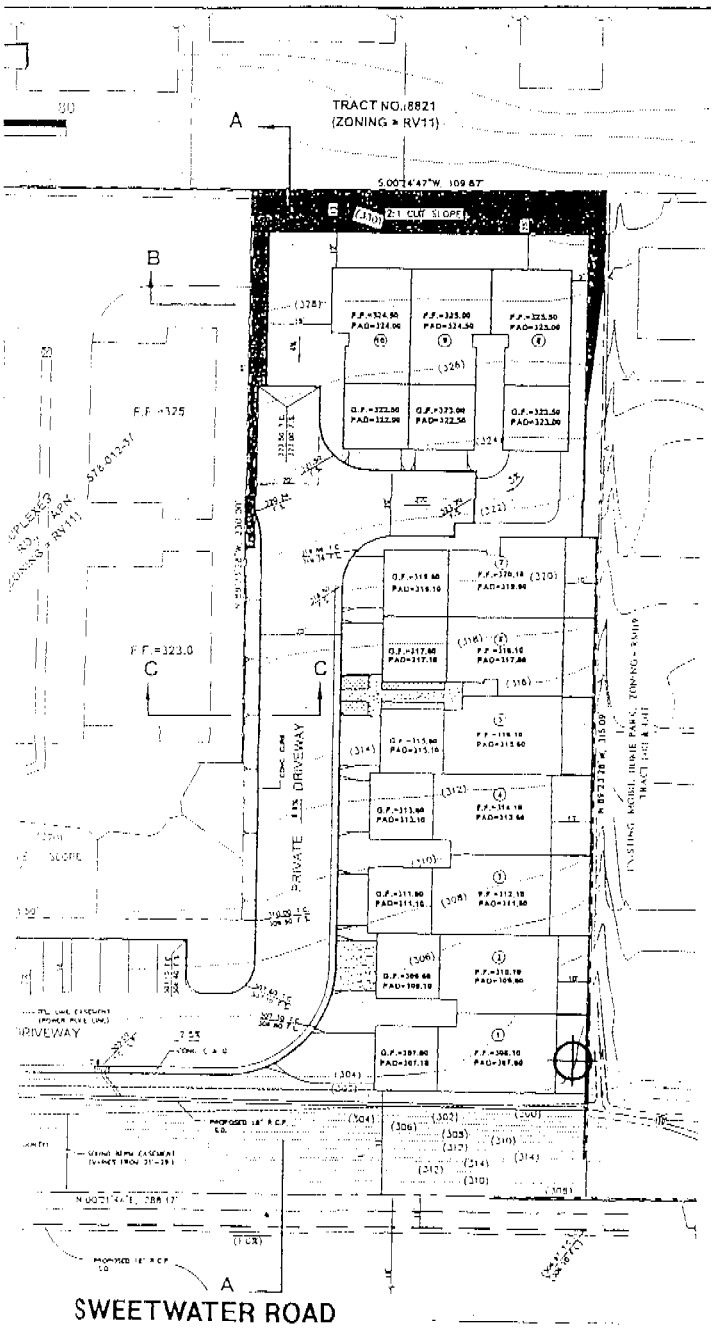


EXHIBIT 2
SITE MAP



SCALE 1" = 60'

EXHIBIT 3
SITE WALL

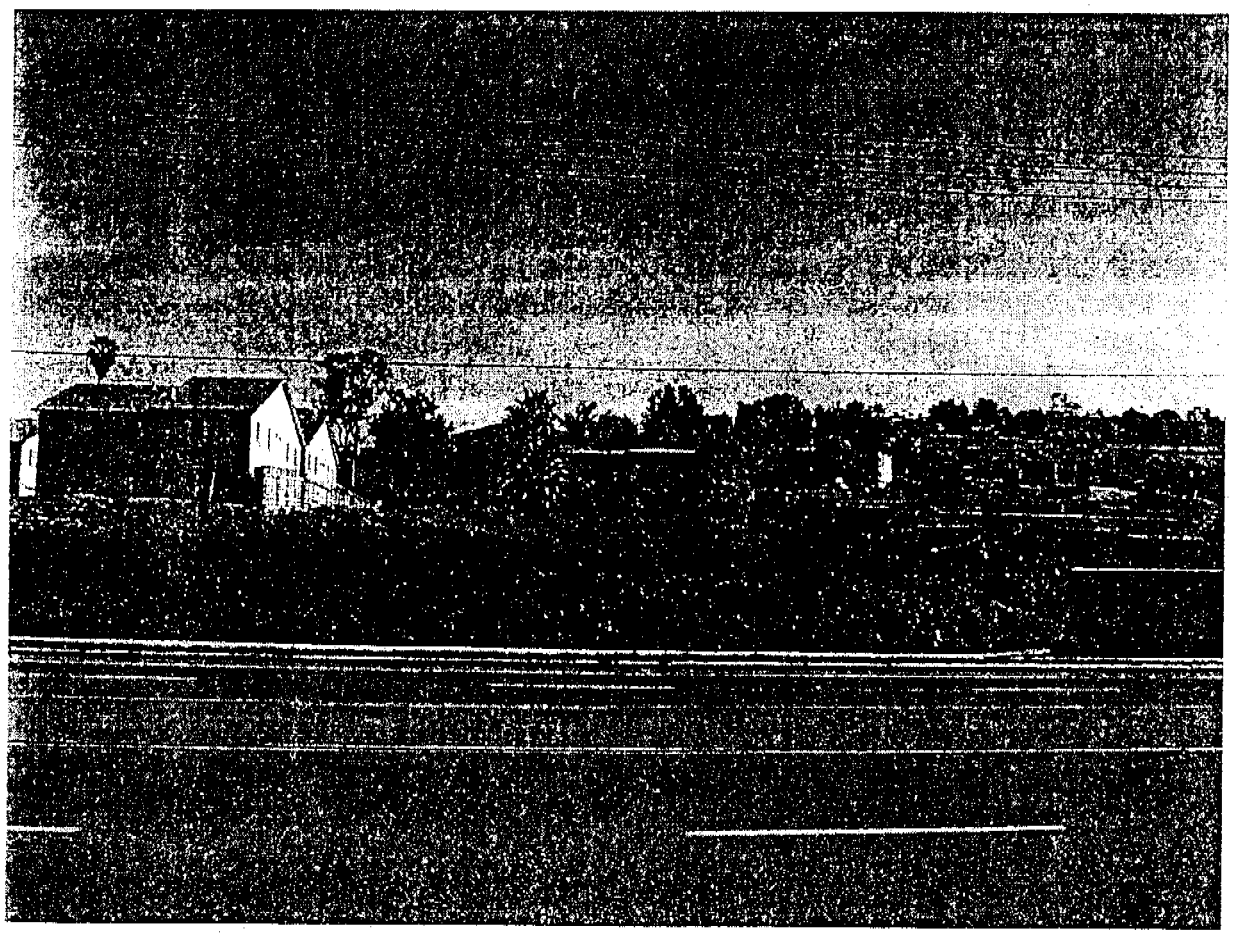
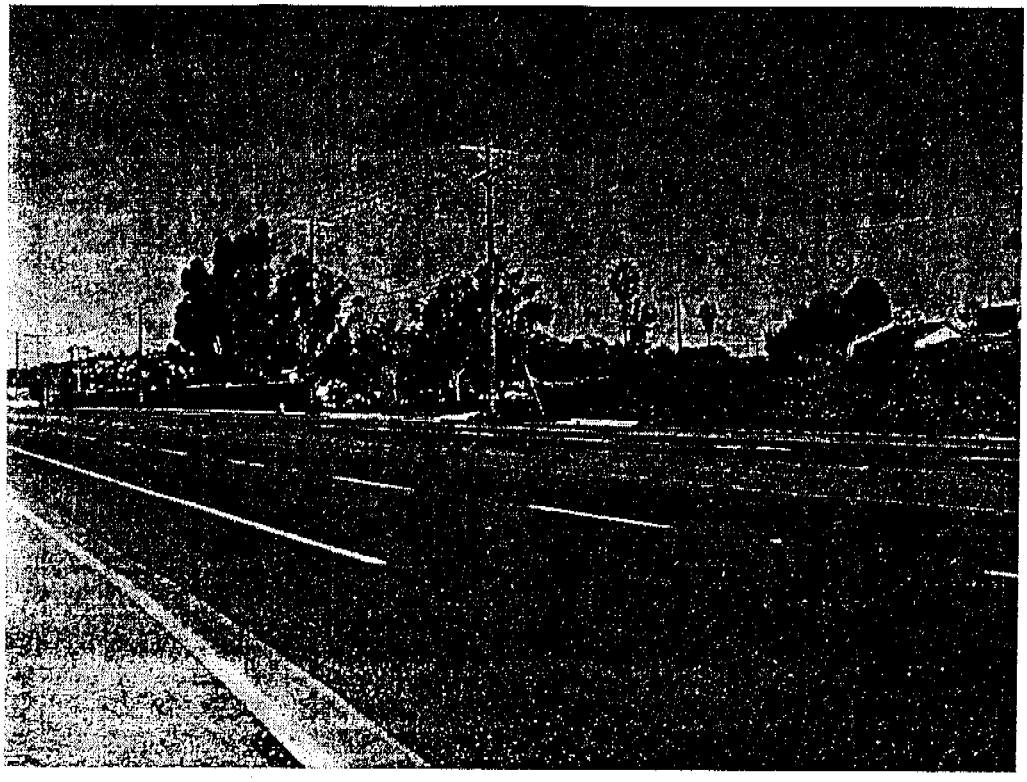


EXHIBIT 4
FREEWAY VIEW

EXHIBIT 5



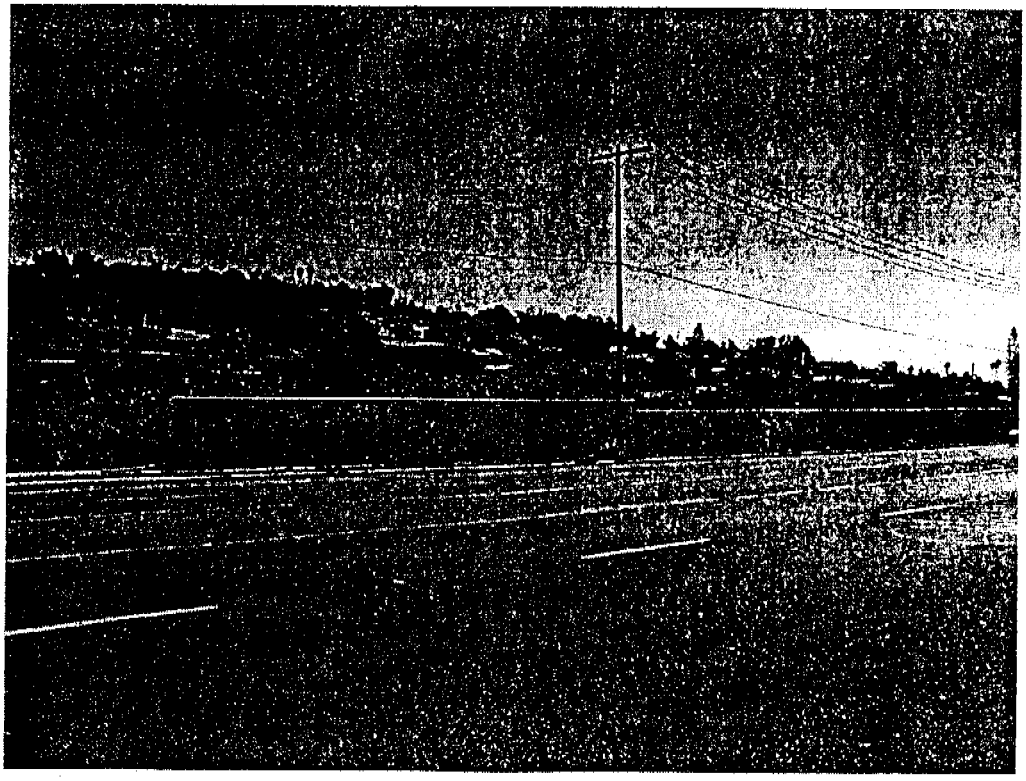


EXHIBIT 6

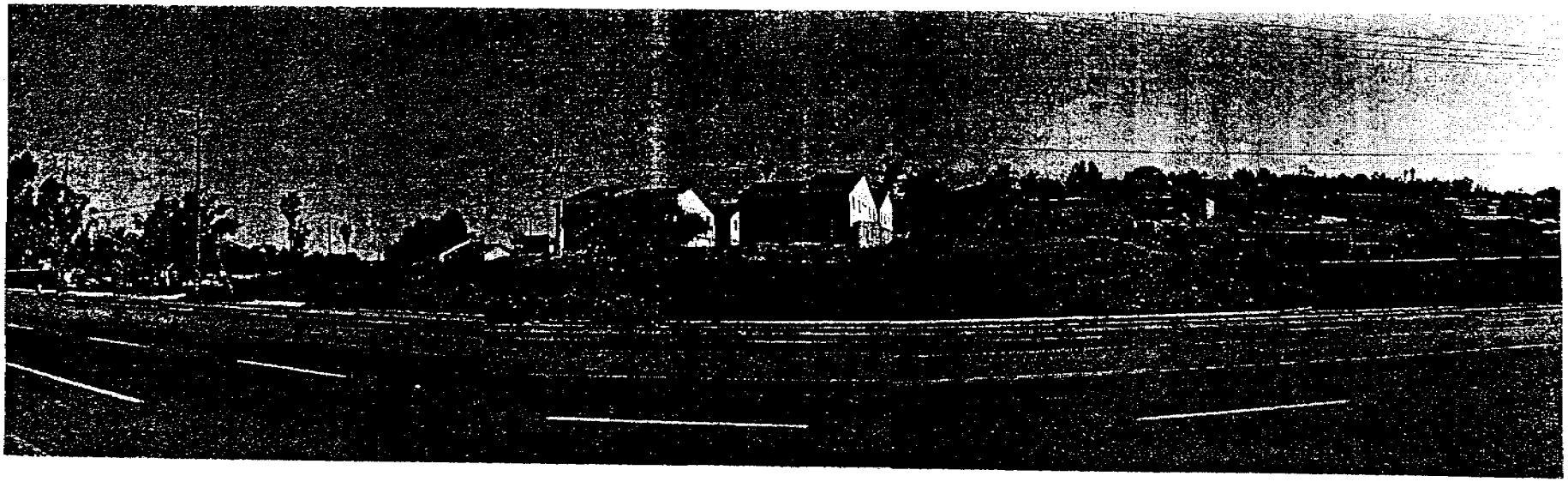


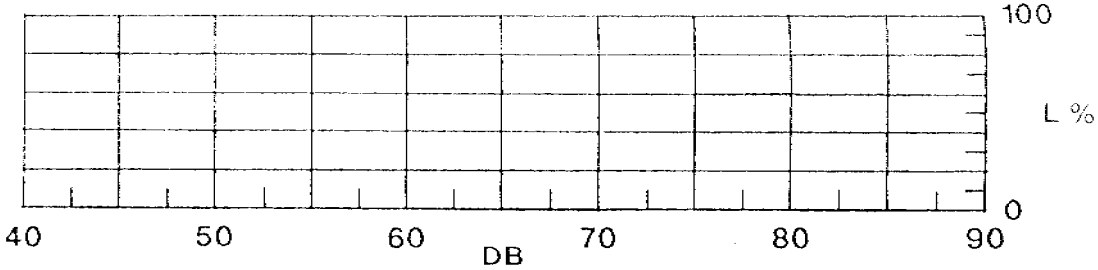
EXHIBIT 7

DATE 5/4/05

CHART SPEED .3mm

SCALE A

LOCATION SWEETWATER



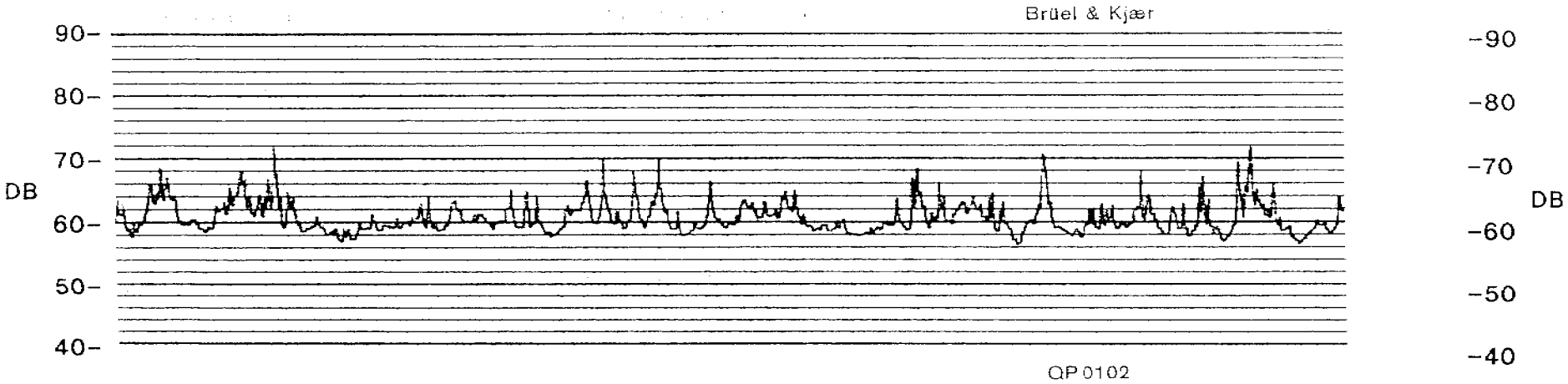
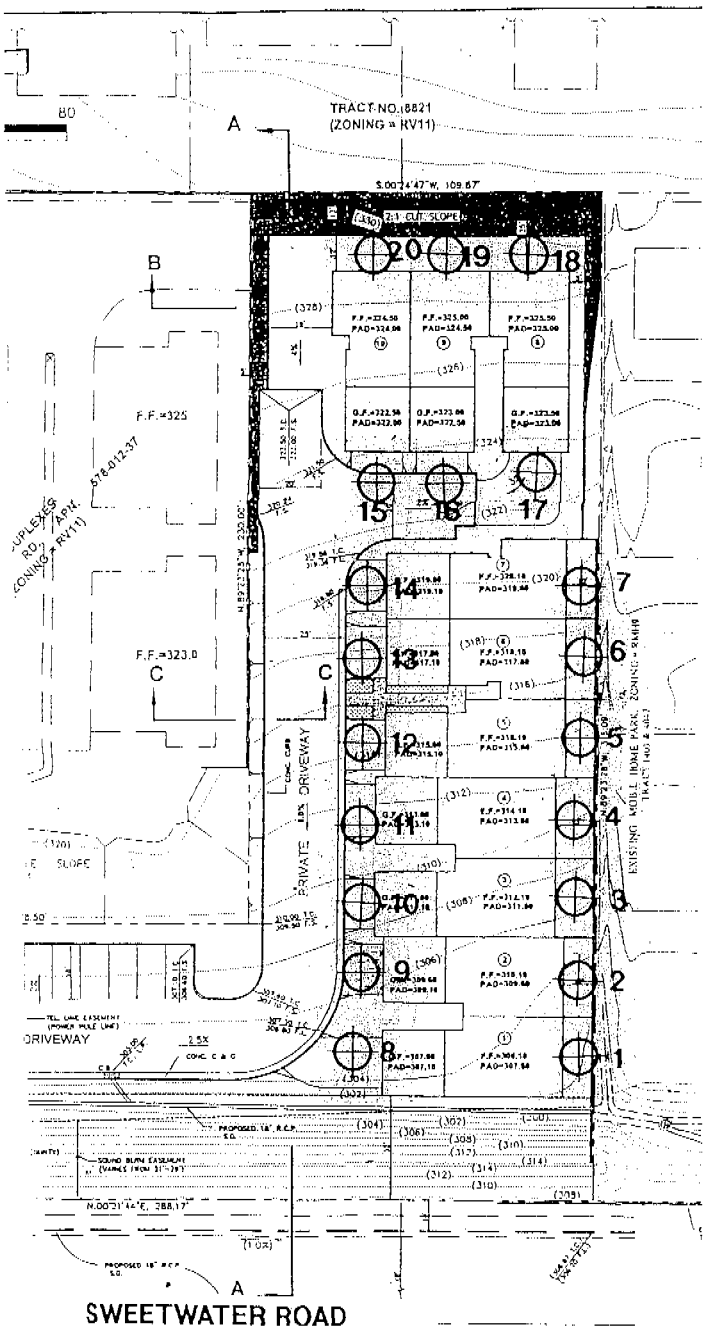
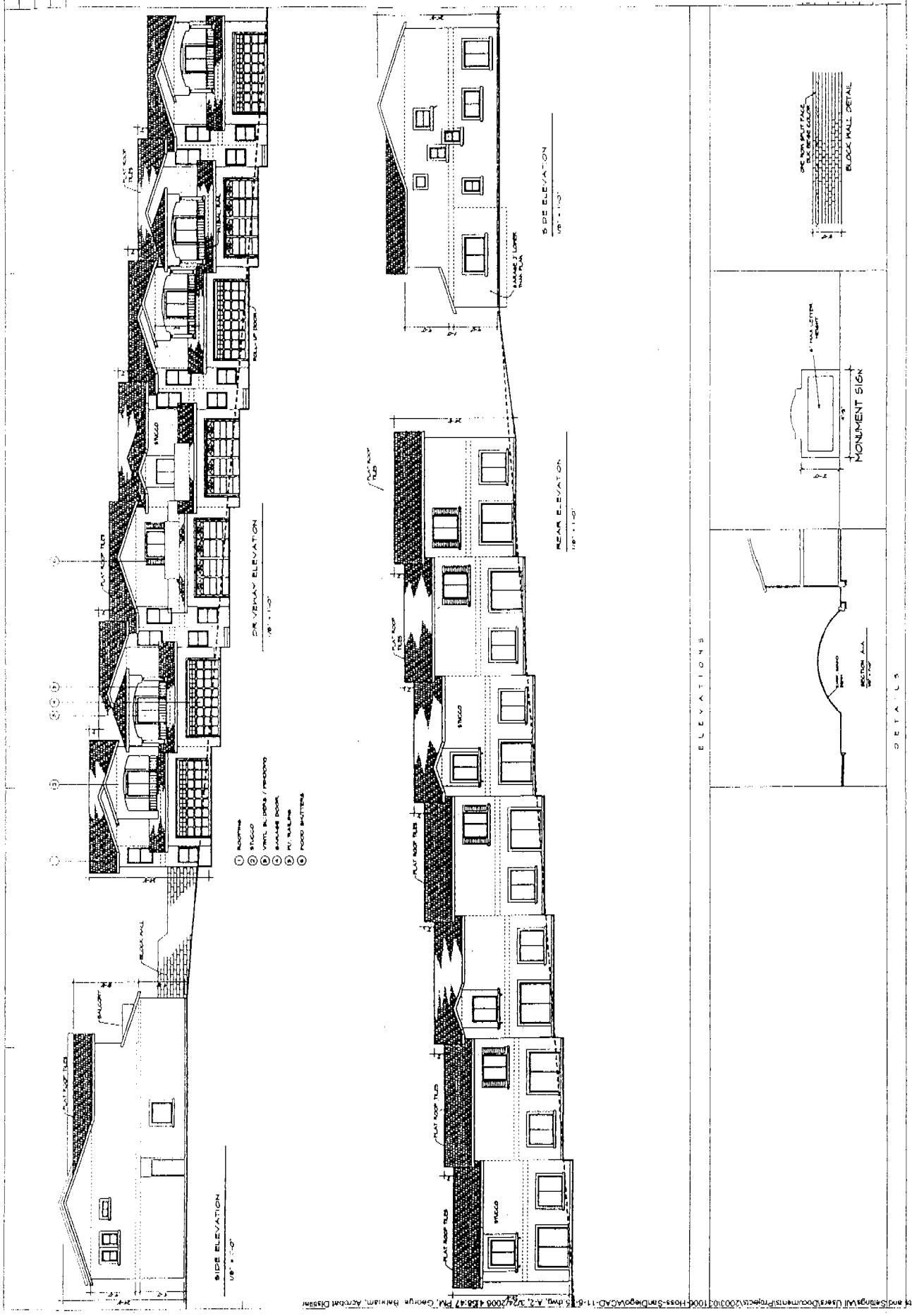


EXHIBIT 8
SITE CALCULATION LOCATIONS



SCALE 1" = 60'

EXHIBIT 9
BUILDINGS SIDE & REAR VIEWS



A P P E N D I X 1

FREEWAY MAPS

OR-9

DIST	COUNTY	ROUTE	KILOMETERS POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	125	19.4/22.1	73	466

Caltrans Metric

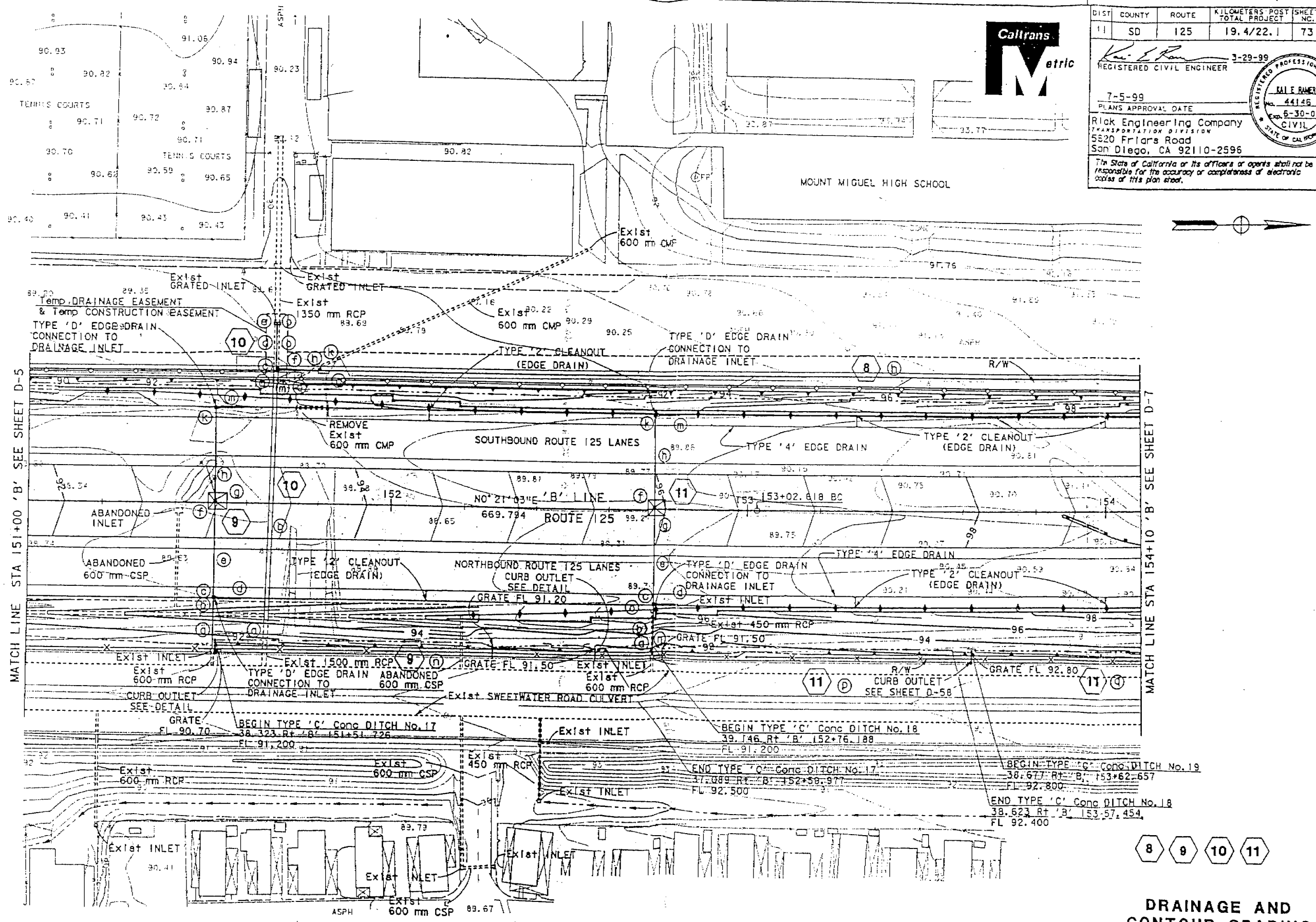
REGISTERED CIVIL ENGINEER 3-29-99

7-5-99
PLANS APPROVAL DATE

Rick Engineering Company
TRANSPORTATION DIVISION
5620 Friars Road
San Diego, CA 92110-2596

REGISTERED PROFESSIONAL ENGINEER KAI E RAMER No. 44146 Exp. 6-30-01 CIVIL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



NOTE: 1. THIS PLAN ACCURATE FOR DRAINAGE AND CONTOUR GRADING ONLY.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

DRAINAGE AND CONTOUR GRADING

SCALE: 1:500

D-6

DESIGN BY K. M. JEWEL

CALCULATED/DESIGNED BY | CHECKED BY | DATE REVISED BY | DATE REVISED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 03-29-99 | DATE PLOTTED => 13-Jul-1999 | TIME PLOTTED => 08:24

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 10 20 30 40

USERNAME => trilm
DGN FILE => b00193106_13081402

CU 11220

EA 001931

DIST	COUNTY	ROUTE	KILOMETERS POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	125	19.4/22.1	74	466

Caltrans Metric

REGISTERED CIVIL ENGINEER 3-29-99

7-5-99
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — KAI E RAMER No. 44146 Exp. 6-30-01 CIVIL — STATE OF CALIFORNIA

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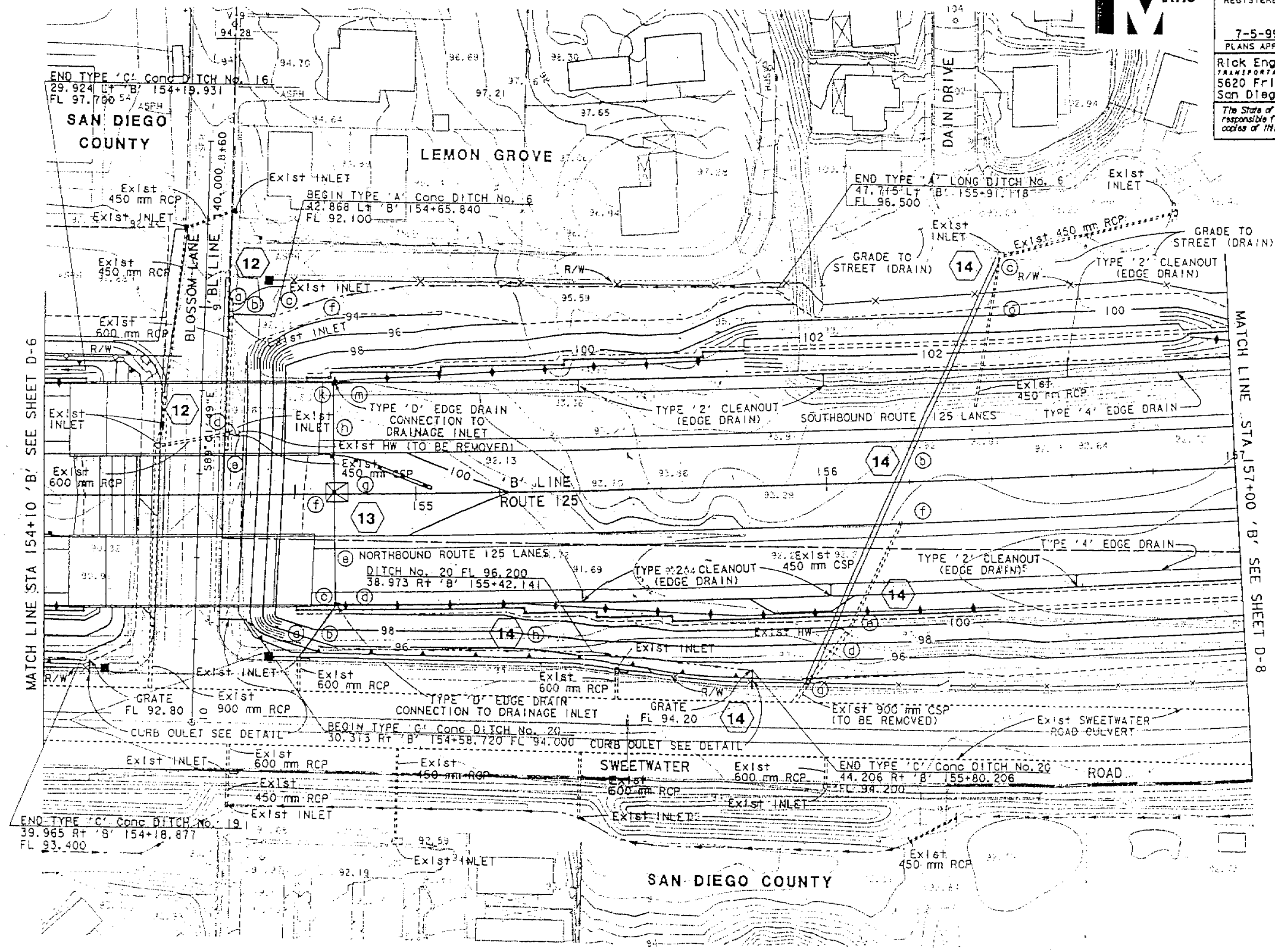


NOTE: 1. THIS PLAN ACCURATE FOR DRAINAGE AND CONTOUR GRADING ONLY.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

12 13 14

DRAINAGE AND CONTOUR GRADING

SCALE: 1:500

D-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

DESIGN OVERSIGHT: K. M. JEWEL

CALCULATED/DESIGNED BY | CHECKED BY | DATE | REVISED BY | DATE REVISED

DIST	COUNTY	ROUTE	KILOMETERS POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	125	19.4/22.1	75	466

Caltrans Metric

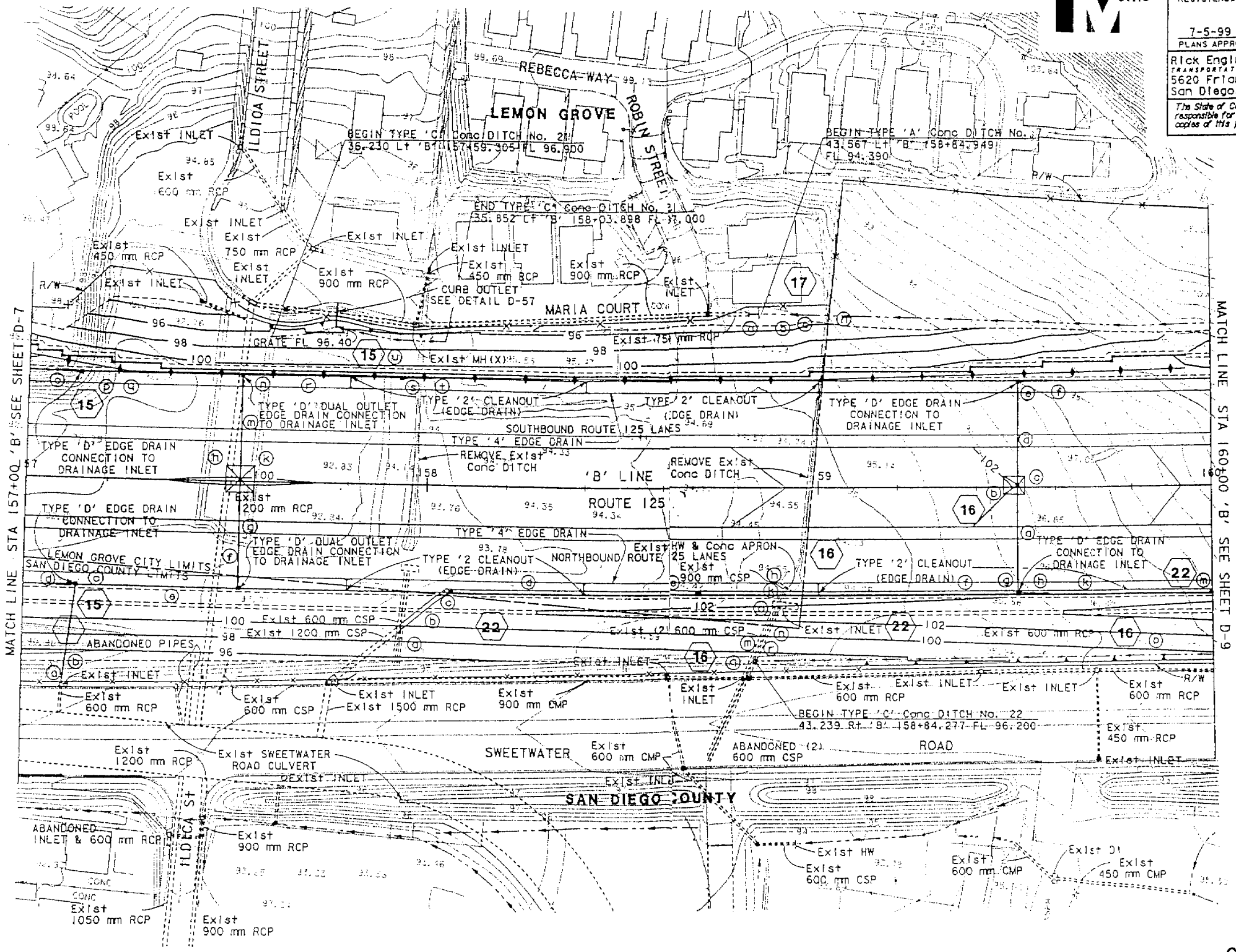
REGISTERED CIVIL ENGINEER 3-29-99

7-5-99
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — KAI E RAUER No. 44146 Exp. 6-30-01 CIVIL — STATE OF CALIFORNIA

Rick Engineering Company
TRANSPORTATION DIVISION
5620 Friars Road
San Diego, CA 92110-2596

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



NOTE: 1. THIS PLAN ACCURATE FOR DRAINAGE AND CONTOUR GRADING ONLY.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

15 16 17 22

DRAINAGE AND CONTOUR GRADING

SCALE: 1:500

D-8

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY
CHECKED BY

DESIGN OVERSIGHT
K. M. JEWEL

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 03-29-99
DATE PLOTTED => 13-Jul-1999
TIME PLOTTED => 08:27

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 10 20 30 40

USERNAME => trim
DGN FILE => 0001931D8_130814.4

CU 11220

EA 001931

A P P E N D I X 2

MEASUREMENT CALIBRATION CALCULATIONS

BARRIER NAMING NOMENCLATURE

1. SR125 Wall. - This is the wall that runs north and south and is programmed from Station 153 to the north termination at Station 156.40

2. SR125 Berm. - This is the extension of the barrier from Station 156.40 to Station 157.40.

3. Sweetwater MHP wall. - This is the wall on the south side of Sweetwater Road running in front of the Mobile Home Park and ending at Station 155.40.

4. Sweetwater Site Berm. — This is the berm in front of the site running from Station 155.40 to Station 156.15.

5. Sweetwater Wall North of the Site. This is the wall on the east side of Sweetwater Road running from Station 156.40 to Station 157.40.

6. South Side of Bldg 1 Units 1-7. - This is the south side of the building approximated by a 20 foot free standing wall.

7. North Side Bldg 1 Units 1-7. - This is the north side of the building approximated by a 20 foot free standing wall.

8. South MHP P/L Wall. - This is the six foot wall running east and west along the south common property line.

9. Unit 1 Wall. - This is the six foot wall along the west side of the patio and parallel to Sweetwater Road

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS4M
BARRIER COST FILE : CALIF$.DTA
DATE : 08-12-2005

SITE EXISTING LDN AT MEASUREMENT POINT

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1696	55	82	55	33	55	SWEETWATER
2	5587	65	118	65	164	65	SR125 NORTHBOUND
3	5587	65	118	65	164	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40
2	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
3	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40
	10	NO	809.0	-60.0	328.0	157

934.0 -60.0 328.0 15/740

BARRIER DATA

Barrier No. 1 Description: SR25 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	89.0	328.0	336.0	*153	* 8
2	0.0	89.0	328.0	336.0	*154+40	* 8
3	36.0	89.0	328.0	336.0	*154+50	* 8
4	169.0	89.0	328.0	336.0	*155	* 8
5	312.0	98.0	328.0	336.0	*SITE	* 8
6	334.0	98.0	328.0	336.0	*155+40	* 8
7	489.0	107.0	328.0	336.0	*156	* 8
8	539.0	98.0	328.0	336.0	*156+15	* 8
	623.0	98.0	328.0	336.0	*156+40	* 8

Barrier No. 2 Description: SR25 BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	623.0	98.0	328.0	336.0	*156+40	* 8
2	809.0	98.0	328.0	336.0	*157	* 8
	934.0	98.0	328.0	336.0	*157+40	* 8

Barrier No. 3 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0	*153	* 6
2	0.0	226.0	304.0	310.0	*154+40	* 6
3	36.0	226.0	304.0	310.0	*154+50	* 6
4	169.0	226.0	308.0	314.0	*155	* 6
5	312.0	226.0	308.0	314.0	*SITE	* 6
	334.0	226.0	308.0	314.0	*155+40	* 6

Barrier No. 4 Description: SWEETWATER SITE BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	334.0	242.0	308.0	314.5	*155+40	* 7
2	489.0	255.0	308.0	315.0	*156	* 7

539.0 255.0 308.0 315.0 *156+15 * 7

Barrier No. 5 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0 *156+40	* 6
2	809.0	252.0	308.0	314.0 *157	* 6
	934.0	252.0	308.0	314.0 *157+40	* 6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	312.6	67	500	UNIT 1

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
SITE EXISTING LDN AT MEASUREMENT POINT

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							155+40
7	-	0.*							156
8	-	0.*							156+15
9	-	0.*							156+40
10	-	0.*							157
11	-	0.*							153
12	-	0.*							154+40
13	-	0.*							154+50
14	-	0.*							155
15	-	0.*							SITE
16	-	0.*							155+40
17	-	0.*							156
18	-	0.*							156+40
19	-	0.*							157
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	BARRIER HEIGHTS 0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	8.*							153	500.0	MASONRY
2	-	8.*							154+40	36.0	MASONRY
3	-	8.*							154+50	133.0	MASONRY
4	-	8.*							155	143.3	MASONRY
5	-	8.*							SITE	22.0	MASONRY
6	-	8.*							155+40	155.3	MASONRY
7	-	8.*							156	50.8	MASONRY
8	-	8.*							156+15	84.0	MASONRY
9	-	8.*							156+40	186.0	BERM
10	-	8.*							157	125.0	BERM
11	-	6.*							153	500.0	MASONRY
12	-	6.*							154+40	36.0	MASONRY
13	-	6.*							154+50	133.1	MASONRY

```
14      -    6.*
15      -    6.*

16      -    7.*
17      -    7.*

18      -    6.*
19      -    6.*
-----------------------------------------------------------------------------
        0    1    2    3    4    5    6    7
```

155	143.0	MASONRY
SITE	22.0	MASONRY
155+40	155.5	BERM
156	50.0	BERM
156+40	186.2	MASONRY
157	125.0	MASONRY

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	UNIT 1	67.	500.	62.4

BARRIER TYPE	COST
BERM	13758.
MASONRY	138721.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 152000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION

8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 6. 6. 6. 6. 6. 7. 7. 6. 6.

A P P E N D I X 3

EXISTING LDN CALCULATIONS VACANT SITE AT MEASUREMENT LOCATION

BARRIER NAMING NOMENCLATURE

1. SR125 Wall. - This is the wall that runs north and south and is programmed from Station 153 to the north termination at Station 156.40

2. SR125 Berm. - This is the extension of the barrier from Station 156.40 to Station 157.40.

3. Sweetwater MHP wall. - This is the wall on the south side of Sweetwater Road running in front of the Mobile Home Park and ending at Station 155.40.

4. Sweetwater Site Berm. - This is the berm in front of the site running from Station 155.40 to Station 156.15.

5. Sweetwater Wall North of the Site. - This is the wall on the east side of Sweetwater Road running from Station 156.40 to Station 157.40.

6. South Side of Bldg 1 Units 1-7. - This is the south side of the building approximated by a 20 foot free standing wall.

7. North Side Bldg 1 Units 1-7. - This is the north side of the building approximated by a 20 foot free standing wall.

8. South MHP P/L Wall. - This is the six foot wall running east and west along the south common property line.

9. Unit 1 Wall. - This is the six foot wall along the west side of the patio and parallel to Sweetwater Road

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS5M
BARRIER COST FILE : CALIF$.DTA
DATE : 08-11-2005

SITE MEASUREMENT CALIBRATION

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	888	55	54	55	12	55	SWEETWATER
2	4023	65	87	65	138	65	SR125 NORTHBOUND
3	4023	65	87	65	138	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40
2	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
3	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40
	10	NO	809.0	-60.0	328.0	157

934.0 98.0

BARRIER DATA

Barrier No. 1 Description: SR25 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	-500.0	89.0	328.0	336.0 *153	* 8
2	0.0	89.0	328.0	336.0 *154+40	* 8
3	36.0	89.0	328.0	336.0 *154+50	* 8
4	169.0	89.0	328.0	336.0 *155	* 8
5	312.0	98.0	328.0	336.0 *SITE	* 8
6	334.0	98.0	328.0	336.0 *155+40	* 8
7	489.0	107.0	328.0	336.0 *156	* 8
8	539.0	98.0	328.0	336.0 *156+15	* 8
	623.0	98.0	328.0	336.0 *156+40	* 8

Barrier No. 2 Description: SR25 BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	623.0	98.0	328.0	336.0 *156+40	* 8
2	809.0	98.0	328.0	336.0 *157	* 8
	934.0	98.0	328.0	336.0 *157+40	* 8

Barrier No. 3 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0 *153	* 6
2	0.0	226.0	304.0	310.0 *154+40	* 6
3	36.0	226.0	304.0	310.0 *154+50	* 6
4	169.0	226.0	308.0	314.0 *155	* 6
5	312.0	226.0	308.0	314.0 *SITE	* 6
	334.0	226.0	308.0	314.0 *155+40	* 6

Barrier No. 4 Description: SWEETWATER SITE BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	334.0	242.0	308.0	314.5 *155+40	* 7
2	489.0	255.0	308.0	315.0 *156	* 7

339.0 255.0 308.0 315.0 *156+15 * 7

Barrier No. 5 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0 *156+40	* 6
2	809.0	252.0	308.0	314.0 *157	* 6
	934.0	252.0	308.0	314.0 *157+40	* 6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	312.6	67	500	UNIT 1

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

LANE RECEIVER/PAIRS = 0.0 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
SITE MEASUREMENT CALIBRATION

EFFECTIVENESS / COST RATIOS

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							155+40
7	-	0.*							156
8	-	0.*							156+15
9	-	0.*							156+40
10	-	0.*							157
11	-	0.*							153
12	-	0.*							154+40
13	-	0.*							154+50
14	-	0.*							155
15	-	0.*							SITE
16	-	0.*							155+40
17	-	0.*							156
18	-	0.*							156+40
19	-	0.*							157
	0	1	2	3	4	5	6	7	

1

BARRIER DATA

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	8.*							153	500.0	MASONRY
2	-	8.*							154+40	36.0	MASONRY
3	-	8.*							154+50	133.0	MASONRY
4	-	8.*							155	143.3	MASONRY
5	-	8.*							SITE	22.0	MASONRY
6	-	8.*							155+40	155.3	MASONRY
7	-	8.*							156	50.8	MASONRY
8	-	8.*							156+15	84.0	MASONRY
9	-	8.*							156+40	186.0	BERM
10	-	8.*							157	125.0	BERM
11	-	6.*							153	500.0	MASONRY
12	-	6.*							154+40	36.0	MASONRY
13	-	6.*							154+50	133.1	MASONRY

```
14      -    6.*                                                  155          143.0   MASONRY
15      -    6.*                                                  SITE          22.0   MASONRY

16      -    7.*                                                  155+40       155.5   BERM
17      -    7.*                                                  156           50.0   BERM

18      -    6.*                                                  156+40       186.2   MASONRY
19      -    6.*                                                  157          125.0   MASONRY
-----------------------------------------------------------------------------------------------
        0    1    2    3    4    5    6    7
1
```

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	UNIT 1	67.	500.	65.0

BARRIER TYPE	COST
BERM	13758.
MASONRY	138721.
MASONRY/JERSEY	0.
CONCRETE	0.

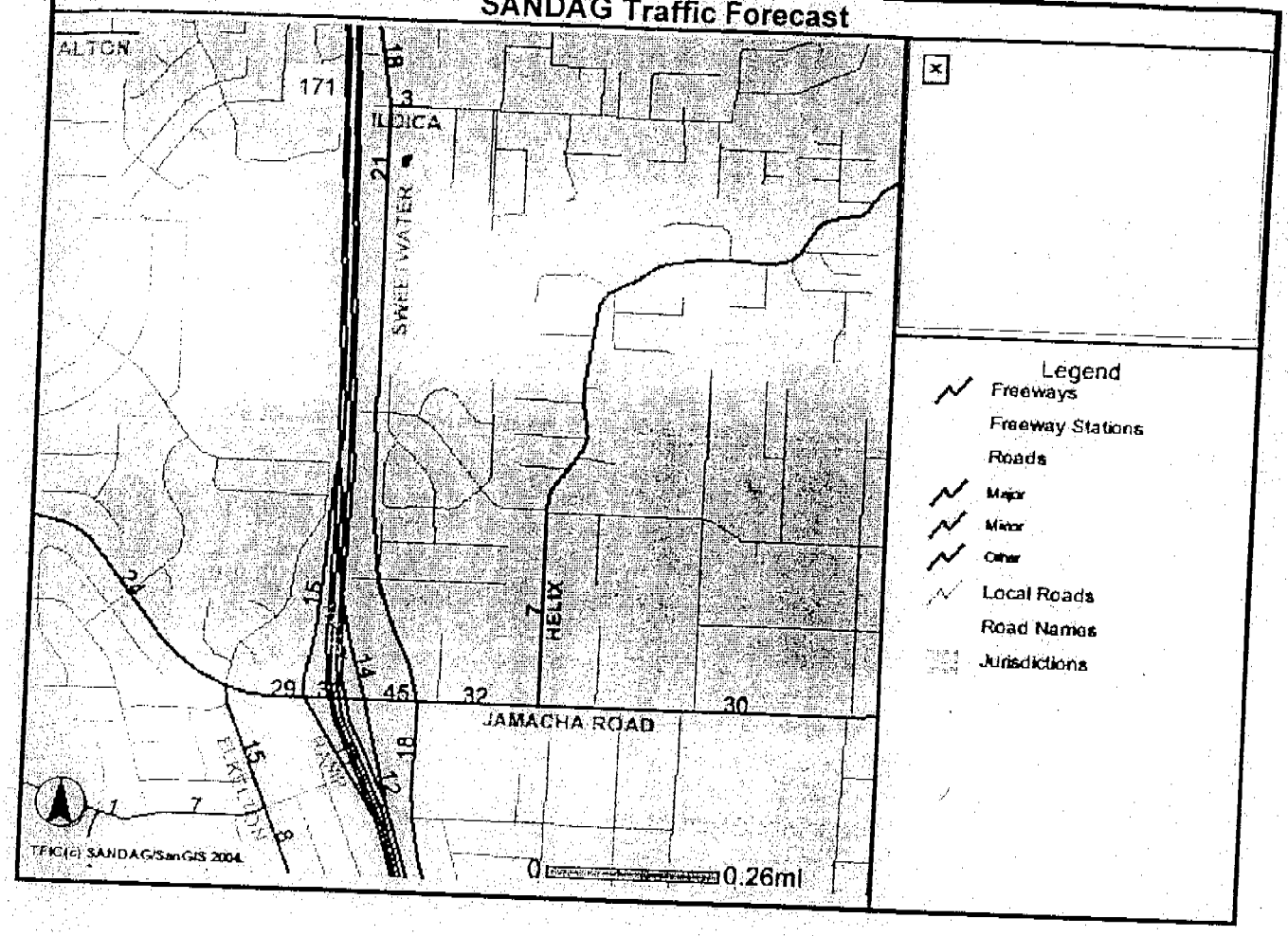
TOTAL COST = $ 152000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 6. 6. 6. 6. 6. 7. 7. 6. 6.

A P P E N D I X 4

2030 SANDAG TRAFFIC VOLUMES

SANDAG Traffic Forecast



A P P E N D I X 5

2030 CNEL CALCULATIONS AT MEASUREMENT POINT

BARRIER NAMING NOMENCLATURE

1. SR125 Wall. - This is the wall that runs north and south and is programmed from Station 153 to the north termination at Station 156.40.

2. SR125 Berm. - This is the extension of the barrier from Station 156.40 to Station 157.40.

3. Sweetwater MHP wall. – This is the wall on the east side of Sweetwater Road running in front of the Mobile Home Park and ending at Station 155.40.

4. Sweetwater Site Berm. – This is the berm in front of the site running from Station 155.40 to Station 156.15.

5. Sweetwater Wall North of the Site. – This is the wall on the east side of Sweetwater Road running from Station 156.40 to Station 157.40.

6. South Side of Bldq 1 Units 1-7. - This is the south side of the building approximated by a 20 foot free standing wall.

7. North Side Bldq 1 Units 1-7. – This is the north side of the building approximated by a 20 foot free standing wall.

8. South MHP P/L Wall. – This is the six foot wall running east and west along the south common property line.

9. Unit 1 Wall. – This is the six foot wall along the west side of the patio and parallel to Sweetwater Road.

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS3M
BARRIER COST FILE : CALIF$.DTA
DATE : 08-12-2005

SITE FUTURE LDN AT MEASUREMENT POINT

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER
2	8096	65	239	65	273	65	SR125 NORTHBOUND
3	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40
2	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
3	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40

10	NO	809.0	-60.0	328.0	157
		934.0	-60.0	328.0	157+40

==========

BARRIER DATA

Barrier No. 1 Description: SR25 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	-500.0	89.0	328.0	336.0	*153	*	8
2	0.0	89.0	328.0	336.0	*154+40	*	8
3	36.0	89.0	328.0	336.0	*154+50	*	8
4	169.0	89.0	328.0	336.0	*155	*	8
5	312.0	98.0	328.0	336.0	*SITE	*	8
6	334.0	98.0	328.0	336.0	*155+40	*	8
7	489.0	107.0	328.0	336.0	*156	*	8
8	539.0	98.0	328.0	336.0	*156+15	*	8
	623.0	98.0	328.0	336.0	*156+40	*	8

Barrier No. 2 Description: SR25 BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	623.0	98.0	328.0	336.0	*156+40	*	8
2	809.0	98.0	328.0	336.0	*157	*	8
	934.0	98.0	328.0	336.0	*157+40	*	8

Barrier No. 3 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	-500.0	226.0	304.0	310.0	*153	*	6
2	0.0	226.0	304.0	310.0	*154+40	*	6
3	36.0	226.0	304.0	310.0	*154+50	*	6
4	169.0	226.0	308.0	314.0	*155	*	6
5	312.0	226.0	308.0	314.0	*SITE	*	6
	334.0	226.0	308.0	314.0	*155+40	*	6

Barrier No. 4 Description: SWEETWATER SITE BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	334.0	242.0	308.0	314.5	*155+40	*	7

2	489.0	255.0	308.0	315.0 *156	*	7
	539.0	255.0	308.0	315.0 *156+15	*	7

Barrier No. 5 Description: SWEETWATER WALL NORTH OF SITE

Type - (2)MASONRY

Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	623.0	243.0	308.0	314.0 *156+40	*	6
2	809.0	252.0	308.0	314.0 *157	*	6
	934.0	252.0	308.0	314.0 *157+40	*	6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	312.6	67	500	UNIT 1

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
SITE FUTURE LDN AT MEASUREMENT POINT

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							155+40
7	-	0.*							156
8	-	0.*							156+15
9	-	0.*							156+40
10	-	0.*							157
11	-	0.*							153
12	-	0.*							154+40
13	-	0.*							154+50
14	-	0.*							155
15	-	0.*							SITE
16	-	0.*							155+40
17	-	0.*							156
18	-	0.*							156+40
19	-	0.*							157
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	8.*							153	500.0	MASONRY
2	-	8.*							154+40	36.0	MASONRY
3	-	8.*							154+50	133.0	MASONRY
4	-	8.*							155	143.3	MASONRY
5	-	8.*							SITE	22.0	MASONRY
6	-	8.*							155+40	155.3	MASONRY
7	-	8.*							156	50.8	MASONRY
8	-	8.*							156+15	84.0	MASONRY
9	-	8.*							156+40	186.0	BERM
10	-	8.*							157	125.0	BERM
11	-	6.*							153	500.0	MASONRY
12	-	6.*							154+40	36.0	MASONRY
13	-	6.*							154+50	133.1	MASONRY

14	-	6.*
15	-	6.*
16	-	7.*
17	-	7.*
18	-	6.*
19	-	6.*

155	143.0	MASONRY
SITE	22.0	MASONRY
155+40	155.5	BERM
156	50.0	BERM
156+40	186.2	MASONRY
157	125.0	MASONRY

0 1 2 3 4 5 6 7

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	UNIT 1	67.	500.	63.7

BARRIER TYPE	COST
BERM	13758.
MASONRY	138721.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 152000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 6. 6. 6. 6. 6. 7. 7. 6. 6.

A P P E N D I X 6

2030 CNEL CALCULATIONS FOR VACANT SITE AT 20 GROUND LEVEL LOCATIONS AND FOR CURVE PLOTTING

BARRIER NAMING NOMENCLATURE

1. SR125 Wall. - This is the wall that runs north and south and is programmed from Station 153 to the north termination at Station 156.40.

2. SR125 Berm. – This is the extension of the barrier from Station 156.40 to Station 157.40.

3. Sweetwater MHP wall. – This is the wall on the east side of Sweetwater Road running in front of the Mobile Home Park and ending at Station 155.40.

4. Sweetwater Site Berm. – This is the berm in front of the site running from Station 155.40 to Station 156.15.

5. Sweetwater Wall North of the Site. – This is the wall on the east side of Sweetwater Road running from Station 156.40 to Station 157.40.

6. South Side of Bldq 1 Units 1-7. - This is the south side of the building approximated by a 20 foot free standing wall.

7. North Side Bldq 1 Units 1-7. – This is the north side of the building approximated by a 20 foot free standing wall.

8. South MHP P/L Wall. – This is the six foot wall running east and west along the south common property line.

9. Unit 1 Wall. – This is the six foot wall along the west side of the patio and parallel to Sweetwater Road.

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS2GM
BARRIER COST FILE : CALIF$.DTA
DATE : 08-12-2005

SITE FUTURE LDN AT 20 POINTS GROUND LEVEL FOR VACANT SITE

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER
2	8096	65	239	65	273	65	SR125 NORTHBOUND
3	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40
2	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
3	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40

10	NO	809.0	-60.0	328.0	157
		934.0	-60.0	328.0	157+40

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BARRIER DATA

Barrier No. 1 Description: SR25 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	-500.0	89.0	328.0	336.0	*153	*	8
2	0.0	89.0	328.0	336.0	*154+40	*	8
3	36.0	89.0	328.0	336.0	*154+50	*	8
4	169.0	89.0	328.0	336.0	*155	*	8
5	312.0	98.0	328.0	336.0	*SITE	*	8
6	334.0	98.0	328.0	336.0	*155+40	*	8
7	489.0	107.0	328.0	336.0	*156	*	8
8	539.0	98.0	328.0	336.0	*156+15	*	8
	623.0	98.0	328.0	336.0	*156+40	*	8

Barrier No. 2 Description: SR25 BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	623.0	98.0	328.0	336.0	*156+40	*	8
2	809.0	98.0	328.0	336.0	*157	*	8
	934.0	98.0	328.0	336.0	*157+40	*	8

Barrier No. 3 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	-500.0	226.0	304.0	310.0	*153	*	6
2	0.0	226.0	304.0	310.0	*154+40	*	6
3	36.0	226.0	304.0	310.0	*154+50	*	6
4	169.0	226.0	308.0	314.0	*155	*	6
5	312.0	226.0	308.0	314.0	*SITE	*	6
	334.0	226.0	308.0	314.0	*155+40	*	6

Barrier No. 4 Description: SWEETWATER SITE BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	334.0	242.0	308.0	314.5	*155+40	*	7

2	489.0	255.0	308.0	315.0 *156	*	7
	539.0	255.0	308.0	315.0 *156+15	*	7

Barrier No. 5 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	623.0	243.0	308.0	314.0 *156+40	*	6
2	809.0	252.0	308.0	314.0 *157	*	6
	934.0	252.0	308.0	314.0 *157+40	*	6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	312.6	67	500	1 REAR
2	312.0	300.0	314.6	67	500	2 REAR
3	312.0	314.0	316.6	67	500	3 REAR
4	312.0	338.0	318.6	67	500	4 REAR
5	312.0	364.0	320.6	67	500	5 REAR
6	312.0	396.0	322.6	67	500	6 REAR
7	312.0	412.0	324.6	67	500	7 REAR
8	382.0	274.0	312.1	67	500	8 FRONT
9	382.0	300.0	314.1	67	500	9 FRONT
10	382.0	324.0	316.1	67	500	10 FRONT
11	382.0	338.0	318.1	67	500	11 FRONT
12	382.0	364.0	320.1	67	500	12 FRONT
13	382.0	396.0	322.1	67	500	13 FRONT
14	382.0	412.0	324.1	67	500	14 FRONT
15	376.0	452.0	327.0	67	500	15 FRONT
16	356.0	452.0	327.5	67	500	16 FRONT
17	329.0	452.0	328.0	67	500	17 FRONT
18	329.0	516.0	330.0	67	500	18 REAR
19	356.0	516.0	329.5	67	500	19 REAR
20	376.0	516.0	329.0	67	500	20 REAR

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
SITE FUTURE LDN AT 20 POINTS GROUND LEVEL FOR VACANT SITE

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153 154+40
2	-	0.*							154+50
3	-	0.*							155
4	-	0.*							SITE
5	-	0.*							155+40
6	-	0.*							156
7	-	0.*							156+15
8	-	0.*							156+40
9	-	0.*							157
10	-	0.*							153
11	-	0.*							154+40
12	-	0.*							154+50
13	-	0.*							155
14	-	0.*							SITE
15	-	0.*							155+40
16	-	0.*							156
17	-	0.*							156+40
18	-	0.*							157
19	-	0.*							
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	8.*							153	500.0	MASONRY
2	-	8.*							154+40	36.0	MASONRY
3	-	8.*							154+50	133.0	MASONRY
4	-	8.*							155	143.3	MASONRY
5	-	8.*							SITE	22.0	MASONRY
6	-	8.*							155+40	155.3	MASONRY
7	-	8.*							156	50.8	MASONRY
8	-	8.*							156+15	84.0	MASONRY
9	-	8.*							156+40	186.0	BERM
10	-	8.*							157	125.0	BERM
11	-	6.*							153	500.0	MASONRY
12	-	6.*							154+40	36.0	MASONRY
13	-	6.*							154+50	133.1	MASONRY

14	-	6.*
15	-	6.*
16	-	7.*
17	-	7.*
18	-	6.*
19	-	6.*

155	143.0	MASONRY
SITE	22.0	MASONRY
155+40	155.5	BERM
156	50.0	BERM
156+40	186.2	MASONRY
157	125.0	MASONRY

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1 REAR	67.	500.	63.7
2	2 REAR	67.	500.	63.2
3	3 REAR	67.	500.	63.3
4	4 REAR	67.	500.	63.1
5	5 REAR	67.	500.	62.9
6	6 REAR	67.	500.	62.6
7	7 REAR	67.	500.	62.6
8	8 FRONT	67.	500.	62.4
9	9 FRONT	67.	500.	62.6
10	10 FRONT	67.	500.	62.7
11	11 FRONT	67.	500.	62.8
12	12 FRONT	67.	500.	62.7
13	13 FRONT	67.	500.	62.5
14	14 FRONT	67.	500.	62.5
15	15 FRONT	67.	500.	62.1
16	16 FRONT	67.	500.	62.2
17	17 FRONT	67.	500.	62.3
18	18 REAR	67.	500.	61.4
	19 REAR	67.	500.	61.4
	20 REAR	67.	500.	61.3

BARRIER TYPE	COST
BERM	13758.
MASONRY	138721.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 152000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 6. 6. 6. 6. 6. 7. 7. 6. 6.

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS2GP
BARRIER COST FILE : CALIF$.DTA
DATE : 08-23-2005

SITE FUTURE LDN CURVE WITH DISTANCE POINTS GROUND LEVEL

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
					38	55	SWEETWATER
1	1977	55	95	55	273	65	SR125 NORTHBOUND
2	8096	65	239	65	273	65	SR125 SOUTHBOUND
3	8096	65	239	65			

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40
2	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
3	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40

A P P E N D I X 7

2030 CNEL CALCULATIONS FOR VACANT SITE AT 20 SECOND FLOOR LOCATIONS AND FOR CURVE PLOTTING

BARRIER NAMING NOMENCLATURE

1. SR125 Wall. - This is the wall that runs north and south and is programmed from Station 153 to the north termination at Station 156.40.

2. SR125 Berm. – This is the extension of the barrier from Station 156.40 to Station 157.40.

3. Sweetwater MHP wall. – This is the wall on the east side of Sweetwater Road running in front of the Mobile Home Park and ending at Station 155.40.

4. Sweetwater Site Berm. – This is the berm in front of the site running from Station 155.40 to Station 156.15.

5. Sweetwater Wall North of the Site. – This is the wall on the east side of Sweetwater Road running from Station 156.40 to Station 157.40.

6. South Side of Bldq 1 Units 1-7. - This is the south side of the building approximated by a 20 foot free standing wall.

7. North Side Bldq 1 Units 1-7. – This is the north side of the building approximated by a 20 foot free standing wall.

8. South MHP P/L Wall. – This is the six foot wall running east and west along the south common property line.

9. Unit 1 Wall. – This is the six foot wall along the west side of the patio and parallel to Sweetwater Road.

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS2SM
BARRIER COST FILE : CALIF$.DTA
DATE : 08-12-2005

SITE FUTURE LDN AT 20 POINTS 2ND LEVEL FOR VACANT SITE

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER
2	8096	65	239	65	273	65	SR125 NORTHBOUND
3	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40
2	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
3	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40

LO NO	809.0	-60.0	328.0	157
	934.0	-60.0	328.0	157+40

==========

BARRIER DATA

Barrier No. 1
Type - (2)MASONRY
Height Increment (DELZ)= 0.0

Description: SR25 WALL

No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	-500.0	89.0	328.0	336.0	*153	*	8
2	0.0	89.0	328.0	336.0	*154+40	*	8
3	36.0	89.0	328.0	336.0	*154+50	*	8
4	169.0	89.0	328.0	336.0	*155	*	8
5	312.0	98.0	328.0	336.0	*SITE	*	8
6	334.0	98.0	328.0	336.0	*155+40	*	8
7	489.0	107.0	328.0	336.0	*156	*	8
8	539.0	98.0	328.0	336.0	*156+15	*	8
	623.0	98.0	328.0	336.0	*156+40	*	8

Barrier No. 2
Type - (1)BERM
Height Increment (DELZ)= 0.0

Description: SR25 BERM

No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
	623.0	98.0	328.0	336.0	*156+40	*	8
2	809.0	98.0	328.0	336.0	*157	*	8
	934.0	98.0	328.0	336.0	*157+40	*	8

Barrier No. 3
Type (2)MASONRY
Height Increment (DELZ)= 0.0

Description: SWEETWATER MHP SOUTH WALL

No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	-500.0	226.0	304.0	310.0	*153	*	6
2	0.0	226.0	304.0	310.0	*154+40	*	6
3	36.0	226.0	304.0	310.0	*154+50	*	6
4	169.0	226.0	308.0	314.0	*155	*	6
5	312.0	226.0	308.0	314.0	*SITE	*	6
	334.0	226.0	308.0	314.0	*155+40	*	6

Barrier No. 4
Type - (1)BERM
Height Increment (DELZ)= 0.0

Description: SWEETWATER SITE BERM

No. Height Changes (P)=0

	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	334.0	242.0	308.0	314.5	*155+40	*	7

2	489.0	255.0	308.0	315.0 *156		
	539.0	255.0	308.0	315.0 *156+15	*	7

Barrier No. 5 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	623.0	243.0	308.0	314.0 *156+40	*	6
2	809.0	252.0	308.0	314.0 *157	*	6
	934.0	252.0	308.0	314.0 *157+40	*	6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	322.6	67	500	1 REAR
2	312.0	300.0	324.6	67	500	2 REAR
3	312.0	314.0	326.6	67	500	3 REAR
4	312.0	338.0	328.6	67	500	4 REAR
5	312.0	364.0	330.6	67	500	5 REAR
6	312.0	396.0	332.6	67	500	6 REAR
7	312.0	412.0	334.6	67	500	7 REAR
8	382.0	274.0	322.1	67	500	8 FRONT
9	382.0	300.0	324.1	67	500	9 FRONT
10	382.0	324.0	326.1	67	500	10 FRONT
11	382.0	338.0	328.1	67	500	11 FRONT
12	382.0	364.0	330.1	67	500	12 FRONT
13	382.0	396.0	332.1	67	500	13 FRONT
14	382.0	412.0	334.1	67	500	14 FRONT
15	376.0	452.0	337.0	67	500	15 FRONT
16	356.0	452.0	337.5	67	500	16 FRONT
17	329.0	452.0	338.0	67	500	17 FRONT
18	329.0	516.0	340.0	67	500	18 REAR
19	356.0	516.0	339.5	67	500	19 REAR
20	376.0	516.0	339.0	67	500	20 REAR

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
SITE FUTURE LDN AT 20 POINTS 2ND LEVEL FOR VACANT SITE

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							
2	-	0.*							153
3	-	0.*							154+40
4	-	0.*							154+50
5	-	0.*							155
6	-	0.*							SITE
7	-	0.*							155+40
8	-	0.*							156
									156+15
9		0.*							
10	-	0.*							156+40
									157
11	-	0.*							
12	-	0.*							153
13	-	0.*							154+40
14	-	0.*							154+50
15		0.*							155
									SITE
16	-	0.*							
17	-	0.*							155+40
									156
18	-	0.*							
19	-	0.*							156+40
									157
	0	1	2	3	4	5	6	7	

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	8.*									
2	-	8.*							153	500.0	MASONRY
3	-	8.*							154+40	36.0	MASONRY
4	-	8.*							154+50	133.0	MASONRY
5	-	8.*							155	143.3	MASONRY
6	-	8.*							SITE	22.0	MASONRY
7	-	8.*							155+40	155.3	MASONRY
8	-	8.*							156	50.8	MASONRY
									156+15	84.0	MASONRY
9	-	8.*									
10	-	8.*							156+40	186.0	BERM
									157	125.0	BERM
11	-	6.*									
12	-	6.*							153	500.0	MASONRY
13	-	6.*							154+40	36.0	MASONRY
									154+50	133.1	MASONRY

14	-	6.*			
15	-	6.*	SITE	22.0	MASONRY
16	-	7.*	155+40	155.5	BERM
17	-	7.*	156	50.0	BERM
18	-	6.*	156+40	186.2	MASONRY
19	-	6.*	157	125.0	MASONRY

0 1 2 3 4 5 6 7

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1 REAR	67.	500.	66.0
2	2 REAR	67.	500.	65.1
3	3 REAR	67.	500.	65.0
4	4 REAR	67.	500.	64.7
5	5 REAR	67.	500.	64.4
6	6 REAR	67.	500.	63.7
7	7 REAR	67.	500.	63.5
8	8 FRONT	67.	500.	66.2
9	9 FRONT	67.	500.	64.7
10	10 FRONT	67.	500.	64.4
11	11 FRONT	67.	500.	64.3
12	12 FRONT	67.	500.	64.0
13	13 FRONT	67.	500.	63.6
14	14 FRONT	67.	500.	63.5
15	15 FRONT	67.	500.	63.1
16	16 FRONT	67.	500.	62.9
17	17 FRONT	67.	500.	63.2
18	18 REAR	67.	500.	62.1
19	19 REAR	67.	500.	62.2
20	20 REAR	67.	500.	62.1

BARRIER TYPE	COST
BERM	13758.
MASONRY	138721.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 152000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 6. 6. 6. 6. 6. 7. 7. 6. 6.

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS2SP
BARRIER COST FILE : CALIF$.DTA
DATE : 08-23-2005

SITE FUTURE LDN CURVE WITH DISTANCE POINTS SECOND FLOOR LEVEL

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER
2	8096	65	239	65	273	65	SR125 NORTHBOUND
3	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40
2	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
3	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40

10	NO	809.0	-60.0	328.0	157+
		934.0	-60.0	328.0	157+40

==========

BARRIER DATA

Barrier No. 1 Description: SR25 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	89.0	328.0	336.0	*153	* 8
2	0.0	89.0	328.0	336.0	*154+40	* 8
3	36.0	89.0	328.0	336.0	*154+50	* 8
4	169.0	89.0	328.0	336.0	*155	* 8
5	312.0	98.0	328.0	336.0	*SITE	* 8
6	334.0	98.0	328.0	336.0	*155+40	* 8
7	489.0	107.0	328.0	336.0	*156	* 8
8	539.0	98.0	328.0	336.0	*156+15	* 8
	623.0	98.0	328.0	336.0	*156+40	* 8

Barrier No. 2 Description: SR25 BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	623.0	98.0	328.0	336.0	*156+40	* 8
2	809.0	98.0	328.0	336.0	*157	* 8
	934.0	98.0	328.0	336.0	*157+40	* 8

Barrier No. 3 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0	*153	* 6
2	0.0	226.0	304.0	310.0	*154+40	* 6
3	36.0	226.0	304.0	310.0	*154+50	* 6
4	169.0	226.0	308.0	314.0	*155	* 6
5	312.0	226.0	308.0	314.0	*SITE	* 6
	334.0	226.0	308.0	314.0	*155+40	* 6

Barrier No. 4 Description: SWEETWATER SITE BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	334.0	242.0	308.0	314.5	*155+40	* 7

2	489.0	255.0	308.0	315.0 *156	*	7
	539.0	255.0	308.0	315.0 *156+15	*	7

Barrier No. 5 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	623.0	243.0	308.0	314.0 *156+40	*	6
2	809.0	252.0	308.0	314.0 *157	*	6
	934.0	252.0	308.0	314.0 *157+40	*	6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	200.0	322.6	67	500	200
2	312.0	300.0	324.6	67	500	300
3	312.0	400.0	334.6	67	500	400
4	312.0	500.0	340.0	67	500	500
5	312.0	600.0	350.0	67	500	600
6	312.0	700.0	350.0	67	500	700
7	312.0	800.0	350.0	67	500	800

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
SITE FUTURE LDN CURVE WITH DISTANCE POINTS SECOND FLOOR LEVEL

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							155+40
7	-	0.*							156
8	-	0.*							156+15
9	-	0.*							156+40
10	-	0.*							157
11	-	0.*							153
12	-	0.*							154+40
13	-	0.*							154+50
14	-	0.*							155
15	-	0.*							SITE
16	-	0.*							155+40
17	-	0.*							156
18	-	0.*							156+40
19	-	0.*							157
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	8.*							153	500.0	MASONRY
2	-	8.*							154+40	36.0	MASONRY
3	-	8.*							154+50	133.0	MASONRY
4	-	8.*							155	143.3	MASONRY
5	-	8.*							SITE	22.0	MASONRY
6	-	8.*							155+40	155.3	MASONRY
7	-	8.*							156	50.8	MASONRY
8	-	8.*							156+15	84.0	MASONRY
9	-	8.*							156+40	186.0	BERM
10	-	8.*							157	125.0	BERM
11	-	6.*							153	500.0	MASONRY
12	-	6.*							154+40	36.0	MASONRY
13	-	6.*							154+50	133.1	MASONRY

14	-	6.*	155	143.0	MASONRY
15	-	6.*	SITE	22.0	MASONRY
16	-	7.*	155+40	155.5	BERM
17	-	7.*	156	50.0	BERM
18	-	6.*	156+40	186.2	MASONRY
19	-	6.*	157	125.0	MASONRY

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	200	67.	500.	73.8
2	300	67.	500.	65.1
3	400	67.	500.	64.0
4	500	67.	500.	62.5
5	600	67.	500.	61.6
6	700	67.	500.	60.2
7	800	67.	500.	58.9

BARRIER TYPE	COST
BERM	13758.
MASONRY	138721.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 152000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION

8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 6. 6. 6. 6. 6. 7. 7. 6. 6.

A P P E N D I X 8

2030 CNEL CALCULATIONS BUILT SITE
AT 20 GROUND LEVEL LOCATIONS

BARRIER NAMING NOMENCLATURE

1. SR125 Wall. - This is the wall that runs north and south and is programmed from Station 153 to the north termination at Station 156.40.

2. SR125 Berm. – This is the extension of the barrier from Station 156.40 to Station 157.40.

3. Sweetwater MHP wall. -- This is the wall on the east side of Sweetwater Road running in front of the Mobile Home Park and ending at Station 155.40.

4. Sweetwater Site Berm. – This is the berm in front of the site running from Station 155.40 to Station 156.15.

5. Sweetwater Wall North of the Site. – This is the wall on the east side of Sweetwater Road running from Station 156.40 to Station 157.40.

6. South Side of Bldq 1 Units 1-7. - This is the south side of the building approximated by a 20 foot free standing wall.

7. North Side Bldq 1 Units 1-7. – This is the north side of the building approximated by a 20 foot free standing wall.

8. South MHP P/L Wall. – This is the six foot wall running east and west along the south common property line.

9. Unit 1 Wall. – This is the six foot wall along the west side of the patio and parallel to Sweetwater Road.

```
14        -    6.*
15        -    6.*

16        -    7.*
17        -    7.*

18        -    6.*
19        -    6.*
-----------------------------------------------------------------------------
         0    1    2    3    4    5    6    7
```

155	143.0	MASONRY
SITE	22.0	MASONRY
155+40	155.5	BERM
156	50.0	BERM
156+40	186.2	MASONRY
157	125.0	MASONRY

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	200	67.	500.	73.8
2	300	67.	500.	65.1
3	400	67.	500.	64.0
4	500	67.	500.	62.5
5	600	67.	500.	61.6
6	700	67.	500.	60.2
7	800	67.	500.	58.9

BARRIER TYPE	COST
BERM	13758.
MASONRY	138721.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 152000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION

8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 6. 6. 6. 6. 6. 7. 7. 6. 6.

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS7M
BARRIER COST FILE : CALIF$.DTA
DATE : 08-15-2005

SITE FUTURE LDN AT 20 POINTS GROUND LEVEL FOR BUILT SITE

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER
2	8096	65	239	65	273	65	SR125 NORTHBOUND
3	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40
2	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
3	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40
	10	NO	809.0	-60.0	328.0	157

934.0 -60.0 328.0 157+40

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RIER DATA

Barrier No. 1 Description: SR25 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	89.0	328.0	336.0	*153	* 8
2	0.0	89.0	328.0	336.0	*154+40	* 8
3	36.0	89.0	328.0	336.0	*154+50	* 8
4	169.0	89.0	328.0	336.0	*155	* 8
5	312.0	98.0	328.0	336.0	*SITE	* 8
6	334.0	98.0	328.0	336.0	*155+40	* 8
7	489.0	107.0	328.0	336.0	*156	* 8
8	539.0	98.0	328.0	336.0	*156+15	* 8
	623.0	98.0	328.0	336.0	*156+40	* 8

Barrier No. 2 Description: SR25 BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

G.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	623.0	98.0	328.0	336.0	*156+40	* 8
2	809.0	98.0	328.0	336.0	*157	* 8
	934.0	98.0	328.0	336.0	*157+40	* 8

Barrier No. 3 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0	*153	* 6
2	0.0	226.0	304.0	310.0	*154+40	* 6
3	36.0	226.0	304.0	310.0	*154+50	* 6
4	169.0	226.0	308.0	314.0	*155	* 6
5	312.0	226.0	308.0	314.0	*SITE	* 6
	334.0	226.0	308.0	314.0	*155+40	* 6

Barrier No. 4 Description: SWEETWATER SITE BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	334.0	242.0	308.0	314.5	*155+40	* 7
2	489.0	255.0	308.0	315.0	*156	* 7

539.0	255.0	308.0	315.0 *156+15	*	7

Barrier No. 5 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0 *156+40	* 6
2	809.0	252.0	308.0	314.0 *157	* 6
	934.0	252.0	308.0	314.0 *157+40	* 6

Barrier No. 6 Description: SOUTH SIDE OF BLDG 1 UNIT 1-7
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	317.0	254.0	307.6	327.6 *B6 P1	* 20
	317.0	422.0	319.0	339.0 *B6 P2	* 20

Barrier No. 7 Description: NORTH SIDE BLDG 1 UNIT 1-7
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	354.0	254.0	307.6	327.6 *B7 P1	* 20
	354.0	422.0	319.0	339.0 *B7 P2	* 20

Barrier No. 8 Description: SOUTH MHP P/L WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	307.0	232.0	306.6	313.6 *B8 P1	* 7
	307.0	512.0	322.3	328.3 *B8 P2	* 6

Barrier No. 9 Description: UNIT 1 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
	307.0	254.0	307.6	313.6 *B9 P1	* 6
	317.0	254.0	307.6	313.6 *B9 P2	* 6

Barrier No. 10 Description: UNIT 8/9/10 BLDG

Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

G.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	317.0	512.0	322.3	342.3 *B10 P1	* 20
	392.0	512.0	322.0	342.0 *B10 P2	* 20

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	312.6	67	500	1 REAR
2	312.0	300.0	314.6	67	500	2 REAR
3	312.0	314.0	316.6	67	500	3 REAR
4	312.0	338.0	318.6	67	500	4 REAR
5	312.0	364.0	320.6	67	500	5 REAR
6	312.0	396.0	322.6	67	500	6 REAR
7	312.0	412.0	324.6	67	500	7 REAR
8	382.0	274.0	312.1	67	500	8 FRONT
9	382.0	300.0	314.1	67	500	9 FRONT
10	382.0	324.0	316.1	67	500	10 FRONT
11	382.0	338.0	318.1	67	500	11 FRONT
12	382.0	364.0	320.1	67	500	12 FRONT
3	382.0	396.0	322.1	67	500	13 FRONT
4	382.0	412.0	324.1	67	500	14 FRONT
15	376.0	452.0	327.0	67	500	15 FRONT
16	356.0	452.0	327.5	67	500	16 FRONT
17	329.0	452.0	328.0	67	500	17 FRONT
18	329.0	516.0	330.0	67	500	18 REAR
19	356.0	516.0	329.5	67	500	19 REAR
20	376.0	516.0	329.0	67	500	20 REAR

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
TE FUTURE LDN AT 20 POINTS GROUND LEVEL FOR BUILT SITE

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							155+40
7	-	0.*							156
8		0.*							156+15
9		0.*							156+40
10	-	0.*							157
11	-	0.*							153
12	-	0.*							154+40
13	-	0.*							154+50
14		0.*							155
5	-	0.*							SITE
16		0.*							155+40
17		0.*							156
18	-	0.*							156+40
19	-	0.*							157
20	-	0.*							B6 P1
21	-	0.*							B7 P1
22		0.*							B8 P1
23	-	0.*							B9 P1
24	-	0.*							B10 P1
	0	1	2	3	4	5	6	7	

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
	-	8.*							153	500.0	MASONRY
2	-	8.*							154+40	36.0	MASONRY
3	-	8.*							154+50	133.0	MASONRY
4	-	8.*							155	143.3	MASONRY
5	-	8.*							SITE	22.0	MASONRY

CONCRETE 0.

TOTAL COST = $ 254000.

RRIER HEIGHT INDEX FOR EACH BARRIER SECTION

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION

8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 6. 6. 6. 6. 6. 7. 7. 6. 6.20.20. 7. 6.20.

A P P E N D I X 9

2030 CNEL CALCULATIONS BUILT SITE AT 20 SECOND FLOOR LEVEL LOCATIONS

BARRIER NAMING NOMENCLATURE

1. SR125 Wall. - This is the wall that runs north and south and is programmed from Station 153 to the north termination at Station 156.40.

2. SR125 Berm. - This is the extension of the barrier from Station 156.40 to Station 157.40.

3. Sweetwater MHP wall. – This is the wall on the east side of Sweetwater Road running in front of the Mobile Home Park and ending at Station 155.40.

4. Sweetwater Site Berm. – This is the berm in front of the site running from Station 155.40 to Station 156.15.

5. Sweetwater Wall North of the Site. – This is the wall on the east side of Sweetwater Road running from Station 156.40 to Station 157.40.

6. South Side of Bldq 1 Units 1-7. - This is the south side of the building approximated by a 20 foot free standing wall.

7. North Side Bldq 1 Units 1-7. – This is the north side of the building approximated by a 20 foot free standing wall.

8. South MHP P/L Wall. – This is the six foot wall running east and west along the south common property line.

9. Unit 1 Wall. – This is the six foot wall along the west side of the patio and parallel to Sweetwater Road.

6	-	8.*	155+40	155.3	MASONRY
7	-	8.*	156	50.8	MASONRY
8	-	8.*	156+15	84.0	MASONRY
9	-	8.*	156+40	186.0	BERM
10	-	8.*	157	125.0	BERM
11	-	6.*	153	500.0	MASONRY
12	-	6.*	154+40	36.0	MASONRY
13	-	6.*	154+50	133.1	MASONRY
14	-	6.*	155	143.0	MASONRY
15	-	6.*	SITE	22.0	MASONRY
16	-	7.*	155+40	155.5	BERM
17	-	7.*	156	50.0	BERM
18	-	6.*	156+40	186.2	MASONRY
19		6.*	157	125.0	MASONRY
20	-	20.*	B6 P1	168.4	MASONRY
21		20.*	B7 P1	168.4	MASONRY
22	-	7.*	B8 P1	280.4	MASONRY
23	-	6.*	B9 P1	10.0	MASONRY
24		20.*	B10 P1	75.0	MASONRY

0 1 2 3 4 5 6 7

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1 REAR	67.	500.	60.9
2	2 REAR	67.	500.	61.2
3	3 REAR	67.	500.	61.4
4	4 REAR	67.	500.	61.3
5	5 REAR	67.	500.	61.2
6	6 REAR	67.	500.	60.8
7	7 REAR	67.	500.	60.8
8	8 FRONT	67.	500.	61.3
9	9 FRONT	67.	500.	61.0
10	10 FRONT	67.	500.	61.0
11	11 FRONT	67.	500.	61.2
12	12 FRONT	67.	500.	61.1
13	13 FRONT	67.	500.	60.8
14	14 FRONT	67.	500.	60.8
15	15 FRONT	67.	500.	60.9
16	16 FRONT	67.	500.	61.4
17	17 FRONT	67.	500.	61.5
18	18 REAR	67.	500.	49.1
19	19 REAR	67.	500.	49.1
20	20 REAR	67.	500.	49.1

BARRIER TYPE	COST
BERM	13758.
MASONRY	240438.
MASONRY/JERSEY	0.

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS8M
BARRIER COST FILE : CALIF$.DTA
DATE : 08-15-2005

SITE FUTURE LDN AT 20 POINTS SECOND FLOOR LEVEL FOR BUILT SITE

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER
2	8096	65	239	65	273	65	SR125 NORTHBOUND
3	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40
2	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
3	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40

10	NO	809.0	-60.0	328.0	157
		934.0	-60.0	328.0	157+40

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BARRIER DATA

Barrier No. 1 Description: SR25 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	89.0	328.0	336.0	*153	* 8
2	0.0	89.0	328.0	336.0	*154+40	* 8
3	36.0	89.0	328.0	336.0	*154+50	* 8
4	169.0	89.0	328.0	336.0	*155	* 8
5	312.0	98.0	328.0	336.0	*SITE	* 8
6	334.0	98.0	328.0	336.0	*155+40	* 8
7	489.0	107.0	328.0	336.0	*156	* 8
8	539.0	98.0	328.0	336.0	*156+15	* 8
	623.0	98.0	328.0	336.0	*156+40	* 8

Barrier No. 2 Description: SR25 BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	623.0	98.0	328.0	336.0	*156+40	* 8
2	809.0	98.0	328.0	336.0	*157	* 8
	934.0	98.0	328.0	336.0	*157+40	* 8

Barrier No. 3 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0	*153	* 6
2	0.0	226.0	304.0	310.0	*154+40	* 6
3	36.0	226.0	304.0	310.0	*154+50	* 6
4	169.0	226.0	308.0	314.0	*155	* 6
5	312.0	226.0	308.0	314.0	*SITE	* 6
	334.0	226.0	308.0	314.0	*155+40	* 6

Barrier No. 4 Description: SWEETWATER SITE BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	334.0	242.0	308.0	314.5	*155+40	* 7

2	489.0	255.0	308.0	315.0 *156	*	7
	539.0	255.0	308.0	315.0 *156+15	*	7

Barrier No. 5 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	623.0	243.0	308.0	314.0 *156+40	*	6
2	809.0	252.0	308.0	314.0 *157	*	6
	934.0	252.0	308.0	314.0 *157+40	*	6

Barrier No. 6 Description: SOUTH SIDE OF BLDG 1 UNIT 1-7
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	317.0	254.0	307.6	327.6 *B6 P1	*	20
	317.0	422.0	319.0	339.0 *B6 P2	*	20

Barrier No. 7 Description: NORTH SIDE BLDG 1 UNIT 1-7
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	354.0	254.0	307.6	327.6 *B7 P1	*	20
	354.0	422.0	319.0	339.0 *B7 P2	*	20

Barrier No. 8 Description: SOUTH MHP P/L WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	307.0	232.0	306.6	313.6 *B8 P1	*	7
	307.0	512.0	322.3	328.3 *B8 P2	*	6

Barrier No. 9 Description: UNIT 1 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	307.0	254.0	307.6	313.6 *B9 P1	*	6
	317.0	254.0	307.6	313.6 *B9 P2	*	6

Barrier No. 10 Description: UNIT 8/9/10 BLDG
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	317.0	512.0	322.3	342.3	*B10 P1 * 20
	392.0	512.0	322.0	342.0	*B10 P2 * 20

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	322.6	67	500	1 REAR
2	312.0	300.0	324.6	67	500	2 REAR
3	312.0	314.0	326.6	67	500	3 REAR
4	312.0	338.0	328.6	67	500	4 REAR
5	312.0	364.0	330.6	67	500	5 REAR
6	312.0	396.0	332.6	67	500	6 REAR
7	312.0	412.0	334.6	67	500	7 REAR
8	382.0	274.0	322.1	67	500	8 FRONT
9	382.0	300.0	324.1	67	500	9 FRONT
10	382.0	324.0	326.1	67	500	10 FRONT
11	382.0	338.0	328.1	67	500	11 FRONT
12	382.0	364.0	330.1	67	500	12 FRONT
13	382.0	396.0	332.1	67	500	13 FRONT
14	382.0	412.0	334.1	67	500	14 FRONT
15	376.0	452.0	337.0	67	500	15 FRONT
16	356.0	452.0	337.5	67	500	16 FRONT
17	329.0	452.0	338.0	67	500	17 FRONT
18	329.0	516.0	340.0	67	500	18 REAR
19	356.0	516.0	339.5	67	500	19 REAR
20	376.0	516.0	339.0	67	500	20 REAR

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
CE FUTURE LDN AT 20 POINTS SECOND FLOOR LEVEL FOR BUILT SITE

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							155+40
7	-	0.*							156
8	-	0.*							156+15
9	-	0.*							
10	-	0.*							156+40
									157
11	-	0.*							
12	-	0.*							153
13	-	0.*							154+40
14	-	0.*							154+50
15	-	0.*							155
									SITE
16	-	0.*							
17		0.*							155+40
									156
18	-	0.*							
19		0.*							156+40
									157
20	-	0.*							
									B6 P1
21	-	0.*							
									B7 P1
22		0.*							
									B8 P1
23	-	0.*							
									B9 P1
24	-	0.*							
									B10 P1
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	8.*							153	500.0	MASONRY
2	-	8.*							154+40	36.0	MASONRY
3	-	8.*							154+50	133.0	MASONRY
4	-	8.*							155	143.3	MASONRY
5		8.*							SITE	22.0	MASONRY

6	-	8.*	155+40	155.3	MASONRY
7	-	8.*	156	50.8	MASONRY
8	-	8.*	156+15	84.0	MASONRY
	-	8.*	156+40	186.0	BERM
10	-	8.*	157	125.0	BERM
11	-	6.*	153	500.0	MASONRY
12	-	6.*	154+40	36.0	MASONRY
13	-	6.*	154+50	133.1	MASONRY
14	-	6.*	155	143.0	MASONRY
15	-	6.*	SITE	22.0	MASONRY
16	-	7.*	155+40	155.5	BERM
17	-	7.*	156	50.0	BERM
18	-	6.*	156+40	186.2	MASONRY
19	-	6.*	157	125.0	MASONRY
20	-	20.*	B6 P1	168.4	MASONRY
21	-	20.*	B7 P1	168.4	MASONRY
22	-	7.*	B8 P1	280.4	MASONRY
23	-	6.*	B9 P1	10.0	MASONRY
24	-	20.*	B10 P1	75.0	MASONRY

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1 REAR	67.	500.	64.3
2	2 REAR	67.	500.	63.6
3	3 REAR	67.	500.	63.8
4	4 REAR	67.	500.	63.5
5	5 REAR	67.	500.	63.3
6	6 REAR	67.	500.	62.6
7	7 REAR	67.	500.	62.8
8	8 FRONT	67.	500.	66.3
9	9 FRONT	67.	500.	64.5
10	10 FRONT	67.	500.	64.0
11	11 FRONT	67.	500.	64.0
12	12 FRONT	67.	500.	63.7
13	13 FRONT	67.	500.	63.2
14	14 FRONT	67.	500.	63.1
15	15 FRONT	67.	500.	62.7
16	16 FRONT	67.	500.	62.9
17	17 FRONT	67.	500.	63.0
18	18 REAR	67.	500.	59.2
19	19 REAR	67.	500.	58.1
20	20 REAR	67.	500.	56.7

RRIER TYPE	COST
BERM	13758.
MASONRY	240438.
MASONRY/JERSEY	0.

APPENDIX 10

BASIC ROOM NOISE REDUCTION CALCULATIONS

CONCRETE 0.

TOTAL COST = $ 254000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION

8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 6. 6. 6. 6. 6. 7. 7. 6. 6.20.20. 7. 6.20.

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME LR/DR + STC = 24

FLOOR AREA 500

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		123	0.01230
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			520	
WINDOW 1	22	.05	77	0.48584
WINDOW 2	25	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	22	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	70	.04	500	0.00005
FLOOR		.6	500	
ET*S				0.49819
-10LOG(ET*S)				3.0
10LOGA				25.4
NOISE REDUCTION				22.5

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME LR/DR + STC = 26

FLOOR AREA 500

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		123	0.01230
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			520	
WINDOW 1	24	.05	77	0.30654
WINDOW 2	27	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	24	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	70	.04	500	0.00005
FLOOR		.6	500	
ET*S				0.31889
-10LOG(ET*S)				5.0
10LOGA				25.4
NOISE REDUCTION				24.4

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME LR/DR + STC = 28

FLOOR AREA 500

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		123	0.01230
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			520	
WINDOW 1	26	.05	77	0.19342
WINDOW 2	29	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	26	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	70	.04	500	0.00005
FLOOR		.6	500	
ET*S				0.20577
-10LOG(ET*S)				6.9
10LOGA				25.4
NOISE REDUCTION				26.3

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME LR/DR + STC = 30

FLOOR AREA 500

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		123	0.01230
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			520	
WINDOW 1	28	.05	77	0.12204
WINDOW 2	31	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	28	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	70	.04	500	0.00005
FLOOR		.6	500	
ET*S				0.13439
-10LOG(ET*S)				8.7
10LOGA				25.4
NOISE REDUCTION				28.2

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME LR/DR + STC = 32

FLOOR AREA 500

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		123	0.01230
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			520	
WINDOW 1	30	.05	77	0.07700
WINDOW 2	33	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	30	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	70	.04	500	0.00005
FLOOR		.6	500	
ET*S				0.08935
-10LOG(ET*S)				10.5
10LOGA				25.4
NOISE REDUCTION				29.9

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME LR/DR + STC = 34

FLOOR AREA 500

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		123	0.01230
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			520	
WINDOW 1	32	.05	77	0.04858
WINDOW 2	35	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	32	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	70	.04	500	0.00005
FLOOR		.6	500	
ET*S				0.06093
-10LOG(ET*S)				12.2
10LOGA				25.4
NOISE REDUCTION				31.6

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME LR/DR + STC = 36

FLOOR AREA 500

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		123	0.01230
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			520	
WINDOW 1	34	.05	77	0.03065
WINDOW 2	37	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	34	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	70	.04	500	0.00005
FLOOR		.6	500	
ET*S				0.04300
-10LOG(ET*S)				13.7
10LOGA				25.4
NOISE REDUCTION				33.1

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME BR + STC = 24

FLOOR AREA 132

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		68	0.00680
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			280	
WINDOW 1	22	.05	20	0.12619
WINDOW 2	25	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	22	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	50	.04	132	0.00132
FLOOR		.6	132	
ET*S				0.13431
-10LOG(ET*S)				8.7
10LOGA				20.0
NOISE REDUCTION				22.7

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME BR + STC = 26

FLOOR AREA 132

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		68	0.00680
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			280	
WINDOW 1	24	.05	20	0.07962
WINDOW 2	27	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	24	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	50	.04	132	0.00132
FLOOR		.6	132	
ET*S				0.08774
-10LOG(ET*S)				10.6
10LOGA				20.0
NOISE REDUCTION				24.6

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME BR + STC = 28

FLOOR AREA 132

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		68	0.00680
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			280	
WINDOW 1	26	.05	20	0.05024
WINDOW 2	29	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	26	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	50	.04	132	0.00132
FLOOR		.6	132	
ET*S				0.05836
-10LOG(ET*S)				12.3
10LOGA				20.0
NOISE REDUCTION				26.4

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME BR + STC = 30

FLOOR AREA 132

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		68	0.00680
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			280	
WINDOW 1	28	.05	20	0.03170
WINDOW 2	31	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	28	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	50	.04	132	0.00132
FLOOR		.6	132	
ET*S				0.03982
-10LOG(ET*S)				14.0
10LOGA				20.0
NOISE REDUCTION				28.0

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME BR + STC = 32

FLOOR AREA 132

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		68	0.00680
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			280	
WINDOW 1	30	.05	20	0.02000
WINDOW 2	33	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	30	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	50	.04	132	0.00132
FLOOR		.6	132	
ET*S				0.02812
-10LOG(ET*S)				15.5
10LOGA				20.0
NOISE REDUCTION				29.5

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME BR + STC = 34

FLOOR AREA 132

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		68	0.00680
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			280	
WINDOW 1	32	.05	20	0.01262
WINDOW 2	35	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	32	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	50	.04	132	0.00132
FLOOR		.6	132	
ET*S				0.02074
-10LOG(ET*S)				16.8
10LOGA				20.0
NOISE REDUCTION				30.8

WORK SHEET FOR CALCULATING ROOM NOISE REDUCTION VALUE

ROOM NAME BR + STC = 36

FLOOR AREA 132

SURFACES	TL	@	AREA	T*S
EXT.WALL 1	40		68	0.00680
EXT.WALL 2	43		0	0.00000
EXT.WALL 3	0		0	0.00000
INT.WALL			280	
WINDOW 1	34	.05	20	0.00796
WINDOW 2	37	.05	0	0.00000
WINDOW 3	0	.05	0	0.00000
SGD	34	.05	0	0.00000
DOORS	0	.04	0	0.00000
ROOF	50	.04	132	0.00132
FLOOR		.6	132	
ET*S				0.01608
-10LOG(ET*S)				17.9
10LOGA				20.0
NOISE REDUCTION				32.0

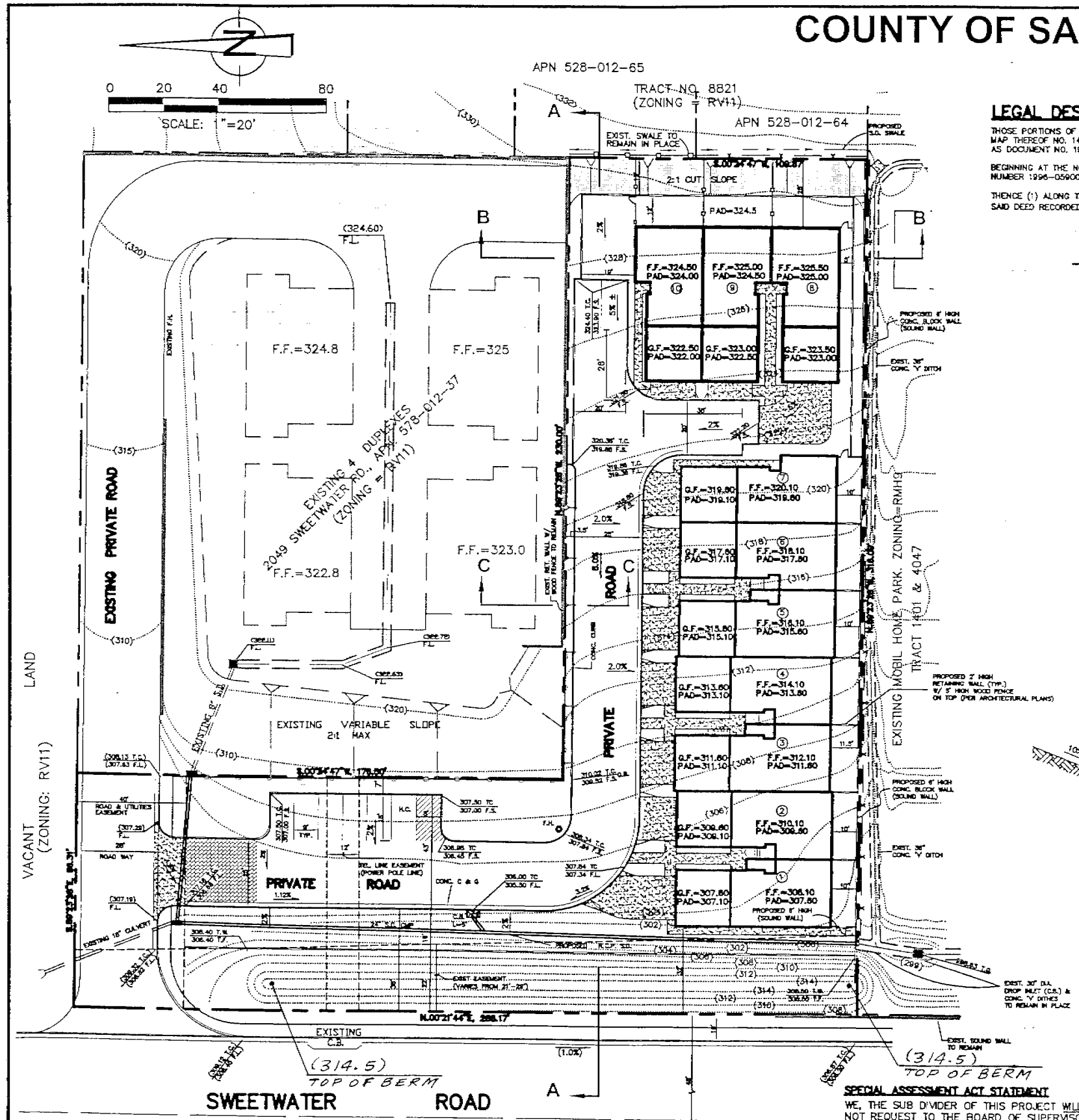
APPENDIX 11

SITE PLAN WITH PAD AND FINISH ELEVATIONS

GRADING PLAN WITH TOP OF THE WALL ELEVATION

COUNTY OF SAN DIEGO TRACT, TM 5392 RPL 3; STP 04-050

FOR COMDOMINIUM PURPOSES



LEGAL DESCRIPTION:

THOSE PORTIONS OF THE NORTH 2 ACRES OF LOT 11, AND OF THE WEST HALF OF THE SOUTH 1 ACRE OF LOT 2 OF TRACT 1401 IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 1401 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY ON DECEMBER 8, 1911 CONVEYED TO THE STATE OF CALIFORNIA IN A DEED RECORDED MARCH 15, 1995, AS DOCUMENT NO. 1995-0108927, FILED IN THE OFFICE OF SAID COUNTY RECORDER, LYING EASTERLY OF THE FOLLOWING DESCRIBED LINE.

BEGINNING AT THE NORTHEASTERLY CORNER OF PARCEL 21979-1, AS CONVEYED TO THE STATE OF CALIFORNIA IN A FINAL ORDER OF CONDEMNATION RECORDED ON NOVEMBER 20, 1996 AS DOCUMENT NUMBER 1996-0590034 OF OFFICIAL RECORDS.

THENCE (1) ALONG THE EASTERLY LINE OF SAID PARCEL 21979-1 AND THE SOUTHERLY PROLONGATION THEREOF SOUTH 00°21'44" WEST, 402.25 FEET TO THE SOUTHERLY LINE OF THE LAND CONVEYED IN SAID DEED RECORDED MARCH 15, 1995, AND THE POINT OF TERMINUS. **(ASSESSOR'S PARCEL NO: 578-012-80)**

GENERAL PROJECT INFORMATION

EXISTING

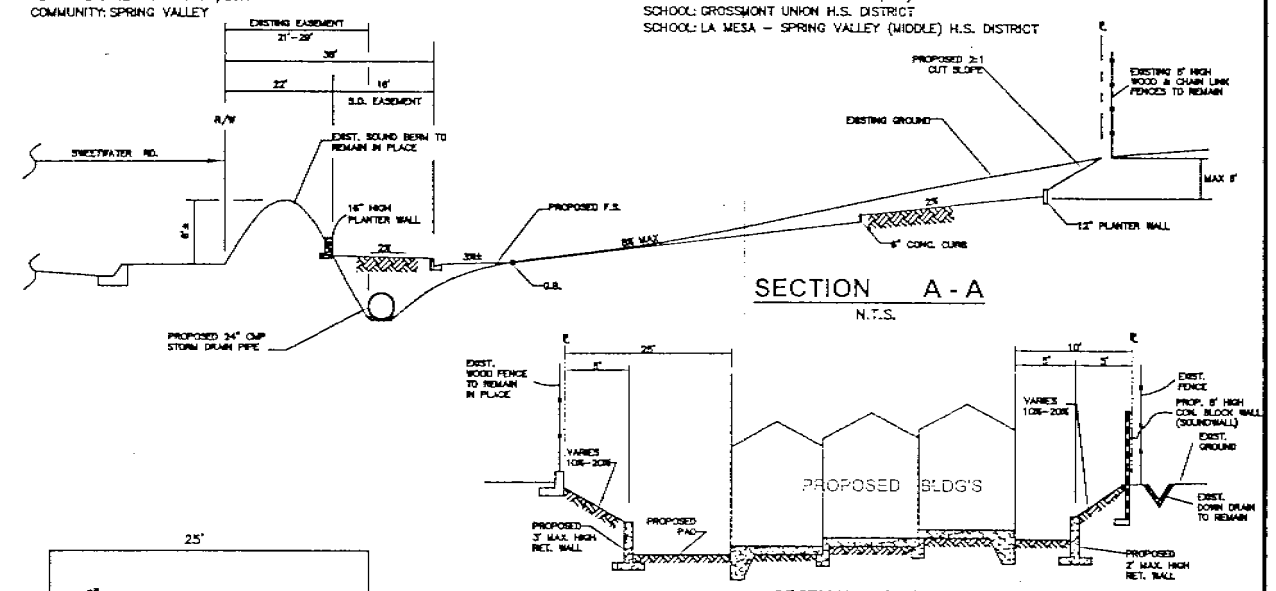
ASSESOR PARCEL NO: 578-012-80
SITE AREA1.15 ACRES
EXISTING ZONING: RV11
EXISTING USE: VACANT
ASSESSORS TAX RATE AREA = 83171
GENERAL PLAN = (7) RESIDENTIAL
REGIONAL CATEGORY= CUDA/ECA
COMMUNITY: SPRING VALLEY

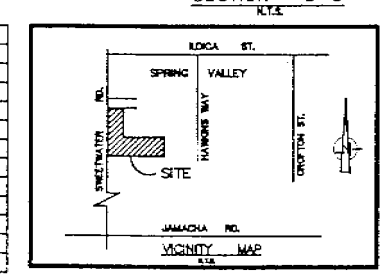
PROPOSED

PROPOSED USE:10 UNITS CONDOMINIUMS
PROPOSED SETBACKS:
FRONT: 32', REAR: 25', SIDE: 10' MIN.
GROSS AREA: 1.15 ACRES
NET AREA: 1.07 ACRES
ZONING: RV11

UTILITIE SERVICES

GAS AND ELECTRICSDG & E TEL. (800) 411-7343
SEWER: SPRING VALLEY SANITATION
MAINTENANCE DISTRICT TEL. (619)-660-2007
WATER: HELIX WATER DISTRICT TEL. (619) 527-7482
CABLE: COX COMMUNICATIONS TEL. (800) 221-4188
TELEPHONE: SBC TEL. (800) 955-4296
FIRE: SAN MIGUEL FIRE DEP. TEL. (619) 670-0500
SCHOOL: GROSSMONT UNION H.S. DISTRICT
SCHOOL: LA MESA - SPRING VALLEY (MIDDLE) H.S. DISTRICT





SOLAR ACCESS STATEMENT

"ALL LOTS WITHIN THIS SUBDIVISION HAVE A MINIMUM OF 100 SQUARE FEET OF SOLAR ACCESS FOR EACH FUTURE DWELLING BY THIS SUBDIVISION. WHEN PARCELS LESS THAN ONE AREA ARE PROPOSED, THE STATEMENT MUST BE SIGNED BY A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR. A STATEMENT SUPPORTING THE EXCEPTION OF ANY LOT/PARCEL FROM SOLAR ACCESS MUST ALSO BE SIGNED BY A REGISTERED ENGINEER OR LAND SURVEYOR.

CONDOMINIUM MAP STATEMENT

"THIS IS A MAP OF A CONDOMINIUM PEOJECT AS DEFINED IN SECTION 1350 OF THE STATE OF CALIFORNIA CIVIL CODES, THE MAXIMUM NUMBER OF DWELLING UNITS IS 10".

SPECIAL ASSESSMENT ACT STATEMENT

WE, THE SUB DIVIDER OF THIS PROJECT WILL NOT REQUEST TO THE BOARD OF SUPERVISOR FOR PERMISSION TO INITIATE PROCEEDING UNDER A SPECIAL ASSESSMENT ACT FOR CONSTRUCTION OF ANY OF THE PROPOSED IMPROVEMENT.

HOSSEIN EFTEKHARI FEREYDOON ALIPANAH

COUNTY OF SAN DIEGO
DEPARMENT OF PLANNING AND LAND USE
ZONING INFORMATION

ZONE		
USE REGULATIONS		RV 11
ANIMAL REGULATIONS		Q
DEVELOPMENT REGULATIONS	DENSITY	10.9
	LOT SIZE	10,000
	BUILDING TYPE	K
	MAXIMUM FLOOR AREA	–
	FLOOR AREA RATIO	–
	HEIGHT	C
	LOT COVERAGE	–
	SETBACK	K
	OPEN SPACE	I
SPECIAL AREA REGULATIONS		B,D1,D2

AUGUST 30,2005

LEGEND & ABBREVIATIONS

LOT BOUNDARIES
PROPOSED 2:1 SLOPE
EXISTING CONTOUR LINE
PROPOSED CONC. SIDEWALK/DRWY.
EXISTING CONCRETE BLOCK WALL
PROPOSED CONCRETE BLOCK WALL W/RET. PER PLAN
G.B. GRADE BREAK
CMP CORRUGATED METAL PIPE
T.C. TOP OF CURB
F.L. FLOW LINE
F.F. FINISHED FLOOR
L.P. LOW POINT
C.B. CATCH BASIN
T.G. TOP OF GRATE
S.D. STORM DRAIN

ARCHITECT:	OWNER / SUBDIVIDER	BENCH MARK
GEORGE BEHNAM 1150E. ORANGETHOPE #109 PLACENTIA, CA 92807 TEL. (714) 572-2384	A & E SWEET HOMES LLC. 100 S. ANAHEIM BLVD. # 360 ANAHEIM CA 92805 TEL. (714) 991-4411	2" BRASS DISK CBV2 N. PC ILDICA STREET 12' W. ILDICA CT. COUNTY ENGR. ELEVATION = 425.21 FT. (USGS)

PREPARED BY:
HOSS, WILLIAM & ASSOCIATES INC.
PLANNERS • CONSULTING ENGINEERS • SURVEYORS
100 SOUTH ANAHEIM BLVD. • 360 ANAHEIM, CA 92805
TEL. (714) 991-4411 FAX (714) 991-4491

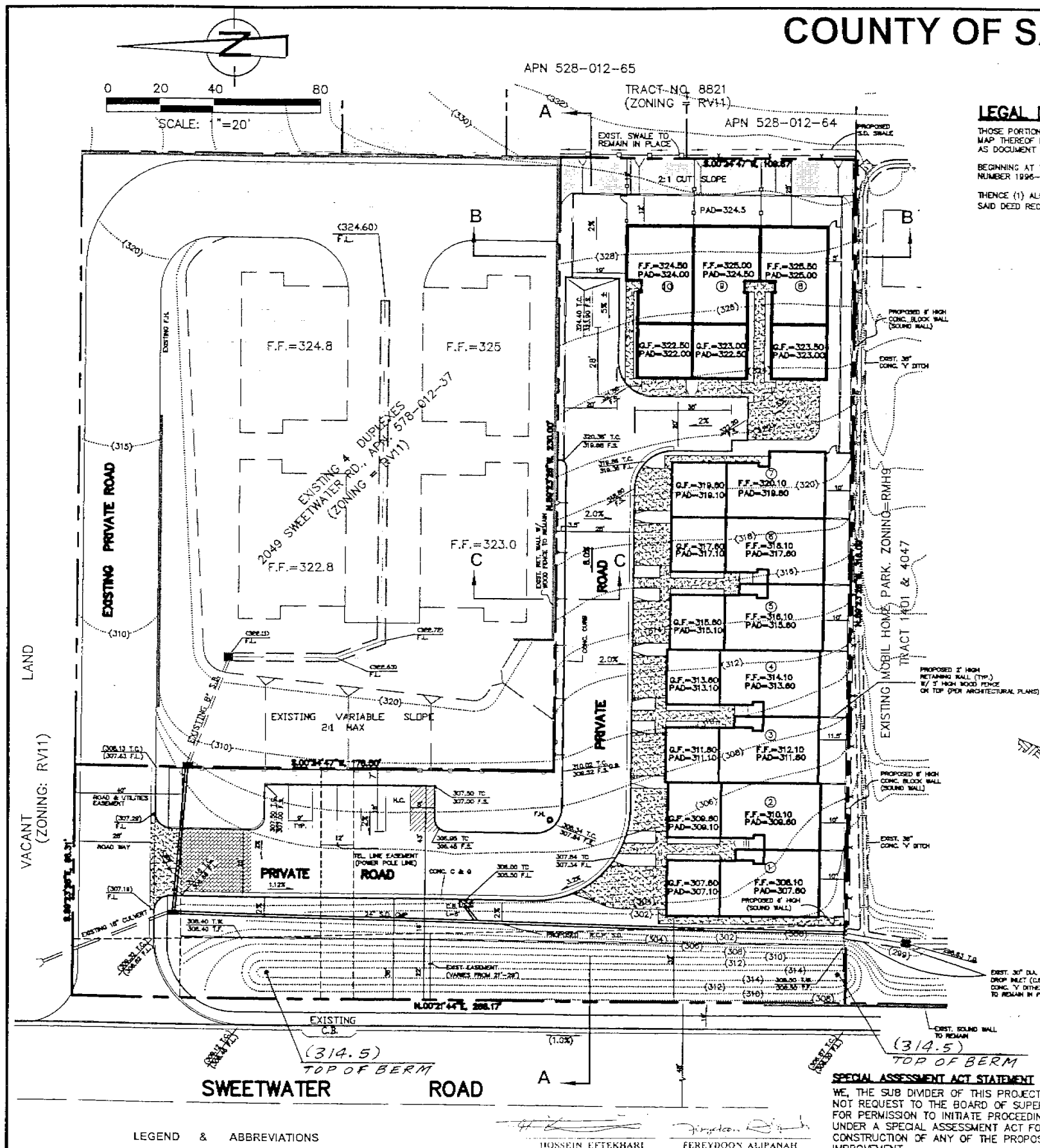
REGISTERED PROFESSIONAL ENGINEER HOSSEIN EFTEKHARI No. C50121 Exp. 6/30/07 CIVIL STATE OF CALIFORNIA

COUNTY OF SAN DIEGO TRACT
TM 5392 RPL 3; STP 04-050
SWEETWATER ROAD SAN DIEGO

SCALE: 1"=20' SHEET 1 OF 1

COUNTY OF SAN DIEGO TRACT, TM 5392 RPL 3; STP 04-050

FOR COMDOMINIUM PURPOSES



LEGAL DESCRIPTION:

THOSE PORTIONS OF THE NORTH 2 ACRES OF LOT 11, AND OF THE WEST HALF OF THE SOUTH 1 ACRE OF LOT 2 OF TRACT 1401 IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 1401 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY ON DECEMBER 8, 1911 CONVEYED TO THE STATE OF CALIFORNIA IN A DEED RECORDED MARCH 15, 1995, AS DOCUMENT NO. 1995-0108927, FILED IN THE OFFICE OF SAID COUNTY RECORDER, LYING EASTERLY OF THE FOLLOWING DESCRIBED LINE.

BEGINNING AT THE NORTHEASTERLY CORNER OF PARCEL 21979-1, AS CONVEYED TO THE STATE OF CALIFORNIA IN A FINAL ORDER OF CONDEMNATION RECORDED ON NOVEMBER 20, 1996 AS DOCUMENT NUMBER 1996-0590034 OF OFFICIAL RECORDS.

THENCE (1) ALONG THE EASTERLY LINE OF SAID PARCEL 21979-1 AND THE SOUTHERLY PROLONGATION THEREOF SOUTH 00°21'44" WEST, 402.25 FEET TO THE SOUTHERLY LINE OF THE LAND CONVEYED IN SAID DEED RECORDED MARCH 15, 1995, AND THE POINT OF TERMINUS. **(ASSESSOR'S PARCEL NO: 578-012-80)**

GENERAL PROJECT INFORMATION

EXISTING

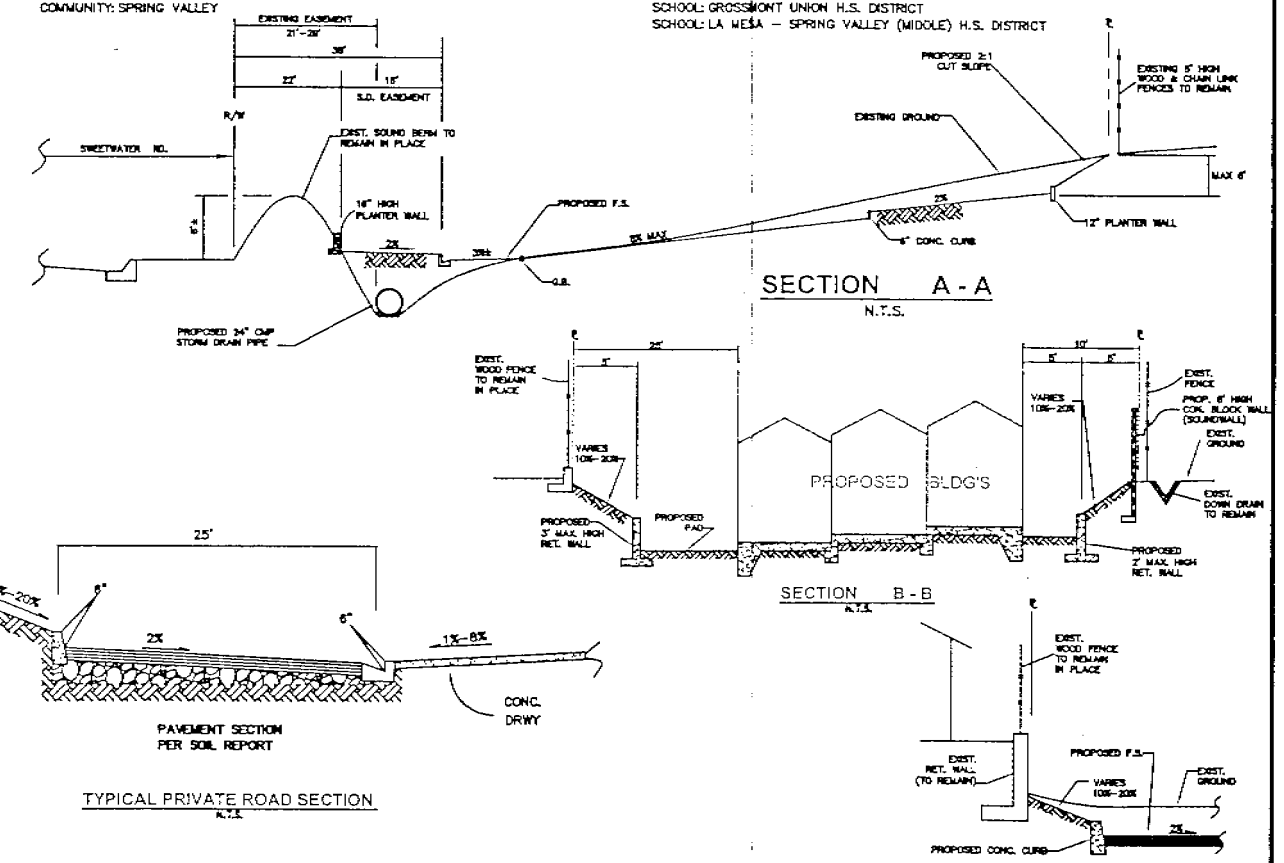
ASSESOR PARCEL NO: 578-012-80
SITE AREA:1.15 ACRES
EXISTING ZONING: RV11
EXISTING USE: VACANT
ASSESSORS TAX RATE AREA = 83171
GENERAL PLAN = (7) RESIDENTIAL
REGIONAL CATEGORY= CUDA/ECA
COMMUNITY: SPRING VALLEY

PROPOSED

PROPOSED USE: 10 UNITS CONDOMINIUMS
PROPOSED SETBACKS:
FRONT: 32', REAR: 25', SIDE: 10' MIN.
GROSS AREA: 1.15 ACRES
NET AREA: 1.07 ACRES
ZONING: RV11

UTILITIE SERVICES

GAS AND ELECTRICSDG & E TEL. (800) 411-7343
SEWER: SPRING VALLEY SANITATION
MAINTENANCE DISTRICT TEL. (619)-660-2007
WATER: HELIX WATER DISTRICT TEL. (619) 527-7482
CABLE: COX COMMUNICATIONS TEL. (800) 221-4188
TELEPHONE: SBC TEL. (800) 955-4296
FIRE: SAN MIGUEL FIRE DEP. TEL. (619) 670-0500
SCHOOL: GROSSMONT UNION H.S. DISTRICT
SCHOOL: LA MESA - SPRING VALLEY (MIDDLE) H.S. DISTRICT



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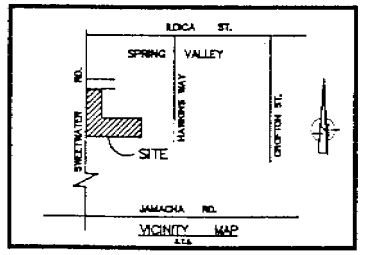
CONDOMINIUM MAP STATEMENT

"THIS IS A MAP OF A CONDOMINIUM PEOJECT AS DEFINED IN SECTION 1350 OF THE STATE OF CALIFORNIA CIVIL CODES, THE MAXIMUM NUMBER OF DWELLING UNITS IS 10".

COUNTY OF SAN DIEGO
DEPARMENT OF PLANNING AND LAND USE
ZONING INFORMATION

ZONE		
USE REGULATIONS		RV 11
ANIMAL REGULATIONS		Q
DEVELOPMENT REGULATIONS	DENSITY	10.9
	LOT SIZE	10,000
	BUILDING TYPE	K
	MAXIMUM FLOOR AREA	–
	FLOOR AREA RATIO	–
	HEIGHT	C
	LOT COVERAGE	–
	SETBACK	K
	OPEN SPACE	I
SPECIAL AREA REGULATIONS		8,D1,D2



SPECIAL ASSESSMENT ACT STATEMENT

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HOSSEIN EFTEKHARI FEREYDOON ALIPANAH

AUGUST 30,2005

LEGEND & ABBREVIATIONS

LOT BOUNDARIES
PROPOSED 2:1 SLOPE
EXISTING CONTOUR LINE
PROPOSED CONC. SIDEWALK/DRWY.
EXISTING CONCRETE BLOCK WALL
PROPOSED CONCRETE BLOCK WALL W/RET. PER PLAN
G.B. GRADE BREAK
CMP CORRUGATED METAL PIPE
T.C. TOP OF CURB
F.L. FLOW LINE
F.F. FINISHED FLOOR
L.P. LOW POINT
C.B. CATCH BASIN
T.G. TOP OF GRATE
S.D. STORM DRAIN

ARCHITECT:
GEORGE BEHNAM
1150E. ORANGETHOPE #109
PLACENTIA, CA 92807
TEL. (714) 572-2384

OWNER / SUBDIVIDER
A & E SWEET HOMES LLC.
100 S. ANAHEIM BLVD. # 360
ANAHEIM CA 92805
TEL. (714) 991-4411

BENCH MARK
2" BRASS DISK CBV2 N. PC ILDICA STREET
12' W. ILDICA CT. COUNTY ENGR.
ELEVATION = 425.21 FT. (USGS)

PREPARED BY:
HOSS. WILLIAM & ASSOCIATES INC.
PLANNERS • CONSULTING ENGINEERS • SURVEYORS
100 SOUTH ANAHEIM BLVD. # 366 ANAHEIM, CA 92805
TEL. (714) 991-4411 FAX (714) 991-4491

REGISTERED PROFESSIONAL ENGINEER HOSSEIN EFTEKHARI No. C50121 Exp. 6/30/07 CIVIL STATE OF CALIFORNIA

COUNTY OF SAN DIEGO TRACT
TM 5392 RPL 3; STP 04-050
SWEETWATER ROAD SAN DIEGO

SCALE: 1"=20' SHEET 1 OF 1

ATTACHMENT A

Tabulated Design Elevation Of Sound Attenuation Features

TM 5392RPL3: STP04 - 050

Tabulated Designed Elevations of the Sound Attenuation Features

Unit No.	Finish Floor Elevation (ft.)	Top of Southerly Soundwall (ft.)	Top of Roof (ft.)	Top of Westerly Soundwall (ft.)	Balcony Finish Floor (ft.)	Top of Balcony Wall (ft.)
1	308.1	314.1	332.8	314.5	317.1	320.6
2	310.1	316.1	334.8	--------	319.1	322.6
3	312.1	318.1	336.8	--------	321.1	324.6
4	314.1	320.1	338.8	--------	323.1	326.6
5	316.1	322.1	340.8	--------	325.1	328.6
6	318.1	324.1	342.8	--------	327.1	330.6
7	320.1	326.1	344.8	--------	329.1	332.6
8	325.5	331.5	350.2	--------	334.5	339.5
9	325.0	--------	349.7	--------	334.0	339
10	324.5	--------	349.2	--------	333.5	338.5

Notes:

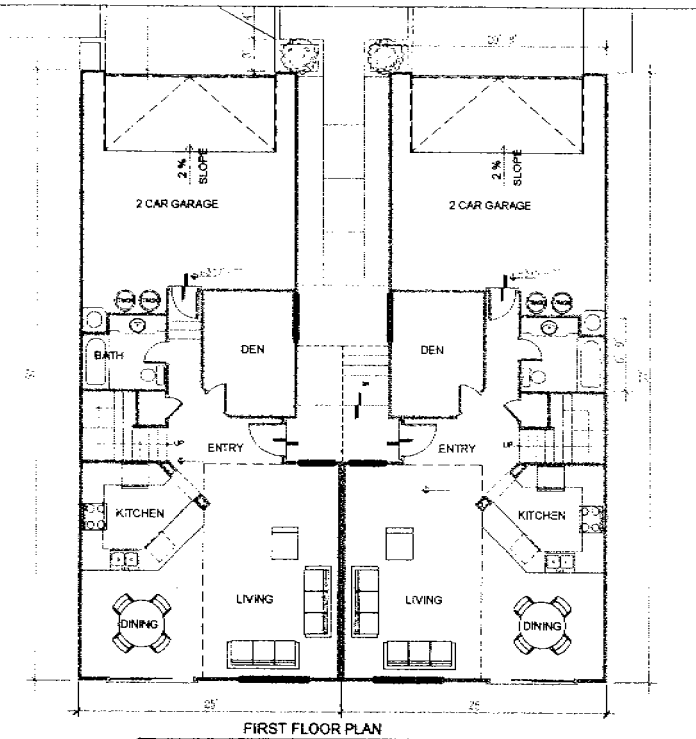
Top of existing earth berm along Sweetwater Road is 314.5 (See TM5392).
(located at westerly side of the project, see TM5392)

All units (1-10) are two story and the exact hight from finish floor to top of the the roof is 24.7 ft.(see architect plans).

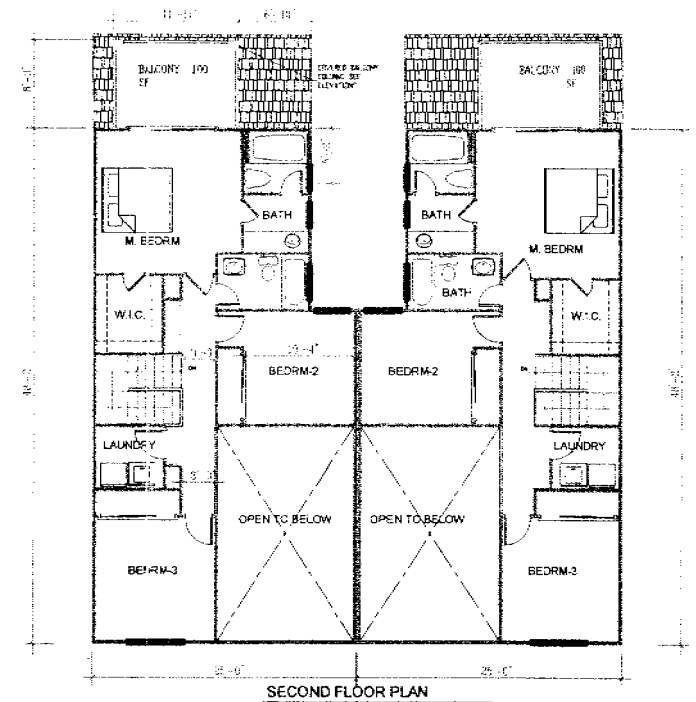
ATTACHMENT B

Architectural Plans with highlighted top of Sound Walls Elevations

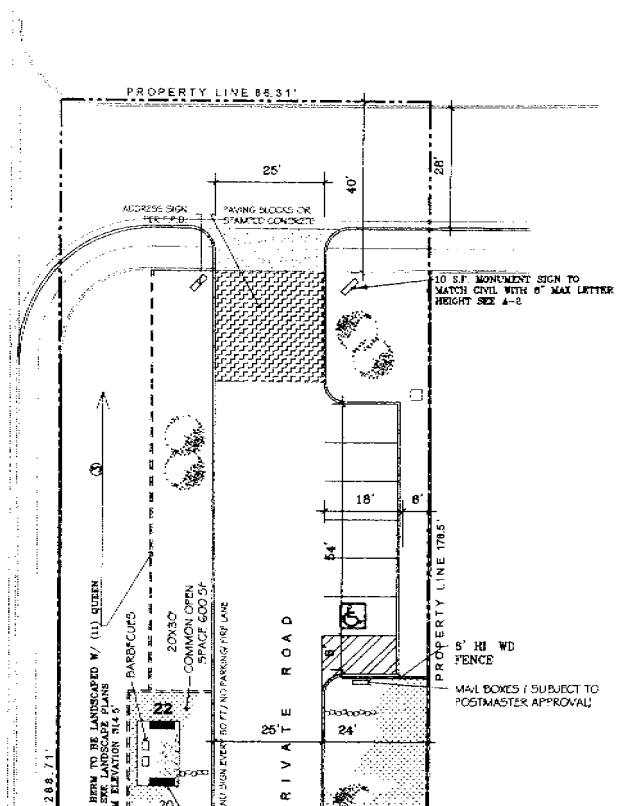
10 - CONDOMINIUMS
- - - - SWEETWATER RD.
SPRING VALLEY , CA
A.P.N 578-012-80

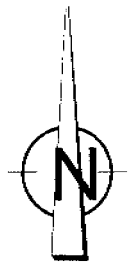


FIRST FLOOR PLAN
1/8" = 1'-0" 425 SF GAR. 835 SF LIV.



SECOND FLOOR PLAN
1/8" = 1'-0" 1131 SF. LIV

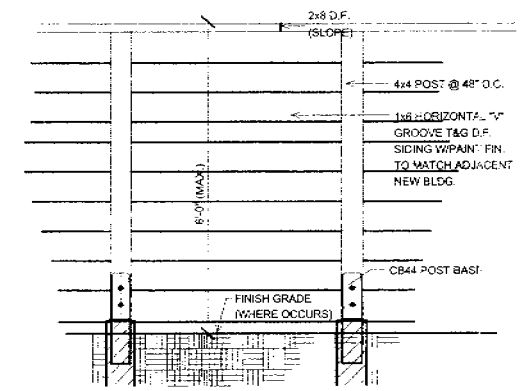




DESIGNATED NOISE CONTROL ELEMENTS

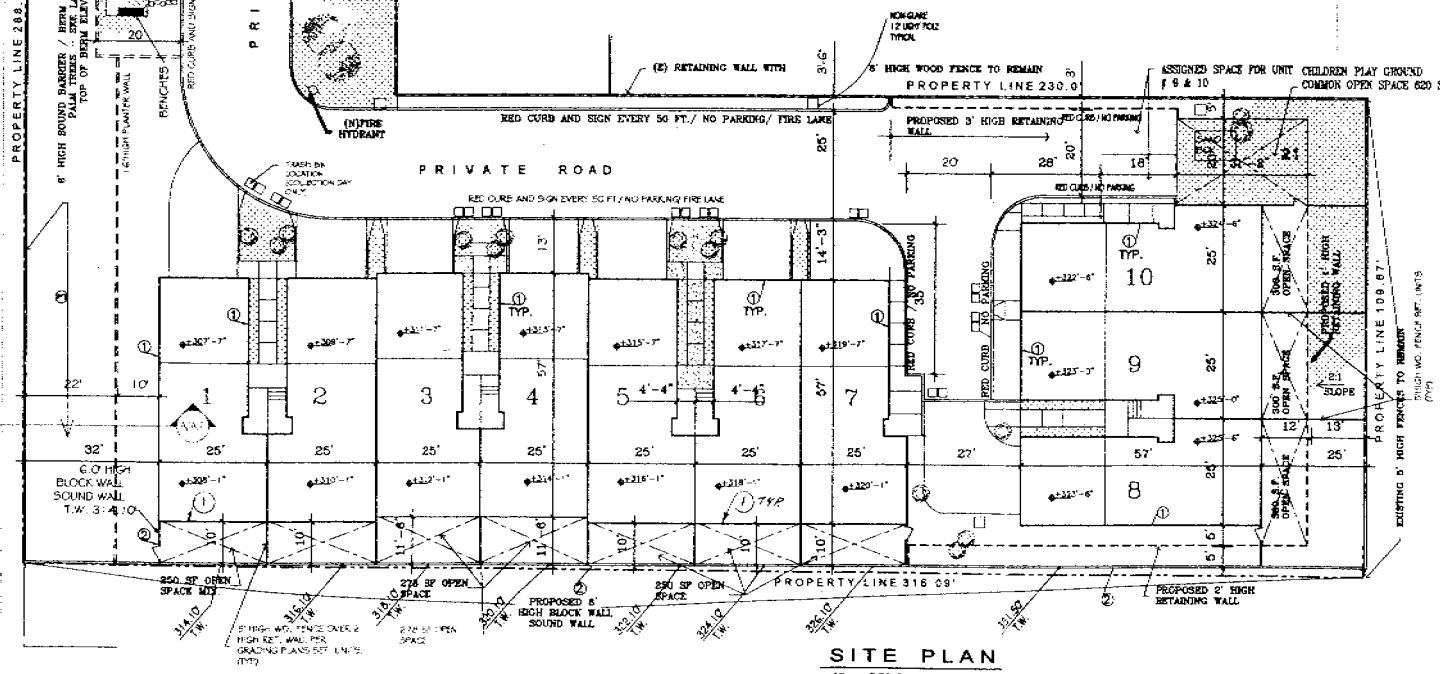
1. 20 FEET TALL DWELLING EXTERIOR WALLS
2. 6 FEET TALL CONCRETE BLOCK WALL
3. 6 FEET TALL (EXISTING) EARTH BERM
4. TABLE A (DESIGNEN ELEVATIONS FOR SOUND ATTENUATION FEATURES)

NOTE :
Sound attenuation barriers may be a berm, wall, or a combination design. The wall portion of each barrier shall be made of earthen, masonry, ¾ inch thick plywood, ¼ inch thick glass, ½ inch thick Lexan, fiberglass, or a combination with no cracks or gaps through or below the barrier. The minimum surface density of each barrier shall be at least 3.5 pounds per square foot.



NOTE
FENCE NOT TO EXCEED 6'-0" HIGH FROM NATURAL GRADE

PATIO FENCE BETWEEN UNITS
3/4"=1'-0"



SITE PLAN
1" = 20'-0"

4 - TABLE "A"

TM 5392RPL3: STP04 - 050

Tabulated Designed Elevations of the Sound Attenuation Features

Unit No.	Finish Floor Elevation (ft.)	Top of Southerly Soundwall (ft.)	Top of Roof (ft.)	Top of Westerly Soundwall (ft.)	Balcony Finish Floor (ft.)	Top of Balcony Wall (ft.)
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Notes:
Top of existing earth berm along Sweetwater Road is 314.5 (See TM5392). (located at westerny side of the project see TM5392)

All units (1-10) are two story and the exact hight from finish floor to top of the the roof is 24.7 ft (see architect plans).

INTERIOR NOISE CONTROL NOTES
ALL WINDOWS HAS TO BE RATED AS HIGH AS STC 24

SAN MIGUEL CONSOLIDATED FIRE PROTECTION DISTRICT NOTES:

1. HOME OWNERS ASSOCIATION CC&RS SHALL ENFORCE TOWING ILLEGAL/PARKED VEHICLES.
2. ENTIRE STREET, TURN AROUND AREA MUST BE STRIPED WITH RED PAINT AND WHITE LETTERS ENTIRE ROADWAY IS A FIRE LANE. SIGNS EVERY 50' SHALL BE INSTALLED IN BOTH DIRECTIONS INDICATING " NO PARKING-FIRE LANE"
3. A FIRE HYDRANT SHALL BE INSTALLED AT THE NORTH EAST CORNER DRIVEWAY.
4. PERMANENT ADDRESS SIGN SHALL BE INSTALLED AT THE SWEETWATER ENTRANCE.
5. ALL UNITS SHALL HAVE A NFPA 13 D SPRINKLER SYSTEM INSTALL PRIOR TO OCCUPANCY.

ZONING DEPT. STATISTICS AND NOTES

1. PRESENT USE :VACANT
2. NO TREES 6" DIA EXISTING
3. ADDRESS AND MONUMENT SIGNS PROPOSED.

LOT SIZE =500868 SQ.FT. =1.15 ACRE

UNITS AREA

FIRST FLOOR AREA	= 835 SQ. FT.
SECOND FLOOR AREA	= 1131 SQ. FT.
TOTAL UNIT FLOOR AREA	= 1966 SQ. FT.
GARAGE AREA	= 425 SQ. FT.
UNIT FOOT PRINT	= 1262 SQ.FT
TOTAL UNITS FOOT PRINT	= 12620 SQ.FT.
BUILDING LOT COVERAGE	= 25%

PRIVATE OPEN SPACE

REQUIRED 10 UNITS X 350 SQ. FT. = 3,500 SQ. FT
OPEN SPACE UNITS 1,2,5,6&7
PATIO = 252 SQ. FT. FIRST FLOOR
BALCONY = 100 SQ. FT. SECOND FLOOR
OPEN SPACE UNITS 3 & 4
PATIO = 278 SQ. FT. FIRST FLOOR
BALCONY = 100 SQ. FT. SECOND FLOOR
OPEN SPACE UNITS 8
PATIO = 360 SQ. FT. FIRST FLOOR
BALCONY = 100 SQ. FT. SECOND FLOOR
OPEN SPACE UNITS 9 & 10
PATIO = 360 SQ. FT. FIRST FLOOR
BALCONY = 100 SQ. FT. SECOND FLOOR

TOTAL PROVIDED PRIVATE OPEN SPACE 3,788 SQ. FT. > 3,500 O.K.

COMMON OPEN SPACE

REQUIRED = 1,000 SF
PROVIDED = 600 SF @ FRONT WEST AREA
620 SF @ BACK EAST AREA
TOTAL PROVIDED=1 220 SF

PROVIDED VISITOR PARKING 3 PARKING SPACE

LANDSCAPE AREA = 14495 SQ.FT.
LANDSCAPE COVERAGE (14495/50068) =29%

PAVING AREA = 14599 SQ.FT.
PAVING AREA COVERAGE (14599/50068) =29%

SWEETWATER RD.

JOB NAME: 10 CONDOMINIUMS
LOCATION: 2047 SWEET LAND DR
SPRING VALLEY, CA

DESCRIPTION: SITE PLAN/FLOOR PLANS

GEORGE BEHNAM
ARCHITECT
1150 E. ORANGETHORPE # 109
PLACENTIA, CA 92870
(714)572-2364 FAX(714)572-2365
GBehnam@aol.com

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© PROTECTED UNDER COPYRIGHT LAWS

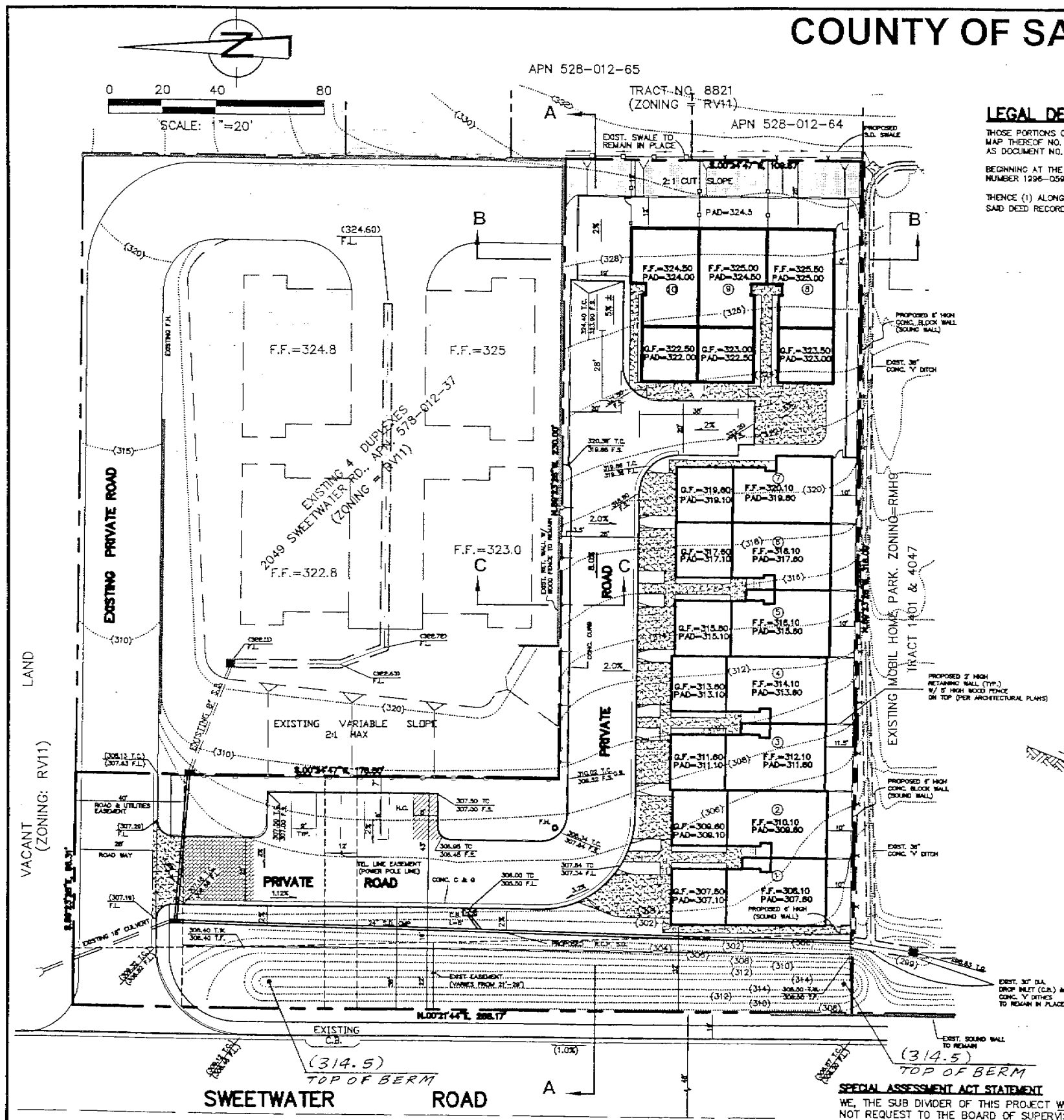
DATE:	02-14-05
JOB:	031006
DRAWN BY:	M.M.
CHECKED BY:	G.B.
SCALE:	Noted
SHEET	A-1

ATTACHMENT C

Tract Map (TM 5392) with highlighted top of Berm Elevation

COUNTY OF SAN DIEGO TRACT, TM 5392 RPL 3; STP 04-050

FOR COMDOMINIUM PURPOSES



LEGAL DESCRIPTION:

THOSE PORTIONS OF THE NORTH 2 ACRES OF LOT 11, AND OF THE WEST HALF OF THE SOUTH 1 ACRE OF LOT 2 OF TRACT 1401 IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 1401 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY ON DECEMBER 8, 1911 CONVEYED TO THE STATE OF CALIFORNIA IN A DEED RECORDED MARCH 15, 1995, AS DOCUMENT NO. 1995-0108927, FILED IN THE OFFICE OF SAID COUNTY RECORDER, LYING EASTERLY OF THE FOLLOWING DESCRIBED LINE.

BEGINNING AT THE NORTHEASTERLY CORNER OF PARCEL 21979-1, AS CONVEYED TO THE STATE OF CALIFORNIA IN A FINAL ORDER OF CONDEMNATION RECORDED ON NOVEMBER 20, 1995 AS DOCUMENT NUMBER 1996-0590034 OF OFFICIAL RECORDS.

THENCE (1) ALONG THE EASTERLY LINE OF SAID PARCEL 21979-1 AND THE SOUTHERLY PROLONGATION THEREOF SOUTH 00°21'44" WEST, 402.25 FEET TO THE SOUTHERLY LINE OF THE LAND CONVEYED IN SAID DEED RECORDED MARCH 15, 1995, AND THE POINT OF TERMINUS. **(ASSESSOR'S PARCEL NO: 578-012-80)**

GENERAL PROJECT INFORMATION

EXISTING

ASSESOR PARCEL NO: 578-012-80
SITE AREA:1.15 ACRES
EXISTING ZONING: RV11
EXISTING USE: VACANT
ASSESSORS TAX RATE AREA = 83171
GENERAL PLAN = (7) RESIDENTIAL
REGIONAL CATEGORY= CUDA/ECA
COMMUNITY: SPRING VALLEY

PROPOSED

PROPOSED USE:10 UNITS CONDOMINIUMS
PROPOSED SETBACKS:
FRONT: 32', REAR: 25', SIDE: 10' MIN.
GROSS AREA: 1.15 ACRES
NET AREA: 1.07 ACRES
ZONING: RV11

UTILITIE SERVICES

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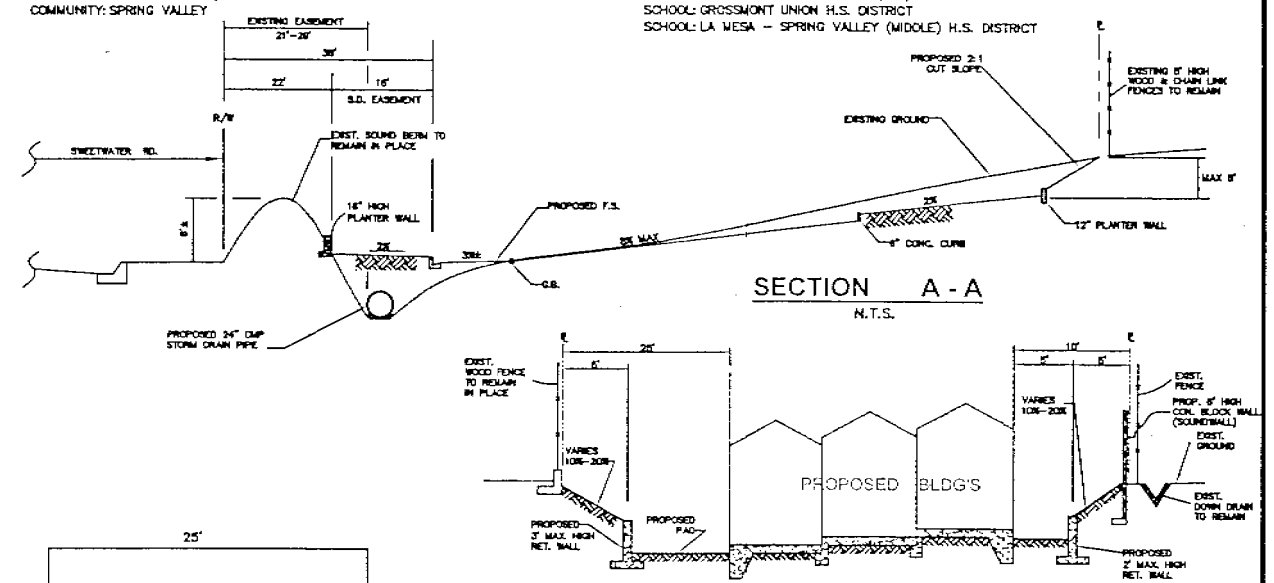
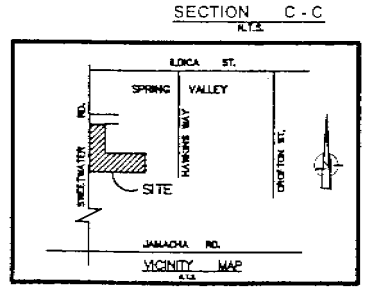
SCHOOL: LA MESA - SPRING VALLEY (MIDDLE) H.S. DISTRICT





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COUNTY OF SAN DIEGO
DEPARMENT OF PLANNING AND LAND USE
ZONING INFORMATION

	ZONE	
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DEVELOPMENT REGULATIONS	DENSITY	10.9
	LOT SIZE	10,000
	BUILDING TYPE	K
	MAXIMUM FLOOR AREA	-
	FLOOR AREA RATIO	-
	HEIGHT	C
	LOT COVERAGE	-
	SETBACK	K
	OPEN SPACE	I
SPECIAL AREA REGULATIONS		B,D1,D2

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HOSSEIN EFTEKHARI FEREYDOON ALIPANAH

AUGUST 30,2005

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LOT BOUNDARIES
PROPOSED 2:1 SLOPE
EXISTING CONTOUR LINE
PROPOSED CONC. SIDEWALK/DRWY.
EXISTING CONCRETE BLOCK WALL
PROPOSED CONCRETE BLOCK WALL W/RET. PER PLAN
G.B. GRADE BREAK
CMP. CORRUGATED METAL PIPE
T.C. TOP OF CURB
F.L. FLOW LINE
F.F. FINISHED FLOOR
L.P. LOW POINT
C.B. CATCH BASIN
T.G. TOP OF GRATE
S.D. STORM DRAIN

ARCHITECT:	OWNER / SUBDIVIDER	BENCH MARK
GEORGE BEHNAM 1150E. ORANGETHOPE #109 PLACENTIA, CA 92807 TEL. (714) 572-2384	A & E SWEET HOMES LLC. 100 S. ANAHEIM BLVD. # 360 ANAHEIM CA 92805 TEL. (714) 991-4411	2" BRASS DISK C8V2 N. PC ILDICA STREET 12' W. ILDICA CT. COUNTY ENGR. ELEVATION = 425.21 FT. (USGS)

PREPARED BY:
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TEL. (714) 991-4411 FAX (714) 991-4491

REGISTERED PROFESSIONAL ENGINEER HOSSEIN EFTEKHARI No. C50121 Exp. 6/30/07 CIVIL STATE OF CALIFORNIA

COUNTY OF SAN DIEGO TRACT
TM 5392 RPL 3; STP 04-050
SWEETWATER ROAD SAN DIEGO

SCALE: 1"=20' SHEET 1 OF 1

ATTACHMENT D

2030 CNEL calculation for Balconies, Play Lot And Barbeque pit

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

S U M M A R Y

This report addresses the noise levels at 22 locations on the project site using a modified calculation method suggested by the County. Details are discussed in the body of the report. The results are given below.

NUMBER	GROUND (1)	BALCONY
1	57.1*	
2	55.9*	
3	56.8*	
4	57.7*	
5	57.9*	
6	57.8*	
7	58.8*	
8	63.2	59.7
9	61.9	58.3
10	60.2	55.4
11	61.1	56.2
12	60.6	57.9
13	60.2	56.0
14	60.2	59.5
15	59.7	56.7
16	60.3	59.2
17	60.1	58.5
18	41.5*	
19	41.4*	
20	41.5*	
21	58.2*	
22	54.5*	

(1) Asterisk denotes patios and recreation areas.

1621 East Seventeenth Street, Suite K Santa Ana, California 92705-8518
Phone (714) 835-0249 FAX (714) 835-1957

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

1.0 INTRODUCTION

This report presents the results of a revised set of calculations for the project. The most recent report on the project addressed the noise level at 20 points for both the ground level and the second floor level. The following three changes were requested by the County:

1. Although the present County exterior requirement does not explicitly require the project to meet a level of 60 dBA CNEL, the County has decided that it wishes to do so in this project. The original calculations at the 20 points were slightly higher than 60 dBA CNEL.

2. The project has added two recreational areas on the site. There will now be 22 points.

3. Since there was already ground level private open space, the balconies were originally thought to be exempt from the 60 dBA limit. However, the architect counted the balconies to meet the project's open space requirement. As a result, the balconies must also meet the 60 dBA CNEL requirement.

The points are indicated on Exhibits 1 and 2. There are 22 locations. Ground level points are indicated by the symbol "G" and the balcony locations by the symbol "B".

The computer program used for this project will account for the noise reduction due to only one barrier. In the case of multiple barriers, the program selects the barrier that produces the highest noise reduction. In that event, the likelihood exists that the actual noise level with multiple barriers is lower than the computer model predicts. It was suggested by John Bennet of the County that an alternate procedure be employed that he felt would account for the added noise reduction.

1621 East Seventeenth Street, Suite K Santa Ana, California 92705-8518
Phone (714) 835-0249 FAX (714) 835-1957

2.0 ALTERNATE CALCULATION PROCEDURE

The suggested alternate calculation procedure would involve computing the noise reduction for the exterior sound walls and the noise reduction of the buildings and any other secondary structure separately, and, then, combining the results in a particular manner. The procedure works as follows:

Step 1. Compute the Noise Level of the vacant site without the freeway wall/berm for the freeway alone. All other barriers are left in place.

Step 2. Compute the Noise Level of the vacant site without the Sweetwater berm for Sweetwater Road alone. All other barriers are left in place.

Step 3. Compute the Noise Level of the vacant site with the freeway wall/berm for the freeway alone. All other barriers are left in place.

Step 4. Compute the Noise Level of the vacant site with the Sweetwater berm for Sweetwater Road alone. All other barriers are left in place.

Step 5. Subtract the results of Step 3 from Step 1 to obtain the reduction of the freeway wall.

Step 6. Subtract the results of Step 4 from Step 2 to obtain the reduction of the Sweetwater berm.

Step 7. Add the results of Step 1 to the result of Step 2. This is the combined freeway and Sweetwater Road results for the vacant site.

Step 8. Add the results of Step 3 to the results of Step 4. This is the combined freeway and Sweetwater Road results with the freeway and Sweetwater Road barriers in place.

Step 9. Subtract the results of Step 3 from Step 7 to obtain the combined noise reduction of the all barriers for both noise sources.

In actuality, the calculations could have gone to Steps 7 and 8 immediately since neither barrier interacts with the other noise source with one exception which will be addressed later. The main reason to break up the calculations by source is to view the various contributions so as to address any further mitigation should it be required.

Steps 1 through 9 addressed the vacant site. The next series of steps addresses the effect of the building without the freeway or Sweetwater barriers.

Step 10. Compute the freeway contribution for the buildings without Sweetwater Road.

Step 11. Compute the Sweetwater contribution of the buildings without the freeway.

Step 12. Add the results of Step 11 to Step 12. This is the combined effect of the buildings.

Step 13. Subtract Step 10 from Step 1. This provides the noise reduction of the buildings for the freeway.

Step 14. Subtract Step 11 from Step 2. This provides the noise reduction of the buildings for Sweetwater Road.

Step 15. Subtract the results of Step 12 from Step 8. The is the combined noise reduction of the buildings.

Step 16. The results of Step 15 represent the added reduction of the buildings. These values are then subtracted from the levels produced for the freeway and Sweetwater Road barriers. This means Step 15 results are subtracted from Step 8.

There is one exception to the Steps as listed. Position #22 is set into the Sweetwater berm. As a result, this position is not affected by the buildings but will be affected by both the freeway noise reduction plus the Sweetwater Road berm noise reduction. Steps 10 to 16 are the same except the Sweetwater berm effect replaces the buildings.

The balconies represent a different set of barrier considerations from the buildings alone. Each balcony space has only one open face. Therefore, the space is semi-enclosed. The program cannot address the roof of the balcony so the calculations assume an open roof. The space is modeled with a back and two side paneled, one open side and an open roof. Otherwise, Steps 10 through 16 are the same procedure.

3.0 GROUND LEVEL CALCULATIONS NO BUILDINGS

The results of Steps 1 through 9 are given in Tables 1 and 2 on the following pages.

TABLE 1

SITE CALCULATIONS FOR FREEWAY AND SWEETWATER ROAD WITHOUT BUILDINGS IN PLACE STEPS 1 TO 6 FOR POINTS G1 TO G21 (1)

NO.	FREEWAY ALONE			SWEETWATER ALONE		
	NO WALL (Step 1)	WITH WALL (Step 3)	CHANGE (Step 5)	NO BERM (Step 2)	WITH BERM (Step 4)	CHANGE (Step 6)
G1	70.4	60.8	9.6	64.0	60.4	7.2
G2	71.3	61.0	10.3	63.2	59.2	8.7
G3	71.6	61.2	10.4	62.8	59.1	8.8
G4	71.4	61.2	10.2	62.0	58.5	8.8
G5	70.9	61.2	9.7	61.3	58.0	8.5
G6	70.4	61.1	9.3	60.4	57.4	8.2
G7	70.1	61.1	9.0	60.1	57.3	7.9
G8	72.0	60.6	11.1	66.5	57.7	9.7
G9	71.4	60.8	10.6	64.8	58.1	9.6
G10	71.3	60.9	10.4	63.7	58.1	9.3
G11	71.2	61.0	10.2	63.1	58.1	9.0
G12	70.9	61.0	9.9	62.1	57.8	8.7
G13	70.3	60.9	9.4	61.0	57.3	8.4
G14	70.0	60.9	9.1	60.6	57.3	8.0
G15	69.4	60.7	8.7	59.5	56.7	7.7
G16	69.5	60.8	8.7	59.5	56.7	7.7
G17	69.5	60.9	8.6	59.3	56.8	7.6
G18	68.6	60.1	8.5	57.9	55.5	7.6
G19	68.5	60.1	8.4	58.0	55.5	7.5
G20	68.5	60.0	8.5	58.0	55.5	7.6
G21	68.7	58.7	10.0	58.5	54.8	8.9
RUN	9GM	10GM		11G	12GM	

(1) The actual calculations are contained in Appendices 1, 2, 3 and 4

TABLE 2

SITE CALCULATIONS FOR FREEWAY AND SWEETWATER ROAD WITHOUT BUILDINGS IN PLACE STEPS 7 TO 9 FOR POINTS G1 TO G21

NO.	FREEWAY PLUS SWEETWATER NO WALL/BERM (Step 7)	WITH WALL/BERM (Step 8)	CHANGE (Step 9)
G1	70.8	63.6	7.2
G2	71.9	63.2	8.7
G3	72.1	63.3	8.8
G4	71.9	63.1	8.8
G5	71.4	62.9	8.5
G6	70.8	62.6	8.2
G7	70.5	62.6	7.9
G8	73.1	63.4	9.7
G9	72.3	62.7	9.6
G10	72.0	62.7	9.3
G11	71.8	62.8	9.0
G12	71.4	62.7	8.7
G13	70.8	62.4	8.4
G14	70.5	62.5	8.0
G15	69.8	62.1	7.7
G16	69.9	62.2	7.7
G17	69.9	62.3	7.6
G18	69.0	61.4	7.5
G19	68.9	61.4	7.6
G20	68.9	61.3	8.9
G21	69.1	60.2	5.7

4.0 GROUND LEVEL CALCULATIONS BUILDINGS ALONE

The next series of Steps is for the buildings alone without the freeway and Sweetwater barriers. The results are given in Tables 3 and 4.

TABLE 3

SITE CALCULATIONS FOR FREEWAY AND SWEETWATER ROAD WITH BUILDINGS IN PLACE STEPS 1 TO 6 FOR POINTS G1 TO G21

	FREEWAY ALONE			SWEETWATER ALONE		
NO.	NO BLDG (Step 1)	WITH BLDG (Step 10)	CHANGE (Step 13)	NO BLDG (Step 2)	WITH BLDG (Step 11)	CHANGE (Step 14)
G1	70.4	63.6	6.8	64.0	56.1	7.9
G2	71.3	64.0	7.3	63.2	55.9	7.2
G3	71.6	65.1	6.5	62.8	56.4	6.4
G4	71.4	66.1	5.3	62.0	56.2	5.8
G5	70.9	66.0	4.9	61.3	55.7	5.6
G6	70.4	65.6	4.8	60.4	55.0	5.4
G7	70.1	67.5	2.6	60.1	54.8	5.3
G8	72.0	71.8	0.2	66.5	66.3	0.2
G9	71.4	70.6	0.8	64.8	64.4	0.4
G10	71.3	69.7	1.6	63.7	53.0	0.7
G11	71.2	69.3	1.9	63.1	62.3	0.8
G12	70.9	68.6	1.2	62.1	61.2	0.9
G13	70.3	67.9	2.4	61.0	60.0	1.0
G14	70.0	67.6	2.4	60.6	59.5	1.1
G15	69.4	66.9	2.5	59.5	58.5	1.0
G16	69.5	67.5	2.0	59.5	58.6	0.9
G17	69.5	67.3	2.2	59.3	56.7	2.6
G18	68.6	48.5	20.1	57.9	40.3	17.7
G19	68.5	48.5	20.0	58.0	40.3	17.7
G20	68.5	48.5	20.0	58.0	40.3	17.7
G21	68.7	66.6	2.1	58.5	57.7	0.8
RUN	9GM	13G		11G	14G	

(1) The actual additional calculations are contained in Appendices 5 and 6.

TABLE 4

SITE CALCULATIONS FOR FREEWAY AND SWEETWATER ROAD WITHOUT BUILDINGS IN PLACE STEPS 7 TO 9 FOR POINTS G1 TO G21

NO.	FREEWAY PLUS SWEETWATER NO WALL/BERM (Step 7)	WITH WALL/BERM (Step 8)	CHANGE (Step 9)
G1	70.8	64.6	6.5
G2	71.9	64.6	7.3
G3	72.1	65.6	6.5
G4	71.9	66.5	5.4
G5	71.4	66.4	5.0
G6	70.8	66.0	4.8
G7	70.5	67.7	2.8
G8	73.1	72.9	0.2
G9	72.3	71.5	0.8
G10	72.0	70.5	1.5
G11	71.8	70.1	1.7
G12	71.4	69.3	2.1
G13	70.8	68.6	2.2
G14	70.5	68.2	2.3
G15	69.8	67.4	2.4
G16	69.9	68.0	1.9
G17	69.9	67.7	2.2
G18	69.0	49.1	19.9
G19	68.9	49.9	19.0
G20	68.9	49.1	19.8
G21	69.1	67.1	0.2

5.0 GROUND LEVEL COMBINED BUILDING AND WALL EFFECTS

Step 15 subtracts the Changed results (Step 15) in Table 4 from the combined freeway and Sweetwater Road results (Step 8) in Table 2. The results are given in Table 5.

TABLE 5

SITE CALCULATIONS FOR FREEWAY AND SWEETWATER ROAD FOR WALLS AND BUILDINGS FOR POINTS G1 TO G21 (1)

	FREEWAY PLUS SWEETWATER WALLS PLUS BUILDINGS		
NO.	WALLS ONLY LEVEL	ADDED BLDG CHANGE	COMBINED LEVEL
G1	63.6	- 6.5	57.1*
G2	63.2	- 7.3	55.9*
G3	63.3	- 6.5	56.8*
G4	63.1	- 5.4	57.7*
G5	62.9	- 5.0	57.9*
G6	62.6	- 4.8	57.8*
G7	62.6	- 2.8	58.8*
G8	63.4	- 0.2	63.2
G9	62.7	- 0.8	61.9
G10	62.7	- 1.5	60.2
G11	62.8	- 1.7	61.1
G12	62.7	- 2.1	60.6
G13	62.4	- 2.2	60.2
G14	62.5	- 2.3	60.2
G15	62.1	- 2.4	59.7
G16	62.2	--1.9	60.3
G17	62.3	- 2.2	60.1
G18	61.4	-19.9	41.5*
G19	61.4	-19.0	41.4*
G20	61.3	-19.8	41.5*
G21	60.2	- 2.0	58.2*

(1) The asterisk indicates a patio or recreational area.

All the patios are less than 60 dBA CNEL as required. The other locations are front yards.

6.0 GROUND LEVEL LOCATION #22

Location #22 is not affected by the buildings but is affected by being set into the berm. The procedure is the same as before except the building calculation is replaced by a calculation of the effect of the berm on the freeway noise at Location #22. The results are given in Table 6. The calculations are in the various Appendices previously mentioned with the exception of Run 15GM which is contained in Appendix 7.

TABLE 6

LOCATION #22 CALCULATIONS (1)

CONDITION	CNEL	RUN
Freeway Alone Without Walls and Berms	73.1	9GM
Freeway Alone With Freeway Wall only	60.6	10GM
Sweetwater Alone Without Berm	65.3	11G
Sweetwater Alone With Berm	53.8	12GM
Freeway Alone with Berm Only	58.2	15GM

(1) Reduction of freeway by berm = 73.1-58.2=14.9
Freeway adjusted for Freeway Wall and berm = 60.6-14.9=46.4
Final combined adjusted freeway and Sweetwater = 46.4+53.8 (Log addition) = 54.5.

7.0 BALCONY CALCULATIONS NO BUILDINGS

The second floor calculations follow the same steps as for the ground except there are fewer locations. They have a corresponding number to the first floor calculation location but with a separate identifier. The vacant site calculation results are given in Tables 7 and 8.

TABLE 7

SITE CALCULATIONS FOR FREEWAY AND SWEETWATER ROAD WITHOUT BUILDINGS IN PLACE STEPS 1 TO 6 FOR POINTS B8 TO B17 (1)

	FREEWAY ALONE			SWEETWATER ALONE		
NO.	NO WALL (Step 1)	WITH WALL (Step 3)	CHANGE (Step 5)	NO BERM (Step 2)	WITH BERM (Step 4)	CHANGE (Step 6)
B8	72.7	62.6	10.1	66.5	63.7	2.8
B9	72.1	62.6	9.5	64.9	60.5	4.4
B10	71.6	62.6	9.0	63.7	59.7	4.0
B11	71.3	62.6	8.7	63.2	59.5	3.7
B12	70.9	62.4	8.5	62.2	59.0	3.2
B13	70.3	62.1	8.2	61.2	58.3	2.9
B14	70.1	62.1	8.0	60.8	58.2	2.6
B15	69.3	61.5	7.8	59.5	57.3	2.2
B16	69.3	61.5	7.6	59.2	57.6	2.6
B17	69.3	61.6	7.7	59.1	57.7	2.4
RUN	15S	16S		17S	18S	

(1) The actual calculations are contained in Appendices 8, 9, 10 and 11.

TABLE 8

SITE CALCULATIONS FOR FREEWAY AND SWEETWATER ROAD WITHOUT BUILDINGS IN PLACE STEPS 7 TO 9 FOR POINTS B8 TO B17

NO.	FREEWAY PLUS SWEETWATER NO WALL/BERM (Step 7)	WITH WALL/BERM (Step 8)	CHANGE (Step 9)
B8	73.6	66.2	7.4
B99	72.9	64.7	8.2
B10	72.3	64.4	7.9
B11	71.9	64.3	7.6
B12	71.4	63.7	7.7
B13	70.8	63.6	7.2
B14	70.6	63.5	7.1
B15	69.8	63.0	6.8
B16	69.9	63.1	6.8
B17	69.9	63.1	6.8

8.0 BALCONY CALCULATIONS BUILDINGS ALONE

The balcony calculations were based on two different railing models. Balconies B8 to B14 will have 42 inch high, solid railings. Balconies B15, B16 and B17 will have 60 inch high, solid railings. The results are given in Tables 9 and 10.

TABLE 9

SITE CALCULATIONS FOR FREEWAY AND SWEETWATER ROAD WITH BUILDINGS IN PLACE STEPS 1 TO 6 FOR POINTS B8 TO B17 (1)

NO.	FREEWAY ALONE NO BLDG (Step 1)	WITH BLDG (Step 10)	CHANGE (Step 13)	SWEETWATER ALONE NO BLDG (Step 2)	WITH BLDG (Step 11)	CHANGE (Step 14)
B8	72.1	66.2	6.5	66.5	59.6	6.9
B9	72.1	65.8	6.3	64.9	58.1	6.8
B10	71.6	62.8	8.8	63.7	56.0	7.7
B11	71.3	63.2	8.1	63.2	55.4	7.8
B12	70.9	66.9	4.0	62.2	59.1	3.1
B13	70.3	62.6	7.7	61.2	54.3	6.9
B14	70.1	66.0	4.1	60.8	58.0	2.8
B15	69.3	63.9	5.4	59.5	55.4	4.1
B16	69.3	65.6	3.7	59.2	55.2	4.0
B17	69.3	64.8	4.5	59.1	55.6	3.5
RUN	15S	23SA		17S	24SA	
		26SB			25SB	

(1) The actual Additional calculations are contained in Appendices 12, 13, 14 and 15.

TABLE 10

SITE CALCULATIONS FOR FREEWAY AND SWEETWATER ROAD WITH BUILDINGS IN PLACE STEPS 7 TO 9 FOR POINTS B8 TO B17

NO.	FREEWAY PLUS SWEETWATER NO WALL/BERM (Step 7)	WITH WALL/BERM (Step 8)	CHANGE (Step 9)
B8	73.6	67.1	6.5
B9	72.9	66.5	6.4
B10	72.3	63.5	8.8
B11	71.9	63.8	8.1
B12	71.4	67.6	4.8
B13	70.8	63.2	7.6
B14	70.6	66.6	4.0
B15	69.8	64.5	5.3
B16	69.9	66.0	3.9
B17	69.9	65.3	4.6

9.0 BALCONY BUILDING AND WALL EFFECTS

Table 10 provides the amount of noise reduction to be added to the noise level from Step 10 of Table 9 for the freeway and Sweetwater barriers. The addition is given in Table 11.

TABLE 11

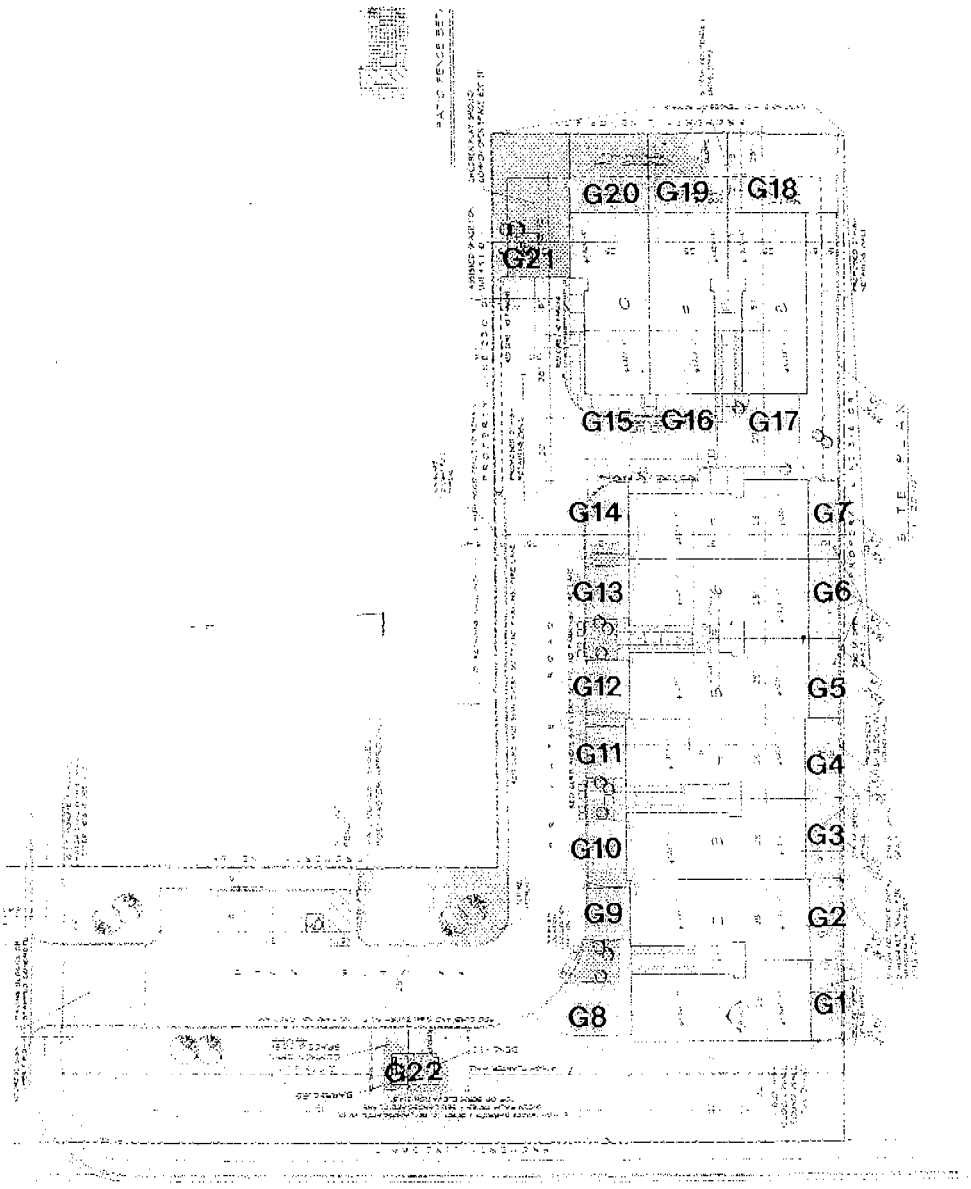
SITE CALCULATIONS FOR FREEWAY AND SWEETWATER ROAD FOR WALLS AND BUILDINGS FOR POINTS B8 TO B17 (1)

NO.	FREEWAY PLUS SWEETWATER WALLS PLUS BUILDINGS WALLS ONLY LEVEL	ADDED BLDG CHANGE	COMBINED LEVEL
B8	66.2	- 6.5	59.7
B9	64.7	- 6.4	58.3
B10	64.4	- 8.8	55.4
B11	64.3	- 7.1	56.2
B12	63.7	- 4.8	57.9
B13	63.6	- 7.6	56.0
B14	63.5	- 4.0	59.5
B15	63.0	- 5.3	56.7
B16	63.1	--3.9	59.2
B17	63.1	- 4.6	58.5

(1) Patios or recreational area.

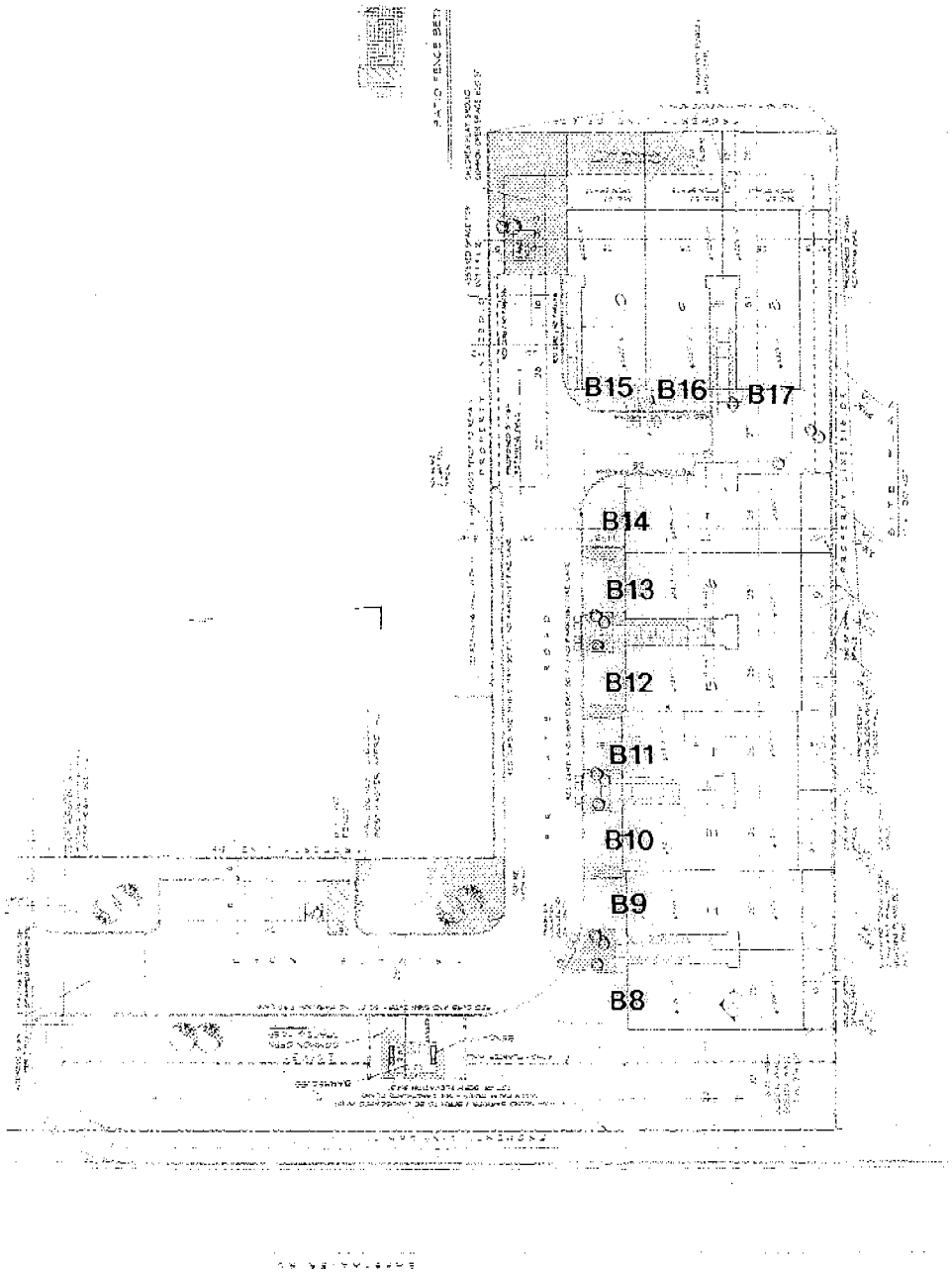
All balconies comply with the requirement of 60 dBA CNEL.

EXHIBIT 1
GROUND LOCATIONS



SCALE 1" = 60'

EXHIBIT 2
BALCONY LOCATIONS



SCALE 1" = 60'

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

A P P E N D I X 1

RUN 9GM

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS9GM
BARRIER COST FILE : CALIF$.DTA
DATE : 08-01-2006

FUTURE LDN/GRND LEVEL/VACANT/SITE/FW NO WALLS OR BERMS L22M

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	8096	65	239	65	273	65	SR125 NORTHBOUND
2	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
2	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40
	10	NO	809.0	-60.0	328.0	157
			934.0	-60.0	328.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	-500.0	226.0	304.0	310.0	*153	*	6
2	0.0	226.0	304.0	310.0	*154+40	*	6
3	36.0	226.0	304.0	310.0	*154+50	*	6
4	169.0	226.0	308.0	314.0	*155	*	6
5	312.0	226.0	308.0	314.0	*SITE	*	6
	334.0	226.0	308.0	314.0	*155+40	*	6

Barrier No. 2 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	623.0	243.0	308.0	314.0	*156+40	*	6
2	809.0	252.0	308.0	314.0	*157	*	6
	934.0	252.0	308.0	314.0	*157+40	*	6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	312.6	67	500	1 REAR
2	312.0	300.0	314.6	67	500	2 REAR
3	312.0	314.0	316.6	67	500	3 REAR
4	312.0	338.0	318.6	67	500	4 REAR
5	312.0	364.0	320.6	67	500	5 REAR
6	312.0	396.0	322.6	67	500	6 REAR
7	312.0	412.0	324.6	67	500	7 REAR
8	382.0	274.0	312.1	67	500	8 FRONT
9	382.0	300.0	314.1	67	500	9 FRONT
10	382.0	324.0	316.1	67	500	10 FRONT
11	382.0	338.0	318.1	67	500	11 FRONT
12	382.0	364.0	320.1	67	500	12 FRONT
13	382.0	396.0	322.1	67	500	13 FRONT
14	382.0	412.0	324.1	67	500	14 FRONT
15	376.0	452.0	327.0	67	500	15 FRONT
16	356.0	452.0	327.5	67	500	16 FRONT
17	329.0	452.0	328.0	67	500	17 FRONT
18	329.0	516.0	330.0	67	500	18 REAR
19	356.0	516.0	329.5	67	500	19 REAR
20	376.0	516.0	329.0	67	500	20 REAR
21	407.0	479.0	313.0	67	500	REC1
22	429.0	252.0	312.0	67	500	REC2

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
FUTURE LDN/GRND LEVEL/VACANT/SITE/FW NO WALLS OR BERMS L22M

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1		0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							156+40
7	-	0.*							157
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1		6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
3	-	6.*							154+50	133.1	MASONRY
4	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	6.*							156+40	186.2	MASONRY
7	-	6.*							157	125.0	MASONRY
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1 REAR	67.	500.	70.4
2	2 REAR	67.	500.	71.3
3	3 REAR	67.	500.	71.6
4	4 REAR	67.	500.	71.4
5	5 REAR	67.	500.	70.9
6	6 REAR	67.	500.	70.4
7	7 REAR	67.	500.	70.1
8	8 FRONT	67.	500.	72.0
9	9 FRONT	67.	500.	71.4
10	10 FRONT	67.	500.	71.3
11	11 FRONT	67.	500.	71.2
12	12 FRONT	67.	500.	70.9
13	13 FRONT	67.	500.	70.3
14	14 FRONT	67.	500.	70.0
15	15 FRONT	67.	500.	69.4
16	16 FRONT	67.	500.	69.5
17	17 FRONT	67.	500.	69.5

18	18 REAR	67.	500.	68.6
19	19 REAR	67.	500.	68.5
20	20 REAR	67.	500.	68.5
21	REC1	67.	500.	68.7
22	REC2	67.	500.	73.1

BARRIER TYPE	COST
BERM	0.
MASONRY	60242.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 60000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
6. 6. 6. 6. 6. 6. 6.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

A P P E N D I X 2

RUN 10GM

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS10GM
BARRIER COST FILE : CALIF$.DTA
DATE : 07-27-2006

FUTURE LDN AT 22 POINTS GROUND LEVEL FOR VACANT SITE FW ONLY WITH WALL 22M

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	8096	65	239	65	273	65	SR125 NORTHBOUND
2	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
2	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40
	10	NO	809.0	-60.0	328.0	157
			934.0	-60.0	328.0	157+40

BARRIER DATA

Barrier No. 1 Description: SR25 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	-500.0	89.0	328.0	336.0	*153	*	8
2	0.0	89.0	328.0	336.0	*154+40	*	8
3	36.0	89.0	328.0	336.0	*154+50	*	8
4	169.0	89.0	328.0	336.0	*155	*	8
5	312.0	98.0	328.0	336.0	*SITE	*	8
6	334.0	98.0	328.0	336.0	*155+40	*	8
7	489.0	107.0	328.0	336.0	*156	*	8
8	539.0	98.0	328.0	336.0	*156+15	*	8
	623.0	98.0	328.0	336.0	*156+40	*	8

Barrier No. 2 Description: SR25 BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	623.0	98.0	328.0	336.0	*156+40	*	8
2	809.0	98.0	328.0	336.0	*157	*	8
	934.0	98.0	328.0	336.0	*157+40	*	8

Barrier No. 3 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	-500.0	226.0	304.0	310.0	*153	*	6
2	0.0	226.0	304.0	310.0	*154+40	*	6
3	36.0	226.0	304.0	310.0	*154+50	*	6
4	169.0	226.0	308.0	314.0	*155	*	6
5	312.0	226.0	308.0	314.0	*SITE	*	6
	334.0	226.0	308.0	314.0	*155+40	*	6

Barrier No. 4 Description: SWEETWATER [illegible] NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	623.0	243.0	308.0	314.0	*156+40	*	6
2	809.0	252.0	308.0	314.0	*157	*	6
	934.0	252.0	308.0	314.0	*157+40	*	6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	312.6	67	500	1 REAR
2	312.0	300.0	314.6	67	500	2 REAR

3	312.0	314.0	316.6	67	500	3 REAR
4	312.0	338.0	318.6	67	500	4 REAR
5	312.0	364.0	320.6	67	500	5 REAR
6	312.0	396.0	322.6	67	500	6 REAR
7	312.0	412.0	324.6	67	500	7 REAR
8	382.0	274.0	312.1	67	500	8 FRONT
9	382.0	300.0	314.1	67	500	9 FRONT
10	382.0	324.0	316.1	67	500	10 FRONT
11	382.0	338.0	318.1	67	500	11 FRONT
12	382.0	364.0	320.1	67	500	12 FRONT
13	382.0	396.0	322.1	67	500	13 FRONT
14	382.0	412.0	324.1	67	500	14 FRONT
15	376.0	452.0	327.0	67	500	15 FRONT
16	356.0	452.0	327.5	67	500	16 FRONT
17	329.0	452.0	328.0	67	500	17 FRONT
18	329.0	516.0	330.0	67	500	18 REAR
19	356.0	516.0	329.5	67	500	19 REAR
20	376.0	516.0	329.0	67	500	20 REAR
21	407.0	479.0	313.0	67	500	EC1
22	429.0	252.0	312.0	67	500	EC2 MOD

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DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

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K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

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SOUND32 - RELEASE 07/30/91

TITLE:
TURE LDN AT 22 POINTS GROUND LEVEL FOR VACANT SITE W ONLY WITH WALL 22M

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1		0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							155+40
7	-	0.*							156
8		0.*							156+15
9	-	0.*							156+40
10	-	0.*							157
11		0.*							153
12		0.*							154+40
13	-	0.*							154+50
14	-	0.*							155
15	-	0.*							SITE
16	-	0.*							156+40
17		0.*							157
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	8.*							153	500.0	MASONRY
2	-	8.*							154+40	36.0	MASONRY
3	-	8.*							154+50	133.0	MASONRY
4	-	8.*							155	143.3	MASONRY
5	-	8.*							SITE	22.0	MASONRY
6	-	8.*							155+40	155.3	MASONRY
7	-	8.*							156	50.8	MASONRY
8	-	8.*							156+15	84.0	MASONRY
9	-	8.*							156+40	186.0	BERM
10	-	8.*							157	125.0	BERM
11	-	6.*							153	500.0	MASONRY
12	-	6.*							154+40	36.0	MASONRY
13	-	6.*							154+50	133.1	MASONRY
14	-	6.*							155	143.0	MASONRY
15	-	6.*							SITE	22.0	MASONRY

16	-	6.*	156+40	186.2	MASONRY
17	-	6.*	157	125.0	MASONRY

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1 REAR	67.	500.	60.8
2	2 REAR	67.	500.	61.0
3	3 REAR	67.	500.	61.2
4	4 REAR	67.	500.	61.2
5	5 REAR	67.	500.	61.2
6	6 REAR	67.	500.	61.1
7	7 REAR	67.	500.	61.1
8	8 FRONT	67.	500.	60.6
9	9 FRONT	67.	500.	60.8
10	10 FRONT	67.	500.	60.9
11	11 FRONT	67.	500.	61.0
12	12 FRONT	67.	500.	61.0
13	13 FRONT	67.	500.	60.9
14	14 FRONT	67.	500.	60.9
15	15 FRONT	67.	500.	60.7
16	16 FRONT	67.	500.	60.8
17	17 FRONT	67.	500.	60.9
18	18 REAR	67.	500.	60.1
19	19 REAR	67.	500.	60.1
20	20 REAR	67.	500.	60.0
21	REC1	67.	500.	58.7
22	REC2 MOD	67.	500.	60.6

BARRIER TYPE	COST
BERM	9019.
MASONRY	138721.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 148000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION

8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 6. 6. 6. 6. 6. 6. 6.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

APPENDIX 3

RUN 11GM

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS11G
BARRIER COST FILE : CALIF$.DTA
DATE : 07-19-2006

FUTURE LDN AT 22 POINTS GROUND LEVEL FOR VACANT SITE SWEETWATER NO BERM

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0	*153	* 6
2	0.0	226.0	304.0	310.0	*154+40	* 6
3	36.0	226.0	304.0	310.0	*154+50	* 6
4	169.0	226.0	308.0	314.0	*155	* 6
5	312.0	226.0	308.0	314.0	*SITE	* 6
	334.0	226.0	308.0	314.0	*155+40	* 6

Barrier No. 2 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0 *156+40	* 6
2	809.0	252.0	308.0	314.0 *157	* 6
3	934.0	252.0	308.0	314.0 *157+40	* 6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	312.6	67	500	1 REAR
2	312.0	300.0	314.6	67	500	2 REAR
3	312.0	314.0	316.6	67	500	3 REAR
4	312.0	338.0	318.6	67	500	4 REAR
5	312.0	364.0	320.6	67	500	5 REAR
6	312.0	396.0	322.6	67	500	6 REAR
7	312.0	412.0	324.6	67	500	7 REAR
8	382.0	274.0	312.1	67	500	8 FRONT
9	382.0	300.0	314.1	67	500	9 FRONT
10	382.0	324.0	316.1	67	500	10 FRONT
11	382.0	338.0	318.1	67	500	11 FRONT
12	382.0	364.0	320.1	67	500	12 FRONT
13	382.0	396.0	322.1	67	500	13 FRONT
14	382.0	412.0	324.1	67	500	14 FRONT
15	376.0	452.0	327.0	67	500	15 FRONT
16	356.0	452.0	327.5	67	500	16 FRONT
17	329.0	452.0	328.0	67	500	17 FRONT
18	329.0	516.0	330.0	67	500	18 REAR
19	356.0	516.0	329.5	67	500	19 REAR
20	376.0	516.0	329.0	67	500	20 REAR
21	407.0	479.0	313.0	67	500	REC1
22	429.0	302.0	328.0	67	500	REC2

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
FUTURE LDN AT 22 POINTS GROUND LEVEL FOR VACANT SITE SWEETWATER NO BERM

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							156+40
7	-	0.*							157
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
3	-	6.*							154+50	133.1	MASONRY
4	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	6.*							156+40	186.2	MASONRY
7	-	6.*							157	125.0	MASONRY
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1 REAR	67.	500.	64.0
2	2 REAR	67.	500.	63.2
3	3 REAR	67.	500.	62.8
4	4 REAR	67.	500.	62.0
5	5 REAR	67.	500.	61.3
6	6 REAR	67.	500.	60.4
7	7 REAR	67.	500.	60.1
8	8 FRONT	67.	500.	66.5
9	9 FRONT	67.	500.	64.8
10	10 FRONT	67.	500.	63.7
11	11 FRONT	67.	500.	63.1
12	12 FRONT	67.	500.	62.1
13	13 FRONT	67.	500.	61.0
14	14 FRONT	67.	500.	60.6
15	15 FRONT	67.	500.	59.5
16	16 FRONT	67.	500.	59.5
17	17 FRONT	67.	500.	59.3

18	18 REAR	67.	500.	57.9
19	19 REAR	67.	500.	58.0
20	20 REAR	67.	500.	58.0
21	REC1	67.	500.	58.5
22	REC2	67.	500.	65.3

BARRIER TYPE	COST
BERM	0.
MASONRY	60242.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 60000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
6. 6. 6. 6. 6. 6. 6.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

A P P E N D I X 4

RUN 12GM

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS12GM
BARRIER COST FILE : CALIF$.DTA
DATE : 07-27-2006

FUTURE LDN AT 22 PTS GRND LEVEL FOR VACANT SITE SWEETWATER WITH BERM 22M

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0	*153	* 6
2	0.0	226.0	304.0	310.0	*154+40	* 6
3	36.0	226.0	304.0	310.0	*154+50	* 6
4	169.0	226.0	308.0	314.0	*155	* 6
5	312.0	226.0	308.0	314.0	*SITE	* 6
	334.0	226.0	308.0	314.0	*155+40	* 6

Barrier No. 2 Description: SWEETWATER SITE BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	334.0	242.0	308.0	314.5 *19[illegible]0	* 7
2	489.0	255.0	308.0	315.0 *15[illegible]	* 7
	539.0	255.0	308.0	315.0 *19[illegible]15	* 7

Barrier No. 3 Description: SWEETWATER W[illegible] NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height C[illegible]nges (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0 *15[illegible]+40	* 6
2	809.0	252.0	308.0	314.0 *15[illegible]	* 6
	934.0	252.0	308.0	314.0 *15[illegible]40	* 6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	[illegible]
1	312.0	274.0	312.6	67	500	1 REAR
2	312.0	300.0	314.6	67	500	2 REAR
3	312.0	314.0	316.6	67	500	3 REAR
4	312.0	338.0	318.6	67	500	4 REAR
5	312.0	364.0	320.6	67	500	5 REAR
6	312.0	396.0	322.6	67	500	[illegible] REAR
7	312.0	412.0	324.6	67	500	[illegible] REAR
8	382.0	274.0	312.1	67	500	1 FRONT
9	382.0	300.0	314.1	67	500	[illegible] FRONT
10	382.0	324.0	316.1	67	500	10 FRONT
11	382.0	338.0	318.1	67	500	11 FRONT
12	382.0	364.0	320.1	67	500	2 FRONT
13	382.0	396.0	322.1	67	500	3 FRONT
14	382.0	412.0	324.1	67	500	4 FRONT
15	376.0	452.0	327.0	67	500	5 FRONT
16	356.0	452.0	327.5	67	500	6 FRONT
17	329.0	452.0	328.0	67	500	7 FRONT
18	329.0	516.0	330.0	67	500	18 REAR
19	356.0	516.0	329.5	67	500	19 REAR
20	376.0	516.0	329.0	67	500	20 REAR
21	407.0	479.0	313.0	67	500	EC1
22	429.0	252.0	312.0	67	500	EC2

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

12	12	FRONT	67.	500.	57.8
13	13	FRONT	67.	500.	57.3
14	14	FRONT	67.	500.	57.3
15	15	FRONT	67.	500.	56.7
16	16	FRONT	67.	500.	56.7
17	17	FRONT	67.	500.	56.8
18	18	REAR	67.	500.	55.5
19	19	REAR	67.	500.	55.5
20	20	REAR	67.	500.	55.5
21	REC1		67.	500.	54.8
22	REC2		67.	500.	53.8

BARRIER TYPE	COST
BERM	4739.
MASONRY	60242.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 65000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
6. 6. 6. 6. 6. 7. 7. 6. 6.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

A P P E N D I X 4

RUN 12GM

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS12GM
BARRIER COST FILE : CALIF$.DTA
DATE : 07-27-2006

FUTURE LDN AT 22 PTS GRND LEVEL FOR VACANT SITE SWEETWATER WITH BERM 22M

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0 *153	* 6
2	0.0	226.0	304.0	310.0 *154+40	* 6
3	36.0	226.0	304.0	310.0 *154+50	* 6
4	169.0	226.0	308.0	314.0 *155	* 6
5	312.0	226.0	308.0	314.0 *SITE	* 6
	334.0	226.0	308.0	314.0 *155+10	* 6

Barrier No. 2 Description: SWEETWATER SITE BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	334.0	242.0	308.0	314.5 *15[illegible]0	* 7
2	489.0	255.0	308.0	315.0 *156	* 7
	539.0	255.0	308.0	315.0 *156-15	* 7

Barrier No. 3 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0 *156+40	* 6
2	809.0	252.0	308.0	314.0 *15[illegible]	* 6
	934.0	252.0	308.0	314.0 *15[illegible]-40	* 6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	[illegible]
1	312.0	274.0	312.6	67	500	1 REAR
2	312.0	300.0	314.6	67	500	2 REAR
3	312.0	314.0	316.6	67	500	3 REAR
4	312.0	338.0	318.6	67	500	4 REAR
5	312.0	364.0	320.6	67	500	5 REAR
6	312.0	396.0	322.6	67	500	6 REAR
7	312.0	412.0	324.6	67	500	7 REAR
8	382.0	274.0	312.1	67	500	8 FRONT
9	382.0	300.0	314.1	67	500	9 FRONT
10	382.0	324.0	316.1	67	500	10 FRONT
11	382.0	338.0	318.1	67	500	11 FRONT
12	382.0	364.0	320.1	67	500	12 FRONT
13	382.0	396.0	322.1	67	500	13 FRONT
14	382.0	412.0	324.1	67	500	14 FRONT
15	376.0	452.0	327.0	67	500	15 FRONT
16	356.0	452.0	327.5	67	500	16 FRONT
17	329.0	452.0	328.0	67	500	17 FRONT
18	329.0	516.0	330.0	67	500	18 REAR
19	356.0	516.0	329.5	67	500	19 REAR
20	376.0	516.0	329.0	67	500	20 REAR
21	407.0	479.0	313.0	67	500	EC1
22	429.0	252.0	312.0	67	500	EC2

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

12	12	FRONT	67.	500.	57.8
13	13	FRONT	67.	500.	57.3
14	14	FRONT	67.	500.	57.3
15	15	FRONT	67.	500.	56.7
[illegible]	16	FRONT	67.	500.	56.7
[illegible]	17	FRONT	67.	500.	56.8
18	18	REAR	67.	500.	55.5
19	19	REAR	67.	500.	55.5
20	20	REAR	67.	500.	55.5
21	REC1		67.	500.	54.8
22	REC2		67.	500.	53.8

BARRIER TYPE	COST
BERM	4739.
MASONRY	60242.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 65000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
6. 6. 6. 6. 6. 7. 7. 6. 6.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

APPENDIX 5

RUN 13G

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS13G
BARRIER COST FILE : CALIF$.DTA
DATE : 07-19-2006

FUTURE LDN AT ~~20~~ 22 POINTS GROUND LEVEL FOR BUILT SITE FW WITH NO WALL

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	8096	65	239	65	273	65	SR125 NORTHBOUND
2	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
2	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40
	10	NO	809.0	-60.0	328.0	157
			934.0	-60.0	328.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	-500.0	226.0	304.0	310.0	*153	*	6
2	0.0	226.0	304.0	310.0	*154+40	*	6
3	36.0	226.0	304.0	310.0	*154+50	*	6
4	169.0	226.0	308.0	314.0	*155	*	6
5	312.0	226.0	308.0	314.0	*SITE	*	6
	334.0	226.0	308.0	314.0	*155+40	*	6

Barrier No. 2 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	623.0	243.0	308.0	314.0	*156+40	*	6
2	809.0	252.0	308.0	314.0	*157	*	6
	934.0	252.0	308.0	314.0	*157+40	*	6

Barrier No. 3 Description: SOUTH SIDE OF BLDG 1 UNIT 1-7
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	317.0	254.0	307.6	327.6	*B3 P1	*	20
	317.0	422.0	319.0	339.0	*B3 P2	*	20

Barrier No. 4 Description: NORTH SIDE BLDG 1 UNIT 1-7
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	354.0	254.0	307.6	327.6	*B4 P1	*	20
	354.0	422.0	319.0	339.0	*B4 P2	*	20

Barrier No. 5 Description: SOUTH MHP P/L WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	307.0	232.0	306.6	313.6	*B5 P1	*	7
	307.0	512.0	322.3	328.3	*B5 P2	*	6

Barrier No. 6 Description: UNIT 1 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	307.0	254.0	307.6	313.6	*B6 P1	* 6
	317.0	254.0	307.6	313.6	*B6 P2	* 6

Barrier No. 7 Description: UNIT 8/9/10 BLDG
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	317.0	512.0	322.3	342.3	*B7 P1	* 20
	392.0	512.0	322.0	342.0	*B7 P2	* 20

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	312.6	67	500	1 REAR
2	312.0	300.0	314.6	67	500	2 REAR
3	312.0	314.0	316.6	67	500	3 REAR
4	312.0	338.0	318.6	67	500	4 REAR
5	312.0	364.0	320.6	67	500	5 REAR
6	312.0	396.0	322.6	67	500	6 REAR
7	312.0	412.0	324.6	67	500	7 REAR
8	382.0	274.0	312.1	67	500	8 FRONT
9	382.0	300.0	314.1	67	500	9 FRONT
10	382.0	324.0	316.1	67	500	10 FRONT
11	382.0	338.0	318.1	67	500	11 FRONT
12	382.0	364.0	320.1	67	500	12 FRONT
13	382.0	396.0	322.1	67	500	13 FRONT
14	382.0	412.0	324.1	67	500	14 FRONT
15	376.0	452.0	327.0	67	500	15 FRONT
16	356.0	452.0	327.5	67	500	16 FRONT
17	329.0	452.0	328.0	67	500	17 FRONT
18	329.0	516.0	330.0	67	500	18 REAR
19	356.0	516.0	329.5	67	500	19 REAR
20	376.0	516.0	329.0	67	500	20 REAR
21	407.0	479.0	313.0	67	500	REC1
22	429.0	302.0	328.0	67	500	REC2

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1 REAR	67.	500.	63.6
2	2 REAR	67.	500.	64.0
3	3 REAR	67.	500.	65.1
4	4 REAR	67.	500.	66.1
5	5 REAR	67.	500.	66.0
6	6 REAR	67.	500.	65.6
7	7 REAR	67.	500.	67.5
8	8 FRONT	67.	500.	71.8
9	9 FRONT	67.	500.	70.6
10	10 FRONT	67.	500.	69.7
11	11 FRONT	67.	500.	69.3
12	12 FRONT	67.	500.	68.6
13	13 FRONT	67.	500.	67.9
14	14 FRONT	67.	500.	67.6
15	15 FRONT	67.	500.	66.9
16	16 FRONT	67.	500.	67.5
17	17 FRONT	67.	500.	67.3
18	18 REAR	67.	500.	48.5
19	19 REAR	67.	500.	48.5
20	20 REAR	67.	500.	48.5
21	REC1	67.	500.	66.6
22	REC2	67.	500.	71.7

BARRIER TYPE	COST
BERM	0.
MASONRY	161959.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 162000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
6. 6. 6. 6. 6. 6. 6.20.20. 7. 6.20.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

APPENDIX 6

RUN 14G

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS14G
BARRIER COST FILE : CALIF$.DTA
DATE : 07-19-2006

FUTURE LDN AT 22 POINTS GROUND LEVEL FOR BUILT SITE SWEETWATER ONLY

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0 *153	* 6
2	0.0	226.0	304.0	310.0 *154+40	* 6
3	36.0	226.0	304.0	310.0 *154+50	* 6
4	169.0	226.0	308.0	314.0 *155	* 6
5	312.0	226.0	308.0	314.0 *SITE	* 6
	334.0	226.0	308.0	314.0 *155+40	* 6

Barrier No. 2 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0 *156+40	* 6
2	809.0	252.0	308.0	314.0 *157	* 6
	934.0	252.0	308.0	314.0 *157+40	* 6

Barrier No. 3 Description: SOUTH SIDE OF BLDG 1 UNIT 1-7
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	317.0	254.0	307.6	327.6 *B3 P1	* 20
	317.0	422.0	319.0	339.0 *B3 P2	* 20

Barrier No. 4 Description: NORTH SIDE BLDG 1 UNIT 1-7
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	354.0	254.0	307.6	327.6 *B4 P1	* 20
	354.0	422.0	319.0	339.0 *B4 P2	* 20

Barrier No. 5 Description: SOUTH MHP P/L WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	307.0	232.0	306.6	313.6 *B5 P1	* 7
	307.0	512.0	322.3	328.3 *B5 P2	* 6

Barrier No. 6 Description: UNIT 1 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	307.0	254.0	307.6	313.6 *B6 P1	* 6
	317.0	254.0	307.6	313.6 *B6 P2	* 6

Barrier No. 7 Description: UNIT 8/9/10 BLDG
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	317.0	512.0	322.3	342.3 *B7 P1	* 20

392.0 512.0 322.0 342.0 *B7 P2 * 20

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	312.6	67	500	1 REAR
2	312.0	300.0	314.6	67	500	2 REAR
3	312.0	314.0	316.6	67	500	3 REAR
4	312.0	338.0	318.6	67	500	4 REAR
5	312.0	364.0	320.6	67	500	5 REAR
6	312.0	396.0	322.6	67	500	6 REAR
7	312.0	412.0	324.6	67	500	7 REAR
8	382.0	274.0	312.1	67	500	8 FRONT
9	382.0	300.0	314.1	67	500	9 FRONT
10	382.0	324.0	316.1	67	500	10 FRONT
11	382.0	338.0	318.1	67	500	11 FRONT
12	382.0	364.0	320.1	67	500	12 FRONT
13	382.0	396.0	322.1	67	500	13 FRONT
14	382.0	412.0	324.1	67	500	14 FRONT
15	376.0	452.0	327.0	67	500	15 FRONT
16	356.0	452.0	327.5	67	500	16 FRONT
17	329.0	452.0	328.0	67	500	17 FRONT
18	329.0	516.0	330.0	67	500	18 REAR
19	356.0	516.0	329.5	67	500	19 REAR
20	376.0	516.0	329.0	67	500	20 REAR
21	407.0	479.0	313.0	67	500	REC1
22	429.0	302.0	328.0	67	500	REC2

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
FUTURE LDN AT 22 POINTS GROUND LEVEL FOR BUILT SITE SWEETWATER ONLY

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							156+40
7	-	0.*							157
8	-	0.*							B3 P1
9	-	0.*							B4 P1
10	-	0.*							B5 P1
11	-	0.*							B6 P1
12	-	0.*							B7 P1
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
3	-	6.*							154+50	133.1	MASONRY
4	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	6.*							156+40	186.2	MASONRY
7	-	6.*							157	125.0	MASONRY
8	-	20.*							B3 P1	168.4	MASONRY
9	-	20.*							B4 P1	168.4	MASONRY
10	-	7.*							B5 P1	280.4	MASONRY
11	-	6.*							B6 P1	10.0	MASONRY
12	-	20.*							B7 P1	75.0	MASONRY
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1 REAR	67.	500.	56.1
2	2 REAR	67.	500.	55.9
3	3 REAR	67.	500.	56.4
4	4 REAR	67.	500.	56.2
5	5 REAR	67.	500.	55.7
6	6 REAR	67.	500.	55.0
7	7 REAR	67.	500.	54.8
8	8 FRONT	67.	500.	66.3
9	9 FRONT	67.	500.	64.4
10	10 FRONT	67.	500.	63.0
11	11 FRONT	67.	500.	62.3
12	12 FRONT	67.	500.	61.2
13	13 FRONT	67.	500.	60.0
14	14 FRONT	67.	500.	59.5
15	15 FRONT	67.	500.	58.5
16	16 FRONT	67.	500.	58.6
17	17 FRONT	67.	500.	56.7
18	18 REAR	67.	500.	40.3
19	19 REAR	67.	500.	40.3
20	20 REAR	67.	500.	40.3
21	REC1	67.	500.	57.7
22	REC2	67.	500.	65.2

BARRIER TYPE	COST
BERM	0.
MSONRY	161959.
MSONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST - $ 162000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
6. 6. 6. 6. 6. 6. 6.20.20. 7. 6.20.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

A P P E N D I X 7

RUN 15GM

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS15GM
BARRIER COST FILE : CALIF$.DTA
DATE : 08-01-2006

FUTURE LDN/GRND LEVEL/FW/VACANT/SW BERM/ #22M

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	8096	65	239	65	273	65	SR125 NORTHBOUND
2	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
2	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40
	10	NO	809.0	-60.0	328.0	157
			934.0	-60.0	328.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	-500.0	226.0	304.0	310.0	*153	*	6
2	0.0	226.0	304.0	310.0	*154+40	*	6
3	36.0	226.0	304.0	310.0	*154+50	*	6
4	169.0	226.0	308.0	314.0	*155	*	6
5	312.0	226.0	308.0	314.0	*SITE	*	6
	334.0	226.0	308.0	314.0	*155+40	*	6

Barrier No. 2 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	623.0	243.0	308.0	314.0	*156+40	*	6
2	809.0	252.0	308.0	314.0	*157	*	6
	934.0	252.0	308.0	314.0	*157+40	*	6

Barrier No. 3 Description: SWEETWATER BERM WITH L#22M
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	334.0	242.0	308.0	314.5	*B3 P1	*	7
2	489.0	255.0	308.0	315.0	*B3 P2	*	7
	539.0	255.0	308.0	315.0	*B3 P3	*	7

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	312.0	274.0	312.6	67	500	1 REAR
2	312.0	300.0	314.6	67	500	2 REAR
3	312.0	314.0	316.6	67	500	3 REAR
4	312.0	338.0	318.6	67	500	4 REAR
5	312.0	364.0	320.6	67	500	5 REAR
6	312.0	396.0	322.6	67	500	6 REAR
7	312.0	412.0	324.6	67	500	7 REAR
8	382.0	274.0	312.1	67	500	8 FRONT
9	382.0	300.0	314.1	67	500	9 FRONT
10	382.0	324.0	316.1	67	500	10 FRONT
11	382.0	338.0	318.1	67	500	11 FRONT
12	382.0	364.0	320.1	67	500	12 FRONT
13	382.0	396.0	322.1	67	500	13 FRONT
14	382.0	412.0	324.1	67	500	14 FRONT
15	376.0	452.0	327.0	67	500	15 FRONT
16	356.0	452.0	327.5	67	500	16 FRONT
17	329.0	452.0	328.0	67	500	17 FRONT
18	329.0	516.0	330.0	67	500	18 REAR
19	356.0	516.0	329.5	67	500	19 REAR
20	376.0	516.0	329.0	67	500	20 REAR

21	407.0	479.0	313.0	67	500	REC1
22	429.0	252.0	312.0	67	500	REC2

==========

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

==========

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

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SOUND32 - RELEASE 07/30/91

TITLE:
FUTURE LDN/GRND LEVEL/FW/VACANT/SW BERM/ #22M

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							156+40
7	-	0.*							157
8	-	0.*							B3 P1
9	-	0.*							B3 P2
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
3	-	6.*							154+50	133.1	MASONRY
4	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	6.*							156+40	186.2	MASONRY
7	-	6.*							157	125.0	MASONRY
8	-	7.*							B3 P1	155.5	BERM
9	-	7.*							B3 P2	50.0	BERM
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1 REAR	67.	500.	68.7
2	2 REAR	67.	500.	69.6
3	3 REAR	67.	500.	70.6
4	4 REAR	67.	500.	71.0
5	5 REAR	67.	500.	70.9
6	6 REAR	67.	500.	70.3
7	7 REAR	67.	500.	70.1
8	8 FRONT	67.	500.	65.1
9	9 FRONT	67.	500.	66.8
10	10 FRONT	67.	500.	68.9
11	11 FRONT	67.	500.	70.6

12	12	FRONT	67.	500.	70.8
13	13	FRONT	67.	500.	70.3
14	14	FRONT	67.	500.	70.0
15	15	FRONT	67.	500.	69.4
16	16	FRONT	67.	500.	69.4
17	17	FRONT	67.	500.	69.5
18	18	REAR	67.	500.	68.6
19	19	REAR	67.	500.	68.5
20	20	REAR	67.	500.	68.5
21	REC1		67.	500.	67.3
22	REC2		67.	500.	58.2

BARRIER TYPE	COST
BERM	4739.
MASONRY	60242.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 65000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
6. 6. 6. 6. 6. 6. 6. 7. 7.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

A P P E N D I X 8

RUN 15S

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* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS15S
BARRIER COST FILE : CALIF$.DTA
DATE : 07-19-2006

FUTURE LDN AT BALCONIES LEVEL FOR VACANT SITE FREEWAY ONLY NO WALL

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	8096	65	239	65	273	65	SR125 NORTHBOUND
2	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
2	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40
	10	NO	809.0	-60.0	328.0	157
			934.0	-60.0	328.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	-500.0	226.0	304.0	310.0	*153	*	6
2	0.0	226.0	304.0	310.0	*154+40	*	6
3	36.0	226.0	304.0	310.0	*154+50	*	6
4	169.0	226.0	308.0	314.0	*155	*	6
5	312.0	226.0	308.0	314.0	*SITE	*	6
	334.0	226.0	308.0	314.0	*155+40	*	6

Barrier No. 2 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS	
1	623.0	243.0	308.0	314.0	*156+40	*	6
2	809.0	252.0	308.0	314.0	*157	*	6
	934.0	252.0	308.0	314.0	*157+40	*	6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	377.0	274.0	322.1	67	500	8 BAL
2	377.0	300.0	324.1	67	500	9 BAL
3	377.0	324.0	326.1	67	500	10 BAL
4	377.0	338.0	328.1	67	500	11 BAL
5	377.0	364.0	330.1	67	500	12 BAL
6	377.0	396.0	332.1	67	500	13 BAL
7	377.0	412.0	334.1	67	500	14 BAL
8	376.0	462.0	337.0	67	500	15 BAL
9	356.0	462.0	337.5	67	500	16 BAL
10	329.0	462.0	338.0	67	500	17 BAL

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
FUTURE LDN AT BALCONIES LEVEL FOR VACANT SITE FREEWAY ONLY NO WALL

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							156+40
7	-	0.*							157
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
3	-	6.*							154+50	133.1	MASONRY
4	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	6.*							156+40	186.2	MASONRY
7	-	6.*							157	125.0	MASONRY
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	8 BAL	67.	500.	72.7
2	9 BAL	67.	500.	72.1
3	10 BAL	67.	500.	71.6
4	11 BAL	67.	500.	71.3
5	12 BAL	67.	500.	70.9
6	13 BAL	67.	500.	70.3
7	14 BAL	67.	500.	70.1
8	15 BAL	67.	500.	69.3
9	16 BAL	67.	500.	69.3
10	17 BAL	67.	500.	69.3

BARRIER TYPE	COST
BERM	0.
MASONRY	60242.
MASONRY/JERSEY	0.

CONCRETE 0.

TOTAL COST = $ 60000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
6. 6. 6. 6. 6. 6. 6.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

A P P E N D I X 9

RUN 16S

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS16S
BARRIER COST FILE : CALIF$.DTA
DATE : 07-19-2006

SITE FUTURE LDN AT BALCONIES VACANT SITE FREEWAY WITH FW WALL ONLY

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	8096	65	239	65	273	65	SR125 NORTHBOUND
2	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
2	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40
	10	NO	809.0	-60.0	328.0	157
			934.0	-60.0	328.0	157+40

BARRIER DATA

Barrier No. 1 Description: SR25 WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	-500.0	89.0	328.0	336.0	*153	*	8
2	0.0	89.0	328.0	336.0	*154+40	*	8
3	36.0	89.0	328.0	336.0	*154+50	*	8
4	169.0	89.0	328.0	336.0	*155	*	8
5	312.0	98.0	328.0	336.0	*SITE	*	8
6	334.0	98.0	328.0	336.0	*155+40	*	8
7	489.0	107.0	328.0	336.0	*156	*	8
8	539.0	98.0	328.0	336.0	*156+15	*	8
	623.0	98.0	328.0	336.0	*156+40	*	8

Barrier No. 2 Description: SR25 BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)			BARRIER HEIGHTS AT ENDS
1	623.0	98.0	328.0	336.0	*156+40	*	8
2	809.0	98.0	328.0	336.0	*157	*	8
	934.0	98.0	328.0	336.0	*157+40	*	8

Barrier No. 3 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)			BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0	*153	*	6
2	0.0	226.0	304.0	310.0	*154+40	*	6
3	36.0	226.0	304.0	310.0	*154+50	*	6
4	169.0	226.0	308.0	314.0	*155	*	6
5	312.0	226.0	308.0	314.0	*SITE	*	6
	334.0	226.0	308.0	314.0	*155+40	*	6

Barrier No. 4 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)			BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0	*156+40	*	6
2	809.0	252.0	308.0	314.0	*157	*	6
	934.0	252.0	308.0	314.0	*157+40	*	6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID	
1	377.0	274.0	322.1	67	500	8	BAL
2	377.0	300.0	324.1	67	500	9	BAL

3	377.0	324.0	326.1	67	500	10 BAL
4	377.0	338.0	328.1	67	500	11 BAL
5	377.0	364.0	330.1	67	500	12 BAL
6	377.0	396.0	332.1	67	500	13 BAL
7	377.0	412.0	334.1	67	500	14 BAL
8	376.0	462.0	337.0	67	500	15 BAL
9	356.0	462.0	337.5	67	500	16 BAL
10	329.0	462.0	338.0	67	500	17 BAL

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
SITE FUTURE LDN AT BALCONIES VACANT SITE FREEWAY WITH FW WALL ONLY

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							155+40
7	-	0.*							156
8	-	0.*							156+15
9	-	0.*							156+40
10	-	0.*							157
11	-	0.*							153
12	-	0.*							154+40
13	-	0.*							154+50
14	-	0.*							155
15	-	0.*							SITE
16	-	0.*							156+40
17	-	0.*							157
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	BARRIER HEIGHTS 0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	8.*							153	500.0	MASONRY
2	-	8.*							154+40	36.0	MASONRY
3	-	8.*							154+50	133.0	MASONRY
4	-	8.*							155	143.3	MASONRY
5	-	8.*							SITE	22.0	MASONRY
6	-	8.*							155+40	155.3	MASONRY
7	-	8.*							156	50.8	MASONRY
8	-	8.*							156+15	84.0	MASONRY
9	-	8.*							156+40	186.0	BERM
10	-	8.*							157	125.0	BERM
11	-	6.*							153	500.0	MASONRY
12	-	6.*							154+40	36.0	MASONRY
13	-	6.*							154+50	133.1	MASONRY
14	-	6.*							155	143.0	MASONRY
15	-	6.*							SITE	22.0	MASONRY

16	-	6.*	156+40	186.2	MASONRY
17	-	6.*	157	125.0	MASONRY

0 1 2 3 4 5 6 7

C	REC ID	DNL	PEOPLE	LEQ(CAL)
1	8 BAL	67.	500.	62.6
2	9 BAL	67.	500.	62.6
3	10 BAL	67.	500.	62.6
4	11 BAL	67.	500.	62.6
5	12 BAL	67.	500.	62.4
6	13 BAL	67.	500.	62.1
7	14 BAL	67.	500.	62.1
8	15 BAL	67.	500.	61.5
9	16 BAL	67.	500.	61.5
10	17 BAL	67.	500.	61.6

BARRIER TYPE	COST
BERM	9019.
MASONRY	138721.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 148000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

RRESPONDING BARRIER HEIGHTS FOR EACH SECTION

. 8. 8. 8. 8. 8. 8. 8. 8. 8. 6. 6. 6. 6. 6. 6. 6.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

APPENDIX 10

RUN 17S

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS17S
BARRIER COST FILE : CALIF$.DTA
DATE : 07-19-2006

FUTURE LDN AT BALCONCIES FOR SWEETWATER ALONE VACANT SITE

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0	*153	* 6
2	0.0	226.0	304.0	310.0	*154+40	* 6
3	36.0	226.0	304.0	310.0	*154+50	* 6
4	169.0	226.0	308.0	314.0	*155	* 6
5	312.0	226.0	308.0	314.0	*SITE	* 6
	334.0	226.0	308.0	314.0	*155+40	* 6

Barrier No. 2 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0 *156+40	* 6
2	809.0	252.0	308.0	314.0 *157	* 6
	934.0	252.0	308.0	314.0 *157+40	* 6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	377.0	274.0	322.1	67	500	8 BAL
2	377.0	300.0	324.1	67	500	9 BAL
3	377.0	324.0	326.1	67	500	10 BAL
4	377.0	338.0	328.1	67	500	11 BAL
5	377.0	364.0	330.1	67	500	12 BAL
6	377.0	396.0	332.1	67	500	13 BAL
7	377.0	412.0	334.1	67	500	14 BAL
8	376.0	462.0	337.0	67	500	15 BAL
9	356.0	462.0	337.5	67	500	16 BAL
10	329.0	462.0	338.0	67	500	17 BAL

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
FUTURE LDN AT BALCONCIES FOR SWEETWATER ALONE VACANT SITE

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							156+40
7	-	0.*							157
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
	BARRIER HEIGHTS										
1	-	6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
3	-	6.*							154+50	133.1	MASONRY
4	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	6.*							156+40	186.2	MASONRY
7	-	6.*							157	125.0	MASONRY
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	8 BAL	67.	500.	66.5
2	9 BAL	67.	500.	64.9
3	10 BAL	67.	500.	63.7
4	11 BAL	67.	500.	63.2
5	12 BAL	67.	500.	62.2
6	13 BAL	67.	500.	61.2
7	14 BAL	67.	500.	60.8
8	15 BAL	67.	500.	59.5
9	16 BAL	67.	500.	59.2
10	17 BAL	67.	500.	59.1

BARRIER TYPE	COST
BERM	0.
MASONRY	60242.
MASONRY/JERSEY	0.

```
CONCRETE                    0.
-------------------------------
       TOTAL COST = $     60000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
  1  1  1  1  1  1  1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
 6. 6. 6. 6. 6. 6. 6.
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GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

APPENDIX 11

RUN 18S

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS18S
BARRIER COST FILE : CALIF$.DTA
DATE : 07-19-2006

FUTURE LDN AT BALCONIES SWEETWATER ONLY VACANT SITE WITH BERM

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0	*153	* 6
2	0.0	226.0	304.0	310.0	*154+40	* 6
3	36.0	226.0	304.0	310.0	*154+50	* 6
4	169.0	226.0	308.0	314.0	*155	* 6
5	312.0	226.0	308.0	314.0	*SITE	* 6
	334.0	226.0	308.0	314.0	*155+40	* 6

Barrier No. 2 Description: SWEETWATER SITE BERM
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	334.0	242.0	308.0	314.5	*155+40	* 7
2	489.0	255.0	308.0	315.0	*156	* 7
	539.0	255.0	308.0	315.0	*156+15	* 7

Barrier No. 3 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0	*156+40	* 6
2	809.0	252.0	308.0	314.0	*157	* 6
	934.0	252.0	308.0	314.0	*157+40	* 6

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	377.0	274.0	322.1	67	500	8 BAL
2	377.0	300.0	324.1	67	500	9 BAL
3	377.0	324.0	326.1	67	500	10 BAL
4	377.0	338.0	328.1	67	500	11 BAL
5	377.0	364.0	330.1	67	500	12 BAL
6	377.0	396.0	332.1	67	500	13 BAL
7	377.0	412.0	334.1	67	500	14 BAL
8	376.0	462.0	337.0	67	500	15 BAL
9	356.0	462.0	337.5	67	500	16 BAL
10	329.0	462.0	338.0	67	500	17 BAL

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
FUTURE LDN AT BALCONIES SWEETWATER ONLY VACANT SITE WITH BERM

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							155+40
7	-	0.*							156
8	-	0.*							156+40
9	-	0.*							157
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
3	-	6.*							154+50	133.1	MASONRY
4	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	7.*							155+40	155.5	BERM
7	-	7.*							156	50.0	BERM
8	-	6.*							156+40	186.2	MASONRY
9	-	6.*							157	125.0	MASONRY
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	8 BAL	67.	500.	63.7
2	9 BAL	67.	500.	60.5
3	10 BAL	67.	500.	59.7
4	11 BAL	67.	500.	59.5
5	12 BAL	67.	500.	59.0
6	13 BAL	67.	500.	58.3
7	14 BAL	67.	500.	58.2
8	15 BAL	67.	500.	57.3
9	16 BAL	67.	500.	56.6
10	17 BAL	67.	500.	56.7

BARRIER TYPE	COST
BERM	4739.
MASONRY	60242.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 65000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION

1 1 1 1 1 1 1 1 1

CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION

6. 6. 6. 6. 6. 7. 7. 6. 6.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

A P P E N D I X 1 2

RUN 23SA

1621 East Seventeenth Street, Suite K Santa Ana, California 92705-8518
Phone (714) 835-0249 FAX (714) 835-1957

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

APPENDIX 12

RUN 23SA

1621 East Seventeenth Street, Suite K
Phone (714) 835-0249
Santa Ana, California 92705-8518
FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS23SA
BARRIER COST FILE : CALIF$.DTA
DATE : 07-20-2006

FUTURE LDN/BALCONIES/BUILT SITE/NO FW OR SW WALLS/BERMS UNITS 8-13 FW ONLY

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	8096	65	239	65	273	65	SR125 NORTHBOUND
2	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
2	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40
	10	NO	809.0	-60.0	328.0	157
			934.0	-60.0	328.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	-500.0	226.0	304.0	310.0	*153	* 6
2	0.0	226.0	304.0	310.0	*154+40	* 6
3	36.0	226.0	304.0	310.0	*154+50	* 6
4	169.0	226.0	308.0	314.0	*155	* 6
5	312.0	226.0	308.0	314.0	*SITE	* 6
	334.0	226.0	308.0	314.0	*155+40	* 6

Barrier No. 2 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0	*156+40	* 6
2	809.0	252.0	308.0	314.0	*157	* 6
	934.0	252.0	308.0	314.0	*157+40	* 6

Barrier No. 3 Description: NORTH SIDE BLDG 1
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	254.0	307.6	327.6	*B3 P1	* 20
	372.0	433.0	319.0	339.0	*B3 P2	* 20

Barrier No. 4 Description: UNIT 8/9/10 BLDG
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	317.0	467.0	323.0	343.0	*B4 P1	* 20
	392.0	467.0	323.0	343.0	*B4 P2	* 20

Barrier No. 5 Description: WING ALL 8 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	267.0	307.0	327.0	*B5 P1	* 20
	382.0	267.0	307.0	327.0	*B5 P2	* 20

Barrier No. 6 Description: WING ALL 8 EAST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	372.0	283.0	307.0	327.0	*B6 P1	* 20
	382.0	283.0	307.0	327.0	*B6 P2	* 20

Barrier No. 7 Description: WING ALL 9 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	296.0	309.0	329.0	*B7 P1	* 20
	382.0	296.0	309.0	329.0	*B7 P2	* 20

Barrier No. 8 Description: WING ALL 9 EAST/10 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	316.0	309.0	329.0	*B8 P1	* 20
	382.0	316.0	309.0	329.0	*B8 P2	* 20

Barrier No. 9 Description: WING ALL 10 EAST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	336.0	311.0	331.0	*B9 P1	* 20
	382.0	336.0	311.0	323.0	*B9 P2	* 12

Barrier No. 10 Description: WING ALL 11 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	346.0	313.0	333.0	*B10 P1	* 20
	382.0	346.0	313.0	333.0	*B10 P2	* 20

Barrier No. 11 Description: WING ALL 11 EAST/12 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	365.0	313.0	333.0	*B11 P1	* 20
	382.0	365.0	313.0	333.0	*B11 P2	* 20

Barrier No. 12 Description: WING ALL 12 EAST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	387.0	315.0	335.0	*B12 P1 * 20
	382.0	387.0	315.0	335.0	*B12 P2 * 20

Barrier No. 13 Description: WING ALL 13 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	395.0	317.0	337.0	*B13 P1 * 20
	382.0	395.0	317.0	337.0	*B13 P2 * 20

Barrier No. 14 Description: WING ALL 13 EAST/14 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	414.0	317.0	337.0	*B14 P1 * 20
	382.0	414.0	317.0	337.0	*B14 P2 * 20

Barrier No. 15 Description: BAL 8 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	267.0	307.0	320.5	*B15 P1 * 14
	382.0	283.0	307.0	320.5	*B15 P2 * 14

Barrier No. 16 Description: BAL 9 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	296.0	309.0	322.5	*B16 P1 * 14
	382.0	316.0	309.0	322.5	*B16 P2 * 14

Barrier No. 17 Description: BAL 10 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

GROUND TOP BARRIER

SEG.	X	Y	(Z0)	(Z)	HEIGHTS AT ENDS
1	382.0	316.0	312.0	325.5	*B17 P1 * 14
	382.0	336.0	312.0	325.5	*B17 P2 * 14

Barrier No. 18 Description: BAL 11 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	346.0	313.0	326.5	*B18 P1 * 14
	382.0	365.0	313.0	326.5	*B18 P2 * 14

Barrier No. 19 Description: BAL 12 42" WALL
Type (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	365.0	315.0	328.5	*B19 P1 * 14
	382.0	387.0	315.0	328.5	*B19 P2 * 14

Barrier No. 20 Description: BAL 13 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)- 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	395.0	317.0	330.5	*B20 P1 * 14
	382.0	414.0	317.0	330.5	*B20 P2 * 14

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	377.0	274.0	322.1	67	500	8 BAL
2	377.0	306.0	324.1	67	500	9 BAL
3	377.0	324.0	326.1	67	500	10 BAL
4	377.0	353.0	328.1	67	500	11 BAL
5	377.0	364.0	330.1	67	500	12 BAL
6	377.0	405.0	332.1	67	500	13 BAL

DROP OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

==========

SOUND32 - RELEASE 07/30/91

TITLE:
FUTURE LDN/BALCONIES/BUILT SITE/NO FW OR SW WALLS/BERMS UNITS 8-13 FW ONLY

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1		0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6		0.*							156+40
7	-	0.*							157
8		0.*							B3 P1
9	-	0.*							B4 P1
10	-	0.*							B5 P1
11	-	0.*							B6 P1
12	-	0.*							B7 P1
13	-	0.*							B8 P1
14		0.*							B9 P1
15	-	0.*							B10 P1
16	-	0.*							B11 P1
17	-	0.*							B12 P1
18	-	0.*							B13 P1
19	-	0.*							B14 P1
20	-	0.*							B15 P1
21	-	0.*							B16 P1
22	-	0.*							B17 P1
23	-	0.*							B18 P1
24		0.*							B19 P1
25	-	0.*							B20 P1
	0	1	2	3	4	5	6	7	

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
	BARRIER HEIGHTS										
1	-	6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
3	-	6.*							154+50	133.1	MASONRY
4	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	6.*							156+40	186.2	MASONRY
7		6.*							157	125.0	MASONRY
8	-	20.*							B3 P1	179.4	MASONRY
9	-	20.*							B4 P1	75.0	MASONRY
10	-	20.*							B5 P1	10.0	MASONRY
11		20.*							B6 P1	10.0	MASONRY
12		20.*							B7 P1	10.0	MASONRY
13	-	20.*							B8 P1	10.0	MASONRY
14	-	16.*							B9 P1	12.8	MASONRY
15		20.*							B10 P1	10.0	MASONRY
16	-	20.*							B11 P1	10.0	MASONRY
17		20.*							B12 P1	10.0	MASONRY
18	-	20.*							B13 P1	10.0	MASONRY
19		20.*							B14 P1	10.0	MASONRY
20	-	14.*							B15 P1	16.0	MASONRY
21	-	14.*							B16 P1	20.0	MASONRY
22	-	14.*							B17 P1	20.0	MASONRY
23	-	14.*							B18 P1	19.0	MASONRY
24	-	14.*							B19 P1	22.0	MASONRY
25	-	14.*							B20 P1	19.0	MASONRY
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	8 BAL	67.	500.	66.2
2	9 BAL	67.	500.	65.8
3	10 BAL	67.	500.	62.8
4	11 BAL	67.	500.	63.2
5	12 BAL	67.	500.	66.9

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1		6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
3	-	6.*							154+50	133.1	MASONRY
4	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	6.*							156+40	186.2	MASONRY
7	-	6.*							157	125.0	MASONRY
8	-	20.*							B3 P1	179.4	MASONRY
9	-	20.*							B4 P1	75.0	MASONRY
10	-	20.*							B5 P1	10.0	MASONRY
11	-	20.*							B6 P1	10.0	MASONRY
12		20.*							B7 P1	10.0	MASONRY
13	-	20.*							B8 P1	10.0	MASONRY
14		16.*							B9 P1	12.8	MASONRY
15	-	20.*							B10 P1	10.0	MASONRY
16	-	20.*							B11 P1	10.0	MASONRY
17	-	20.*							B12 P1	10.0	MASONRY
18	-	20.*							B13 P1	10.0	MASONRY
19	-	20.*							B14 P1	10.0	MASONRY
20		14.*							B15 P1	16.0	MASONRY
21	-	14.*							B16 P1	20.0	MASONRY
22	-	14.*							B17 P1	20.0	MASONRY
23	-	14.*							B18 P1	19.0	MASONRY
24	-	14.*							B19 P1	22.0	MASONRY
25	-	14.*							B20 P1	19.0	MASONRY
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	8 BAL	67.	500.	66.2
2	9 BAL	67.	500.	65.8
3	10 BAL	67.	500.	62.8
4	11 BAL	67.	500.	63.2
5	12 BAL	67.	500.	66.9

```
 6  13 BAL    67.    500.   62.6
-------------------------------

BARRIER TYPE                COST
-------------------------------
JERM                        0.
MASONRY                149337.
MASONRY/JERSEY              0.
CONCRETE                    0.
-------------------------------
       TOTAL COST = $   149000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
 6. 6. 6. 6. 6. 6. 6.20.20.20.20.20.20.16.20.20.20.20.20.14.14.14.14.14.14.
```

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

APPENDIX 13

RUN 24SA

1621 East Seventeenth Street, Suite K Santa Ana, California 92705-8518
Phone (714) 835-0249 FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS24SA
BARRIER COST FILE : CALIF$.DTA
DATE : 07-20-2006

FUTURE LDN/BALCONIES/BUILT SITE/NO FW OR SW WALLS/BERMS UNITS 8-13 SW ONLY

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	500.0	226.0	304.0	310.0 *153	* 6
2	0.0	226.0	304.0	310.0 *154+40	* 6
3	36.0	226.0	304.0	310.0 *154+50	* 6
4	169.0	226.0	308.0	314.0 *155	* 6
5	312.0	226.0	308.0	314.0 *SITE	* 6
	334.0	226.0	308.0	314.0 *155+40	* 6

Barrier No. 2 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0 *156+40	* 6
2	809.0	252.0	308.0	314.0 *157	* 6
	934.0	252.0	308.0	314.0 *157+40	* 6

Barrier No. 3 Description: NORTH SIDE BLDG 1
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	254.0	307.6	327.6 *B3 P1	* 20
	372.0	433.0	319.0	339.0 *B3 P2	* 20

Barrier No. 4 Description: UNIT 8/9/10 BLDG
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	317.0	467.0	323.0	343.0 *B4 P1	* 20
	392.0	467.0	323.0	343.0 *B4 P2	* 20

Barrier No. 5 Description: WING ALL 8 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	267.0	307.0	327.0 *B5 P1	* 20
	382.0	267.0	307.0	327.0 *B5 P2	* 20

Barrier No. 6 Description: WING ALL 8 EAST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	283.0	307.0	327.0 *B6 P1	* 20
	382.0	283.0	307.0	327.0 *B6 P2	* 20

Barrier No. 7 Description: WING ALL 9 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	296.0	309.0	329.0 *B7 P1	* 20

*	382.0	296.0	309.0	329.0 *B7 P2	* 20

Barrier No. 8
Type - (2)MASONRY Description: WING ALL 9 EAST/10 WEST
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	316.0	309.0	329.0 *B8 P1	* 20
	382.0	316.0	309.0	329.0 *B8 P2	* 20

Barrier No. 9
Type - (2)MASONRY Description: WING ALL 10 EAST
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	336.0	311.0	331.0 *B9 P1	* 20
	382.0	336.0	311.0	323.0 *B9 P2	* 12

Barrier No. 10
Type - (2)MASONRY Description: WING ALL 11 WEST
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	346.0	313.0	333.0 *B10 P1	* 20
	382.0	346.0	313.0	333.0 *B10 P2	* 20

Barrier No. 11
Type - (2)MASONRY Description: WING ALL 11 EAST/12 WEST
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	365.0	313.0	333.0 *B11 P1	* 20
	382.0	365.0	313.0	333.0 *B11 P2	* 20

arrier No. 12
ype - (2)MASONRY Description: WING ALL 12 EAST
eight Increment (DELZ)= 0.0 No. Height Changes (P)=0

G.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
	372.0	387.0	315.0	335.0 *B12 P1	* 20
	382.0	387.0	315.0	335.0 *B12 P2	* 20

rrier No. 13
pe - (2)MASONRY Description: WING ALL 13 WEST

Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	395.0	317.0	337.0 *B13 P1	* 20
	382.0	395.0	317.0	337.0 *B13 P2	* 20

Barrier No. 14 Description: WING ALL 13 EAST/14 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	414.0	317.0	337.0 *B14 P1	* 20
	382.0	414.0	317.0	337.0 *B14 P2	* 20

Barrier No. 15 Description: BAL 8 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	267.0	307.0	320.5 *B15 P1	* 14
	382.0	283.0	307.0	320.5 *B15 P2	* 14

Barrier No. 16 Description: BAL 9 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	296.0	309.0	322.5 *B16 P1	* 14
	382.0	316.0	309.0	322.5 *B16 P2	* 14

Barrier No. 17 Description: BAL 10 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	316.0	312.0	325.5 *B17 P1	* 14
	382.0	336.0	312.0	325.5 *B17 P2	* 14

Barrier No. 18 Description: BAL 11 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	382.0	346.0	313.0	326.5	*B18 P1 * 14
	382.0	365.0	313.0	326.5	*B18 P2 * 14

Barrier No. 19 Description: BAL 12 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	365.0	315.0	328.5	*B19 P1 * 14
	382.0	387.0	315.0	328.5	*B19 P2 * 14

Barrier No. 20 Description: BAL 13 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	395.0	317.0	330.5	*B20 P1 * 14
	382.0	414.0	317.0	330.5	*B20 P2 * 14

RECEIVER DATA

R. NO.	X	Y	Z	DNL	PEOPLE	ID
1	377.0	274.0	322.1	67	500	8 BAL
2	377.0	306.0	324.1	67	500	9 BAL
3	377.0	324.0	326.1	67	500	10 BAL
4	377.0	353.0	328.1	67	500	11 BAL
5	377.0	364.0	330.1	67	500	12 BAL
6	377.0	405.0	332.1	67	500	13 BAL

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
FUTURE LDN/BALCONIES/BUILT SITE/NO FW OR SW WALLS/BERMS UNITS 8-13 SW ONLY

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							156+40
7	-	0.*							157
8	-	0.*							B3 P1
9	-	0.*							B4 P1
10	-	0.*							B5 P1
11	-	0.*							B6 P1
12	-	0.*							B7 P1
13	-	0.*							B8 P1
14	-	0.*							B9 P1
15	-	0.*							B10 P1
16	-	0.*							B11 P1
17	-	0.*							B12 P1
18	-	0.*							B13 P1
19	-	0.*							B14 P1
20	-	0.*							B15 P1
21	-	0.*							B16 P1
22	-	0.*							B17 P1
23	-	0.*							B18 P1
24	-	0.*							B19 P1
25	-	0.*							B20 P1
	0	1	2	3	4	5	6	7	

1

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

A P P E N D I X 1 4

RUN 25SB

1621 East Seventeenth Street, Suite K Santa Ana, California 92705-8518
Phone (714) 835-0249 FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS25SB
BARRIER COST FILE : CALIF$.DTA
DATE : 07-20-2006

LDN/BALCONIES/BUILT/NO FW OR SW WALLS/BERMS UNITS 14-17/15-17 60"/SW ONLY

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1977	55	95	55	38	55	SWEETWATER

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	178.0	304.0	153
	2	NO	0.0	178.0	304.0	154+40
	3	NO	36.0	178.0	304.0	154+50
	4	NO	169.0	178.0	308.0	155
	5	NO	312.0	182.0	308.0	SITE
	6	NO	334.0	182.0	308.0	155+40
	7	NO	489.0	195.0	309.0	156
	8	NO	539.0	195.0	309.0	156+15
	9	NO	623.0	195.0	309.0	156+40
	10	NO	809.0	204.0	309.0	157
			934.0	204.0	309.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	-500.0	226.0	304.0	310.0	*153	* 6
2	0.0	226.0	304.0	310.0	*154+40	* 6
3	36.0	226.0	304.0	310.0	*154+50	* 6
4	169.0	226.0	308.0	314.0	*155	* 6
5	312.0	226.0	308.0	314.0	*SITE	* 6
	334.0	226.0	308.0	314.0	*155+40	* 6

Barrier No. 2 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	623.0	243.0	308.0	314.0	*156+40	* 6
2	809.0	252.0	308.0	314.0	*157	* 6
	934.0	252.0	308.0	314.0	*157+40	* 6

Barrier No. 3 Description: NORTH SIDE BLDG 1
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	254.0	307.6	327.6	*B3 P1	* 20
	372.0	433.0	319.0	339.0	*B3 P2	* 20

Barrier No. 4 Description: UNIT 8/9/10 BLDG
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	317.0	467.0	323.0	343.0	*B4 P1	* 20
	392.0	467.0	323.0	343.0	*B4 P2	* 20

Barrier No. 5 Description: WING ALL 8 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	267.0	307.0	327.0	*B5 P1	* 20
	382.0	267.0	307.0	327.0	*B5 P2	* 20

Barrier No. 6 Description: WING ALL 8 EAST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	283.0	307.0	327.0	*B6 P1	* 20
	382.0	283.0	307.0	327.0	*B6 P2	* 20

Barrier No. 7 Description: WING ALL 9 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	296.0	309.0	329.0	*B7 P1	* 20

	382.0	296.0	309.0	329.0	*B7 P2 * 20

Barrier No. 8 Description: WING ALL 9 EAST/10 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	316.0	309.0	329.0	*B8 P1 * 20
	382.0	316.0	309.0	329.0	*B8 P2 * 20

Barrier No. 9 Description: WING ALL 10 EAST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	336.0	311.0	331.0	*B9 P1 * 20
	382.0	336.0	311.0	323.0	*B9 P2 * 12

Barrier No. 10 Description: WING ALL 11 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	346.0	313.0	333.0	*B10 P1 * 20
	382.0	346.0	313.0	333.0	*B10 P2 * 20

Barrier No. 11 Description: WING ALL 11 EAST/12 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	365.0	313.0	333.0	*B11 P1 * 20
	382.0	365.0	313.0	333.0	*B11 P2 * 20

Barrier No. 12 Description: WING ALL 12 EAST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	387.0	315.0	335.0	*B12 P1 * 20
	382.0	387.0	315.0	335.0	*B12 P2 * 20

Barrier No. 13 Description: WING ALL 13 WEST
Type - (2)MASONRY

Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	395.0	317.0	337.0 *B13 P1	* 20
	382.0	395.0	317.0	337.0 *B13 P2	* 20

Barrier No. 14 Description: WING ALL 13 EAST/14 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	414.0	317.0	337.0 *B14 P1	* 20
	382.0	414.0	317.0	337.0 *B14 P2	* 20

Barrier No. 15 Description: BAL 14 60" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	414.0	319.0	332.5 *B15 P1	* 14
	382.0	434.0	319.0	332.5 *B15 P2	* 14

Barrier No. 16 Description: BAL 15 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	457.0	322.0	337.0 *B16 P1	* 15
	392.0	457.0	322.0	337.0 *B16 P2	* 15

Barrier No. 17 Description: BAL 16 60" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	352.0	457.0	323.0	338.0 *B17 P1	* 15
	372.0	457.0	323.0	338.0 *B17 P2	* 15

Barrier No. 18 Description: BAL 17 60" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	322.0	457.0	323.0	338.0	*B18	P1	* 15
	342.0	457.0	323.0	338.0	*B18	P2	* 15

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	377.0	412.0	334.1	67	500	14 BAL
2	376.0	462.0	337.0	67	500	15 BAL
3	356.0	462.0	337.5	67	500	16 BAL
4	329.0	462.0	338.0	67	500	17 BAL

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
LDN/BALCONIES/BUILT/NO FW OR SW WALLS/BERMS UNITS 14-17/15-17 60"/SW ONLY

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							156+40
7	-	0.*							157
8	-	0.*							B3 P1
9	-	0.*							B4 P1
10	-	0.*							B5 P1
11	-	0.*							B6 P1
12	-	0.*							B7 P1
13	-	0.*							B8 P1
14	-	0.*							B9 P1
15	-	0.*							B10 P1
16	-	0.*							B11 P1
17	-	0.*							B12 P1
18	-	0.*							B13 P1
19	-	0.*							B14 P1
20	-	0.*							B15 P1
21	-	0.*							B16 P1
22	-	0.*							B17 P1
23	-	0.*							B18 P1
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR	BARRIER HEIGHTS	BAR

ELE	0	1	2	3	4	5	6	7	ID	LENGTH	TYPE
1	-	6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
[illegible]	-	6.*							154+50	133.1	MASONRY
[illegible]	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	6.*							156+40	186.2	MASONRY
7	-	6.*							157	125.0	MASONRY
8	-	20.*							B3 P1	179.4	MASONRY
9	-	20.*							B4 P1	75.0	MASONRY
10	-	20.*							B5 P1	10.0	MASONRY
11		20.*							B6 P1	10.0	MASONRY
12	-	20.*							B7 P1	10.0	MASONRY
13	-	20.*							B8 P1	10.0	MASONRY
14		16.*							B9 P1	12.8	MASONRY
15	-	20.*							B10 P1	10.0	MASONRY
16		20.*							B11 P1	10.0	MASONRY
17	-	20.*							B12 P1	10.0	MASONRY
[illegible]	-	20.*							B13 P1	10.0	MASONRY
19	-	20.*							B14 P1	10.0	MASONRY
20		14.*							B15 P1	20.0	MASONRY
21	-	15.*							B16 P1	20.0	MASONRY
22	-	15.*							B17 P1	20.0	MASONRY
23	-	15.*							B18 P1	20.0	MASONRY

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	14 BAL	67.	500.	58.0
2	15 BAL	67.	500.	55.4
3	16 BAL	67.	500.	55.2
4	17 BAL	67.	500.	55.6

BARRIER TYPE	COST
BERM	0.
MASONRY	146265.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 146000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION

6. 6. 6. 6. 6. 6. 6.20.20.20.20.20.20.16.20.20.20.20.20.14.15.15.15.

GORDON BRICKEN & ASSOCIATES
ACOUSTICAL and ENERGY ENGINEERS

APPENDIX 15

RUN 26SB

1621 East Seventeenth Street, Suite K Santa Ana, California 92705-8518
Phone (714) 835-0249 FAX (714) 835-1957

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : HOSS26SB
BARRIER COST FILE : CALIF$.DTA
DATE : 07-20-2006

LDN/BALCONIES/BUILTE/NO FW OR SW WALLS/BERMS UNITS 14-17/ 15-17 60"/FW ONLY

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	8096	65	239	65	273	65	SR125 NORTHBOUND
2	8096	65	239	65	273	65	SR125 SOUTHBOUND

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-500.0	60.0	328.0	153
	2	NO	0.0	60.0	328.0	154+40
	3	NO	36.0	60.0	328.0	154+50
	4	NO	169.0	60.0	328.0	155
	5	NO	312.0	60.0	328.0	SITE
	6	NO	334.0	60.0	328.0	155+40
	7	NO	489.0	60.0	328.0	156
	8	NO	539.0	60.0	328.0	156+15
	9	NO	623.0	60.0	328.0	156+40
	10	NO	809.0	60.0	328.0	157
			934.0	60.0	328.0	157+40
2	1	NO	-500.0	-60.0	328.0	153
	2	NO	0.0	-60.0	328.0	154+40
	3	NO	36.0	-60.0	328.0	154+50
	4	NO	169.0	-60.0	328.0	155
	5	NO	312.0	-60.0	328.0	SITE
	6	NO	334.0	-60.0	328.0	155+40
	7	NO	489.0	-60.0	328.0	156
	8	NO	539.0	-60.0	328.0	156+15
	9	NO	623.0	-60.0	328.0	156+40
	10	NO	809.0	-60.0	328.0	157
			934.0	-60.0	328.0	157+40

BARRIER DATA

Barrier No. 1 Description: SWEETWATER MHP SOUTH WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	-500.0	226.0	304.0	310.0 *153	*	6
2	0.0	226.0	304.0	310.0 *154+40	*	6
3	36.0	226.0	304.0	310.0 *154+50	*	6
4	169.0	226.0	308.0	314.0 *155	*	6
5	312.0	226.0	308.0	314.0 *SITE	*	6
	334.0	226.0	308.0	314.0 *155+40	*	6

Barrier No. 2 Description: SWEETWATER WALL NORTH OF SITE
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	623.0	243.0	308.0	314.0 *156+40	*	6
2	809.0	252.0	308.0	314.0 *157	*	6
	934.0	252.0	308.0	314.0 *157+40	*	6

Barrier No. 3 Description: NORTH SIDE BLDG 1
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	372.0	254.0	307.6	327.6 *B3 P1	*	20
	372.0	433.0	319.0	339.0 *B3 P2	*	20

Barrier No. 4 Description: UNIT 8/9/10 BLDG
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	317.0	467.0	323.0	343.0 *B4 P1	*	20
	392.0	467.0	323.0	343.0 *B4 P2	*	20

Barrier No. 5 Description: WING ALL 8 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS	
1	372.0	267.0	307.0	327.0 *B5 P1	*	20
	382.0	267.0	307.0	327.0 *B5 P2	*	20

Barrier No. 6 Description: WING ALL 8 EAST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS

1	372.0	283.0	307.0	327.0	*B6 P1	* 20
	382.0	283.0	307.0	327.0	*B6 P2	* 20

Barrier No. 7 Description: WING ALL 9 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	296.0	309.0	329.0	*B7 P1	* 20
	382.0	296.0	309.0	329.0	*B7 P2	* 20

Barrier No. 8 Description: WING ALL 9 EAST/10 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	316.0	309.0	329.0	*B8 P1	* 20
	382.0	316.0	309.0	329.0	*B8 P2	* 20

Barrier No. 9 Description: WING ALL 10 EAST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	336.0	311.0	331.0	*B9 P1	* 20
	382.0	336.0	311.0	323.0	*B9 P2	* 12

Barrier No. 10 Description: WING ALL 11 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	372.0	346.0	313.0	333.0	*B10 P1	* 20
	382.0	346.0	313.0	333.0	*B10 P2	* 20

Barrier No. 11 Description: WING ALL 11 EAST/12 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
	372.0	365.0	313.0	333.0	*B11 P1	* 20
	382.0	365.0	313.0	333.0	*B11 P2	* 20

Barrier No. 12 Description: WING ALL 12 EAST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	387.0	315.0	335.0 *B12 P1	* 20
	382.0	387.0	315.0	335.0 *B12 P2	* 20

Barrier No. 13 Description: WING ALL 13 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	395.0	317.0	337.0 *B13 P1	* 20
	382.0	395.0	317.0	337.0 *B13 P2	* 20

Barrier No. 14 Description: WING ALL 13 EAST/14 WEST
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	414.0	317.0	337.0 *B14 P1	* 20
	382.0	414.0	317.0	337.0 *B14 P2	* 20

Barrier No. 15 Description: BAL 14 42" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	382.0	414.0	319.0	332.5 *B15 P1	* 14
	382.0	434.0	319.0	332.5 *B15 P2	* 14

Barrier No. 16 Description: BAL 15 60" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	372.0	457.0	322.0	337.0 *B16 P1	* 15
	392.0	457.0	322.0	337.0 *B16 P2	* 15

Barrier No. 17 Description: BAL 16 60" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

			GROUND	TOP	BARRIER

SEG.	X	Y	(Z0)	(Z)	HEIGHTS AT ENDS
1	352.0	457.0	132.0	338.0	*B17 P1 * %206
	372.0	457.0	323.0	338.0	*B17 P2 * 15

Barrier No. 18 Description: BAL 17 60" WALL
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	322.0	457.0	323.0	338.0	*B18 P1 * 15
	342.0	457.0	323.0	338.0	*B18 P2 * 15

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	377.0	412.0	334.1	67	500	14 BAL
2	376.0	462.0	337.0	67	500	15 BAL
3	356.0	462.0	337.5	67	500	16 BAL
4	329.0	462.0	338.0	67	500	17 BAL

P-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

K CONSTANTS

ALL LANE RECEIVER/PAIRS = -4.7 DBA

SOUND32 - RELEASE 07/30/91

TITLE:
LDN/BALCONIES/BUILTE/NO FW OR SW WALLS/BERMS UNITS 14-17/ 15-17 60"/FW ONLY

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							153
2	-	0.*							154+40
3	-	0.*							154+50
4	-	0.*							155
5	-	0.*							SITE
6	-	0.*							156+40
7	-	0.*							157
8	-	0.*							B3 P1
9	-	0.*							B4 P1
10	-	0.*							B5 P1
11	-	0.*							B6 P1
12	-	0.*							B7 P1
13	-	0.*							B8 P1
14	-	0.*							B9 P1
15	-	0.*							B10 P1
16	-	0.*							B11 P1
17	-	0.*							B12 P1
18	-	0.*							B13 P1
19	-	0.*							B14 P1
20	-	0.*							B15 P1
21	-	0.*							B16 P1
22	-	0.*							B17 P1
23	-	0.*							B18 P1
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR BARRIER HEIGHTS BAR

ELE	0	1	2	3	4	5	6	7	ID	LENGTH	TYPE
1	-	6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
[illegible]	-	6.*							154+50	133.1	MASONRY
[illegible]	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	6.*							156+40	186.2	MASONRY
7	-	6.*							157	125.0	MASONRY
8	-	20.*							B3 P1	179.4	MASONRY
9	-	20.*							B4 P1	75.0	MASONRY
10	-	20.*							B5 P1	10.0	MASONRY
11	-	20.*							B6 P1	10.0	MASONRY
12	-	20.*							B7 P1	10.0	MASONRY
13	-	20.*							B8 P1	10.0	MASONRY
14	-	16.*							B9 P1	12.8	MASONRY
15	-	20.*							B10 P1	10.0	MASONRY
16		20.*							B11 P1	10.0	MASONRY
17	-	20.*							B12 P1	10.0	MASONRY
[illegible]	-	20.*							B13 P1	10.0	MASONRY
19	-	20.*							B14 P1	10.0	MASONRY
20	-	14.*							B15 P1	20.0	MASONRY
21	-	15.*							B16 P1	20.0	MASONRY
22	-	111.*							B17 P1	20.0	MASONRY
23	-	15.*							B18 P1	20.0	MASONRY

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	14 BAL	67.	500.	66.0
2	15 BAL	67.	500.	63.9
3	16 BAL	67.	500.	65.6
4	17 BAL	67.	500.	64.8

BARRIER TYPE	COST
BERM	0.
MASONRY	142985.
MASONRY/JERSEY	0.
CONCRETE	0.

BARRIER DATA
****

BAR NUM	BARRIER HEIGHTS 0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	6.*							153	500.0	MASONRY
2	-	6.*							154+40	36.0	MASONRY
3	-	6.*							154+50	133.1	MASONRY
4	-	6.*							155	143.0	MASONRY
5	-	6.*							SITE	22.0	MASONRY
6	-	6.*							156+40	186.2	MASONRY
7	-	6.*							157	125.0	MASONRY
8	-	20.*							B3 P1	179.4	MASONRY
9	-	20.*							B4 P1	75.0	MASONRY
10	-	20.*							B5 P1	10.0	MASONRY
11	-	20.*							B6 P1	10.0	MASONRY
12		20.*							B7 P1	10.0	MASONRY
13	-	20.*							B8 P1	10.0	MASONRY
14	-	16.*							B9 P1	12.8	MASONRY
15		20.*							B10 P1	10.0	MASONRY
[illegible]		20.*							B11 P1	10.0	MASONRY
17	-	20.*							B12 P1	10.0	MASONRY
18	-	20.*							B13 P1	10.0	MASONRY
19	-	20.*							B14 P1	10.0	MASONRY
20	-	14.*							B15 P1	16.0	MASONRY
21	-	14.*							B16 P1	20.0	MASONRY
22	-	14.*							B17 P1	20.0	MASONRY
23	-	14.*							B18 P1	19.0	MASONRY
24	-	14.*							B19 P1	22.0	MASONRY
25	-	14.*							B20 P1	19.0	MASONRY

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	8 BAL	67.	500.	59.6
[illegible]	9 BAL	67.	500.	58.1
3	10 BAL	67.	500.	56.0
4	11 BAL	67.	500.	55.4
5	12 BAL	67.	500.	59.1

```
 6  13 BAL    67.    500.   54.3
-------------------------------

BARRIER TYPE                COST
-------------------------------
BERM                        0.
MASONRY                149337.
MASONRY/JERSEY              0.
CONCRETE                    0.
-------------------------------
       TOTAL COST = $   149000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
 6. 6. 6. 6. 6. 6. 6.20.20.20.20.20.20.16.20.20.20.20.20.14.14.14.14.14.14.
```