
To	Christopher A. Joseph and Associates	Reference number
		32363/AY
cc	Jack Rubens, Sheppard Mullin Richter and Hampton	File reference
From	Amir Yazdanniyaz, PE	Date
		June 24, 2004
Subject	Canyon Hills Supplemental Noise Report	

Arup Acoustics has performed a supplemental traffic noise analysis with respect to the proposed Canyon Hills Project in order to evaluate the performance of the proposed noise mitigation in connection with the relocation of the sound receptors R10, R11 and R12. These sound receptors represent the future sites of proposed residential homes that the Draft EIR identified as significantly impacted by the traffic noise from Interstate 210. Initial findings in the Draft EIR indicated that Interstate 210 traffic noise levels at these sound receptors would likely exceed the Caltrans noise criteria of 67dBA and that sound walls would not be effective due to local topography and landscape.

This supplemental report analyzes the Interstate 210 traffic noise impacts on the modified locations of sound receptors R10, R11 and R12.

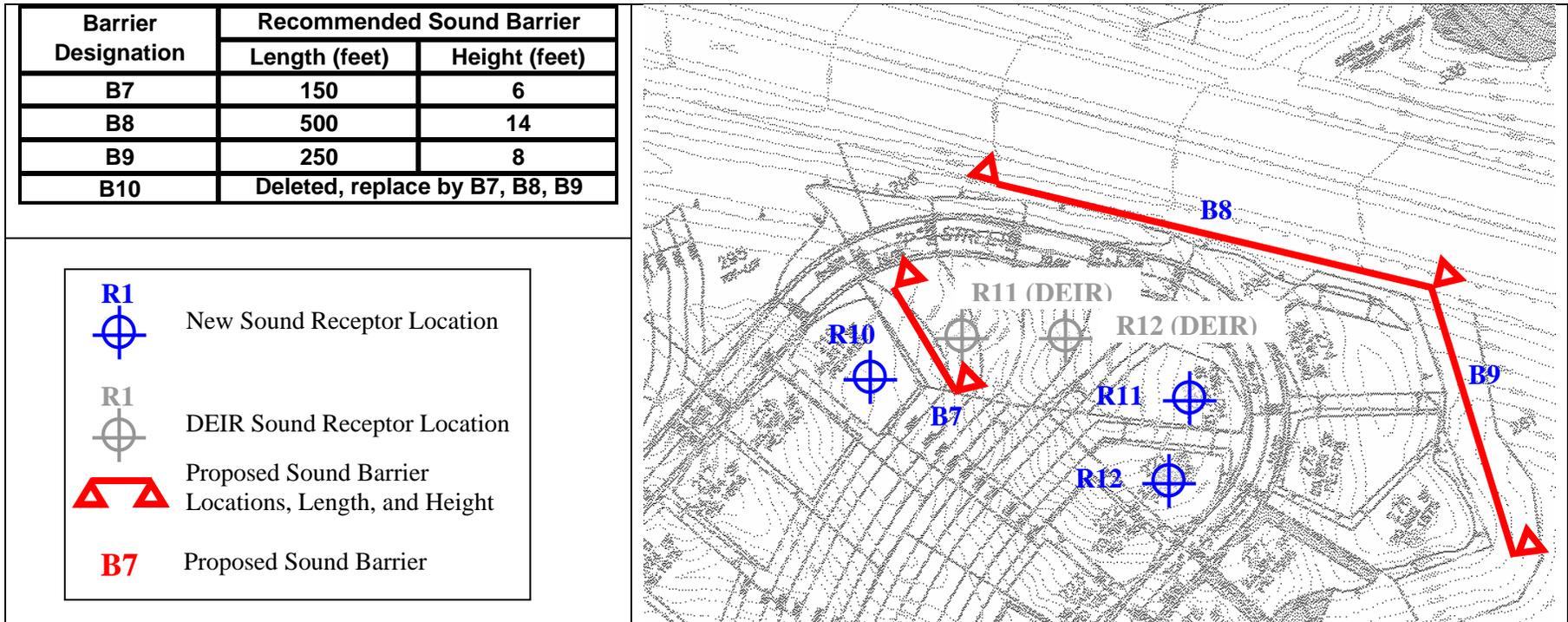
Traffic noise analysis was carried out in accordance with the project noise prediction model established in conjunction with the Draft EIR noise study. New technical information utilized in this supplemental study includes the vesting tentative tract map prepared for the proposed Canyon Hills project. Other related technical information used to estimate traffic noise levels, including traffic volume, fleet mix and freeway speed, remained identical to the data utilized in connection with the analysis in the Draft EIR. Figure 3-S, which includes the relevant portion of the vesting tentative tract map, provides a visual presentation of the sound receptors R10, R11 and R12.

The new modified sound walls identified as B7, B8 and B9 on Figure 3-S which range in height from 6 feet to 14 feet (above grade level) and in length from 150 feet to 500 feet, are estimated to provide noise reduction ranging from 6dBA to 11dBA. Furthermore, the sound wall identified as B10 in the Draft EIR has been deleted because the new revised sound walls are sufficient to mitigate the noise impacts on R10, R11 and R12. Table 7-S provides additional details regarding the modified proposed sound walls. Appendix H-S presents the technical output of the traffic noise prediction model with respect to the R10, R11, and R12.

Based on the noise analysis outlined above, we conclude as follows:

1. With the construction of the modified proposed sound walls (B7, B8 and B9) and the other sound walls described in the Draft EIR, all of the proposed residential lots would meet the Caltrans traffic noise criteria.
2. The new modified sound walls would not change the findings in the Draft EIR with respect to the rest of the sound receptors (i.e., R1 through R9, R13 and R14).
3. The proposed project would experience no significant noise impacts from Interstate 210 traffic.

Figure 3-S: Sound Wall Analysis Based on Interstate 210 Traffic Noise (Partial, South Only)



Tentative Vesting Tract Map (Partial)
 Source: Templeton Planning Group

Table 7-S: Sound Wall Analysis Based on Interstate 210 Traffic Noise (Receptor 10,11, 12 only)

Sound Receptor (Figure 3)	Recommended Sound Wall (Figure 3)	Interstate 210 Traffic Noise Level at Selected Residential Lots Nearest to Interstate 210, L_{eq} in dBA		Interstate 210 Traffic Noise Levels with Respect to Caltrans Criteria of 67 dBA	
		Without Sound Walls	With Sound Walls	Without Sound Walls	With Sound Walls
R10	B7	68	62	Exceeds Criteria by 1 dBA	Meets Criteria
R11	B8 & B9	73	64	Exceeds Criteria by 6 dBA	Meets Criteria
R12	B9	75	63	Exceeds Criteria by 8 dBA	Meets Criteria

Arup**Acoustics**

APPENDIX H-S

**"Sound 2000" Input and
Output Files**

AM PEAK TRAFFIC LEVELS WITH PROPOSED SOUND WALLS (SOUND 2000 INPUT FILE)

CANYON HILLS

T-NORMAL, 1

5609 , 65 , 115 , 65 , 340 , 65

T-NORMAL, 2

5609 , 65 , 115 , 65 , 340 , 65

T-NORMAL, 3

2663 , 65 , 55 , 65 , 161 , 65

T-, 4

5967 , 65 , 123 , 65 , 361 , 65

T-NORMAL, 5

2503 , 65 , 51 , 65 , 152 , 65

L- FREEWAY 210 EASTBOUND LANE 1B, 1

Y,3176.6,-417.3,1654,210 E POINT 32

Y,2788.4,-370.6,1642,210 E POINT 33

Y,1998.6,-235.4,1612,210 E POINT 34

Y,1134.6,-74.1,1572,210 E POINT 35

Y,676.4,-13.1,1548,210 E POINT 36

Y,353.5,-13.1,1532,210 E POINT 37

4.4,-61,1514,210 E POINT 38

L- FREEWAY 210 EASTBOUND LANE 1, 2

N,6459.8,1106.7,1714,210 E POINT 19

N,6163.1,967.2,1712,210 E POINT 20

N,5870.7,792.8,1708,210 E POINT 21

N,5611.5,611.6,1704,210 E POINT 22

N,5327.9,384.9,1701,210 E POINT 23

N,5131.5,232.3,1700,210 E POINT 24

N,4922.1,79.7,1698,210 E POINT 25

N,4689,-72.8,1696,210 E POINT 26

N,4376.6,-208,1690,210 E POINT 27

Y,4145.3,-295.2,1684,210 E POINT 28

Y,3800.6,-373.7,1674,210 E POINT 29

Y,3451.5,-408.6,1662,210 E POINT 31

3176.6,-417.3,1654,210 E POINT 32
L- FREEWAY 210 WESTBOUND LANE 2, 3
N,6556.5,1243.6,1718,210 W POINT 14
7789.1,1752.7,1730,210 W POINT 15
L- FREEWAY 210 EASTBOUND LANE 2, 4
N,7834.4,1673.5,1734,210 E POINT 16
N,7323.8,1455.5,1727,210 E POINT 17
N,6944.2,1302.9,1721,210 E POINT 18
6459.8,1106.7,1714,210 E POINT 19
L- FREEWAY 210 WESTBOUND LANE 1, 5
N,-3.5,57.9,1515,210 W POINT 1
N,652.5,89.7,1550,210 W POINT 2
N,1331.6,-5.6,1580,210 W POINT 3
N,1981.8,-118.2,1612,210 W POINT 4
N,2369.1,-193.2,1626,210 W POINT 5
N,2966.5,-291.6,1646,210 W POINT 6
N,3365.3,-308.9,1656,210 W POINT 7
N,3767,-265.6,1672,210 W POINT 8
N,4191.8,-155.9,1684,210 W POINT 9
N,4446.1,-69.3,1690,210 W POINT 10
N,4957.3,217.4,1696,210 W POINT 11
N,5512.1,656.3,1708,210 W POINT 12
N,5972.8,957.7,1712,210 W POINT 13
6556.5,1243.6,1718,210 W POINT 14
B- SOUTHE, 1 , 2 , 0 ,
1564,-256,1620,1628,
1786.2,-291.6,1600,1614,
1988.1,-333.6,1590,1604,
2035.3,-362.1,1590,1604,
2116.7,-566.5,1580,1588,
B- SOUTHERN, 2 , 1 , 0 ,
452.6,-754.3,1780,1780,B9 P1
655.9,-445,1740,1740,B9 P2
893.2,-375.3,1730,1730,B9 P3
1167.2,-203.3,1630,1630,B9 P4
1489.3,-218.6,1630,1630,B9 P5

1693.3,-246,1630,1630,B9 P6

B- AR10 BARRIER, 3 , 1 , 0 ,

1353,-355,1653,1659

1430,-452,1653,1659

R, 1 , 67 ,500

1317,-401,1658,R10

R, 2 , 67 ,500

1619,-372,1588,R11

R, 3 , 67 ,500

1770,-403,1573.,R12

D, 4.5

ALL,16

C,C

AM PEAK TRAFFIC LEVELS WITH PROPOSED SOUND WALLS (SOUND 2000 OUTPUT FILE)

SOUND32 - RELEASE 07/30/91

TITLE:

CANYON HILLS

REC REC ID DNL PEOPLE LEQ(CAL)

1	REC 10	67.	500.	60.9
2	REC 11	67.	500.	64.1
3	REC 12	67.	500.	63.0

AM PEAK TRAFFIC LEVELS WITHOUT PROPOSED SOUND WALLS (SOUND 2000 INPUT FILE)

CANYON HILLS

T-NORMAL, 1

5609 , 65 , 115 , 65 , 340 , 65

T-NORMAL, 2

5609 , 65 , 115 , 65 , 340 , 65

T-NORMAL, 3

2663 , 65 , 55 , 65 , 161 , 65

T-, 4

5967 , 65 , 123 , 65 , 361 , 65

T-NORMAL, 5

2503 , 65 , 51 , 65 , 152 , 65

L- FREEWAY 210 EASTBOUND LANE 1B, 1

Y,3176.6,-417.3,1654,210 E POINT 32

Y,2788.4,-370.6,1642,210 E POINT 33

Y,1998.6,-235.4,1612,210 E POINT 34

Y,1134.6,-74.1,1572,210 E POINT 35

Y,676.4,-13.1,1548,210 E POINT 36

Y,353.5,-13.1,1532,210 E POINT 37

4.4,-61,1514,210 E POINT 38

L- FREEWAY 210 EASTBOUND LANE 1, 2

N,6459.8,1106.7,1714,210 E POINT 19

N,6163.1,967.2,1712,210 E POINT 20

N,5870.7,792.8,1708,210 E POINT 21

N,5611.5,611.6,1704,210 E POINT 22

N,5327.9,384.9,1701,210 E POINT 23

N,5131.5,232.3,1700,210 E POINT 24

N,4922.1,79.7,1698,210 E POINT 25

N,4689,-72.8,1696,210 E POINT 26

N,4376.6,-208,1690,210 E POINT 27

Y,4145.3,-295.2,1684,210 E POINT 28

Y,3800.6,-373.7,1674,210 E POINT 29

Y,3451.5,-408.6,1662,210 E POINT 31

3176.6,-417.3,1654,210 E POINT 32

L- FREEWAY 210 WESTBOUND LANE 2, 3

N,6556.5,1243.6,1718,210 W POINT 14
7789.1,1752.7,1730,210 W POINT 15
L- FREEWAY 210 EASTBOUND LANE 2, 4
N,7834.4,1673.5,1734,210 E POINT 16
N,7323.8,1455.5,1727,210 E POINT 17
N,6944.2,1302.9,1721,210 E POINT 18
6459.8,1106.7,1714,210 E POINT 19
L- FREEWAY 210 WESTBOUND LANE 1, 5
N,-3.5,57.9,1515,210 W POINT 1
N,652.5,89.7,1550,210 W POINT 2
N,1331.6,-5.6,1580,210 W POINT 3
N,1981.8,-118.2,1612,210 W POINT 4
N,2369.1,-193.2,1626,210 W POINT 5
N,2966.5,-291.6,1646,210 W POINT 6
N,3365.3,-308.9,1656,210 W POINT 7
N,3767,-265.6,1672,210 W POINT 8
N,4191.8,-155.9,1684,210 W POINT 9
N,4446.1,-69.3,1690,210 W POINT 10
N,4957.3,217.4,1696,210 W POINT 11
N,5512.1,656.3,1708,210 W POINT 12
N,5972.8,957.7,1712,210 W POINT 13
6556.5,1243.6,1718,210 W POINT 14
B- SOUTHERN, 1 , 1 , 0 ,
452.6,-754.3,1780,1780,B9 P1
655.9,-445,1740,1740,B9 P2
893.2,-375.3,1730,1730,B9 P3
1167.2,-203.3,1630,1630,B9 P4
1489.3,-218.6,1630,1630,B9 P5
1693.3,-246,1630,1630,B9 P6
R, 1 , 67 ,500
1317,-401,1658,R10
R, 2 , 67 ,500
1619,-372,1588,R11
R, 3 , 67 ,500
1770,-403,1573,R12
D, 4.5

ALL,16

C,C

AM PEAK TRAFFIC LEVELS WITHOUT PROPOSED SOUND WALLS (SOUND 2000 OUTPUT FILE)

SOUND32 - RELEASE 07/30/91

TITLE:

CANYON HILLS

REC REC ID DNL PEOPLE LEQ(CAL)

1 REC 10 67. 500. 68.0
2 REC 11 67. 500. 72.8
3 REC 12 67. 500. 75.2

PM PEAK TRAFFIC LEVELS WITH PROPOSED SOUND WALLS (SOUND 2000 INPUT FILE)

CANYON HILLS

T-NORMAL, 1

3021 , 65 , 62 , 65 , 183 , 65

T-NORMAL, 2

3021 , 65 , 62 , 65 , 183 , 65

T-NORMAL, 3

6018 , 65 , 124 , 65 , 364 , 65

T-, 4

3213 , 65 , 66 , 65 , 195 , 65

T-NORMAL, 5

5657 , 65 , 116 , 65 , 362 , 65

L- FREEWAY 210 EASTBOUND LANE 1B, 1

Y,3176.6,-417.3,1654,210 E POINT 32

Y,2788.4,-370.6,1642,210 E POINT 33

Y,1998.6,-235.4,1612,210 E POINT 34

Y,1134.6,-74.1,1572,210 E POINT 35

Y,676.4,-13.1,1548,210 E POINT 36

Y,353.5,-13.1,1532,210 E POINT 37

4.4,-61,1514,210 E POINT 38

L- FREEWAY 210 EASTBOUND LANE 1, 2

N,6459.8,1106.7,1714,210 E POINT 19

N,6163.1,967.2,1712,210 E POINT 20

N,5870.7,792.8,1708,210 E POINT 21

N,5611.5,611.6,1704,210 E POINT 22

N,5327.9,384.9,1701,210 E POINT 23

N,5131.5,232.3,1700,210 E POINT 24

N,4922.1,79.7,1698,210 E POINT 25

N,4689,-72.8,1696,210 E POINT 26

N,4376.6,-208,1690,210 E POINT 27

Y,4145.3,-295.2,1684,210 E POINT 28

Y,3800.6,-373.7,1674,210 E POINT 29

Y,3451.5,-408.6,1662,210 E POINT 31

3176.6,-417.3,1654,210 E POINT 32

L- FREEWAY 210 WESTBOUND LANE 2, 3

N,6556.5,1243.6,0,210 W POINT 14
7789.1,1752.7,1730,210 W POINT 15
L- FREEWAY 210 EASTBOUND LANE 2, 4
N,7834.4,1673.5,1734,210 E POINT 16
N,7323.8,1455.5,1727,210 E POINT 17
N,6944.2,1302.9,1721,210 E POINT 18
6459.8,1106.7,1714,210 E POINT 19
L- FREEWAY 210 WESTBOUND LANE 1, 5
N,-3.5,57.9,1515,210 W POINT 1
N,652.5,89.7,1550,210 W POINT 2
N,1331.6,-5.6,1580,210 W POINT 3
N,1981.8,-118.2,1612,210 W POINT 4
N,2369.1,-193.2,1626,210 W POINT 5
N,2966.5,-291.6,1646,210 W POINT 6
N,3365.3,-308.9,1656,210 W POINT 7
N,3767,-265.6,1672,210 W POINT 8
N,4191.8,-155.9,1684,210 W POINT 9
N,4446.1,-69.3,1690,210 W POINT 10
N,4957.3,217.4,1696,210 W POINT 11
N,5512.1,656.3,1708,210 W POINT 12
N,5972.8,957.7,1712,210 W POINT 13
6556.5,1243.6,1718,210 W POINT 14
B- SOUTHE, 1 , 2 , 0 ,
1564,-256,1620,1628,
1786.2,-291.6,1600,1614,
1988.1,-333.6,1590,1604,
2035.3,-362.1,1590,1604,
2116.7,-566.5,1580,1588,
B- SOUTHERN, 2 , 1 , 0 ,
452.6,-754.3,1780,1780,B9 P1
655.9,-445,1740,1740,B9 P2
893.2,-375.3,1730,1730,B9 P3
1167.2,-203.3,1630,1630,B9 P4
1489.3,-218.6,1630,1630,B9 P5
1693.3,-246,1630,1630,B9 P6
B- AR10 BARRIER, 3 , 1 , 0 ,

1353,-355,1653,1659

1430,-452,1653,1659

R, 1 , 67 ,500

1317,-401,1658,R10

R, 2 , 67 ,500

1619,-372,1588,R11

R, 3 , 67 ,500

1770,-403,1573.,R12

D, 4.5

ALL,16

C,C

**PM PEAK TRAFFIC LEVELS WITH PROPOSED SOUND WALLS (SOUND 2000
OUTPUT FILE)**

SOUND32 - RELEASE 07/30/91

TITLE:

CANYON HILLS

REC REC ID DNL PEOPLE LEQ(CAL)

1 REC 10 67. 500. 61.7
2 REC 11 67. 500. 63.3
3 REC 12 67. 500. 61.9

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3021 , 65 , 62 , 65 , 183 , 65

T-NORMAL, 3

6018 , 65 , 124 , 65 , 364 , 65

T-, 4

3213 , 65 , 66 , 65 , 195 , 65

T-NORMAL, 5

5657 , 65 , 116 , 65 , 362 , 65

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Y,1998.6,-235.4,1612,210 E POINT 34

Y,1134.6,-74.1,1572,210 E POINT 35

Y,676.4,-13.1,1548,210 E POINT 36

Y,353.5,-13.1,1532,210 E POINT 37

4.4,-61,1514,210 E POINT 38

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N,5870.7,792.8,1708,210 E POINT 21

N,5611.5,611.6,1704,210 E POINT 22

N,5327.9,384.9,1701,210 E POINT 23

N,5131.5,232.3,1700,210 E POINT 24

N,4922.1,79.7,1698,210 E POINT 25

N,4689,-72.8,1696,210 E POINT 26

N,4376.6,-208,1690,210 E POINT 27

Y,4145.3,-295.2,1684,210 E POINT 28

Y,3800.6,-373.7,1674,210 E POINT 29

Y,3451.5,-408.6,1662,210 E POINT 31

3176.6,-417.3,1654,210 E POINT 32

L- FREEWAY 210 WESTBOUND LANE 2, 3

N,6556.5,1243.6,0,210 W POINT 14
7789.1,1752.7,1730,210 W POINT 15
L- FREEWAY 210 EASTBOUND LANE 2, 4
N,7834.4,1673.5,1734,210 E POINT 16
N,7323.8,1455.5,1727,210 E POINT 17
N,6944.2,1302.9,1721,210 E POINT 18
6459.8,1106.7,1714,210 E POINT 19
L- FREEWAY 210 WESTBOUND LANE 1, 5
N,-3.5,57.9,1515,210 W POINT 1
N,652.5,89.7,1550,210 W POINT 2
N,1331.6,-5.6,1580,210 W POINT 3
N,1981.8,-118.2,1612,210 W POINT 4
N,2369.1,-193.2,1626,210 W POINT 5
N,2966.5,-291.6,1646,210 W POINT 6
N,3365.3,-308.9,1656,210 W POINT 7
N,3767,-265.6,1672,210 W POINT 8
N,4191.8,-155.9,1684,210 W POINT 9
N,4446.1,-69.3,1690,210 W POINT 10
N,4957.3,217.4,1696,210 W POINT 11
N,5512.1,656.3,1708,210 W POINT 12
N,5972.8,957.7,1712,210 W POINT 13
6556.5,1243.6,1718,210 W POINT 14
B- SOUTHERN, 1 , 1 , 0 ,
452.6,-754.3,1780,1780,B9 P1
655.9,-445,1740,1740,B9 P2
893.2,-375.3,1730,1730,B9 P3
1167.2,-203.3,1630,1630,B9 P4
1489.3,-218.6,1630,1630,B9 P5
1693.3,-246,1630,1630,B9 P6
R, 1 , 67 ,500
1317,-401,1658,R10
R, 2 , 67 ,500
1619,-372,1588,R11
R, 3 , 67 ,500
1770,-403,1573.,R12
D, 4.5

ALL,16

C,C

**PM PEAK TRAFFIC LEVELS WITHOUT PROPOSED SOUND WALLS (SOUND 2000
OUTPUT FILE)**

SOUND32 - RELEASE 07/30/91

TITLE:

CANYON HILLS

REC REC ID DNL PEOPLE LEQ(CAL)

1	REC 10	67.	500.	67.9
2	REC 11	67.	500.	72.3
3	REC 12	67.	500.	74.9
