

APPENDIX K

FHWA TRAFFIC NOISE MODEL PRINTOUTS



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TABLE Existing NP-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 427
ELEVATION AT BARRIER BASE: 442
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 445
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 253
BARRIER TO RECEPTOR DISTANCE (FT): 138

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 62.02

BARRIER ATTENUATION (dB):
Autos: - 6.65
Med. Trucks: - 5.97
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 55.87

TABLE Existing NP-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 432
ELEVATION AT BARRIER BASE: 442
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 448
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 530.5
BARRIER TO RECEPTOR DISTANCE (FT): 427

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 56.87

BARRIER ATTENUATION (dB):
Autos: - 6.90
Med. Trucks: - 6.02
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 50.57

TABLE Existing NP-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 404
ELEVATION AT BARRIER BASE: 420
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 435
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 258.5
BARRIER TO RECEPTOR DISTANCE (FT): 79

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 61.87

BARRIER ATTENUATION (dB):
Autos: - 0.00
Med. Trucks: - 0.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 61.87

TABLE Existing NP-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 433
ELEVATION AT BARRIER BASE: 443
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 443
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 315.5
BARRIER TO RECEPTOR DISTANCE (FT): 197

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.49

BARRIER ATTENUATION (dB):
Autos: - 6.30
Med. Trucks: - 5.65
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 54.59

TABLE Existing NP-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 427
ELEVATION AT BARRIER BASE: 443
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 440
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 135
BARRIER TO RECEPTOR DISTANCE (FT): 8

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 66.51

BARRIER ATTENUATION (dB):
Autos: - 4.47
Med. Trucks: - 4.23
Hvy. Trucks: - 3.35

CNEL WITH BARRIER (dB)= 62.33

TABLE Existing NP-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 417
ELEVATION AT BARRIER BASE: 438
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 438.5
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 200
BARRIER TO RECEPTOR DISTANCE (FT): 62

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 63.67

BARRIER ATTENUATION (dB):
Autos: - 5.99
Med. Trucks: - 5.59
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 57.96

TABLE Existing NP-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 411
ELEVATION AT BARRIER BASE: 437
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 437
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 334.5
BARRIER TO RECEPTOR DISTANCE (FT): 195

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.08

BARRIER ATTENUATION (dB):
Autos: -10.41
Med. Trucks: - 9.83
Hvy. Trucks: - 8.24

CNEL WITH BARRIER (dB)= 50.30

TABLE Existing NP-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 359
ELEVATION AT BARRIER BASE: 359
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 349.5
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 169
BARRIER TO RECEPTOR DISTANCE (FT): 101

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 64.68

BARRIER ATTENUATION (dB):
Autos: - 5.42
Med. Trucks: - 5.00
Hvy. Trucks: - 3.33

CNEL WITH BARRIER (dB)= 59.85

TABLE Existing NP-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 351
ELEVATION AT BARRIER BASE: 352
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 348.3
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 96
BARRIER TO RECEPTOR DISTANCE (FT): 39

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 68.74

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 4.59
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 65.38

TABLE Existing NP-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 351
ELEVATION AT BARRIER BASE: 352
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 346.3
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 342
BARRIER TO RECEPTOR DISTANCE (FT): 287

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 59.84

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 4.93
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 56.45

TABLE Existing NP-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 348
ELEVATION AT BARRIER BASE: 349
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 336
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 358.5
BARRIER TO RECEPTOR DISTANCE (FT): 302

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 59.52

BARRIER ATTENUATION (dB):
Autos: - 5.49
Med. Trucks: - 5.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 55.90

TABLE Existing NP-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 362
ELEVATION AT BARRIER BASE: 362
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 354
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 191
BARRIER TO RECEPTOR DISTANCE (FT): 96

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 63.84

BARRIER ATTENUATION (dB):
Autos: - 5.25
Med. Trucks: - 5.00
Hvy. Trucks: - 4.12

CNEL WITH BARRIER (dB)= 58.88

TABLE Existing NP-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 358
ELEVATION AT BARRIER BASE: 358
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 352
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 148
BARRIER TO RECEPTOR DISTANCE (FT): 66

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 65.61

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 5.00
Hvy. Trucks: - 3.10

CNEL WITH BARRIER (dB)= 61.07

TABLE Existing NP-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 350
ELEVATION AT BARRIER BASE: 350
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 350.2
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 139.5
BARRIER TO RECEPTOR DISTANCE (FT): 74

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 66.02

BARRIER ATTENUATION (dB):
Autos: + 0.00
Med. Trucks: + 0.00
Hvy. Trucks: + 0.00

CNEL WITH BARRIER (dB)= 66.02

TABLE Existing NP-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 346
ELEVATION AT BARRIER BASE: 345
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 335
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 293
BARRIER TO RECEPTOR DISTANCE (FT): 214

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.90

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 4.93
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 57.51

TABLE Existing NP-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 38400 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 347
ELEVATION AT BARRIER BASE: 348
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 333
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 128
BARRIER TO RECEPTOR DISTANCE (FT): 61

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 66.19

BARRIER ATTENUATION (dB):
Autos: - 8.45
Med. Trucks: - 7.52
Hvy. Trucks: - 5.45

CNEL WITH BARRIER (dB)= 58.68

TABLE Existing NP-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 38400 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 347
ELEVATION AT BARRIER BASE: 346
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 332
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 190.5
BARRIER TO RECEPTOR DISTANCE (FT): 122

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 63.42

BARRIER ATTENUATION (dB):
Autos: - 5.75
Med. Trucks: - 5.13
Hvy. Trucks: - 3.96

CNEL WITH BARRIER (dB)= 58.20

TABLE Existing NP-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway

NOTES: Yorba Linda Boulevard Widening Project - Existing NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 38400 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 535
ELEVATION AT BARRIER BASE: 353
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 328.8
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 143.5
BARRIER TO RECEPTOR DISTANCE (FT): 91

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 65.38

BARRIER ATTENUATION (dB):
Autos: - 0.00
Med. Trucks: - 0.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 65.38

TABLE Existing With Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 427
ELEVATION AT BARRIER BASE: 442
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 445
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 253
BARRIER TO RECEPTOR DISTANCE (FT): 138

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 62.02

BARRIER ATTENUATION (dB):
Autos: - 6.65
Med. Trucks: - 5.97
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 55.87

TABLE Existing With Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 432
ELEVATION AT BARRIER BASE: 442
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 448
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 530
BARRIER TO RECEPTOR DISTANCE (FT): 427

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 56.88

BARRIER ATTENUATION (dB):
Autos: - 6.91
Med. Trucks: - 6.03
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 50.57

TABLE Existing With Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 404
ELEVATION AT BARRIER BASE: 420
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 435
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 258.5
BARRIER TO RECEPTOR DISTANCE (FT): 79

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 61.87

BARRIER ATTENUATION (dB):
Autos: - 0.00
Med. Trucks: - 0.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 61.87

TABLE Existing With Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 433
ELEVATION AT BARRIER BASE: 443
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 443
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 316
BARRIER TO RECEPTOR DISTANCE (FT): 197

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.48

BARRIER ATTENUATION (dB):
Autos: - 6.29
Med. Trucks: - 5.64
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 54.58

TABLE Existing With Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 427
ELEVATION AT BARRIER BASE: 443
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 440
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 135
BARRIER TO RECEPTOR DISTANCE (FT): 8

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 66.51

BARRIER ATTENUATION (dB):
Autos: - 4.47
Med. Trucks: - 4.23
Hvy. Trucks: - 3.35

CNEL WITH BARRIER (dB)= 62.33

TABLE Existing With Project-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 417
ELEVATION AT BARRIER BASE: 438
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 438.5
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 200
BARRIER TO RECEPTOR DISTANCE (FT): 62

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 63.67

BARRIER ATTENUATION (dB):
Autos: - 5.99
Med. Trucks: - 5.59
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 57.96

TABLE Existing With Project-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42900 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 411
ELEVATION AT BARRIER BASE: 437
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 437
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 334.5
BARRIER TO RECEPTOR DISTANCE (FT): 195

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.08

BARRIER ATTENUATION (dB):
Autos: -10.41
Med. Trucks: - 9.83
Hvy. Trucks: - 8.24

CNEL WITH BARRIER (dB)= 50.30

TABLE Existing With Project-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 359
ELEVATION AT BARRIER BASE: 359
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 349.5
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 169
BARRIER TO RECEPTOR DISTANCE (FT): 101

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 64.68

BARRIER ATTENUATION (dB):
Autos: - 5.42
Med. Trucks: - 5.00
Hvy. Trucks: - 3.33

CNEL WITH BARRIER (dB)= 59.85

TABLE Existing With Project-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 351
ELEVATION AT BARRIER BASE: 352
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 348.3
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 91.5
BARRIER TO RECEPTOR DISTANCE (FT): 33

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 69.10

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 4.54
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 65.75

TABLE Existing With Project-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 351
ELEVATION AT BARRIER BASE: 352
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 346.3
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 337.5
BARRIER TO RECEPTOR DISTANCE (FT): 279

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 59.93

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 5.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 56.53

TABLE Existing With Project-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 348
ELEVATION AT BARRIER BASE: 349
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 336
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 353.5
BARRIER TO RECEPTOR DISTANCE (FT): 296

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 59.61

BARRIER ATTENUATION (dB):
Autos: - 5.50
Med. Trucks: - 5.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 56.00

TABLE Existing With Project-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 362
ELEVATION AT BARRIER BASE: 362
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 354
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 191
BARRIER TO RECEPTOR DISTANCE (FT): 96

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 63.84

BARRIER ATTENUATION (dB):
Autos: - 5.25
Med. Trucks: - 5.00
Hvy. Trucks: - 4.12

CNEL WITH BARRIER (dB)= 58.88

TABLE Existing With Project-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 358
ELEVATION AT BARRIER BASE: 358
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 352
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 148
BARRIER TO RECEPTOR DISTANCE (FT): 66

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 65.61

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 5.00
Hvy. Trucks: - 3.10

CNEL WITH BARRIER (dB)= 61.07

TABLE Existing With Project-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 350
ELEVATION AT BARRIER BASE: 350
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 350.2
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 144
BARRIER TO RECEPTOR DISTANCE (FT): 74

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 65.80

BARRIER ATTENUATION (dB):
Autos: + 0.00
Med. Trucks: + 0.00
Hvy. Trucks: + 0.00

CNEL WITH BARRIER (dB)= 65.80

TABLE Existing With Project-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 42300 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 346
ELEVATION AT BARRIER BASE: 345
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 335
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 303
BARRIER TO RECEPTOR DISTANCE (FT): 214

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.67

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 5.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 57.27

TABLE Existing With Project-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 38400 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 347
ELEVATION AT BARRIER BASE: 348
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 333
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 114.5
BARRIER TO RECEPTOR DISTANCE (FT): 56

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 66.98

BARRIER ATTENUATION (dB):
Autos: - 8.59
Med. Trucks: - 7.57
Hvy. Trucks: - 5.34

CNEL WITH BARRIER (dB)= 59.42

TABLE Existing With Project-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 38400 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 347
ELEVATION AT BARRIER BASE: 346
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 332
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 208.5
BARRIER TO RECEPTOR DISTANCE (FT): 122

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 62.80

BARRIER ATTENUATION (dB):
Autos: - 5.95
Med. Trucks: - 5.32
Hvy. Trucks: - 4.73

CNEL WITH BARRIER (dB)= 57.23

TABLE Existing With Project-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway

NOTES: Yorba Linda Boulevard Widening Project - Existing With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 38400 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 535
ELEVATION AT BARRIER BASE: 353
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 328.8
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 143.5
BARRIER TO RECEPTOR DISTANCE (FT): 90

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 65.38

BARRIER ATTENUATION (dB):
Autos: - 0.00
Med. Trucks: - 0.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 65.38

TABLE 2035 NP-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020
ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road
NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 427
ELEVATION AT BARRIER BASE: 442
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 445
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 253
BARRIER TO RECEPTOR DISTANCE (FT): 138

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 62.51

BARRIER ATTENUATION (dB):
Autos: - 6.65
Med. Trucks: - 5.97
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 56.35

TABLE 2035 NP-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020
ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road
NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 432
ELEVATION AT BARRIER BASE: 442
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 448
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 530.5
BARRIER TO RECEPTOR DISTANCE (FT): 427

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 57.36

BARRIER ATTENUATION (dB):
Autos: - 6.90
Med. Trucks: - 6.02
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 51.06

TABLE 2035 NP-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020
ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road
NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 404
ELEVATION AT BARRIER BASE: 420
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 435
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 258.5
BARRIER TO RECEPTOR DISTANCE (FT): 79

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 62.36

BARRIER ATTENUATION (dB):
Autos: - 0.00
Med. Trucks: - 0.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 62.36

TABLE 2035 NP-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020
ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road
NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 433
ELEVATION AT BARRIER BASE: 443
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 443
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 315.5
BARRIER TO RECEPTOR DISTANCE (FT): 197

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.98

BARRIER ATTENUATION (dB):
Autos: - 6.30
Med. Trucks: - 5.65
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 55.07

TABLE 2035 NP-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020
ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road
NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 427
ELEVATION AT BARRIER BASE: 443
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 440
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 135
BARRIER TO RECEPTOR DISTANCE (FT): 8

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 67.00

BARRIER ATTENUATION (dB):
Autos: - 4.47
Med. Trucks: - 4.23
Hvy. Trucks: - 3.35

CNEL WITH BARRIER (dB)= 62.82

TABLE 2035 NP-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020
ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road
NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 417
ELEVATION AT BARRIER BASE: 438
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 438.5
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 200
BARRIER TO RECEPTOR DISTANCE (FT): 62

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 64.15

BARRIER ATTENUATION (dB):
Autos: - 5.99
Med. Trucks: - 5.59
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 58.44

TABLE 2035 NP-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 411
ELEVATION AT BARRIER BASE: 437
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 437
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 334.5
BARRIER TO RECEPTOR DISTANCE (FT): 195

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.57

BARRIER ATTENUATION (dB):
Autos: -10.41
Med. Trucks: - 9.83
Hvy. Trucks: - 8.24

CNEL WITH BARRIER (dB)= 50.79

TABLE 2035 NP-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 359
ELEVATION AT BARRIER BASE: 359
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 349.5
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 169
BARRIER TO RECEPTOR DISTANCE (FT): 101

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 64.63

BARRIER ATTENUATION (dB):
Autos: - 5.42
Med. Trucks: - 5.00
Hvy. Trucks: - 3.33

CNEL WITH BARRIER (dB)= 59.79

TABLE 2035 NP-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 351
ELEVATION AT BARRIER BASE: 352
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 348.3
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 96
BARRIER TO RECEPTOR DISTANCE (FT): 39

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 68.68

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 4.59
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 65.33

TABLE 2035 NP-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 351
ELEVATION AT BARRIER BASE: 352
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 346.3
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 342
BARRIER TO RECEPTOR DISTANCE (FT): 287

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 59.79

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 4.93
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 56.40

TABLE 2035 NP-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 348
ELEVATION AT BARRIER BASE: 349
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 336
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 358.5
BARRIER TO RECEPTOR DISTANCE (FT): 302

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 59.47

BARRIER ATTENUATION (dB):
Autos: - 5.49
Med. Trucks: - 5.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 55.85

TABLE 2035 NP-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 362
ELEVATION AT BARRIER BASE: 362
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 354
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 191
BARRIER TO RECEPTOR DISTANCE (FT): 96

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 63.79

BARRIER ATTENUATION (dB):
Autos: - 5.25
Med. Trucks: - 5.00
Hvy. Trucks: - 4.12

CNEL WITH BARRIER (dB)= 58.83

TABLE 2035 NP-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 358
ELEVATION AT BARRIER BASE: 358
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 352
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 148
BARRIER TO RECEPTOR DISTANCE (FT): 66

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 65.56

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 5.00
Hvy. Trucks: - 3.10

CNEL WITH BARRIER (dB)= 61.02

TABLE 2035 NP-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 350
ELEVATION AT BARRIER BASE: 350
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 350.2
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 139.5
BARRIER TO RECEPTOR DISTANCE (FT): 74

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 65.97

BARRIER ATTENUATION (dB):
Autos: + 0.00
Med. Trucks: + 0.00
Hvy. Trucks: + 0.00

CNEL WITH BARRIER (dB)= 65.97

TABLE 2035 NP-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 346
ELEVATION AT BARRIER BASE: 345
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 335
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 293
BARRIER TO RECEPTOR DISTANCE (FT): 214

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.85

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 4.93
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 57.46

TABLE 2035 NP-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020
ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway
NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41100 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 347
ELEVATION AT BARRIER BASE: 348
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 333
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 128
BARRIER TO RECEPTOR DISTANCE (FT): 61

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 66.48

BARRIER ATTENUATION (dB):
Autos: - 8.45
Med. Trucks: - 7.52
Hvy. Trucks: - 5.45

CNEL WITH BARRIER (dB)= 58.97

TABLE 2035 NP-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020
ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway
NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41100 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 347
ELEVATION AT BARRIER BASE: 346
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 332
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 190.5
BARRIER TO RECEPTOR DISTANCE (FT): 122

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 63.72

BARRIER ATTENUATION (dB):
Autos: - 5.75
Med. Trucks: - 5.13
Hvy. Trucks: - 3.96

CNEL WITH BARRIER (dB)= 58.49

TABLE 2035 NP-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020
ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway
NOTES: Yorba Linda Boulevard Widening Project - 2035 NP

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41100 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 535
ELEVATION AT BARRIER BASE: 353
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 328.8
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 143.5
BARRIER TO RECEPTOR DISTANCE (FT): 91

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 65.68

BARRIER ATTENUATION (dB):
Autos: - 0.00
Med. Trucks: - 0.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 65.68

TABLE 2035 With Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 427
ELEVATION AT BARRIER BASE: 442
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 445
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 253
BARRIER TO RECEPTOR DISTANCE (FT): 138

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 62.51

BARRIER ATTENUATION (dB):
Autos: - 6.65
Med. Trucks: - 5.97
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 56.35

TABLE 2035 With Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 432
ELEVATION AT BARRIER BASE: 442
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 448
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 530
BARRIER TO RECEPTOR DISTANCE (FT): 427

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 57.37

BARRIER ATTENUATION (dB):
Autos: - 6.91
Med. Trucks: - 6.03
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 51.06

TABLE 2035 With Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 404
ELEVATION AT BARRIER BASE: 420
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 435
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 258.5
BARRIER TO RECEPTOR DISTANCE (FT): 79

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 62.36

BARRIER ATTENUATION (dB):
Autos: - 0.00
Med. Trucks: - 0.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 62.36

TABLE 2035 With Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 433
ELEVATION AT BARRIER BASE: 443
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 443
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 316
BARRIER TO RECEPTOR DISTANCE (FT): 197

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.97

BARRIER ATTENUATION (dB):
Autos: - 6.29
Med. Trucks: - 5.64
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 55.07

TABLE 2035 With Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 427
ELEVATION AT BARRIER BASE: 443
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 440
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 135
BARRIER TO RECEPTOR DISTANCE (FT): 8

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 67.00

BARRIER ATTENUATION (dB):
Autos: - 4.47
Med. Trucks: - 4.23
Hvy. Trucks: - 3.35

CNEL WITH BARRIER (dB)= 62.82

TABLE 2035 With Project-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 417
ELEVATION AT BARRIER BASE: 438
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 438.5
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 200
BARRIER TO RECEPTOR DISTANCE (FT): 62

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 64.15

BARRIER ATTENUATION (dB):
Autos: - 5.99
Med. Trucks: - 5.59
Hvy. Trucks: - 5.00

CNEL WITH BARRIER (dB)= 58.44

TABLE 2035 With Project-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Weir Canyon Road between SR-91 EB Ramps and Santa Ana Canyon Road

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 48000 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 46 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 411
ELEVATION AT BARRIER BASE: 437
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 437
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 334.5
BARRIER TO RECEPTOR DISTANCE (FT): 195

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.57

BARRIER ATTENUATION (dB):
Autos: -10.41
Med. Trucks: - 9.83
Hvy. Trucks: - 8.24

CNEL WITH BARRIER (dB)= 50.79

TABLE 2035 With Project-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 359
ELEVATION AT BARRIER BASE: 359
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 349.5
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 169
BARRIER TO RECEPTOR DISTANCE (FT): 101

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 64.63

BARRIER ATTENUATION (dB):
Autos: - 5.42
Med. Trucks: - 5.00
Hvy. Trucks: - 3.33

CNEL WITH BARRIER (dB)= 59.79

TABLE 2035 With Project-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 351
ELEVATION AT BARRIER BASE: 352
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 348.3
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 91.5
BARRIER TO RECEPTOR DISTANCE (FT): 33

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 69.05

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 4.54
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 65.70

TABLE 2035 With Project-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 351
ELEVATION AT BARRIER BASE: 352
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 346.3
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 337.5
BARRIER TO RECEPTOR DISTANCE (FT): 279

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 59.88

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 5.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 56.48

TABLE 2035 With Project-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 348
ELEVATION AT BARRIER BASE: 349
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 336
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 353.5
BARRIER TO RECEPTOR DISTANCE (FT): 296

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 59.56

BARRIER ATTENUATION (dB):
Autos: - 5.50
Med. Trucks: - 5.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 55.94

TABLE 2035 With Project-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 362
ELEVATION AT BARRIER BASE: 362
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 354
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 191
BARRIER TO RECEPTOR DISTANCE (FT): 96

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 63.79

BARRIER ATTENUATION (dB):
Autos: - 5.25
Med. Trucks: - 5.00
Hvy. Trucks: - 4.12

CNEL WITH BARRIER (dB)= 58.83

TABLE 2035 With Project-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 358
ELEVATION AT BARRIER BASE: 358
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 352
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 148
BARRIER TO RECEPTOR DISTANCE (FT): 66

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 65.56

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 5.00
Hvy. Trucks: - 3.10

CNEL WITH BARRIER (dB)= 61.02

TABLE 2035 With Project-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 350
ELEVATION AT BARRIER BASE: 350
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 350.2
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 144
BARRIER TO RECEPTOR DISTANCE (FT): 74

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 65.75

BARRIER ATTENUATION (dB):
Autos: + 0.00
Med. Trucks: + 0.00
Hvy. Trucks: + 0.00

CNEL WITH BARRIER (dB)= 65.75

TABLE 2035 With Project-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between Savi Ranch Parkway and SR-91 WB Ramps

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41800 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 34 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 346
ELEVATION AT BARRIER BASE: 345
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 335
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 303
BARRIER TO RECEPTOR DISTANCE (FT): 214

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 60.62

BARRIER ATTENUATION (dB):
Autos: - 5.00
Med. Trucks: - 5.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 57.22

TABLE 2035 With Project-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41100 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 347
ELEVATION AT BARRIER BASE: 348
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 333
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 114.5
BARRIER TO RECEPTOR DISTANCE (FT): 56

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 67.27

BARRIER ATTENUATION (dB):
Autos: - 8.59
Med. Trucks: - 7.57
Hvy. Trucks: - 5.34

CNEL WITH BARRIER (dB)= 59.72

TABLE 2035 With Project-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41100 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 347
ELEVATION AT BARRIER BASE: 346
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 332
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 208.5
BARRIER TO RECEPTOR DISTANCE (FT): 122

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 63.10

BARRIER ATTENUATION (dB):
Autos: - 5.95
Med. Trucks: - 5.32
Hvy. Trucks: - 4.73

CNEL WITH BARRIER (dB)= 57.53

TABLE 2035 With Project-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 02/25/2020

ROADWAY SEGMENT: Yorba Linda Boulevard between La Palma Avenue and Savi
Ranch Parkway

NOTES: Yorba Linda Boulevard Widening Project - 2035 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41100 SPEED (MPH): 40 GRADE: .5

| | TRAFFIC DISTRIBUTION PERCENTAGES | | |
|----------|----------------------------------|---------|-------|
| | DAY | EVENING | NIGHT |
| | --- | ----- | ----- |
| AUTOS | 75.51 | 12.57 | 9.34 |
| M-TRUCKS | 1.56 | 0.09 | 0.19 |
| H-TRUCKS | 0.64 | 0.02 | 0.08 |

ACTIVE HALF-WIDTH (FT): 32 SITE CHARACTERISTICS: SOFT

ELEVATION AT ROAD SURFACE: 535
ELEVATION AT BARRIER BASE: 353
BARRIER HEIGHT (FT): 0
BARRIER TYPE: WALL
ELEVATION AT RECEPTOR BASE: 328.8
RECEPTOR HEIGHT (FT): 5

ROADWAY CENTERLINE TO RECEPTOR DISTANCE (FT): 143.5
BARRIER TO RECEPTOR DISTANCE (FT): 90

* * CALCULATED NOISE LEVELS * *

CNEL WITHOUT BARRIER (dB)= 65.68

BARRIER ATTENUATION (dB):
Autos: - 0.00
Med. Trucks: - 0.00
Hvy. Trucks: - 0.00

CNEL WITH BARRIER (dB)= 65.68
