

Appendix D:
Noise Supporting Information

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TABLE Existing -01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/13/2018
ROADWAY SEGMENT: Goodrick Avenue - Elmar Court to Richmond Parkway
NOTES: Richmond PowerPlant - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 220 SPEED (MPH): 35 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): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 47.62

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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0.0	0.0	0.0	0.0

TABLE Existing -02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/13/2018
ROADWAY SEGMENT: Richmond Parkway - Parr Boulevard to Goodrick Avenue
NOTES: Richmond PowerPlant - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 28400 SPEED (MPH): 50 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
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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): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.06

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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85.8	179.1	383.1	823.9

TABLE Existing + Project -01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/13/2018

ROADWAY SEGMENT: Goodrick Avenue - Elmar Court to Richmond Parkway

NOTES: Richmond PowerPlant - Existing + Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1200 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
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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): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.99

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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0.0	0.0	0.0	55.9

TABLE Existing + Project -02
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/13/2018
 ROADWAY SEGMENT: Richmond Parkway - Parr Boulevard to Goodrick Avenue
 NOTES: Richmond PowerPlant - Existing + Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 28700 SPEED (MPH): 50 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): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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86.4	180.3	385.7	829.6

TABLE Cumulative -01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/13/2018
ROADWAY SEGMENT: Goodrick Avenue - Elmar Court to Richmond Parkway
NOTES: Richmond PowerPlant - Cumulative

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 260 SPEED (MPH): 35 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): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 48.34

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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0.0	0.0	0.0	0.0

TABLE Cumulative -02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/13/2018
ROADWAY SEGMENT: Richmond Parkway - Parr Boulevard to Goodrick Avenue
NOTES: Richmond PowerPlant - Cumulative

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 32800 SPEED (MPH): 50 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
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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): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.69

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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93.8	196.8	421.5	906.8

TABLE Cumulative + Project -01
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/13/2018
 ROADWAY SEGMENT: Goodrick Avenue - Elmar Court to Richmond Parkway
 NOTES: Richmond PowerPlant - Cumulative + Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1300 SPEED (MPH): 35 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): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 55.33

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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0.0	0.0	0.0	58.9

TABLE Cumulative + Project -02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/13/2018
ROADWAY SEGMENT: Richmond Parkway - Parr Boulevard to Goodrick Avenue
NOTES: Richmond PowerPlant - Cumulative + Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 33100 SPEED (MPH): 50 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
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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): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.73

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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94.4	198.0	424.1	912.3
