APPENDIX E

Noise Modeling

Appendix E

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

Project Name : Hidden Falls Regional Park EIR
Project Number : 6110088.01
Modeling Condition : Existing
Ground Type : Soft
K Factor :
Metric (L_{eq}, L_{dn}, CNEL) : CNEL
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	Garden Bar Rd (N)	Mt Pleasant Rd	project access	285	25	50	94	4	2	78.97	11.27	9.76	0
2	Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	885	35	50	94	4	2	78.97	11.27	9.76	0
3	Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	375	45	50	94	4	2	78.97	11.27	9.76	0
4	Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	910	45	50	94	4	2	78.97	11.27	9.76	0
5	Mears Dr (temporary)	Mears Place	Mt Vernon Rd	377	25	50	94	4	2	78.97	11.27	9.76	0
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	260	25	50	94	4	2	78.97	11.27	9.76	0
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	715	35	50	94	4	2	78.97	11.27	9.76	0
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	310	45	50	94	4	2	78.97	11.27	9.76	0
9	WK Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	710	45	50	94	4	2	78.97	11.27	9.76	0
10	WK Mears Dr (temporary)	Mears Place	Mt Vernon Rd	314	25	50	94	4	2	78.97	11.27	9.76	0

Appendix E

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : Hidden Falls Regional Park EIR
Project Number : 6110088.01
Modeling Condition : Existing
Metric (Leq, Ldn, CNEL) : CNEL

		Segment		Noise Levels, dB CNEL				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Garden Bar Rd (N)	Mt Pleasant Rd	project access	42.6	40.5	45.1	47.9	2	4	8	17	36
2	Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	51.7	47.7	49.9	54.8	5	10	23	49	105
3	Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	51.1	45.7	47.1	53.4	4	8	18	39	84
4	Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	55.0	49.5	51.0	57.2	7	15	33	70	152
5	Mears Dr (temporary)	Mears Place	Mt Vernon Rd	43.8	41.7	46.3	49.1	2	4	9	20	44
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	42.2	40.1	44.7	47.5	2	3	7	16	34
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	50.8	46.8	48.9	53.9	4	9	20	42	91
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	50.3	44.8	46.3	52.6	3	7	16	34	74
9	WK Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	53.9	48.4	49.9	56.2	6	13	28	60	129
10	WK Mears Dr (temporary)	Mears Place	Mt Vernon Rd	43.0	40.9	45.5	48.3	2	4	8	18	39

Appendix E

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

Project Name : Hidden Falls Regional Park EIR
Project Number : 6110088.01
Modeling Condition : Existing + Project
Ground Type : Soft
K Factor :
Metric (L_{eq}, L_{dn}, CNEL) : CNEL
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access	541	25	50	94	4	2	78.97	11.27	9.76	0
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	969	35	50	94	4	2	78.97	11.27	9.76	0
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	457	45	50	94	4	2	78.97	11.27	9.76	0
4	WD Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	1000	45	50	94	4	2	78.97	11.27	9.76	0
5	WD Mears Dr (temporary)	Mears Place	Mt Vernon Rd	441	25	50	94	4	2	78.97	11.27	9.76	0
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	720	25	50	94	4	2	78.97	11.27	9.76	0
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	867	35	50	94	4	2	78.97	11.27	9.76	0
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	458	45	50	94	4	2	78.97	11.27	9.76	0
9	WK Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	872	45	50	94	4	2	78.97	11.27	9.76	0
10	WK Mears Dr (temporary)	Mears Place	Mt Vernon Rd	429	25	50	94	4	2	78.97	11.27	9.76	0

Appendix E

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : Hidden Falls Regional Park EIR
Project Number : 6110088.01
Modeling Condition : Existing + Project
Metric (Leq, Ldn, CNEL) : CNEL

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		Segment		Noise Levels, dB CNEL				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access	45.4	43.3	47.9	50.7	3	6	12	26	56
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	52.1	48.1	50.3	55.2	5	11	24	52	111
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	52.0	46.5	48.0	54.2	4	10	21	45	96
4	WD Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	55.4	49.9	51.4	57.6	8	16	35	75	162
5	WD Mears Dr (temporary)	Mears Place	Mt Vernon Rd	44.5	42.4	47.0	49.8	2	5	10	22	48
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	46.6	44.5	49.1	51.9	3	7	14	31	67
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	51.6	47.6	49.8	54.7	5	10	22	48	103
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	52.0	46.5	48.0	54.3	4	10	21	45	96
9	WK Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	54.8	49.3	50.8	57.0	7	15	32	68	148
10	WK Mears Dr (temporary)	Mears Place	Mt Vernon Rd	44.4	42.3	46.9	49.7	2	5	10	22	48

Appendix E

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

Project Name : Hidden Falls Regional Park EIR
Project Number : 6110088.01
Modeling Condition : Cumulative + Project
Ground Type : Soft
K Factor :
Metric (L_{eq}, L_{dn}, CNEL) : CNEL
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access	500	25	50	94	4	2	78.97	11.27	9.76	0
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	1110	35	50	94	4	2	78.97	11.27	9.76	0
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	540	45	50	94	4	2	78.97	11.27	9.76	0
4	WD Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd	1125	45	50	94	4	2	78.97	11.27	9.76	0
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	455	25	50	94	4	2	78.97	11.27	9.76	0
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	900	35	50	94	4	2	78.97	11.27	9.76	0
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	435	45	50	94	4	2	78.97	11.27	9.76	0
9	WK Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd	880	45	50	94	4	2	78.97	11.27	9.76	0

Appendix E

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : Hidden Falls Regional Park EIR
Project Number : 6110088.01
Modeling Condition : Cumulative + Project
Metric (Leq, Ldn, CNEL) : CNEL

		Segment		Noise Levels, dB CNEL				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access	45.0	42.9	47.5	50.3	2	5	11	24	53
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	52.7	48.7	50.9	55.8	6	12	26	57	122
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	52.7	47.2	48.7	55.0	5	11	23	50	107
4	WD Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	55.9	50.4	51.9	58.2	8	17	38	81	175
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	44.6	42.5	47.1	50.0	2	5	11	23	50
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	51.8	47.8	49.9	54.9	5	11	23	49	106
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	51.8	46.3	47.8	54.0	4	9	20	43	93
9	WK Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	54.8	49.4	50.8	57.1	7	15	32	69	148

Appendix G

Traffic Noise Prediction Model, (FHWA RD-77-108)

Model Input Sheet

Project Name : Hidden Falls Regional Park EIR
Project Number : 6110088.01
Modeling Condition : Cumulative + Project
Ground Type : Soft
K Factor :
Metric (L_{eq}, L_{dn}, CNEL) : CNEL
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access	756	25	50	94	4	2	78.97	11.27	9.76	0
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	1194	35	50	94	4	2	78.97	11.27	9.76	0
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	622	45	50	94	4	2	78.97	11.27	9.76	0
4	WD Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	1215	45	50	94	4	2	78.97	11.27	9.76	0
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	915	25	50	94	4	2	78.97	11.27	9.76	0
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	1052	35	50	94	4	2	78.97	11.27	9.76	0
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	583	45	50	94	4	2	78.97	11.27	9.76	0
9	WK Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	1042	45	50	94	4	2	78.97	11.27	9.76	0

Appendix G

Traffic Noise Prediction Model, (FHWA RD-77-108)

Predicted Noise Levels

Project Name : Hidden Falls Regional Park EIR
Project Number : 6110088.01
Modeling Condition : Cumulative + Project
Metric (Leq, Ldn, CNEL) : CNEL

		Segment		Noise Levels, dB CNEL				Distance to Traffic Noise Contours, Feet				
Segment	Roadway	From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access	46.8	44.7	49.3	52.1	3	7	15	32	69
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	53.0	49.0	51.2	56.1	6	13	28	59	128
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	53.3	47.9	49.3	55.6	5	12	25	55	118
4	WD Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	56.2	50.8	52.2	58.5	9	18	40	85	184
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	47.6	45.5	50.2	53.0	4	8	17	37	79
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	52.5	48.4	50.6	55.6	5	12	25	55	118
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N	53.0	47.6	49.1	55.3	5	11	24	52	113
9	WK Mt Pleasant Rd	Garden Bar Rd (S	Wally Allen Rd	55.6	50.1	51.6	57.8	8	17	36	77	166