Appendix 4.8.4
Predicted Noise Level for Light Rail (Unmitigated)

NSR ID	mPD	Leq,30min, dB(A)		Lmax, dB(A)	Leq, 24-hr, dB(A)
		Daytime	Nighttime		
Planned NSR					
LR-P1_1	11.0	51	51	55	50
LR-P1_2	14.1	51	51	55	50
LR-P1_3	17.3	51	51	55	50
LR-P1_4	20.4	51	51	55	50
LR-P1_5	23.5	51	51	55	50
LR-P1_6	26.7	51	51	55	50
LR-P1_7	29.8	51	51	55	49
LR-P1_8	32.9	51	51	55	49
LR-P1_9	36.1	51	51	54	49
LR-P1_10	39.2	51	50	54	49
LR-P1_11	42.4	51	50	54	49
LR-P1_12	45.5	51	50	54	49
LR-P1_13	48.6	51	50	54	49
LR-P1_14	51.8	50	50	54	49
LR-P1_15	54.9	50	50	53	49
LR-P1_16	58.0	50	50	53	49
LR-P1_17	61.2	50	50	53	49
LR-P1_18	64.3	50	50	53	49
LR-P1_19	67.4	50	50	53	48
LR-P1_20	70.6	50	50	52	48
LR-P1_21	73.7	50	49	52	48
LR-P1_22	76.8	50	49	52	48
LR-P1_23	80.0	49	49	52	48
LR-P1_24	83.1	49	49	52	48
LR-P1_25	86.2	49	49	51	48
LR-P1_26	89.4	49	49	51	48
LR-P1_27	92.5	49	49	51	48
LR-P1_28	95.6	49	49	51	47
LR-P1_29	98.8	49	48	51	47
LR-P1_30	101.9	49	48	50	47
LR-P1_31	105.1	49	48	50	47
LR-P1_32	108.2	48	48	50	47
LR-P1_33	111.3	48	48	50	47
LR-P1_34	114.5	48	48	50	47
LR-P1_35	117.6	48	48	49	47
LR-P1_36	120.7	48	48	49	47
LR-P1_37	123.9	48	48	49	46
LR-P1_38	127.0	48	48	49	46
LR-P2_1	12.0	54	54	58	52
LR-P2_2	15.3	54	54	58	52
LR-P2_3	18.7	54	54	58	52
LR-P2_4	22.0	54	54	58	52
LR-P2_5	25.3	54	54	58	52
LR-P2_6	28.7	54	53	58	52

Appendix 4.8.4
Predicted Noise Level for Light Rail (Unmitigated)

NSR ID	mPD	Leq,30min, dB(A)		Lmax, dB(A)	Leq, 24-hr, dB(A)
		Daytime	Nighttime		
LR-P2_7	32.0	54	53	57	52
LR-P2_8	35.3	54	53	57	52
LR-P2_9	38.7	53	53	57	52
LR-P2_10	42.0	53	53	57	52
LR-P2_11	45.3	53	53	56	52
LR-P2_12	48.7	53	53	56	52
LR-P2_13	52.0	53	53	56	51
LR-P2_14	55.3	53	53	56	51
LR-P2_15	58.7	53	52	55	51
LR-P2_16	62.0	53	52	55	51
LR-P2_17	65.3	52	52	55	51
LR-P2_18	68.7	52	52	55	51
LR-P2_19	72.0	52	52	54	51
LR-P2_20	75.3	52	52	54	50
LR-P2_21	78.7	52	51	54	50
LR-P2_22	82.0	52	51	53	50
LR-P2_23	85.3	51	51	53	50
LR-P2_24	88.7	51	51	53	50
LR-P2_25	92.0	51	51	53	50
LR-P2_26	95.3	51	51	52	49
LR-P2_27	98.7	51	51	52	49
LR-P2_28	102.0	51	50	52	49
LR-P2_29	105.3	51	50	52	49
LR-P2_30	108.7	50	50	51	49
LR-P2_31	112.0	50	50	51	49
LR-P2_32	115.3	50	50	51	49
LR-P2_33	118.7	50	50	51	49
LR-P2_34	122.0	50	50	50	48
LR-P2_35	125.3	50	49	50	48
LR-P2_36	128.7	50	49	50	48
LR-P2_37	132.0	49	49	50	48
LR-P2_38	135.3	49	49	49	48
LR-P2_39	138.7	49	49	49	48
LR-P2_40	142.0	49	49	49	48
LR-P2_41	145.3	49	49	49	48
LR-P2_42	148.7	49	49	49	47
LR-P2_43	152.0	49	48	48	47
LR-P3a_1	13.0	57	57	66	55
LR-P3a_2	16.1	57	57	66	55
LR-P3a_3	19.2	57	57	66	55
LR-P3a_4	22.4	57	56	65	55
LR-P3a_5	25.5	57	56	65	55
LR-P3a_6	28.6	57	56	65	55
LR-P3a_7	31.7	56	56	65	55
LR-P3a_8	34.8	56	56	65	55

Numbers in bold denote exceedances of the noise criteria

Appendix 4.8.4
Predicted Noise Level for Light Rail (Unmitigated)

NSR ID	mPD	Leq,30min, dB(A)		Lmax, dB(A)	Leq, 24-hr, dB(A)
		Daytime	Nighttime		
LR-P3a_9	38.0	56	56	64	55
LR-P3a_10	41.1	56	56	64	55
LR-P3a_11	44.2	56	56	64	54
LR-P3a_12	47.3	56	55	64	54
LR-P3a_13	50.4	56	55	63	54
LR-P3a_14	53.5	55	55	63	54
LR-P3a_15	56.7	55	55	63	54
LR-P3a_16	59.8	55	55	62	54
LR-P3a_17	62.9	55	55	62	53
LR-P3a_18	66.0	55	54	62	53
LR-P3a_19	69.1	55	54	61	53
LR-P3a_20	72.3	54	54	61	53
LR-P3a_21	75.4	54	54	61	53
LR-P3a_22	78.5	54	54	60	53
LR-P3a_23	81.6	54	54	60	52
LR-P3a_24	84.7	54	53	60	52
LR-P3a_25	87.9	54	53	59	52
LR-P3a_26	91.0	53	53	59	52
LR-P3a_27	94.1	53	53	59	52
LR-P3a_28	97.2	53	53	59	52
LR-P3a_29	100.3	53	53	58	51
LR-P3a_30	103.5	53	52	58	51
LR-P3a_31	106.6	53	52	58	51
LR-P3a_32	109.7	53	52	58	51
LR-P3a_33	112.8	52	52	57	51
LR-P3a_34	115.9	52	52	57	51
LR-P3a_35	119.0	52	52	57	51
LR-P3a_36	122.2	52	52	57	50
LR-P3a_37	125.3	52	52	56	50
LR-P3a_38	128.4	52	51	56	50
LR-P3a_39	131.5	52	51	56	50
LR-P3a_40	134.6	51	51	56	50
LR-P3a_41	137.8	51	51	55	50
LR-P3a_42	140.9	51	51	55	50
LR-P3a_43	144.0	51	51	55	50
LR-P3b_1	13.0	58	57	68	56
LR-P3b_2	16.1	58	57	68	56
LR-P3b_3	19.2	57	57	68	56
LR-P3b_4	22.4	57	57	68	56
LR-P3b_5	25.5	57	57	68	56
LR-P3b_6	28.6	57	57	67	56
LR-P3b_7	31.7	57	57	67	55
LR-P3b_8	34.8	57	56	67	55
LR-P3b_9	38.0	56	56	66	55
LR-P3b_10	41.1	56	56	66	55

Numbers in bold denote exceedances of the noise criteria

Appendix 4.8.4
Predicted Noise Level for Light Rail (Unmitigated)

NSR ID	mPD	Leq,30min, dB(A)		Lmax, dB(A)	Leq, 24-hr, dB(A)
		Daytime	Nighttime		
LR-P3b_11	44.2	56	56	66	55
LR-P3b_12	47.3	56	55	65	54
LR-P3b_13	50.4	56	55	65	54
LR-P3b_14	53.5	55	55	64	54
LR-P3b_15	56.7	55	55	64	54
LR-P3b_16	59.8	55	55	63	53
LR-P3b_17	62.9	55	54	63	53
LR-P3b_18	66.0	54	54	63	53
LR-P3b_19	69.1	54	54	62	53
LR-P3b_20	72.3	54	54	62	53
LR-P3b_21	75.4	54	54	62	52
LR-P3b_22	78.5	54	53	61	52
LR-P3b_23	81.6	53	53	61	52
LR-P3b_24	84.7	53	53	61	52
LR-P3b_25	87.9	53	53	60	52
LR-P3b_26	91.0	53	53	60	51
LR-P3b_27	94.1	53	52	60	51
LR-P3b_28	97.2	53	52	59	51
LR-P3b_29	100.3	52	52	59	51
LR-P3b_30	103.5	52	52	59	51
LR-P3b_31	106.6	52	52	58	51
LR-P3b_32	109.7	52	52	58	50
LR-P3b_33	112.8	52	52	58	50
LR-P3b_34	115.9	52	51	58	50
LR-P3b_35	119.0	52	51	57	50
LR-P3b_36	122.2	51	51	57	50
LR-P3b_37	125.3	51	51	57	50
LR-P3b_38	128.4	51	51	57	50
LR-P3b_39	131.5	51	51	56	49
LR-P3b_40	134.6	51	51	56	49
LR-P3b_41	137.8	51	50	56	49
LR-P3b_42	140.9	51	50	56	49
LR-P3b_43	144.0	50	50	55	49
LR-P4_1	12.0	64	NA	78	63
LR-P4_2	16.5	64	NA	77	63
LR-P4_3	21.0	63	NA	76	62
LR-P4_4	25.5	63	NA	75	61
LR-P4_5	30.0	62	NA	74	60
LR-P4_6	34.5	61	NA	73	59
LR-P4_7	39.0	60	NA	71	59
LR-P4_8	43.5	60	NA	70	58
LR-P4_9	48.0	59	NA	69	58
LR-P5a_1	5.0	55	**56**	61	55
LR-P5a_2	8.4	55	**56**	61	55
LR-P5a_3	11.9	55	**56**	60	55

Numbers in bold denote exceedances of the noise criteria

Appendix 4.8.4
Predicted Noise Level for Light Rail (Unmitigated)

NSR ID	mPD	Leq,30min, dB(A)		Lmax, dB(A)	Leq, 24-hr, dB(A)
		Daytime	Nighttime		
LR-P5a_4	15.3	55	**56**	60	55
LR-P5a_5	18.7	55	**56**	60	55
LR-P5a_6	22.1	55	55	60	55
LR-P5a_7	25.6	55	55	60	55
LR-P5a_8	29.0	55	55	59	55
LR-P5a_9	32.4	55	55	59	55
LR-P5a_10	35.8	54	55	59	55
LR-P5a_11	39.3	54	55	58	54
LR-P5a_12	42.7	54	55	58	54
LR-P5a_13	46.1	54	54	58	54
LR-P5a_14	49.5	54	54	57	54
LR-P5a_15	53.0	54	54	57	54
LR-P5a_16	56.4	53	54	57	53
LR-P5a_17	59.8	53	54	56	53
LR-P5a_18	63.2	53	53	56	53
LR-P5a_19	66.7	53	53	56	53
LR-P5a_20	70.1	53	53	55	53
LR-P5a_21	73.5	52	53	55	53
LR-P5a_22	76.9	52	53	55	52
LR-P5a_23	80.4	52	53	54	52
LR-P5a_24	83.8	52	52	54	52
LR-P5a_25	87.2	52	52	54	52
LR-P5a_26	90.6	52	52	53	52
LR-P5a_27	94.1	51	52	53	52
LR-P5a_28	97.5	51	52	53	51
LR-P5a_29	100.9	51	52	52	51
LR-P5a_30	104.3	51	51	52	51
LR-P5a_31	107.8	51	51	52	51
LR-P5a_32	111.2	51	51	52	51
LR-P5a_33	114.6	51	51	51	51
LR-P5a_34	118.0	50	51	51	51
LR-P5a_35	121.5	50	51	51	50
LR-P5a_36	124.9	50	51	51	50
LR-P5a_37	128.3	50	50	50	50
LR-P5a_38	131.7	50	50	50	50
LR-P5a_39	135.2	50	50	50	50
LR-P5a_40	138.6	50	50	50	50
LR-P5a_41	142.0	50	50	49	50
LR-P5b_1	5.0	55	55	60	55
LR-P5b_2	8.4	55	55	60	55
LR-P5b_3	11.9	55	55	60	55
LR-P5b_4	15.3	54	55	60	55
LR-P5b_5	18.7	54	55	60	54
LR-P5b_6	22.1	54	55	60	54
LR-P5b_7	25.6	54	55	60	54

Numbers in bold denote exceedances of the noise criteria

Appendix 4.8.4
Predicted Noise Level for Light Rail (Unmitigated)

NSR ID	mPD	Leq,30min, dB(A)		Lmax, dB(A)	Leq, 24-hr, dB(A)
		Daytime	Nighttime		
LR-P5b_8	29.0	54	55	59	54
LR-P5b_9	32.4	54	54	59	54
LR-P5b_10	35.8	54	54	59	54
LR-P5b_11	39.3	54	54	58	54
LR-P5b_12	42.7	53	54	58	53
LR-P5b_13	46.1	53	54	58	53
LR-P5b_14	49.5	53	54	57	53
LR-P5b_15	53.0	53	53	57	53
LR-P5b_16	56.4	53	53	57	53
LR-P5b_17	59.8	53	53	56	53
LR-P5b_18	63.2	52	53	56	52
LR-P5b_19	66.7	52	53	56	52
LR-P5b_20	70.1	52	52	55	52
LR-P5b_21	73.5	52	52	55	52
LR-P5b_22	76.9	52	52	55	52
LR-P5b_23	80.4	51	52	54	51
LR-P5b_24	83.8	51	52	54	51
LR-P5b_25	87.2	51	52	54	51
LR-P5b_26	90.6	51	51	53	51
LR-P5b_27	94.1	51	51	53	51
LR-P5b_28	97.5	51	51	53	51
LR-P5b_29	100.9	50	51	52	51
LR-P5b_30	104.3	50	51	52	50
LR-P5b_31	107.8	50	51	52	50
LR-P5b_32	111.2	50	50	52	50
LR-P5b_33	114.6	50	50	51	50
LR-P5b_34	118.0	50	50	51	50
LR-P5b_35	121.5	50	50	51	50
LR-P5b_36	124.9	49	50	51	50
LR-P5b_37	128.3	49	50	50	49
LR-P5b_38	131.7	49	50	50	49
LR-P5b_39	135.2	49	50	50	49
LR-P5b_40	138.6	49	49	50	49
LR-P5b_41	142.0	49	49	49	49
LR-P5c_1	5.0	54	55	62	54
LR-P5c_2	8.4	54	55	62	54
LR-P5c_3	11.9	54	55	62	54
LR-P5c_4	15.3	54	55	62	54
LR-P5c_5	18.7	54	55	62	54
LR-P5c_6	22.1	54	55	61	54
LR-P5c_7	25.6	54	54	61	54
LR-P5c_8	29.0	54	54	61	54
LR-P5c_9	32.4	54	54	60	54
LR-P5c_10	35.8	53	54	60	54
LR-P5c_11	39.3	53	54	60	53

Numbers in bold denote exceedances of the noise criteria

Appendix 4.8.4
Predicted Noise Level for Light Rail (Unmitigated)

NSR ID	mPD	Leq,30min, dB(A)		Lmax, dB(A)	Leq, 24-hr, dB(A)
		Daytime	Nighttime		
LR-P5c_12	42.7	53	54	59	53
LR-P5c_13	46.1	53	53	59	53
LR-P5c_14	49.5	53	53	59	53
LR-P5c_15	53.0	53	53	58	53
LR-P5c_16	56.4	52	53	58	52
LR-P5c_17	59.8	52	53	57	52
LR-P5c_18	63.2	52	52	57	52
LR-P5c_19	66.7	52	52	57	52
LR-P5c_20	70.1	52	52	56	52
LR-P5c_21	73.5	51	52	56	51
LR-P5c_22	76.9	51	52	56	51
LR-P5c_23	80.4	51	52	55	51
LR-P5c_24	83.8	51	51	55	51
LR-P5c_25	87.2	51	51	55	51
LR-P5c_26	90.6	51	51	54	51
LR-P5c_27	94.1	50	51	54	50
LR-P5c_28	97.5	50	51	54	50
LR-P5c_29	100.9	50	51	53	50
LR-P5c_30	104.3	50	50	53	50
LR-P5c_31	107.8	50	50	53	50
LR-P5c_32	111.2	50	50	52	50
LR-P5c_33	114.6	50	50	52	50
LR-P5c_34	118.0	49	50	52	49
LR-P5c_35	121.5	49	50	52	49
LR-P5c_36	124.9	49	50	51	49
LR-P5c_37	128.3	49	49	51	49
LR-P5c_38	131.7	49	49	51	49
LR-P5c_39	135.2	49	49	51	49
LR-P5c_40	138.6	49	49	50	49
LR-P5c_41	142.0	48	49	50	49
LR-P6_1	5.0	56	**56**	63	56
LR-P6_2	8.4	56	**56**	63	56
LR-P6_3	11.8	56	**56**	63	56
LR-P6_4	15.3	56	**56**	63	56
LR-P6_5	18.7	56	**56**	63	56
LR-P6_6	22.1	56	**56**	63	56
LR-P6_7	25.5	56	**56**	63	56
LR-P6_8	28.9	55	**56**	62	55
LR-P6_9	32.3	55	**56**	62	55
LR-P6_10	35.8	55	**56**	62	55
LR-P6_11	39.2	55	55	62	55
LR-P6_12	42.6	55	55	61	55
LR-P6_13	46.0	55	55	61	55
LR-P6_14	49.4	55	55	61	55
LR-P6_15	52.9	54	55	60	54

Numbers in bold denote exceedances of the noise criteria

Appendix 4.8.4
Predicted Noise Level for Light Rail (Unmitigated)

NSR ID	mPD	Leq,30min, dB(A)		Lmax, dB(A)	Leq, 24-hr, dB(A)
		Daytime	Nighttime		
LR-P6_16	56.3	54	55	60	54
LR-P6_17	59.7	54	54	60	54
LR-P6_18	63.1	54	54	59	54
LR-P6_19	66.5	54	54	59	54
LR-P6_20	70.0	53	54	59	54
LR-P6_21	73.4	53	54	58	53
LR-P6_22	76.8	53	54	58	53
LR-P6_23	80.2	53	53	58	53
LR-P6_24	83.6	53	53	57	53
LR-P6_25	87.0	53	53	57	53
LR-P6_26	90.5	53	53	57	53
LR-P6_27	93.9	52	53	57	52
LR-P6_28	97.3	52	53	56	52
LR-P6_29	100.7	52	53	56	52
LR-P6_30	104.1	52	52	56	52
LR-P6_31	107.6	52	52	55	52
LR-P6_32	111.0	52	52	55	52
LR-P6_33	114.4	52	52	55	52
LR-P6_34	117.8	51	52	55	51
LR-P6_35	121.2	51	52	54	51
LR-P6_36	124.7	51	52	54	51
LR-P6_37	128.1	51	51	54	51
LR-P6_38	131.5	51	51	54	51
LR-P6_39	134.9	51	51	53	51
LR-P6_40	138.3	51	51	53	51
LR-P6_41	141.7	51	51	53	51
LR-P6_42	145.2	50	51	53	50
LR-P6_43	148.6	50	51	53	50
LR-P6_44	152.0	50	51	52	50
Existing NSR					
LR-E1_1	12.5	61	60	72	59
LR-E1_2	15.5	61	60	72	59
LR-E1_3	18.5	60	60	71	59
LR-E1_4	21.5	60	60	71	59
LR-E2_1	11.6	60	60	70	59
LR-E2_2	14.6	60	60	70	59
LR-E2_3	17.6	60	59	69	58
LR-E2_4	20.6	59	59	69	58
LR-E2_5	23.6	58	58	68	57
LR-E2_6	26.6	58	58	67	56
LR-E2_7	29.6	57	57	66	56
LR-E3_1	10.4	57	57	66	56
LR-E3_2	13.4	57	57	66	56
LR-E3_3	16.4	57	57	66	56
LR-E3_4	19.4	57	57	66	55

Numbers in bold denote exceedances of the noise criteria

Appendix 4.8.4
Predicted Noise Level for Light Rail (Unmitigated)

NSR ID	mPD	Leq,30min, dB(A)		Lmax, dB(A)	Leq, 24-hr, dB(A)
		Daytime	Nighttime		
LR-E3_5	22.4	57	56	65	55
LR-E3_6	25.4	56	56	65	55
LR-E3_7	28.4	56	56	65	55
LR-E3_8	31.4	56	55	64	54
LR-E3_9	34.4	55	55	63	54
LR-E3_10	37.4	55	55	63	54
LR-E3_11	40.4	55	54	62	53
LR-E3_12	43.4	54	54	62	53
LR-E3_13	46.4	54	54	61	53
LR-E4_1	10.1	58	58	67	57
LR-E4_2	13.1	58	58	67	57
LR-E4_3	16.1	58	58	67	57
LR-E4_4	19.1	58	58	67	57
LR-E4_5	22.1	58	58	66	56
LR-E4_6	25.1	57	57	66	56
LR-E4_7	28.1	57	57	65	56
LR-E4_8	31.1	57	57	65	55
LR-E4_9	34.1	56	56	64	55
LR-E4_10	37.1	56	56	64	55
LR-E4_11	40.1	56	56	63	54
LR-E4_12	43.1	55	55	62	54
LR-E4_13	46.1	55	55	62	54
LR-E5_1	10.6	58	58	68	57
LR-E5_2	13.6	58	58	68	57
LR-E5_3	16.6	58	58	68	57
LR-E5_4	19.6	58	58	67	56
LR-E5_5	22.6	57	57	67	56
LR-E5_6	25.6	57	57	66	56
LR-E5_7	28.6	57	56	65	55
LR-E5_8	31.6	56	56	65	55
LR-E5_9	34.6	56	56	64	54
LR-E5_10	37.6	56	55	64	54
LR-E5_11	40.6	55	55	63	54
LR-E5_12	43.6	55	55	62	53
LR-E5_13	46.6	55	54	62	53
LR-E6_1	5.5	58	58	64	57
LR-E6_2	8.5	58	58	64	57
LR-E6_3	11.5	58	58	64	57
LR-E6_4	14.5	58	58	64	57
LR-E7_1	13.5	58	NA	66	57
LR-E7_2	16.5	58	NA	66	56

Numbers in bold denote exceedances of the noise criteria