

**ATTACHMENT X-4
TABULATED SUMMARY OF ACOUSTIC MODELING RESULTS BY
RECEPTOR LOCATION**

Attachment X-4. Revised Tabulated Summary of Acoustic Modeling Results by Receptor Location

NSR Sequential Number	Receptor ID	Receptor Status	Distance from Receptor to the Transmission Line (ft)	Project Transmission Line Milepost	County	UTM Coordinates (m)		Associated Monitoring Position	Late Night Baseline Sound Pressure Level (dBA)	Predicted Sound Level (dBA)		Foul Weather Increase over Late Night Baseline (dBA)
						Easting	Northing			Fair Weather*	Foul Weather	
1	1008	Residence	1,673	1	Morrow	296,829	5,078,967	MP39	50	10	35	-
2	1009	Residence	1,148	1	Morrow	296,681	5,079,106	MP39	50	12	37	-
3	new	Residence	1,837	17.9	Morrow	295,456	5,052,088	MP05	27	10	35	+8
4	new	Residence	3,232	27.9	Morrow	311,219	5,050,286	MP05	27	8	33	+6
5	new	Residence	3,556	28.1	Morrow	311,442	5,050,316	MP05	27	8	33	+6
6	1176	Residence	2,657	33.2	Morrow	318,872	5,046,093	MP05	27	9	34	+7
7	New-1	Residence	2,884	49.7	Umatilla	335,681	5,030,287	MP06	25	9	34	+10
8	New-2	Residence	2,139	58.9	Umatilla	350,487	5,030,937	MP06	25	11	36	+11
5000	5000	Residence	2267	58.9	Umatilla	350,515	5,030,973	MP06	25	10	35	+10
5001	5001	Residence	2352	58.9	Umatilla	350,544	5,031,003	MP06	25	10	35	+10
5002	5002	Residence	2,067	58.9	Umatilla	350,575	5,030,912	MP06	25	11	36	+11
9	New-3	Residence	1,834	59.6	Umatilla	351,608	5,029,688	MP06	25	11	36	+12
10	New-4	Residence	1,834	59.6	Umatilla	351,608	5,029,688	MP06	25	11	36	+12
11	New-5	Residence	1,398	59.7	Umatilla	351,805	5,030,667	MP06	25	13	38	+13
12	new	Residence	2,684	64	Umatilla	358,711	5,030,227	MP28	30	9	34	+6
13	new	Residence	2,221	64.2	Umatilla	358,940	5,030,005	MP28	30	10	35	+6
14	New-6	Residence	1,096	64.7	Umatilla	359,251	5,029,655	MP28	30	14	39	+9
15	new	Residence	2,428	64.8	Umatilla	360,178	5,029,105	MP28	30	10	35	+6
16	new	Residence	4,032	67.2	Umatilla	363,067	5,029,396	MP28	30	9	34	+5
17	new	Residence	2,569	75.7	Umatilla	374,908	5,035,471	MP08	41	10	35	-
18	123	Residence	919	78.5	Umatilla	377,967	5,038,280	MP09	35	16	41	+7
19	128	Residence	2,192	79.8	Umatilla	379,730	5,039,276	MP09	35	12	37	+4
20	118	Residence	1,483	82.9	Umatilla	384,896	5,038,241	MP09	35	14	39	+5
21	108	Residence	2,116	88.8	Union	390,861	5,032,259	MP11	32	13	38	+6
22	111	Residence	2,218	88.9	Union	390,956	5,032,288	MP11	32	12	37	+6
23	107	Residence	1,785	89	Union	391,084	5,032,153	MP11	32	14	39	+7
24	266	Residence	1,555	89	Union	391,099	5,032,083	MP11	32	14	39	+8
25	106	Residence	1,883	90.9	Union	393,171	5,029,402	MP11	32	13	38	+7
26	265	Cabin	1,260	91.6	Union	393,869	5,029,058	MP11	32	15	40	+8
29	257	School/Correctional Facility	1,867	99.1	Union	402,712	5,021,145	MP 100	31	12	37	+7
36	blank	Residence	1,175	105	Union	411,360	5,018,085	MP 101	36	15	40	+6

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						Easting	Northing			Fair Weather*	Foul Weather	
37	blank	Residence	2,733	105.3	Union	411,775	5,017,526	MP 101	36	11	36	+3
38	blank	Residence	1,962	105.8	Union	413,069	5,018,465	MP 102	32	12	37	+6
39	blank	Residence	1,339	105.8	Union	412,939	5,018,324	MP 102	32	14	39	+7
40	blank	Residence	2,402	105.9	Union	413,382	5,018,048	MP 102	32	11	36	+5
5003	5003	Residence	1225	105.9	Union	413,012	5,018,123	MP 102	32	15	40	+8
41	blank	Residence	1,650	106	Union	413,170	5,017,950	MP 102	32	16	41	+9
42	blank	Residence	2,949	106.1	Union	411,871	5,017,363	MP 101	36	14	39	+5
43	blank	Residence	1,978	106.1	Union	413,329	5,017,731	MP 102	32	15	40	+8
44	blank	Residence	1,627	106.1	Union	413,205	5,017,785	MP 102	32	16	41	+9
45	blank	Residence	2,024	106.2	Union	412,192	5,017,242	MP 101	36	16	41	+6
46	blank	Residence	991	106.2	Union	413,066	5,017,539	MP 102	32	18	43	+11
47	blank	Residence	1,345	106.3	Union	412,401	5,017,259	MP 101	36	18	43	+8
48	blank	Residence	2,152	106.3	Union	412,204	5,017,039	MP 101	36	15	40	+6
49	blank	Residence	1,247	106.3	Union	413,179	5,017,410	MP 102	32	17	42	+10
50	blank	Residence	1,791	106.3	Union	413,355	5,017,402	MP 102	32	15	40	+9
51	blank	Residence	3,130	106.4	Union	412,104	5,016,572	MP 100	31	13	38	+8
52	blank	Residence	2,461	106.4	Union	412,287	5,016,666	MP 101	36	15	40	+5
53	blank	Residence	1,759	106.4	Union	412,342	5,016,992	MP 101	36	16	41	+7
54	blank	Residence	1,900	106.4	Union	412,352	5,016,874	MP 101	36	16	41	+6
55	blank	Residence	3,041	106.6	Union	412,252	5,016,409	MP 100	31	14	39	+8
5004**	5004	Residence	338	106.7	Union	413,027	5,016,731	MP 101	36	21	46	+11
537	537	Residence	3,436	107.5	Union	414,796	5,016,231	MP 102	32	10	35	+4
56	blank	Residence	3,035	107.8	Union	413,460	5,014,689	MP 100	31	14	39	+8
5005	5005	Residence	3219	107.9	Union	413,341	5,014,758	MP 100	31	10	35	+5
57	blank	Residence	1,939	110.3	Union	417,831	5,013,289	MP 103	43	12	37	-
58	blank	Residence	1,306	110.9	Union	418,035	5,012,267	MP 103	43	14	39	+1
59	blank	Residence	1,581	111.7	Union	418,564	5,011,176	MP 103	43	13	38	+1
60	blank	Residence	2,349	111.7	Union	418,791	5,011,237	MP 103	43	11	36	-
61	blank	Residence	2,858	111.9	Union	419,051	5,011,007	MP 103	43	10	35	-
62	blank	Residence	3,035	112.6	Union	419,517	5,009,994	MP 103	43	9	34	-
63	blank	Residence	958	112.6	Union	418,948	5,009,711	MP 103	43	15	40	+2

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						Easting	Northing			Fair Weather*	Foul Weather	
64	blank	Residence	1,106	115.4	Union	420,229	5,005,549	MP13	48	15	40	-
65	blank	Residence	1,854	119.4	Union	423,413	4,999,692	MP13	48	12	37	-
66	91	Residence	2,106	120.5	Union	424,119	4,998,514	MP13	48	12	37	-
67	blank	Residence	997	123.7	Union	428,499	4,995,702	MP14	33	16	41	+8
68	85	Residence	2,083	124.1	Union	428,330	4,994,572	MP14	33	12	37	+5
69	83	Residence	1,467	142.6	Baker	439,860	4,968,035	MP15	27	14	39	+12
70	82	Residence	1,053	142.7	Baker	439,993	4,967,946	MP15	27	15	40	+14
71***	-1	Residence	1,335	144.3	Baker	440,661	4,965,581	MP15	27	14	39	+13
72	80	Residence	3,320	144.3	Baker	440,057	4,965,541	MP15	27	10	35	+9
73	78	Residence	2,923	145.2	Baker	440,273	4,963,747	MP15	27	10	35	+9
5012***	5012	Residence	1552	147.1	Baker	439,939	4,961,807	MP15	27	14	39	+12
74	1262	Residence	2,582	153.7	Baker	439,029	4,951,743	MP16	41	11	36	+1
75	523	Residence	1,591	153.8	Baker	439,265	4,951,957	MP16	41	13	38	+2
76	blank	Residence	2,323	154.1	Baker	439,590	4,951,522	MP16	41	12	37	+1
77	1266	Residence	2,707	154.4	Baker	439,982	4,951,168	MP16	41	11	36	+1
78	72	Residence	1,371	154.9	Baker	440,872	4,951,166	MP16	41	14	39	+2
79	71	Residence	860	155.2	Baker	441,403	4,951,092	MP16	41	17	42	+4
80	1269	Residence	3,058	155.6	Baker	441,686	4,950,225	MP16	41	11	36	+1
81	blank	Residence	2,431	156	Baker	442,416	4,950,110	MP16	41	12	37	+1
82	227	Residence	2,182	159.9	Baker	448,178	4,948,130	MP17	41	12	37	+1
83	68	Residence	2,205	162.3	Baker	452,311	4,947,967	MP09	35	12	37	+4
84	1714	Residence	2,881	166.2	Baker	455,371	4,943,302	MP17	41	10	35	+1
5010	5010	Residence	1,170	174.2	Baker	459,026	4,932,158	MP35	24	16	41	+17
85	36	Residence	1,473	185.2	Baker	473,610	4,921,457	MP25	46	13	38	-
86	34	Residence	1,578	185.3	Baker	473,678	4,921,255	MP25	46	12	37	-
88	873	Residence	705	198.5	Malheur	482,540	4,903,638	MP32	41	19	44	+5
89	876	Residence	443	198.7	Malheur	482,856	4,903,318	MP32	41	21	46	+7
90	877	Residence	505	199.1	Malheur	483,155	4,902,774	MP32	41	21	46	+6
91	936	Residence	2,375	199.8	Malheur	482,565	4,901,562	MP33	34	10	35	+3
92	887	Residence	2,434	215.2	Malheur	478,340	4,879,805	MP35	24	10	35	+12
93	888	Residence	2,283	216	Malheur	477,194	4,879,669	MP34	24	10	35	+11

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						Easting	Northing			Fair Weather*	Foul Weather	
94	891	Residence	1,801	216.2	Malheur	476,768	4,879,627	MP34	24	12	37	+12
95	890	Residence	2,070	216.3	Malheur	476,735	4,879,525	MP34	24	11	36	+12
518	518	Residence	2734	216.4	Malheur	296,829	5,078,967	MP34	24	10	35	+11
96	892	Residence	1,470	216.5	Malheur	476,299	4,879,547	MP34	24	13	38	+13
97	929	Residence	1,693	216.5	Malheur	475,893	4,880,423	MP34	24	12	37	+13
98	925	Residence	1,102	216.8	Malheur	475,509	4,880,072	MP35	24	14	39	+15
99	895	Residence	1,768	216.9	Malheur	475,678	4,879,196	MP35	24	12	37	+13
100	896	Residence	2,119	217	Malheur	475,620	4,879,057	MP35	24	11	36	+12
101	899	Residence	673	217	Malheur	475,459	4,879,468	MP34	24	17	42	+17
102	924	Residence	607	217.3	Malheur	474,932	4,879,676	MP35	24	17	42	+18
103	915	Residence	2,575	217.4	Malheur	474,051	4,879,545	MP35	24	10	35	+11
104	916	Residence	1,598	217.4	Malheur	474,382	4,879,621	MP35	24	12	37	+14
105	919	Residence	745	217.4	Malheur	474,630	4,879,540	MP35	24	16	41	+17
106	904	Residence	2,621	217.7	Malheur	475,377	4,878,437	MP35	24	10	35	+11
107	905	Residence	2,474	217.9	Malheur	474,640	4,878,052	MP35	24	10	35	+12
108	911	Residence	2,119	218.1	Malheur	474,307	4,878,073	MP35	24	11	36	+12
109	913	Residence	2,595	218.1	Malheur	473,894	4,879,450	MP35	24	10	35	+11
110	914	Residence	2,648	218.1	Malheur	473,920	4,879,474	MP35	24	10	35	+11
5011	5011	Residence	780	227.1	Malheur	460,787	4,874,759	MP35	24	17	42	+18
111	1415	Residence	2,746	253.5	Malheur	484,633	4,844,659	MP35	24	10	35	+11
5008	5008	Residence	1,340	254.7	Malheur	485,767	4,843,757	MP35	24	13	38	+14
5009	5009	Residence	2,060	254.7	Malheur	485,808	4,843,997	MP35	24	11	36	+12
112	1420	Residence	1,732	254.9	Malheur	486,262	4,843,852	MP35	24	12	37	+13
133	133	Residence	890	255.4	Malheur	486,617	4,842,858	MP35	24	15	40	+16
113	1422	Residence	3,087	263.7	Malheur	492,765	4,831,089	MP35	24	9	34	+11

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Morgan Lake Alternative

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						Easting	Northing			Fair Weather*	Foul Weather	
114	blank	Residence	3,031	1.9	Union	403,831	5,018,094	MP 100	31	10	35	+5
115	blank	Residence	659	6.1	Union	410,100	5,016,605	MP 100	31	21	46	+15
116	blank	Residence	2,989	6.7	Union	411,682	5,016,649	MP 100	31	14	39	+8
117	98	Cabin	2,549	6.7	Union	410,416	5,015,531	MP 100	31	15	40	+9
118	100	Residence	1,499	6.7	Union	410,654	5,015,745	MP 100	31	17	42	+11
119	blank	Structure, Multi-purpose shed	935	6.8	Union	410,895	5,015,727	MP 100	31	20	45	+14
120	blank	Residence	2,897	6.8	Union	411,725	5,016,555	MP 100	31	14	39	+8
121	1237	Structure, General-purpose building	1,079	6.9	Union	410,912	5,015,638	MP 100	31	19	44	+13
122	blank	Residence	2,579	7.1	Union	412,010	5,016,071	MP 100	31	15	40	+9
123	blank	Residence	2,618	7.1	Union	411,979	5,016,127	MP 100	31	14	39	+9
124	blank	Residence	2,953	7.1	Union	412,025	5,016,230	MP 100	31	14	39	+8
125	blank	Residence	1,378	7.4	Union	411,384	5,014,946	MP 100	31	18	43	+12
126	blank	Residence	3,081	8.3	Union	413,366	5,014,719	MP 100	31	14	39	+8
127	blank	Residence	2,077	9.1	Union	413,861	5,013,840	MP 100	31	13	38	+7
128	blank	Residence	1,926	9.1	Union	413,858	5,013,792	MP 100	31	13	38	+8
129	blank	Residence	1,936	9.1	Union	413,823	5,013,810	MP 100	31	13	38	+8
130	blank	Residence	2,297	9.2	Union	413,986	5,013,859	MP 100	31	12	37	+7
131	blank	Residence	3,071	11	Union	414,566	5,010,723	MP 100	31	12	37	+7
132	blank	Residence	1,060	12.3	Union	416,014	5,008,955	MP 100	31	17	42	+11
535	535	Residence	2,249	9.7	Union	413,762	5,012,340	MP 100	31	13	38	+7
536	536	Residence	3,160	7.7	Union	412,811	5,015,417	MP 100	31	10	35	+6
538	538	Residence	3,195	7.1	Union	412,241	5,016,101	MP 100	31	10	35	+6
133	133C	Campsite	2,758	6.1	Union	410,853	5,017,342	MP 100	31	15	40	+9
134	134C	Campsite	2,711	6.1	Union	410,859	5,017,318	MP 100	31	15	40	+9
135	135C	Campsite	1,681	6.1	Union	410,675	5,017,062	MP 100	31	17	42	+11
136	136C	Campsite	2,614	6.1	Union	410,861	5,017,277	MP 100	31	15	40	+9
137	137C	Campsite	2,517	6.1	Union	410,853	5,017,245	MP 100	31	15	40	+9
138	138C	Campsite	2,403	6.1	Union	410,842	5,017,209	MP 100	31	15	40	+9
139	139C	Campsite	2,180	6.1	Union	410,808	5,017,149	MP 100	31	16	41	+10
140	140C	Campsite	2,116	6.1	Union	410,792	5,017,137	MP 100	31	16	41	+10

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						Easting	Northing			Fair Weather*	Foul Weather	
141	141C	Campsite	2,243	6.1	Union	410,820	5,017,164	MP 100	31	16	41	+10
142	142	Recreation Area	1,015	6.4	Union	410,852	5,016,644	MP 100	31	19	44	+13
143	143	Recreation Area	934	6.4	Union	410,898	5,016,569	MP 100	31	20	45	+14
144	144	Recreation Area	1,681	6.5	Union	411,108	5,016,684	MP 100	31	17	42	+11
145	145	Recreation Area	1,899	6.5	Union	411,150	5,016,736	MP 100	31	16	41	+11
146	146	Recreation Area	1,999	6.5	Union	411,184	5,016,746	MP 100	31	16	41	+10
147	147	Recreation Area	1,075	6.3	Union	410,707	5,016,794	MP 100	31	19	44	+13
148	148	Recreation Area	1,058	6.4	Union	410,843	5,016,671	MP 100	31	19	44	+13
149	149	Recreation Area	1,280	6.2	Union	410,626	5,016,944	MP 100	31	18	43	+12
150	150	Recreation Area	1,204	6.2	Union	410,674	5,016,878	MP 100	31	19	44	+13
151	151	Recreation Area	804	6.3	Union	410,658	5,016,726	MP 100	31	21	46	+15
152	152	Recreation Area	900	6.4	Union	410,819	5,016,630	MP 100	31	20	45	+14
153	153	Recreation Area	400	6.4	Union	410,670	5,016,554	MP 100	31	24	49	+18
154	154	Recreation Area	1,272	6.4	Union	410,985	5,016,628	MP 100	31	18	43	+12
155	155	Recreation Area	2,130	6.5	Union	411,171	5,016,807	MP 100	31	16	41	+10
156	156	Recreation Area	1,465	6.1	Union	410,572	5,017,065	MP 100	31	18	43	+12
157	157	Recreation Area	1,611	5.9	Union	410,373	5,017,328	MP 100	31	17	42	+11

Notes:

Receptor IDs are provided for ease in cross-referencing older documentation. An incremental increase presented as (-) signifies that the future increase as a result of the Project is predicted to be less than 1 dBA when considered cumulatively with the baseline condition. The incremental increase is obtained by first logarithmically adding the Predicted Foul Weather Sound Level to the Late Night Baseline Sound Pressure Level. The Late Night Baseline Sound Pressure Level is then arithmetically subtracted from this total to quantify the incremental increase. Note that sound pressure levels cannot be added together linearly. For example, a baseline sound pressure level of 25 dBA plus a received sound pressure level of 33 dBA does not equal 58 dBA; rather, using logarithmic addition, the resultant sound pressure level would be 34 dBA. Sound levels in this table are reported in whole decibels.

* Predicted fair weather sound levels are 25 dBA below predicted foul weather sound levels. Fair weather values in Attachment X-4 have been corrected where applicable.

** IPC's review of Google Earth imagery could not confirm that NSR-5004 is a residence. Nevertheless, as a conservative measure, IPC has designated NSR-5004 as a residence and as an exceedance for the purposes of this review.

***When considered in isolation, IPC's modeling shows NSR-71 is expected to have an estimated noise increase of +13 A-weighted decibels (dBA). However, there is an existing transmission line located between NSR-71 and the Project, and after taking into account the predicted foul weather corona noise from the existing line, the Project does not result in an exceedance at NSR-71. Similarly, when considered in isolation, NSR-5012 is expected to have an increase of +12 dBA; but when the noise from the nearby existing 230-kV line is considered as part of the baseline, the Project does not result in an exceedance at NSR-5012. Therefore, NSR-71 and NSR-5012 are not expected to result in exceedances after the noise from the existing transmission lines is taken into account.

Grey font indicates receptors that *are not* NSRs for purposes of determining compliance with ODEQ's Ambient Antidegradation Standard. See OAR 340-035-0035(1)(b)(B)(i) (the Ambient Antidegradation Standard); OAR 340-035-0015(38) (definition of "noise sensitive property").

Red font indicates foul weather increase for residence over late night baseline of or greater than 11 dBA.

dBA = A-weighted decibel

ft = feet

ID = identification

m = meter

MP = milepost

NSR = noise sensitive receptor

ODEQ = Oregon Department of Environmental Quality

UTM = Universal Transverse Mercator