

# Appendix 12

## **Appendix 12.1**

### **Baseline Noise Monitoring Survey**

### 12.1.1 Unattended Noise Monitoring Location 1

NML1 was located to the rear/side garden of 10 Pairc an Grianan. To be representative of existing noise sources, RPS have undertaken unattended noise monitoring to include daytime and night time data from 10<sup>th</sup> February 2023 to the 14<sup>th</sup> February 2023. Figure 12.1.1 below illustrates the location of the unattended noise monitoring survey.

**Figure 12.1.1: Noise Monitoring Location**



The details of the unattended noise monitoring survey including a description of the noise monitoring location, date, and sound level meter used are summarised in Table 12.1.1. The calibration certificates and sound level meter specifications from the noise survey equipment are detailed below.

**Table 12.1.1: Unattended Noise Monitoring Summary (10/02/2023 – 14/02/2023)**

Noise Monitoring Location	Description of Noise Monitoring Location	Date	Noise Monitor
NML1	Rear/side garden 10 Pairc an Grianan	10/02/2023 – 14/02/2023	Norsonic 140

## 12.1.2 Methodology

The baseline noise monitoring survey at NML1 10<sup>th</sup> February 2023 to the 14<sup>th</sup> February 2023 was carried out using a Norsonic 140 Class 1 Sound Level Analyser in conjunction with the following:

- Norsonic 1211 Outdoor Microphone System and Storage Case;
- Norsonic 1212 – Microphone Dehumidifier Unit;
- CA 1317 – Weather Protection Kit – Type L; and
- Brüel & Kjær 4231 Calibrator.

Table 12.1.2 shows the instrument records for the Norsonic 140 SLM.

**Table 12.1.2: Norsonic 140 Noise Instrument Records.**

Norsonic 140 Sound Level Meter				
Equipment	Model / Type	Serial Number	Calibration Certificate Number	Last Calibration Date
Sound Level Meter	Norsonic 140	1407884	4712339005	16/09/2022
Preamplifier	Norsonic 1209	23500	4712339005	16/09/2022
Microphone	Norsonic 1225	505496	4712339005	16/09/2022
Calibrator	Brüel & Kjær 4231	2445560	UCRT22/2199	10/10/2022

The noise monitoring instrumentation conforms to the requirements for integrating averaging sound level meters (Type 1) as specified in BS EN 60804. The sound level meter was accurately calibrated before and after use.

The microphone was placed at a height of 1.2 - 1.5m above ground level. The sound level meter was accurately calibrated before and after use with no drift observed. Noise measurements were undertaken in 15-minute durations. noise measurements were undertaken in 15 minute durations.

Weather conditions throughout the noise monitoring surveys were suitable for the surveys to be completed, typically with dry and still conditions throughout.

The following acoustic parameters were recorded during the survey periods:

- L<sub>Aeq</sub>** The continuous equivalent A-weighted sound pressure level. This is an “average” of the sound pressure level
- L<sub>Amax</sub>** This is the maximum A-weighted sound level measured during the sample period
- L<sub>Amin</sub>** This is the minimum A-weighted sound level measured during the sample period
- L<sub>A10</sub>** This is the A-weighted sound level that is exceeded for noise for 10% of the sample period
- L<sub>A90</sub>** This is the A-weighted sound level that is exceeded for 90% of the sample period

Calibration certificates and noise monitoring survey photographs are shown below.

**Figure 12.1.2: Calibration Certificate of Norsonic 140 SLM at NML1**

# Certificate of Calibration

**Certificate No.:** 4712339005

**Object:** Sound Analyser Nor140

**Supplier:** Norsonic AS

**Type:** Nor140

**Serial number:** 1407884

**Client:** RPS Ireland Ltd

**This instrument is tested and calibrated in accordance to the Norsonic production standard set for Nor140, ensuring that the instrument conforms to the following standards;**

- IEC 61672-1:2002 class 1
- IEC 61260-1 class 1 Ed 1.0 2014-02
- ANSI S1.4-1983 (R2001) with amd. S1.4A-1985 class 1
- ANSI S1.43-1997 (R2002) class 1
- ANSI S1.11-2004 class 1
- DIN 45 657, Applicable parts
- IEC 61094 part 4

**Instrumentation used for calibration traceable to:**


- Electrical Parameters: IKM, Norway
- Acoustical Parameters: PTB, Germany
- Environmental Parameters: Justervesenet, Norway


**Adjustments:** None

**Comments:** None

**Date of calibration:** 2022-09-16      **Calibration interval recommended:** 2 years

**The environmental parameters applicable to this calibration are kept well within limits ensuring negligible deviation on obtained measurement results.**

**Calibrated by:** 

Sign. 

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Phone +47 32858900 Fax.: +47 32852208, email: info@norsonic.com

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**Table 12.1.3: Photographs of Norsonic 140 Sound Level Meter at NML 1 from Northern, Southern, Easterly and Westerly Directions (10/02/2023 – 14/02/2023)**

North	East
	
South	West
	

### 12.1.3 Noise Monitoring Survey Results

The sections to follow detail the results from the noise monitoring survey undertaken at the development site from Friday 10<sup>th</sup> February 2023 to Tuesday 14<sup>th</sup> February 2023.

Recorded noise data was analysed and visualised using RPS in house software. The software is written in Python and uses advanced statistical and visualisation libraries.

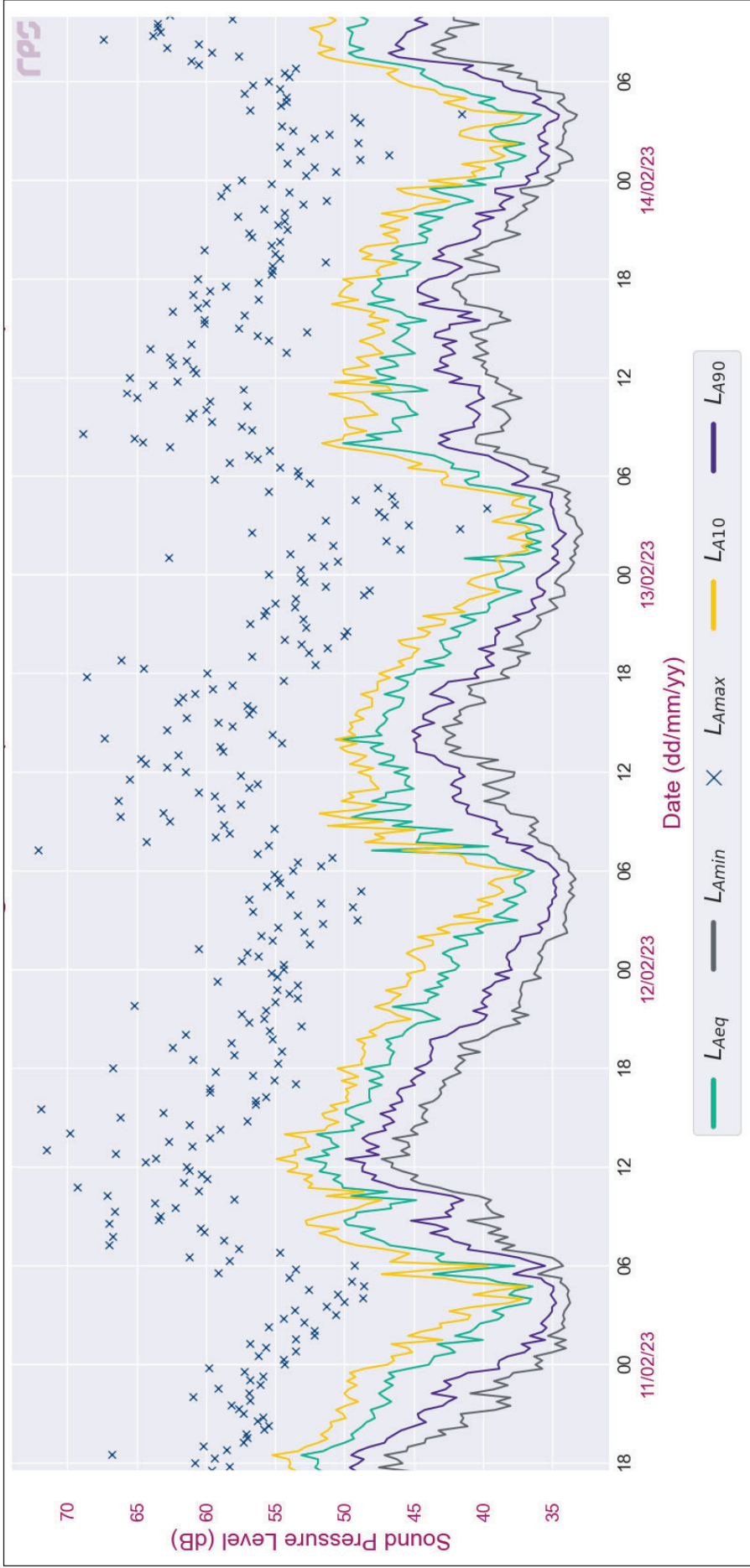
The approach to analysing the recorded noise data involved compiling all observations into a single dataset for the noise monitoring location using their respective time stamps before reading into the software.

The main steps the software takes are described below:

- Before any further analysis, all monitoring data is visualised, and any dubious records are highlighted and removed;
- Data was divided into 2 sets daytime (07:00 – 23:00hrs) and night-time (23:00- 07:00hrs)
- For day and night-time periods, the noise monitoring parameter distributions were plotted for  $L_{Aeq}$  and  $L_{A90}$ .

A complete noise graph was plotted for the noise monitoring results including  $L_{A90}$  and  $L_{Aeq}$  and shown in Figure 12.1.3.

**Figure 12.1.3: NML 1 Complete Noise Data (10/02/2023 – 14/02/2023)**

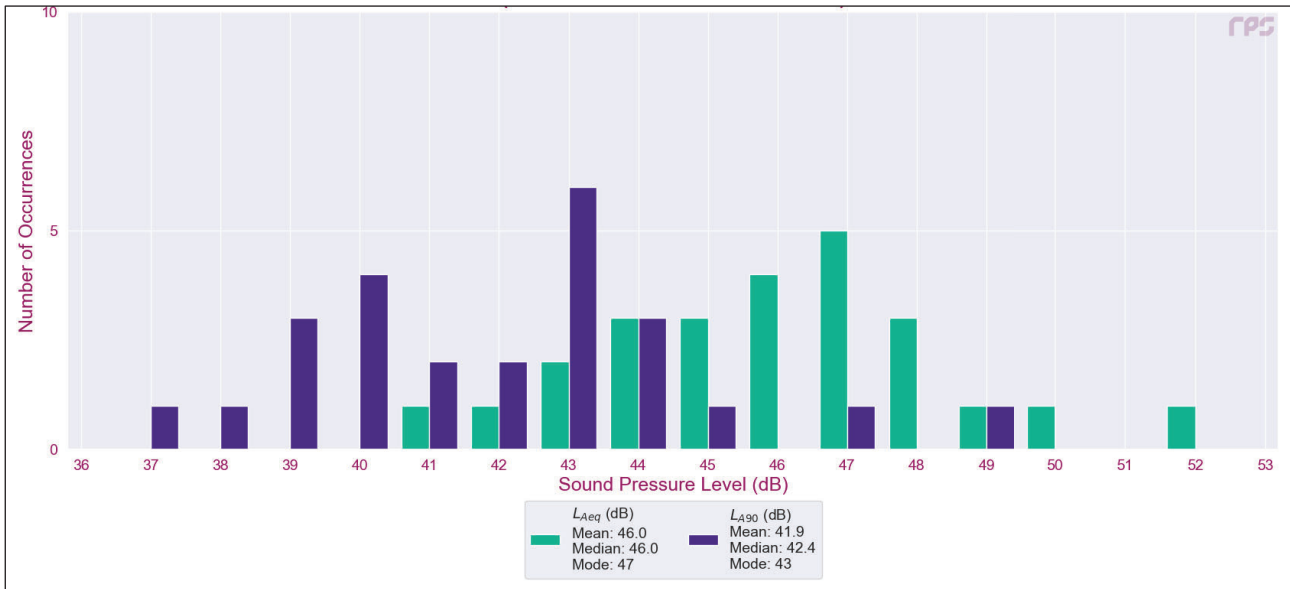


## 12.A.4 Statistical Analysis

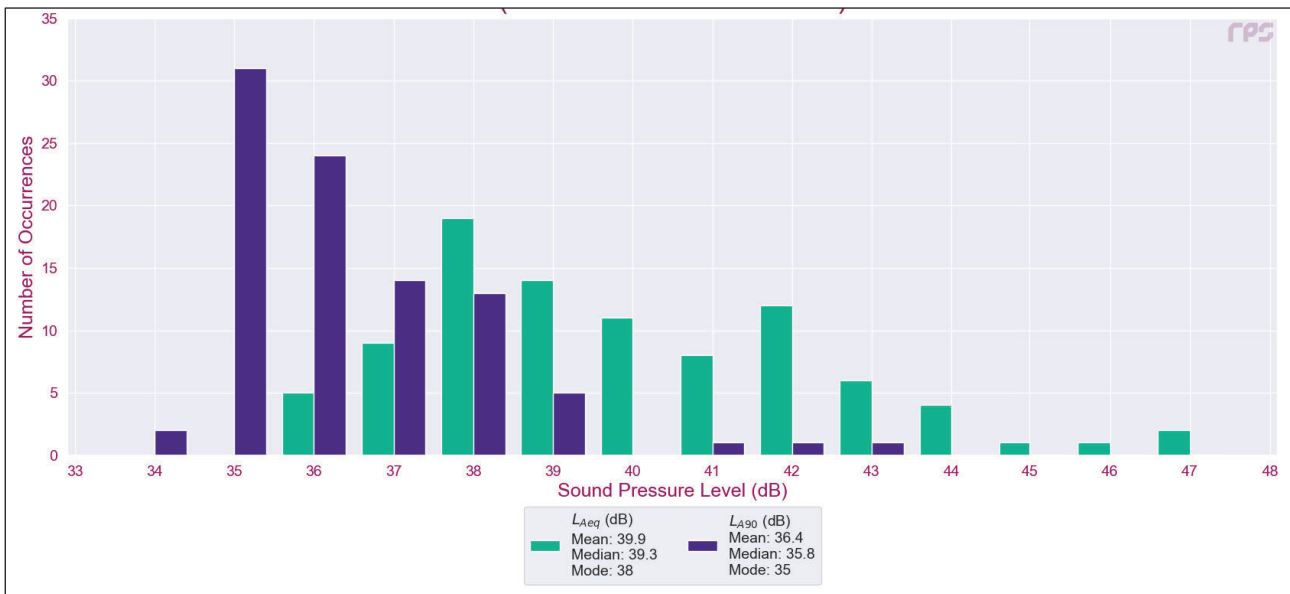
Noise monitoring results from NML1 were statistically analysed to determine the appropriate ‘typical’ background sound levels from both daytime and night-time noise monitoring periods.

Figure 12.1.4 and Figure 12.1.5 below show the frequency results, for daytime and night-time data, from the noise monitoring survey at NML1.

**Figure 12.1.4: Frequency Daytime  $L_{Aeq, 1hr}$  and  $L_{A90 1hr}$  at Noise Monitoring Location 1 (10/02/2023 – 14/02/2023)**



**Figure 12.1.5: Frequency Night-time  $L_{Aeq, 15mins}$  and  $L_{A90 15mins}$  at Noise Monitoring Location 1 (10/02/2023 – 14/02/2023)**



The typical background noise levels for daytime and night-time analysis completed are summarised below in Table 12.1.4 including statistical analysis  $L_{A90}$  noise levels:

**Table 12.1.4: Typical  $L_{A90}$  and  $L_{Aeq}$  Noise Levels at NML 1**

Noise Monitoring Location	$L_{A90}$ Analysis		$L_{Aeq}$ Analysis	
	Daytime (dB)	Night-time (dB)	Daytime (dB)	Night-time (dB)
1	43	35	47	38

## **Appendix 12.2**

### **Construction Noise Assessment**

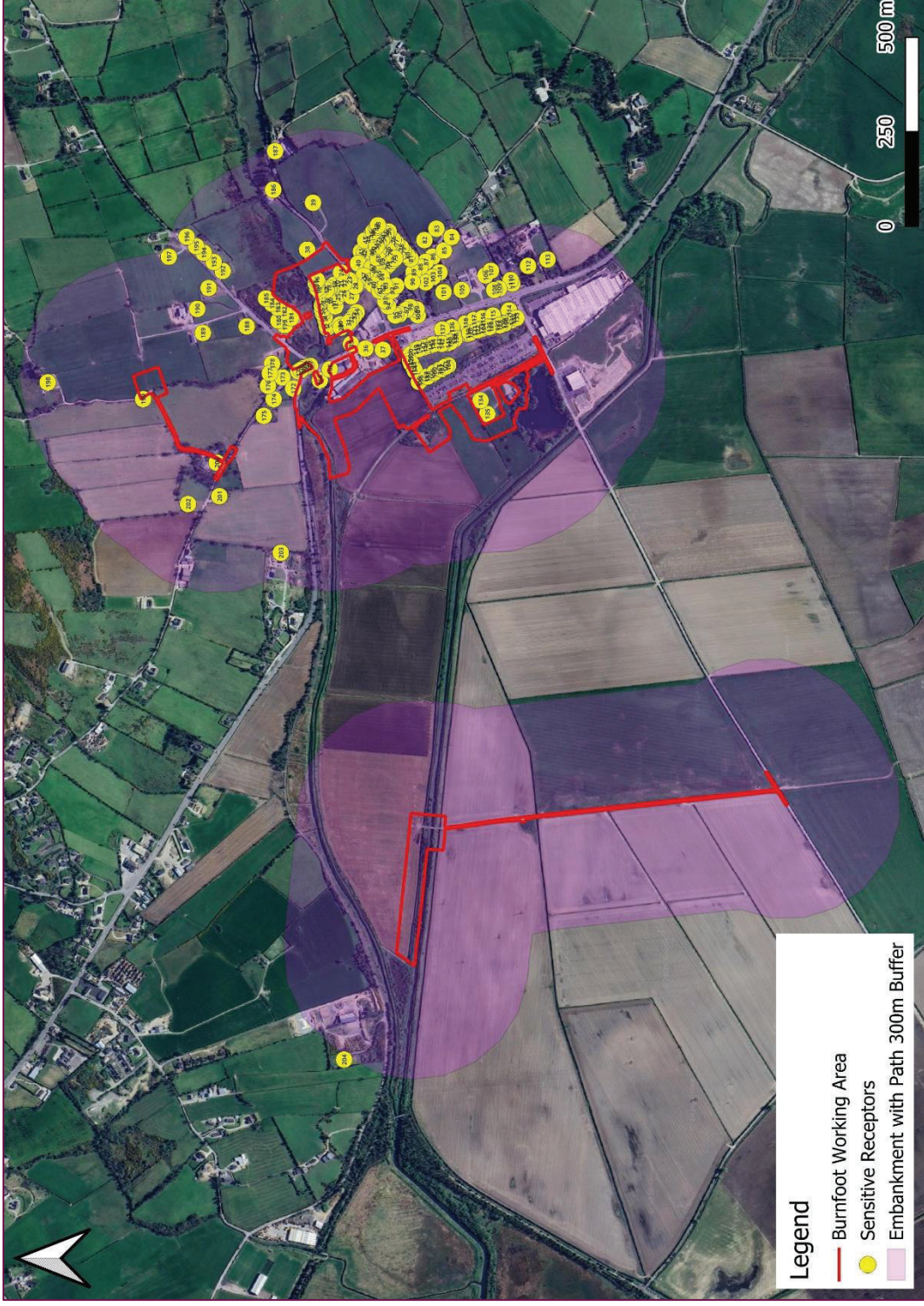
## Construction Receptors and Distances

### Noise and Vibration Construction Receptors

The construction noise and vibration receptor locations<sup>1</sup> are illustrated in Figure 12.2.1 with a list of their identification references (ID's), and location coordinates summarised in Table 12.2.1. The majority of construction noise and vibration receptors identified within the noise and vibration study area are residential properties.

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<sup>1</sup> (N. B. Addresses of the construction noise receptors have not been included due to General Data Protection Regulations (GDPR) and publication of personal data).



**Figure 12.2.1: Map of Complete Construction Noise and Vibration Sensitive Receptors**

**Table 12.2.1: Complete Construction Noise Sensitive Receptors Identification and Coordinates**

Noise Sensitive Receptor ID	Easting	Northing
1	238129	423685
2	238135	423686
3	238150	423690
4	238156	423691
5	238168	423696
6	238177	423698
7	238189	423699
8	238197	423695
9	238200	423684
10	238199	423676
11	238193	423667
12	238185	423663
13	238227	423706
14	238233	423710
15	238247	423714
16	238255	423711
17	238228	423686
18	238234	423679
19	238243	423665
20	238245	423658
21	238245	423647
22	238247	423639
23	238255	423626
24	238275	423648
25	238210	423656
26	238219	423641
27	238212	423621
28	238239	423610
29	238129	423648
30	238138	423650
31	238142	423628
32	238149	423621
33	238160	423613
34	238170	423606
35	238086	423621
36	238074	423583
37	238071	423537
38	238335	423737
39	238459	423722
40	238299	423603
41	238330	423595
42	238325	423586
43	238360	423584
44	238363	423576
45	238376	423567
46	238383	423562
47	238395	423554
48	238400	423550
49	238328	423566
50	238335	423562
51	238344	423554
52	238352	423549
53	238360	423541
54	238367	423536
55	238377	423529
56	238383	423522
57	238266	423588

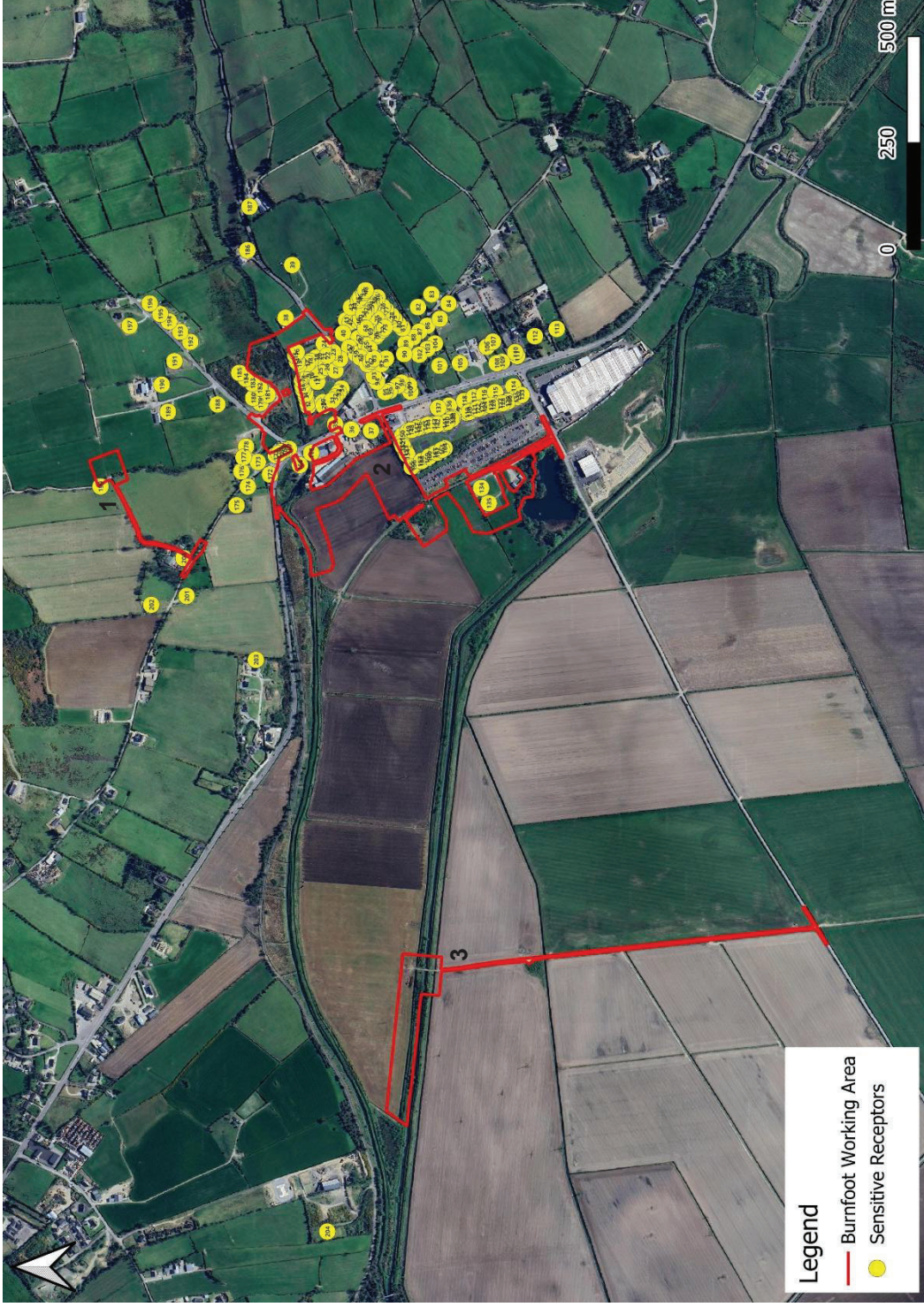
Noise Sensitive Receptor ID	Easting	Northing
58	238260	423583
59	238250	423572
60	238242	423562
61	238227	423546
62	238234	423538
63	238240	423531
64	238263	423540
65	238271	423548
66	238282	423561
67	238288	423566
68	238311	423550
69	238303	423539
70	238291	423525
71	238296	423521
72	238307	423510
73	238312	423505
74	238328	423518
75	238334	423524
76	238361	423510
77	238354	423502
78	238341	423489
79	238333	423482
80	238320	423472
81	238311	423464
82	238361	423427
83	238391	423395
84	238369	423355
85	238333	423376
86	238317	423405
87	238303	423424
88	238290	423438
89	238275	423456
90	238250	423459
91	238240	423502
92	238227	423513
93	238200	423531
94	238186	423523
95	238161	423504
96	238164	423493
97	238176	423475
98	238183	423465
99	238177	423448
100	238162	423445
101	238223	423377
102	238249	423424
103	238263	423405
104	238275	423387
105	238229	423329
106	238267	423265
107	238280	423251
108	238229	423242
109	238232	423230
110	238255	423199
111	238246	423195
112	238292	423153
113	238309	423102
114	238175	423203
115	238161	423246
116	238154	423273

Noise Sensitive Receptor ID	Easting	Northing
117	238149	423296
118	238140	423318
119	238113	423312
120	238115	423307
121	238120	423295
122	238122	423287
123	238125	423276
124	238127	423271
125	238130	423256
126	238131	423251
127	238134	423234
128	238135	423229
129	238139	423217
130	238141	423212
131	238148	423197
132	238152	423192
133	238155	423184
134	237936	423279
135	237901	423261
136	238129	423355
137	238124	423380
138	238101	423345
139	238098	423348
140	238090	423359
141	238088	423365
142	238086	423381
143	238086	423389
144	238085	423404
145	238082	423411
146	238078	423424
147	238076	423431
148	238072	423443
149	238070	423450
150	238059	423463
151	238042	423465
152	238035	423462
153	238023	423456
154	238015	423453
155	237986	423442
156	237989	423437
157	237998	423422
158	238000	423419
159	238006	423406
160	238010	423400
161	238018	423387
162	238019	423382
163	238026	423371
164	238029	423364
165	238011	423672
166	237990	423704
167	238028	423729
168	238025	423740
169	238021	423747
170	238017	423754
171	238013	423761
172	237968	423774
173	237997	423802
174	237940	423826
175	237896	423852

Noise Sensitive Receptor ID	Easting	Northing
176	237975	423841
177	238008	423836
178	238033	423830
179	238135	423796
180	238147	423813
181	238155	423780
182	238171	423798
183	238182	423815
184	238193	423831
185	238206	423846
186	238494	423827
187	238596	423822
188	238132	423897
189	238115	424013
190	238179	424028
191	238234	423998
192	238279	423961
193	238303	423984
194	238327	424011
195	238344	424031
196	238369	424056
197	238317	424103
198	237984	424424
199	237940	424171
200	237772	423976
201	237683	423969
202	237662	424052
203	237533	423807
204	236192	423640

## Distance for Site Establishment and Clearance and General Plant/Transport Construction Activity

The construction noise receptor locations in relation to the site establishment and clearance and general plant/transport construction activities are illustrated in Figure 12.2.2, with associated receptor distances summarised in Table 12.2.2.



**Figure 12.2.2: Site Establishment and Clearance and General Plant/Transport Construction Noise Receptors**

**Table 12.2.2: Distance for Site Establishment and Clearance and General Plant/Transport Construction Activity**

Noise Sensitive Receptor ID	Distance to Working Area Boundary 1 (m)	Distance to Working Area Boundary 2 (m)	Distance to Working Area Boundary 3 (m)
1	400	9	1356
2	405	9	1363
3	415	9	1378
4	419	9	1385
5	426	7	1397
6	433	6	1406
7	443	8	1418
8	451	13	1425
9	460	24	1427
10	463	32	1425
11	463	40	1417
12	459	42	1409
13	471	9	1457
14	469	6	1463
15	472	7	1478
16	478	14	1485
17	483	28	1455
18	491	36	1459
19	506	45	1466
20	512	39	1467
21	517	32	1466
22	523	28	1467
23	537	21	1473
24	543	10	1496
25	483	54	1433
26	499	56	1440
27	505	64	1430
28	533	43	1456
29	423	12	1351
30	429	21	1360
31	446	20	1361
32	456	28	1368
33	469	41	1378
34	481	52	1386
35	411	7	1305
36	432	23	1289
37	467	25	1282
38	501	20	1569
39	597	109	1689
40	587	25	1515
41	617	40	1545
42	618	45	1540
43	641	69	1574
44	650	77	1576
45	665	93	1589
46	672	101	1596
47	686	115	1607
48	691	121	1612
49	631	65	1541
50	639	71	1547
51	652	83	1557
52	660	91	1563
53	672	102	1572
54	680	110	1578
55	693	121	1588

**APPENDICES**

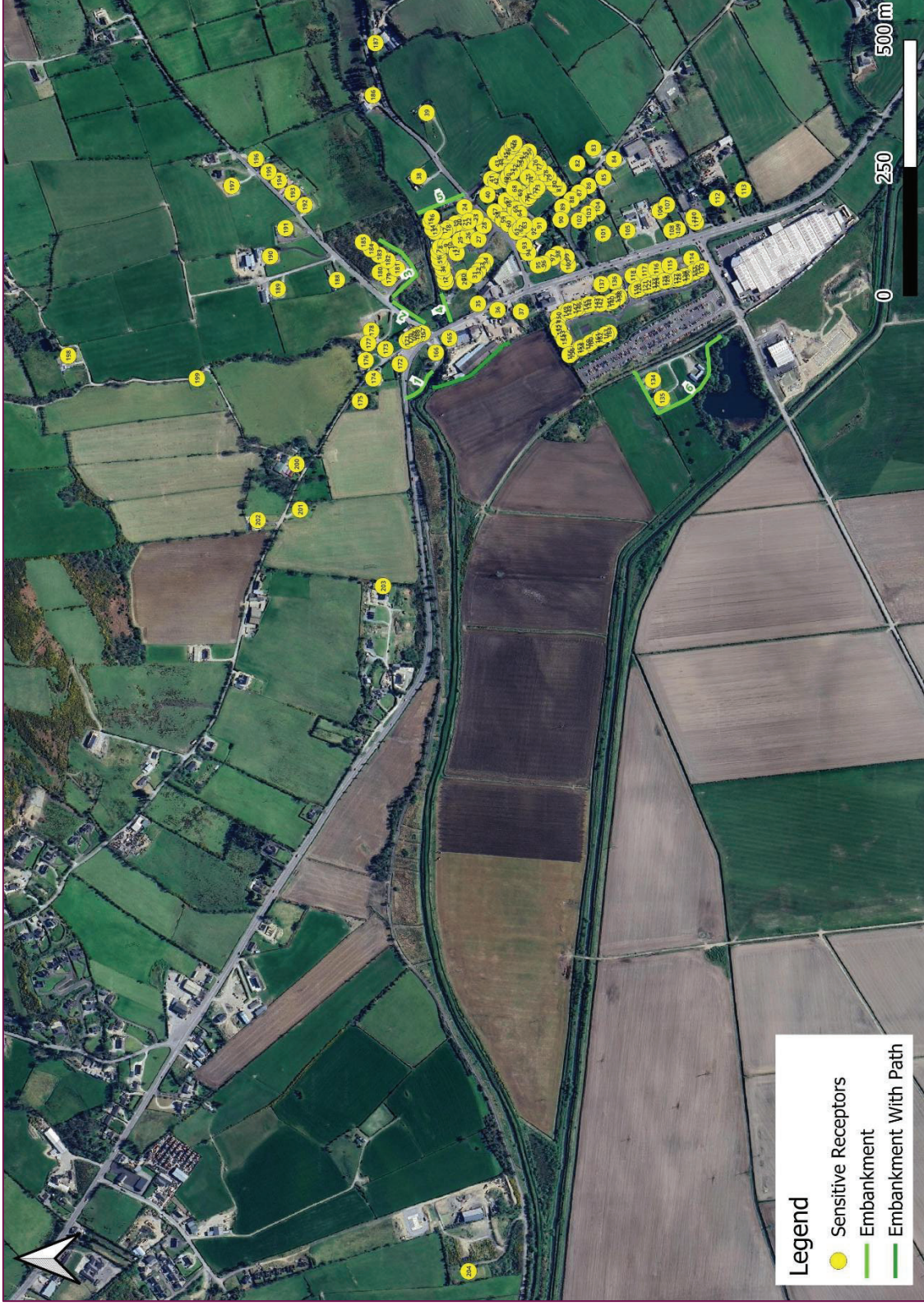
<b>Noise Sensitive Receptor ID</b>	<b>Distance to Working Area Boundary 1 (m)</b>	<b>Distance to Working Area Boundary 2 (m)</b>	<b>Distance to Working Area Boundary 3 (m)</b>
56	702	131	1594
57	568	41	1481
58	566	49	1474
59	565	63	1464
60	565	76	1455
61	564	98	1439
62	575	101	1445
63	584	104	1451
64	595	87	1475
65	596	78	1483
66	597	64	1494
67	599	59	1501
68	627	77	1523
69	627	87	1515
70	627	100	1502
71	633	104	1507
72	648	117	1517
73	656	122	1523
74	660	112	1539
75	661	107	1545
76	691	130	1572
77	690	134	1564
78	688	143	1551
79	686	147	1542
80	683	155	1530
81	682	163	1521
82	743	207	1571
83	787	247	1602
84	798	264	1582
85	759	223	1545
86	726	197	1528
87	704	179	1513
88	684	163	1500
89	661	146	1485
90	641	121	1460
91	603	115	1450
92	587	106	1438
93	555	85	1411
94	550	69	1396
95	549	41	1371
96	558	40	1374
97	580	47	1386
98	592	53	1393
99	602	52	1387
100	595	40	1372
101	686	131	1435
102	667	127	1459
103	690	147	1473
104	711	166	1487
105	729	171	1445
106	802	208	1488
107	821	210	1499
108	801	163	1447
109	813	158	1449
110	851	163	1468
111	850	153	1459
112	910	187	1500
113	963	206	1511

Noise Sensitive Receptor ID	Distance to Working Area Boundary 1 (m)	Distance to Working Area Boundary 2 (m)	Distance to Working Area Boundary 3 (m)
114	808	96	1389
115	764	122	1380
116	737	143	1375
117	714	164	1368
118	690	148	1358
119	683	132	1330
120	689	135	1333
121	702	138	1339
122	709	136	1342
123	720	135	1346
124	726	134	1348
125	741	120	1351
126	746	116	1351
127	762	100	1352
128	768	95	1352
129	780	86	1355
130	785	83	1356
131	802	74	1362
132	808	72	1365
133	816	69	1367
134	657	24	1158
135	668	22	1123
136	653	111	1343
137	629	86	1336
138	648	123	1316
139	644	120	1312
140	631	111	1304
141	625	107	1301
142	609	92	1298
143	602	85	1298
144	589	72	1296
145	581	68	1293
146	568	61	1288
147	561	57	1286
148	548	45	1282
149	541	37	1280
150	524	20	1269
151	514	12	1252
152	513	11	1244
153	514	11	1233
154	514	11	1225
155	513	7	1196
156	519	13	1199
157	536	30	1208
158	540	34	1210
159	554	48	1217
160	560	55	1221
161	575	66	1230
162	581	65	1231
163	594	66	1239
164	601	66	1243
165	324	1	1247
166	285	5	1223
167	294	3	1266
168	284	8	1265
169	277	8	1263
170	270	9	1260
171	262	9	1258

Noise Sensitive Receptor ID	Distance to Working Area Boundary 1 (m)	Distance to Working Area Boundary 2 (m)	Distance to Working Area Boundary 3 (m)
172	219	10	1218
173	225	33	1253
174	164	56	1205
175	113	84	1171
176	187	76	1243
177	218	54	1273
178	244	39	1296
179	350	26	1385
180	341	35	1401
181	375	23	1400
182	363	20	1420
183	353	19	1435
184	344	19	1449
185	338	21	1466
186	559	196	1742
187	649	275	1841
188	257	78	1410
189	148	188	1434
190	185	203	1498
191	247	171	1539
192	306	140	1569
193	314	167	1599
194	325	198	1631
195	335	222	1654
196	352	254	1686
197	293	286	1655
198	226	610	1531
199	3	382	1349
200	8	236	1107
201	44	277	1026
202	98	356	1052
203	255	236	818
204	1346	1539	266

## Distance for Flood Embankment Construction Activity

The construction noise receptor locations in relation to the flood embankment construction activities are illustrated in Figure 12.2.3, with associated receptor distances summarised in Table 12.2.3.



**Figure 12.2.3: Flood Embankment Construction Noise Receptors**

**Table 12.2.3: Distance for Flood Embankment Construction Activity**

Noise Sensitive Receptor ID	Distance to Embankment Area 1 (m)	Distance to Embankment Area 2 (m)	Distance to Embankment Area 3 (m)	Distance to Embankment Area 4 (m)	Distance to Embankment Area 5 (m)	Distance to Embankment Area 6 (m)	Distance to Embankment Area 7 (m)
1	179	90	59	28	144	410	166
2	185	94	56	33	138	414	172
3	200	105	53	48	123	424	186
4	206	109	53	54	116	428	192
5	217	116	52	66	104	438	204
6	225	122	55	75	95	444	212
7	238	132	60	87	83	451	223
8	245	140	66	94	77	452	227
9	250	149	77	98	78	445	225
10	250	153	84	98	82	438	220
11	245	152	90	94	92	427	210
12	239	149	90	88	100	419	202
13	275	160	76	125	45	478	259
14	281	163	76	131	38	485	266
15	295	174	83	146	24	497	280
16	303	182	90	153	18	499	285
17	278	172	92	126	51	463	251
18	284	180	101	132	49	461	252
19	295	195	118	143	46	455	255
20	298	201	125	146	47	451	254
21	300	207	133	149	51	443	251
22	304	213	141	154	52	439	250
23	315	227	156	166	51	434	254
24	329	231	151	178	23	464	279
25	264	173	107	114	80	428	222
26	277	189	125	127	77	422	224
27	276	194	140	131	92	401	211
28	305	222	161	159	73	412	235
29	189	112	94	52	158	377	145
30	196	117	92	55	149	383	154
31	208	135	114	75	153	367	148
32	218	146	121	85	149	364	152

Noise Sensitive Receptor ID	Distance to Embankment Area 1 (m)	Distance to Embankment Area 2 (m)	Distance to Embankment Area 3 (m)	Distance to Embankment Area 4 (m)	Distance to Embankment Area 5 (m)	Distance to Embankment Area 6 (m)	Distance to Embankment Area path) 7 (m)
33	231	159	130	98	142	364	160
34	242	170	138	109	136	364	167
35	162	112	132	61	208	335	95
36	178	146	172	94	234	295	68
37	211	191	216	139	254	252	67
38	384	252	146	237	67	570	369
39	507	376	265	357	175	650	477
40	364	276	201	216	49	451	292
41	395	306	227	247	64	471	322
42	394	307	231	246	71	461	317
43	427	337	255	279	91	489	351
44	432	344	262	284	99	487	353
45	448	360	278	301	115	494	367
46	456	369	286	309	123	497	374
47	470	383	301	323	137	503	385
48	476	389	307	329	143	506	390
49	403	320	248	258	90	452	318
50	411	328	256	266	96	455	325
51	423	341	268	278	107	460	335
52	431	350	276	287	115	463	342
53	442	361	288	298	127	466	351
54	450	369	295	306	134	470	358
55	462	382	307	319	145	476	369
56	471	391	317	328	155	478	376
57	338	257	194	194	71	416	258
58	334	255	195	191	79	408	251
59	330	253	200	190	93	394	241
60	327	253	206	191	106	381	233
61	321	253	213	192	127	359	218
62	331	264	224	202	131	359	226
63	340	273	233	212	134	360	233
64	355	283	234	221	117	384	255
65	359	284	231	222	107	396	262
66	363	285	225	222	92	412	272

Noise Sensitive Receptor ID	Distance to Embankment Area 1 (m)	Distance to Embankment Area 2 (m)	Distance to Embankment Area 3 (m)	Distance to Embankment Area 4 (m)	Distance to Embankment Area 5 (m)	Distance to Embankment Area 6 (m)	Distance to Embankment Area path) 7 (m)
67	366	287	224	224	86	420	279
68	394	315	250	252	102	430	302
69	391	315	255	252	112	417	295
70	387	315	261	252	126	400	285
71	394	321	267	258	130	402	290
72	408	336	282	274	142	405	302
73	415	344	289	281	147	408	308
74	423	348	287	285	137	428	322
75	426	349	285	286	132	435	327
76	456	379	313	316	155	453	356
77	453	378	314	315	159	444	350
78	448	376	317	313	168	426	339
79	444	374	318	311	172	416	333
80	439	371	321	309	180	400	323
81	437	371	324	309	188	389	318
82	498	432	380	369	233	424	376
83	541	475	423	413	272	445	416
84	548	489	446	429	304	405	414
85	508	451	413	391	278	386	373
86	476	418	379	358	247	376	345
87	454	395	356	335	228	368	325
88	435	375	338	315	213	360	307
89	412	352	315	292	197	353	286
90	391	334	303	275	198	332	262
91	356	294	259	234	160	343	238
92	340	278	244	218	156	339	224
93	307	247	219	188	156	329	193
94	301	245	223	188	171	313	181
95	295	249	238	197	201	283	163
96	305	260	249	208	207	278	169
97	326	281	268	228	214	276	188
98	338	294	279	240	218	276	199
99	347	307	296	255	237	262	203
100	340	304	297	253	247	247	193

Noise Sensitive Receptor ID	Distance to Embankment Area 1 (m)	Distance to Embankment Area 2 (m)	Distance to Embankment Area 3 (m)	Distance to Embankment Area 4 (m)	Distance to Embankment Area 5 (m)	Distance to Embankment Area 6 (m)	Distance to Embankment Area 7 (m)
101	431	391	374	337	285	279	283
102	414	363	336	306	233	317	277
103	437	386	358	328	249	324	298
104	458	408	379	350	265	332	318
105	473	437	422	384	330	274	320
106	546	510	492	457	387	273	393
107	565	528	509	475	400	278	412
108	545	516	507	466	414	229	388
109	557	529	519	478	426	227	400
110	595	566	554	515	454	239	438
111	595	567	557	516	459	230	437
112	654	623	607	571	498	271	497
113	707	677	661	625	549	292	549
114	555	538	539	486	464	164	395
115	510	494	496	442	428	171	350
116	483	466	469	414	405	181	323
117	460	442	445	390	385	191	300
118	436	419	423	367	368	189	277
119	431	420	431	367	387	161	271
120	437	425	435	373	390	164	276
121	450	438	447	386	398	169	289
122	457	446	454	393	404	165	297
123	469	457	465	404	413	160	308
124	474	462	470	410	417	158	314
125	489	478	485	425	429	152	329
126	494	482	490	430	433	150	334
127	511	500	507	448	448	142	351
128	517	506	513	453	453	140	356
129	529	518	525	466	462	137	369
130	534	523	529	470	466	137	374
131	551	539	544	487	478	137	391
132	557	545	550	492	482	138	397
133	565	553	557	501	488	139	405
134	433	462	506	412	519	24	292

Noise Sensitive Receptor ID	Distance to Embankment Area 1 (m)	Distance to Embankment Area 2 (m)	Distance to Embankment Area 3 (m)	Distance to Embankment Area 4 (m)	Distance to Embankment Area 5 (m)	Distance to Embankment Area 6 (m)	Distance to Embankment Area 7 (m)
135	453	489	537	440	556	22	319
136	399	381	387	329	341	182	240
137	374	355	362	303	323	185	216
138	396	386	399	333	364	152	236
139	392	382	396	329	363	150	231
140	379	370	385	317	358	146	218
141	373	364	380	312	355	146	213
142	357	347	364	295	343	151	196
143	349	340	356	287	337	154	189
144	336	325	342	273	327	161	176
145	328	318	336	266	323	162	168
146	315	305	324	252	316	168	155
147	307	297	317	245	313	171	147
148	295	285	307	233	307	176	135
149	287	278	300	225	304	180	128
150	271	264	290	211	304	184	111
151	263	262	293	210	316	176	102
152	263	265	299	213	324	170	103
153	265	272	309	220	337	159	107
154	267	277	315	225	345	152	110
155	272	292	337	242	376	132	122
156	277	296	340	246	375	128	126
157	293	309	349	258	377	118	140
158	297	312	352	261	378	115	143
159	311	324	362	273	381	106	156
160	317	329	365	277	381	104	161
161	331	341	375	289	385	99	175
162	336	346	379	294	387	96	180
163	349	357	388	305	390	94	192
164	356	363	393	311	393	93	199
165	76	59	134	34	251	368	82
166	40	64	138	69	275	390	65
167	79	22	92	60	235	421	108
168	79	28	89	71	238	431	107

Noise Sensitive Receptor ID	Distance to Embankment Area 1 (m)	Distance to Embankment Area 2 (m)	Distance to Embankment Area 3 (m)	Distance to Embankment Area 4 (m)	Distance to Embankment Area 5 (m)	Distance to Embankment Area 6 (m)	Distance to Embankment Area path) 7 (m)
169	78	34	89	78	242	437	106
170	78	41	90	86	246	443	105
171	79	48	91	94	251	450	105
172	59	94	133	131	297	459	81
173	98	85	105	139	274	489	121
174	77	145	166	189	335	511	120
175	93	197	216	237	385	540	147
176	110	124	137	183	306	526	144
177	131	94	106	167	274	524	155
178	142	70	81	153	248	521	166
179	202	49	32	109	141	515	230
180	220	66	53	129	139	535	248
181	214	67	26	102	117	507	243
182	235	83	27	126	112	530	264
183	252	98	26	146	114	550	280
184	268	114	25	165	118	569	296
185	288	133	35	186	124	589	315
186	553	407	284	413	247	745	550
187	652	508	386	509	339	819	640
188	258	120	115	207	208	609	283
189	331	229	222	321	314	717	361
190	385	259	218	344	304	748	410
191	401	258	188	333	263	739	425
192	411	259	164	321	225	724	437
193	444	292	196	354	251	755	470
194	479	328	231	389	282	790	505
195	505	354	257	416	305	816	531
196	540	390	291	451	336	850	566
197	533	391	310	463	371	868	558
198	669	646	648	740	741	1108	718
199	414	413	418	505	542	856	464
200	253	368	380	412	546	685	308
201	303	438	456	472	624	706	354
202	378	501	512	542	678	791	432

Noise Sensitive Receptor ID	Distance to Embankment Area 1 (m)	Distance to Embankment Area 2 (m)	Distance to Embankment Area 3 (m)	Distance to Embankment Area 4 (m)	Distance to Embankment Area 5 (m)	Distance to Embankment Area 6 (m)	Distance to Embankment Area 7 (m)
203	370	521	567	535	732	634	401
204	1708	1854	1909	1855	2068	1714	1726

## Distance for Sheet Piled Wall Construction Activity

The construction noise receptor locations in relation to the three sheet pile wall areas are illustrated in Figure 12.2.4, with associated receptor distances summarised in Table 12.2.4.



Figure 12.2.4: Sheet Piled Wall Construction Noise Receptors

**Table 12.2.4: Distance for Sheet Piled Wall Construction Activity**

<b>Noise Sensitive Receptor ID</b>	<b>Distance to Sheet Piled Wall Area 1 (m)</b>	<b>Distance to Sheet Piled Wall Area 2 (m)</b>	<b>Distance to Sheet Piled Wall Area 3 (m)</b>
1	14	109	100
2	14	115	107
3	14	130	122
4	15	136	128
5	12	147	140
6	12	156	149
7	14	168	161
8	19	176	168
9	30	180	171
10	38	180	171
11	45	175	165
12	48	168	158
13	14	206	199
14	10	212	206
15	12	227	220
16	18	234	227
17	33	208	200
18	41	214	205
19	57	224	215
20	64	228	218
21	75	230	219
22	83	234	223
23	98	245	233
24	85	259	249
25	59	194	184
26	76	206	195
27	95	206	194
28	110	235	223
29	50	120	107
30	50	127	114
31	72	140	126
32	81	150	136
33	91	163	149

Noise Sensitive Receptor ID	Distance to Sheet Piled Wall Area 1 (m)	Distance to Sheet Piled Wall Area 2 (m)	Distance to Sheet Piled Wall Area 3 (m)
34	99	175	161
35	72	101	85
36	113	126	111
37	158	167	153
38	71	317	311
39	196	439	432
40	136	294	282
41	155	326	314
42	162	324	312
43	180	358	346
44	188	363	350
45	203	379	366
46	211	387	374
47	224	400	388
48	230	406	394
49	181	334	321
50	188	342	329
51	199	354	341
52	206	362	349
53	218	374	361
54	224	381	368
55	236	394	381
56	245	403	389
57	137	269	256
58	141	265	252
59	149	262	248
60	158	260	246
61	171	256	241
62	180	266	252
63	188	276	261
64	183	289	275
65	177	292	278
66	167	295	281
67	164	298	285
68	188	326	312

Noise Sensitive Receptor ID	Distance to Sheet Piled Wall Area 1 (m)	Distance to Sheet Piled Wall Area 2 (m)	Distance to Sheet Piled Wall Area 3 (m)
69	195	324	310
70	204	321	307
71	210	327	313
72	224	342	328
73	230	349	335
74	225	356	342
75	222	358	344
76	246	389	375
77	250	386	372
78	256	382	368
79	259	379	364
80	264	375	360
81	269	373	358
82	321	434	419
83	362	477	462
84	390	488	472
85	359	448	433
86	327	416	400
87	305	393	378
88	288	374	358
89	268	351	336
90	260	331	315
91	216	294	278
92	204	277	262
93	180	245	230
94	184	240	225
95	197	240	224
96	208	250	234
97	228	271	255
98	240	284	267
99	255	295	279
100	254	290	274
101	335	379	363
102	295	357	341
103	316	380	364

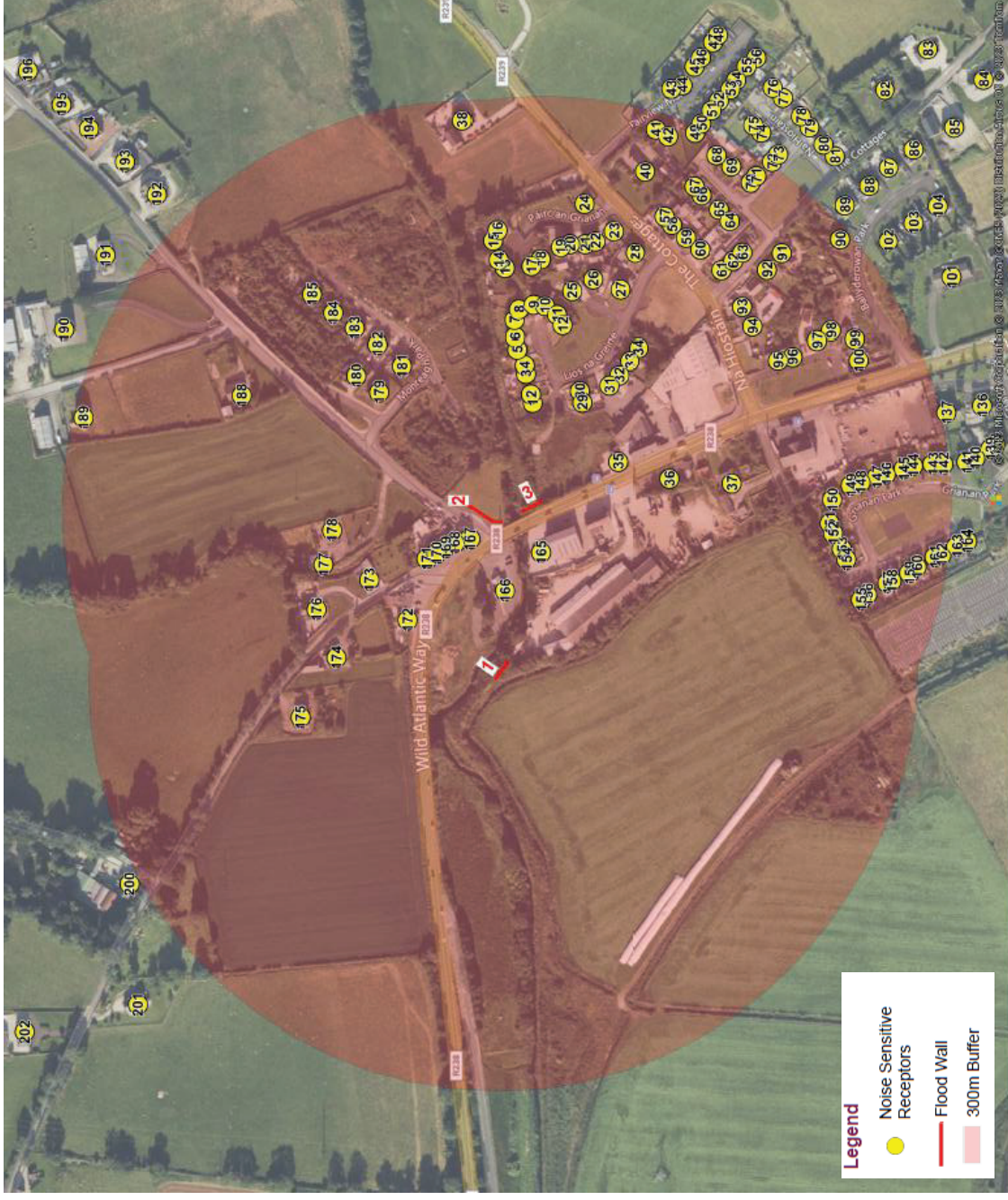
Noise Sensitive Receptor ID	Distance to Sheet Piled Wall Area 1 (m)	Distance to Sheet Piled Wall Area 2 (m)	Distance to Sheet Piled Wall Area 3 (m)
104	335	401	385
105	383	423	407
106	453	497	481
107	470	516	500
108	467	500	484
109	479	513	497
110	515	550	535
111	517	550	535
112	568	608	592
113	622	661	646
114	494	516	502
115	449	471	457
116	422	444	430
117	398	420	406
118	375	396	382
119	380	395	381
120	385	400	387
121	397	413	400
122	405	421	407
123	416	432	419
124	421	438	424
125	436	453	439
126	441	458	444
127	459	476	462
128	464	481	467
129	476	493	480
130	481	498	484
131	497	515	501
132	502	521	507
133	510	529	515
134	445	416	404
135	475	438	426
136	338	359	344
137	313	333	319
138	347	360	346

Noise Sensitive Receptor ID	Distance to Sheet Piled Wall Area 1 (m)	Distance to Sheet Piled Wall Area 2 (m)	Distance to Sheet Piled Wall Area 3 (m)
139	344	356	343
140	333	344	330
141	327	338	325
142	311	321	308
143	303	313	300
144	289	299	286
145	282	292	278
146	269	278	265
147	262	271	257
148	251	258	245
149	244	251	237
150	232	235	222
151	234	231	218
152	239	233	220
153	248	238	224
154	254	241	227
155	276	250	237
156	278	255	242
157	289	270	256
158	291	273	260
159	302	287	273
160	305	292	279
161	316	306	292
162	320	311	297
163	330	323	309
164	335	330	316
165	84	18	5
166	112	11	24
167	83	32	45
168	91	42	56
169	97	49	63
170	105	56	70
171	112	63	78
172	157	64	82
173	152	101	121

Noise Sensitive Receptor ID	Distance to Sheet Piled Wall Area 1 (m)	Distance to Sheet Piled Wall Area 2 (m)	Distance to Sheet Piled Wall Area 3 (m)
174	210	114	127
175	261	150	158
176	195	131	148
177	172	136	153
178	154	133	146
179	93	151	155
180	107	171	176
181	73	157	158
182	87	180	182
183	102	199	201
184	115	217	220
185	124	237	240
186	247	490	486
187	342	587	583
188	192	228	237
189	309	329	340
190	304	366	375
191	263	368	375
192	225	368	373
193	251	402	406
194	282	437	442
195	305	464	469
196	336	499	504
197	371	501	508
198	737	712	726
199	505	459	472
200	435	319	322
201	501	371	369
202	567	445	446
203	579	427	415
204	1905	1755	1738

## Distance for Flood Wall (Reinforced Concrete Wall) Construction Activity

The construction noise receptor locations in relation to the three flood wall areas are illustrated in Figure 12.2.5, with associated receptor distances summarised in Table 12.2.5.



**Figure 12.2.5: Flood Wall (Reinforced Concrete Wall) Construction Noise Receptors**

**Table 12.2.5: Distance for Flood Wall (Reinforced Concrete Wall) Construction Activity**

Noise Sensitive Receptor ID	Distance to Flood Wall Area 1 (m)	Distance to Flood Wall Area 2 (m)	Distance to Flood Wall Area 3 (m)
1	194	90	76
2	200	95	82
3	215	107	98
4	221	113	104
5	232	122	116
6	241	130	125
7	253	142	137
8	261	150	145
9	265	156	147
10	264	158	146
11	259	155	139
12	252	150	132
13	291	178	176
14	297	183	183
15	312	197	197
16	319	205	204
17	293	183	175
18	298	190	180
19	309	202	189
20	312	207	192
21	313	211	193
22	317	216	197
23	327	228	207
24	343	238	223
25	278	175	158
26	289	190	169
27	287	192	167
28	316	222	196
29	200	107	80
30	208	113	88
31	218	129	100
32	227	139	110
33	240	152	123
34	251	164	135

Noise Sensitive Receptor ID	Distance to Flood Wall Area 1 (m)	Distance to Flood Wall Area 2 (m)	Distance to Flood Wall Area 3 (m)
35	169	96	63
36	180	126	94
37	210	170	139
38	401	285	288
39	523	409	408
40	375	278	255
41	407	309	287
42	405	309	285
43	439	341	319
44	444	347	324
45	459	363	340
46	467	371	348
47	481	385	361
48	487	392	368
49	413	320	295
50	421	328	303
51	433	340	314
52	441	349	323
53	452	360	334
54	460	368	342
55	472	381	354
56	481	390	363
57	348	255	229
58	344	252	226
59	339	250	222
60	335	248	220
61	328	246	216
62	338	256	226
63	347	266	235
64	363	278	249
65	367	280	252
66	372	282	255
67	376	285	258
68	403	313	286
69	400	312	284
70	395	310	281

Noise Sensitive Receptor ID	Distance to Flood Wall Area 1 (m)	Distance to Flood Wall Area 2 (m)	Distance to Flood Wall Area 3 (m)
71	401	316	287
72	416	331	302
73	423	338	309
74	432	344	316
75	434	346	318
76	465	377	349
77	461	374	346
78	456	371	342
79	451	368	339
80	445	365	334
81	443	364	333
82	504	425	394
83	546	468	437
84	552	480	448
85	511	441	409
86	480	408	376
87	458	385	354
88	439	366	334
89	417	343	311
90	395	324	292
91	362	285	254
92	345	269	237
93	313	237	205
94	305	233	201
95	298	235	202
96	307	245	212
97	328	267	234
98	340	279	246
99	348	292	258
100	340	287	254
101	431	376	343
102	416	351	318
103	439	374	341
104	460	395	363
105	472	421	388
106	545	494	461

Noise Sensitive Receptor ID	Distance to Flood Wall Area 1 (m)	Distance to Flood Wall Area 2 (m)	Distance to Flood Wall Area 3 (m)
107	564	513	480
108	542	499	466
109	554	512	479
110	592	549	516
111	591	550	517
112	651	606	573
113	703	660	627
114	549	519	486
115	505	474	442
116	478	446	414
117	455	423	390
118	432	399	367
119	425	399	367
120	430	404	373
121	444	417	386
122	451	425	393
123	462	436	404
124	468	442	410
125	483	457	425
126	488	462	430
127	505	480	448
128	510	485	453
129	523	497	466
130	527	502	470
131	544	519	487
132	550	524	492
133	559	533	501
134	419	437	412
135	438	464	440
136	394	361	329
137	370	336	303
138	390	365	333
139	386	361	329
140	373	349	317
141	367	343	312
142	351	326	295

Noise Sensitive Receptor ID	Distance to Flood Wall Area 1 (m)	Distance to Flood Wall Area 2 (m)	Distance to Flood Wall Area 3 (m)
143	344	318	287
144	330	304	273
145	323	297	266
146	309	283	252
147	302	276	245
148	290	264	233
149	282	256	225
150	265	241	211
151	256	239	210
152	256	242	213
153	258	248	220
154	258	253	225
155	261	267	242
156	267	271	246
157	283	284	258
158	287	288	261
159	301	300	273
160	307	305	277
161	322	317	289
162	327	322	294
163	339	333	305
164	347	340	311
165	86	33	29
166	55	48	58
167	98	19	45
168	99	28	56
169	99	34	63
170	99	41	71
171	100	49	79
172	81	94	116
173	121	91	124
174	120	147	174
175	147	198	222
176	144	136	168
177	155	116	152
178	164	104	142

Noise Sensitive Receptor ID	Distance to Flood Wall Area 1 (m)	Distance to Flood Wall Area 2 (m)	Distance to Flood Wall Area 3 (m)
179	223	110	140
180	241	130	161
181	234	117	142
182	255	140	165
183	272	158	185
184	289	176	204
185	308	196	224
186	572	454	465
187	671	553	561
188	279	189	226
189	361	293	331
190	409	327	364
191	422	327	362
192	432	326	358
193	465	360	391
194	500	396	427
195	526	422	453
196	561	457	488
197	555	460	494
198	718	698	737
199	464	457	494
200	308	372	397
201	354	438	458
202	432	504	528
203	401	513	525
204	1726	1841	1849

## Distance for Bridge Replacement Construction Activity

The construction noise receptor locations in relation to the three bridge replacement areas are illustrated in Figure 12.2.6, with associated receptor distances summarised in Table 12.2.6.



**Figure 12.2.6: Bridge Replacement Construction Noise Receptors**

**Table 12.2.6: Distance for Bridge Replacement Construction Activity**

Noise Sensitive Receptor ID	Distance to New Bridge (m)	Distance to Parapet 1 (m)	Distance to Parapet 2 (m)
1	75	100	82
2	81	107	89
3	96	122	104
4	103	128	110
5	115	140	122
6	124	149	131
7	136	161	143
8	142	168	150
9	142	171	154
10	140	171	153
11	132	165	148
12	124	158	141
13	174	199	181
14	181	206	187
15	196	220	202
16	202	227	209
17	170	200	182
18	174	205	187
19	181	215	197
20	182	218	200
21	182	219	203
22	185	223	206
23	193	233	217
24	212	249	232
25	148	184	167
26	157	195	179
27	152	194	179
28	180	223	208
29	67	107	92
30	75	114	99
31	82	126	113
32	91	136	123
33	104	149	136
34	115	161	148

Noise Sensitive Receptor ID	Distance to New Bridge (m)	Distance to Parapet 1 (m)	Distance to Parapet 2 (m)
35	35	85	78
36	65	111	109
37	109	153	153
38	287	311	293
39	403	432	413
40	240	282	266
41	272	314	298
42	269	312	296
43	304	346	330
44	308	350	335
45	324	366	351
46	331	374	359
47	345	388	373
48	351	394	379
49	277	321	306
50	285	329	314
51	296	341	326
52	305	349	335
53	316	361	346
54	323	368	354
55	335	381	366
56	344	389	375
57	212	256	241
58	207	252	238
59	202	248	234
60	199	246	233
61	193	241	230
62	203	252	240
63	212	261	249
64	227	275	262
65	231	278	265
66	235	281	267
67	239	285	270
68	267	312	298
69	263	310	296
70	259	307	294

Noise Sensitive Receptor ID	Distance to New Bridge (m)	Distance to Parapet 1 (m)	Distance to Parapet 2 (m)
71	265	313	300
72	280	328	315
73	287	335	323
74	295	342	329
75	298	344	331
76	329	375	362
77	325	372	359
78	320	368	355
79	316	364	352
80	311	360	348
81	309	358	347
82	370	419	408
83	413	462	451
84	423	472	463
85	383	433	424
86	351	400	391
87	328	378	368
88	309	358	349
89	286	336	326
90	266	315	306
91	229	278	268
92	213	262	252
93	180	230	220
94	175	225	216
95	174	224	217
96	184	234	228
97	206	255	249
98	218	267	261
99	230	279	274
100	226	274	269
101	315	363	358
102	291	341	333
103	314	364	356
104	336	385	378
105	359	407	403
106	433	481	477

Noise Sensitive Receptor ID	Distance to New Bridge (m)	Distance to Parapet 1 (m)	Distance to Parapet 2 (m)
107	451	500	495
108	438	484	481
109	450	497	494
110	488	535	531
111	488	535	532
112	545	592	589
113	599	646	642
114	458	502	501
115	413	457	457
116	385	430	429
117	361	406	405
118	338	382	381
119	338	381	382
120	343	387	387
121	356	400	400
122	364	407	408
123	375	419	419
124	380	424	425
125	396	439	440
126	401	444	445
127	418	462	462
128	424	467	468
129	436	480	480
130	441	484	485
131	458	501	502
132	463	507	507
133	471	515	515
134	382	415	424
135	411	441	451
136	300	344	344
137	274	319	318
138	303	346	348
139	300	343	344
140	288	330	332
141	282	325	326
142	265	308	309

Noise Sensitive Receptor ID	Distance to New Bridge (m)	Distance to Parapet 1 (m)	Distance to Parapet 2 (m)
143	257	300	302
144	243	286	287
145	236	278	280
146	222	265	266
147	215	257	259
148	203	245	247
149	195	237	239
150	181	222	225
151	179	219	223
152	182	221	226
153	190	228	233
154	195	232	238
155	212	246	254
156	216	250	257
157	227	263	270
158	231	266	273
159	242	279	285
160	247	284	290
161	258	296	302
162	263	301	307
163	274	313	318
164	280	319	324
165	12	12	29
166	25	30	48
167	3	32	27
168	9	42	38
169	10	49	46
170	15	56	53
171	22	63	61
172	59	92	99
173	67	107	106
174	116	151	156
175	165	198	205
176	110	150	150
177	98	138	135
178	93	133	126

Noise Sensitive Receptor ID	Distance to New Bridge (m)	Distance to Parapet 1 (m)	Distance to Parapet 2 (m)
179	119	151	134
180	138	171	154
181	126	157	139
182	148	180	162
183	167	199	181
184	185	217	199
185	205	237	220
186	462	486	467
187	560	583	564
188	191	228	214
189	291	329	318
190	328	366	352
191	331	368	353
192	334	368	351
193	367	402	385
194	403	437	420
195	429	464	447
196	464	499	482
197	465	501	486
198	685	726	720
199	439	480	477
200	340	372	380
201	401	432	442
202	470	502	511
203	475	497	513
204	1808	1823	1841

## Distance for Culvert Improvement Activity

The construction noise receptor locations in relation to the two culvert improvement areas are illustrated in Figure 12.2.7, with associated receptor distances summarised in Table 12.2.7.



Figure 12.2.7: Culvert Improvement Construction Noise Receptors

**Table 12.2.7: Distance for Culvert Improvement Activity**

Noise Sensitive Receptor ID	Distance to Culvert Upgrade Area 1 (m)	Distance to Inlet Upgrade Area 1 (m)
1	89	487
2	93	488
3	104	490
4	109	491
5	117	490
6	124	493
7	136	497
8	144	504
9	151	515
10	153	522
11	152	527
12	147	528
13	171	509
14	176	508
15	189	512
16	197	519
17	177	527
18	184	535
19	198	552
20	202	559
21	207	569
22	213	577
23	226	592
24	234	584
25	172	545
26	188	562
27	193	577
28	221	599
29	115	522
30	119	522
31	139	544
32	149	554
33	162	565
34	173	574
35	121	536
36	157	571
37	203	615
38	276	548
39	400	648
40	276	634
41	306	657
42	307	662
43	338	683
44	344	691
45	360	707
46	369	715
47	383	728
48	389	734
49	319	680
50	327	688
51	339	699
52	348	708
53	360	719

Noise Sensitive Receptor ID	Distance to Culvert Upgrade Area 1 (m)	Distance to Inlet Upgrade Area 1 (m)
54	368	727
55	380	738
56	390	748
57	256	631
58	254	633
59	254	638
60	255	643
61	256	652
62	266	662
63	276	671
64	285	672
65	285	668
66	285	662
67	287	660
68	315	686
69	315	691
70	316	698
71	322	704
72	337	719
73	345	726
74	348	722
75	349	720
76	379	746
77	378	749
78	376	754
79	375	755
80	373	758
81	373	762
82	434	817
83	477	859
84	493	884
85	455	850
86	422	817
87	399	794
88	379	775
89	356	753
90	339	740
91	298	697
92	282	682
93	252	656
94	251	658
95	257	668
96	267	679
97	288	700
98	300	711
99	315	727
100	312	725
101	398	808
102	368	773
103	391	795
104	413	816
105	444	856
106	517	928
107	535	945
108	525	938
109	538	951

Noise Sensitive Receptor ID	Distance to Culvert Upgrade Area 1 (m)	Distance to Inlet Upgrade Area 1 (m)
110	574	987
111	575	989
112	631	1042
113	684	1096
114	548	962
115	503	918
116	476	890
117	452	867
118	429	843
119	431	844
120	436	849
121	449	862
122	456	870
123	467	881
124	473	887
125	488	902
126	493	907
127	511	924
128	516	930
129	528	942
130	533	947
131	550	964
132	555	969
133	563	977
134	476	865
135	504	885
136	391	805
137	366	780
138	397	810
139	393	806
140	381	794
141	376	788
142	359	771
143	351	764
144	337	749
145	330	742
146	316	728
147	309	721
148	297	709
149	290	701
150	276	686
151	275	683
152	278	684
153	285	690
154	290	693
155	306	702
156	310	707
157	323	722
158	326	725
159	338	739
160	342	744
161	354	758
162	359	763
163	370	775
164	376	781
165	74	469

Noise Sensitive Receptor ID	Distance to Culvert Upgrade Area 1 (m)	Distance to Inlet Upgrade Area 1 (m)
166	76	441
167	30	419
168	26	408
169	25	401
170	27	393
171	31	386
172	78	370
173	65	343
174	124	319
175	176	300
176	108	303
177	86	311
178	73	321
179	95	386
180	115	377
181	104	410
182	125	401
183	143	393
184	161	386
185	181	382
186	442	614
187	542	705
188	165	297
189	265	198
190	302	241
191	306	304
192	310	361
193	343	371
194	379	383
195	406	393
196	441	411
197	440	351
198	668	267
199	426	25
200	349	256
201	418	332
202	481	316
203	511	548
204	1850	1838

### Distance for Alterations to Arterial Drainage Embankments Activity

The construction noise receptor locations in relation to the two drainage embankment areas are illustrated in Figure 12.2.8, with associated receptor distances summarised in Table 12.2.8.



**Figure 12.2.8: Alterations to Arterial Drainage Embankments Construction Noise Receptors**

**Table 12.2.8: Distance for Alterations to Arterial Drainage Embankments Activity**

Noise Sensitive Receptor ID	Distance to Removed Embankment Area 1 (m)	Distance to Removed Embankment Area 2 (m)
1	1345	207
2	1351	213
3	1367	228
4	1373	234
5	1385	245
6	1394	254
7	1406	266
8	1413	274
9	1415	278
10	1412	278
11	1404	272
12	1396	266
13	1445	304
14	1451	309
15	1466	324
16	1473	331
17	1443	306
18	1446	311
19	1453	322
20	1454	325
21	1452	327
22	1453	331
23	1459	341
24	1482	356
25	1420	292
26	1426	303
27	1416	301
28	1441	330
29	1339	214
30	1347	222
31	1348	233
32	1354	242
33	1364	255
34	1372	266
35	1292	184
36	1274	195
37	1266	225
38	1557	413
39	1676	536
40	1499	390
41	1529	421
42	1524	419
43	1558	453
44	1560	458
45	1573	474
46	1579	482
47	1590	495
48	1594	501
49	1524	428
50	1531	436
51	1540	448
52	1546	456
53	1554	467

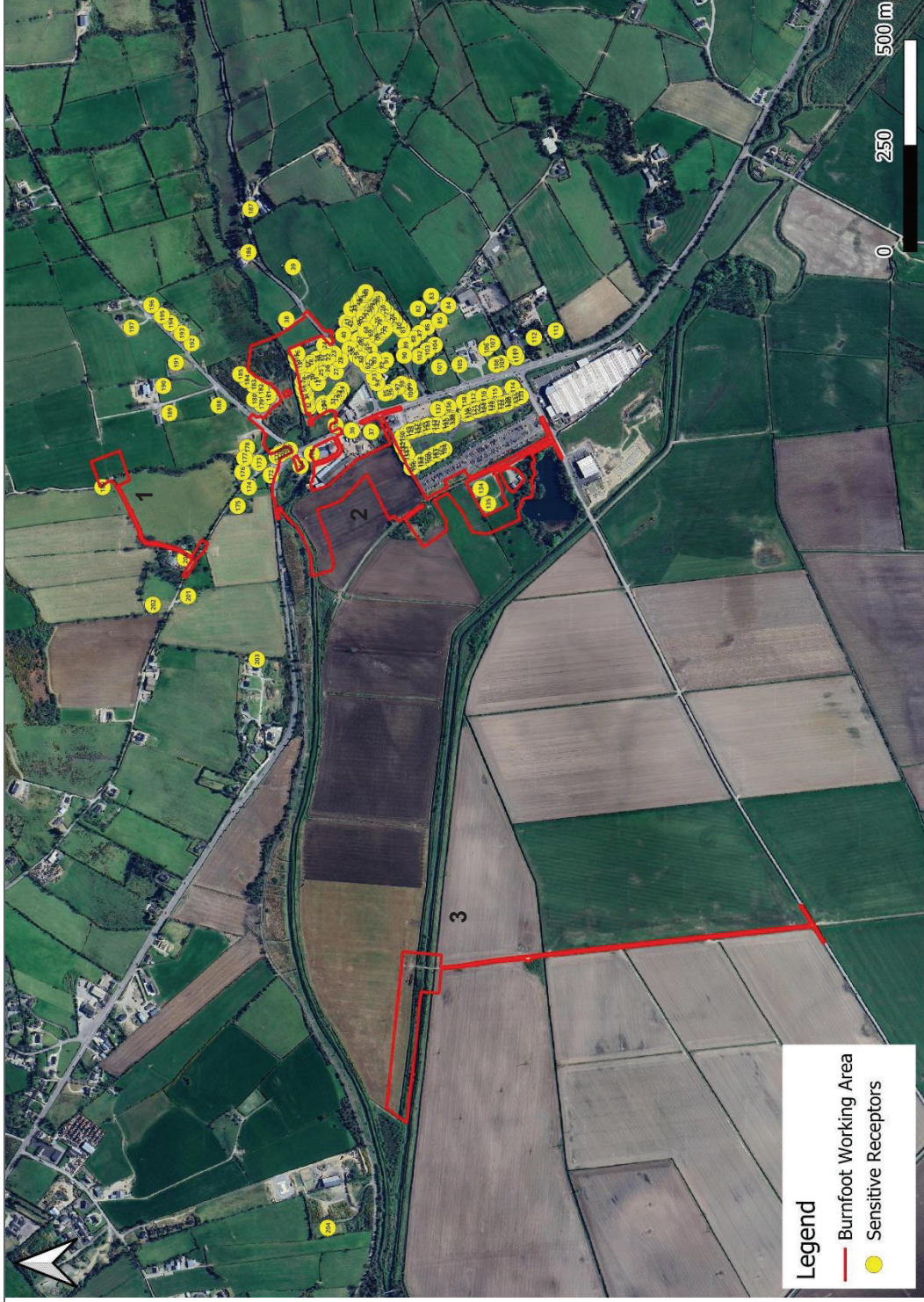
Noise Sensitive Receptor ID	Distance to Removed Embankment Area 1 (m)	Distance to Removed Embankment Area 2 (m)
54	1560	475
55	1570	487
56	1576	495
57	1465	363
58	1458	359
59	1448	354
60	1439	350
61	1422	344
62	1428	353
63	1434	362
64	1458	378
65	1466	382
66	1478	387
67	1485	391
68	1506	418
69	1497	415
70	1485	410
71	1489	416
72	1499	431
73	1504	438
74	1521	447
75	1527	449
76	1553	480
77	1546	476
78	1532	471
79	1523	467
80	1510	461
81	1502	458
82	1550	519
83	1580	561
84	1560	567
85	1523	527
86	1507	496
87	1493	474
88	1480	454
89	1466	432
90	1440	410
91	1432	377
92	1420	361
93	1394	328
94	1379	320
95	1354	313
96	1356	322
97	1367	343
98	1374	355
99	1368	363
100	1352	354
101	1414	446
102	1439	431
103	1452	454
104	1465	475
105	1422	486
106	1465	559
107	1479	578
108	1430	556
109	1435	568

Noise Sensitive Receptor ID	Distance to Removed Embankment Area 1 (m)	Distance to Removed Embankment Area 2 (m)
110	1462	606
111	1454	605
112	1506	665
113	1533	717
114	1382	562
115	1362	518
116	1353	491
117	1345	469
118	1335	445
119	1307	438
120	1310	443
121	1316	457
122	1319	464
123	1323	475
124	1326	481
125	1331	496
126	1332	501
127	1337	517
128	1339	523
129	1345	535
130	1348	540
131	1357	557
132	1362	563
133	1366	571
134	1136	426
135	1103	432
136	1321	408
137	1315	384
138	1293	403
139	1290	399
140	1282	386
141	1280	380
142	1277	364
143	1277	357
144	1275	344
145	1273	336
146	1269	323
147	1267	316
148	1263	303
149	1261	296
150	1250	279
151	1233	269
152	1226	269
153	1214	270
154	1206	271
155	1177	272
156	1180	278
157	1189	294
158	1190	298
159	1196	312
160	1201	318
161	1209	333
162	1210	338
163	1217	351
164	1221	358
165	1236	100

Noise Sensitive Receptor ID	Distance to Removed Embankment Area 1 (m)	Distance to Removed Embankment Area 2 (m)
166	1214	68
167	1257	108
168	1256	107
169	1255	106
170	1252	105
171	1250	105
172	1211	81
173	1247	121
174	1200	103
175	1168	116
176	1239	134
177	1268	153
178	1290	166
179	1377	230
180	1393	248
181	1392	243
182	1411	264
183	1427	280
184	1442	296
185	1459	315
186	1731	582
187	1829	681
188	1405	283
189	1433	356
190	1497	409
191	1536	425
192	1564	437
193	1595	470
194	1627	505
195	1650	531
196	1682	566
197	1653	558
198	1543	693
199	1356	437
200	1111	263
201	1032	303
202	1061	383
203	821	284
204	174	1591

## Distance for Reinstatement Construction Activity

The construction noise receptor locations in relation to the reinstatement activities are illustrated in Figure 12.2.2, with associated receptor distances summarised in Table 12.2.2.



**Figure 12.2.2: Reinstatement Construction Noise Receptors**

**Table 12.2.9: Distance for Reinstatement Construction Activity**

Noise Sensitive Receptor ID	Distance to Site Boundary
1	9
2	9
3	8
4	9
5	6
6	6
7	8
8	13
9	24
10	32
11	39
12	42
13	9
14	6
15	7
16	14
17	28
18	36
19	46
20	47
21	51
22	52
23	51
24	23
25	54
26	71
27	89
28	73
29	30
30	39
31	40
32	48
33	61
34	72
35	6
36	39
37	29
38	21
39	121
40	49
41	64
42	71
43	91
44	99
45	114
46	122
47	136
48	142
49	90
50	96
51	107
52	115
53	127
54	134

Noise Sensitive Receptor ID	Distance to Site Boundary
55	145
56	155
57	71
58	79
59	93
60	106
61	124
62	128
63	133
64	117
65	107
66	92
67	86
68	102
69	112
70	126
71	130
72	142
73	147
74	137
75	132
76	155
77	159
78	168
79	172
80	180
81	188
82	233
83	272
84	302
85	262
86	233
87	213
88	195
89	175
90	151
91	131
92	119
93	94
94	78
95	53
96	58
97	76
98	87
99	93
100	85
101	176
102	165
103	187
104	207
105	218
106	271
107	278
108	227
109	226
110	241

Noise Sensitive Receptor ID	Distance to Site Boundary
111	231
112	275
113	298
114	163
115	167
116	175
117	185
118	186
119	161
120	163
121	162
122	159
123	154
124	152
125	146
126	144
127	138
128	136
129	134
130	135
131	137
132	139
133	140
134	24
135	22
136	149
137	125
138	145
139	141
140	128
141	122
142	106
143	99
144	85
145	78
146	64
147	57
148	45
149	37
150	20
151	12
152	11
153	16
154	23
155	51
156	52
157	57
158	60
159	69
160	73
161	85
162	89
163	91
164	92
165	4
166	3

Noise Sensitive Receptor ID	Distance to Site Boundary
167	3
168	9
169	9
170	8
171	9
172	36
173	50
174	69
175	93
176	93
177	77
178	63
179	27
180	47
181	23
182	19
183	18
184	19
185	21
186	201
187	285
188	108
189	194
190	203
191	171
192	144
193	175
194	209
195	236
196	269
197	291
198	261
199	14
200	250
201	298
202	306
203	274
204	1581

## Predicted Construction Noise Impacts

The predicted noise levels of all Construction Activity are summarised below in Table 12.2.9 to Table 12.2.15. These tables illustrate the worst-case predicted noise from construction activities, which assume a level of simultaneous activity of plant/equipment close to the receptor. This is unlikely to occur in practice but is used to present potential worst-case noise levels that may occur during the construction phase.

## Predictions for Site Establishment and Clearance, Reinstatement and General Plant/Transport Construction Activity

**Table 12.2.10: Construction Noise Predictions for Site Establishment and Clearance and General Plant/Transport Construction Activity (dB)**

Noise Sensitive Receptor ID	Construction Noise Limits dB	Working Area Boundary 1 (dB LAeq,T)	Working Area Boundary 2 (dB LAeq,T)	Working Area Boundary 3 (dB LAeq,T)
1	65	90.5	57.5	55.8
2	65	90.5	57.4	55.8
3	65	91.0	57.2	55.8
4	65	90.5	57.1	55.7
5	65	94.2	56.9	55.7
6	65	93.7	56.7	55.7
7	65	91.2	56.6	55.6
8	65	87.2	56.6	55.5
9	65	81.8	56.7	55.3
10	65	79.3	56.8	55.2
11	65	77.6	57.1	55.1
12	65	77.0	57.2	55.1
13	65	90.3	56.1	55.4
14	65	93.3	55.9	55.4
15	65	92.2	55.7	55.4
16	65	86.6	55.7	55.2
17	65	80.5	56.3	55.1
18	65	78.3	56.4	55.0
19	65	76.1	56.5	54.7
20	65	76.0	56.5	54.6
21	65	75.3	56.7	54.4
22	65	75.2	56.8	54.3
23	65	75.4	56.9	54.1
24	65	82.1	56.3	54.2
25	65	74.8	57.0	54.8
26	65	72.5	57.1	54.5
27	65	70.5	57.6	54.3
28	65	72.3	57.3	54.0
29	65	79.9	58.2	55.2
30	65	77.7	58.1	55.2
31	65	77.5	58.4	54.8
32	65	75.8	58.5	54.7
33	65	73.8	58.5	54.5
34	65	72.4	58.5	54.4
35	65	94.4	59.3	55.0
36	65	77.7	60.5	54.4
37	65	80.2	61.8	53.8
38	65	83.2	54.5	54.8
39	65	67.8	53.3	53.3
40	65	75.7	56.5	53.5
41	65	73.3	56.1	53.2
42	65	72.5	56.3	53.1
43	65	70.3	55.7	52.8
44	65	69.6	55.8	52.7
45	65	68.3	55.6	52.5
46	65	67.7	55.6	52.4
47	65	66.8	55.5	52.3

Noise Sensitive Receptor ID	Construction Noise Limits dB	Working Area Boundary 1 (dB LAeq,T)	Working Area Boundary 2 (dB LAeq,T)	Working Area Boundary 3 (dB LAeq,T)
48	65	66.4	55.4	52.2
49	65	70.4	56.4	52.9
50	65	69.8	56.4	52.8
51	65	68.9	56.3	52.6
52	65	68.3	56.2	52.5
53	65	67.4	56.1	52.4
54	65	67.0	56.1	52.3
55	65	66.2	55.9	52.2
56	65	65.7	55.9	52.1
57	65	72.4	57.2	53.5
58	65	71.5	57.4	53.5
59	65	70.1	57.7	53.4
60	65	69.0	58.0	53.4
61	65	67.6	58.5	53.3
62	65	67.3	58.5	53.1
63	65	67.0	58.4	53.0
64	65	68.1	57.9	53.0
65	65	68.9	57.6	53.0
66	65	70.2	57.3	53.1
67	65	70.8	57.1	53.1
68	65	69.3	56.9	52.8
69	65	68.5	57.1	52.7
70	65	67.4	57.5	52.7
71	65	67.2	57.4	52.6
72	65	66.4	57.4	52.4
73	65	66.1	57.3	52.3
74	65	66.8	56.9	52.4
75	65	67.0	56.7	52.4
76	65	65.7	56.4	52.1
77	65	65.4	56.5	52.0
78	65	65.0	56.9	52.0
79	65	64.8	57.1	52.0
80	65	64.3	57.4	51.9
81	65	64.0	57.7	51.9
82	65	62.1	56.9	51.3
83	65	60.8	56.6	50.8
84	65	59.9	57.4	50.6
85	65	61.1	57.9	50.9
86	65	62.1	58.0	51.3
87	65	62.9	58.2	51.5
88	65	63.7	58.4	51.7
89	65	64.6	58.5	52.0
90	65	65.9	59.1	52.1
91	65	67.1	58.8	52.7
92	65	68.0	59.0	52.9
93	65	70.0	59.3	53.2
94	65	71.6	59.7	53.2
95	65	74.9	60.6	53.0
96	65	74.2	60.8	52.9
97	65	71.9	60.8	52.6
98	65	70.7	60.7	52.5
99	65	70.1	61.2	52.3
100	65	70.9	61.7	52.3
101	65	64.6	60.6	51.4

Noise Sensitive Receptor ID	Construction Noise Limits dB	Working Area Boundary 1 (dB LAeq,T)	Working Area Boundary 2 (dB LAeq,T)	Working Area Boundary 3 (dB LAeq,T)
102	65	65.1	59.5	51.8
103	65	64.1	59.3	51.5
104	65	63.1	59.1	51.3
105	65	62.7	60.9	50.9
106	65	60.2	60.8	50.2
107	65	59.6	60.6	50.0
108	65	60.1	62.4	50.1
109	65	59.8	62.4	50.0
110	65	58.7	61.8	49.6
111	65	58.7	62.2	49.6
112	65	57.4	60.7	49.2
113	65	56.3	60.0	48.7
114	65	59.8	65.2	49.8
115	65	61.2	65.0	50.3
116	65	62.1	64.6	50.5
117	65	63.0	64.2	50.8
118	65	64.1	64.0	51.0
119	65	64.4	65.3	51.0
120	65	64.1	65.2	50.9
121	65	63.5	65.3	50.8
122	65	63.2	65.5	50.7
123	65	62.7	65.7	50.6
124	65	62.5	65.9	50.6
125	65	61.9	66.2	50.4
126	65	61.8	66.3	50.4
127	65	61.2	66.7	50.2
128	65	61.0	66.8	50.1
129	65	60.6	66.9	50.0
130	65	60.5	66.9	50.0
131	65	59.9	66.8	49.8
132	65	59.8	66.6	49.8
133	65	59.5	66.6	49.7
134	65	62.9	81.9	50.8
135	65	61.7	82.7	50.6
136	65	66.0	64.3	51.4
137	65	67.6	64.2	51.7
138	65	66.2	65.8	51.4
139	65	66.5	65.9	51.4
140	65	67.3	66.2	51.5
141	65	67.7	66.2	51.6
142	65	69.0	65.9	51.8
143	65	69.6	65.8	51.9
144	65	70.9	65.5	52.0
145	65	71.7	65.4	52.1
146	65	73.3	65.2	52.3
147	65	74.4	65.1	52.4
148	65	76.5	64.9	52.5
149	65	78.1	64.7	52.6
150	65	83.4	64.6	52.8
151	65	87.8	65.1	52.8
152	65	88.6	65.4	52.8
153	65	85.4	66.1	52.8
154	65	82.4	66.5	52.7
155	65	75.3	68.0	52.6

Noise Sensitive Receptor ID	Construction Noise Limits dB	Working Area Boundary 1 (dB LAeq,T)	Working Area Boundary 2 (dB LAeq,T)	Working Area Boundary 3 (dB LAeq,T)
156	65	75.2	68.3	52.5
157	65	74.3	69.0	52.4
158	65	74.0	69.2	52.3
159	65	72.7	69.8	52.2
160	65	72.2	69.9	52.1
161	65	70.9	70.1	51.9
162	65	70.4	70.3	51.9
163	65	69.4	70.3	51.7
164	65	68.9	70.2	51.7
165	65	96.7	58.5	56.1
166	65	99.4	58.0	56.7
167	65	99.9	57.3	57.1
168	65	90.8	57.1	57.4
169	65	90.7	57.0	57.5
170	65	91.2	56.9	57.7
171	65	90.4	56.7	57.8
172	65	78.4	56.6	58.2
173	65	75.5	56.0	58.9
174	65	72.6	55.6	59.5
175	65	70.1	55.1	60.0
176	65	70.1	55.3	60.0
177	65	71.8	55.4	59.8
178	65	73.6	55.4	59.5
179	65	80.9	55.5	57.8
180	65	76.0	55.1	58.1
181	65	82.3	55.6	57.3
182	65	83.7	55.2	57.5
183	65	84.3	54.9	57.7
184	65	84.0	54.6	57.8
185	65	83.0	54.3	57.9
186	65	63.4	52.1	53.8
187	65	60.4	51.3	52.5
188	65	68.8	54.0	60.1
189	65	63.0	52.6	63.7
190	65	63.3	52.2	61.9
191	65	64.8	52.3	59.9
192	65	66.3	52.4	58.4
193	65	64.6	52.0	58.2
194	65	63.1	51.6	57.9
195	65	62.0	51.4	57.6
196	65	60.9	51.0	57.3
197	65	60.2	50.8	58.6
198	65	53.4	48.7	61.1
199	65	57.3	51.0	86.3
200	65	61.5	53.0	61.5
201	65	60.0	52.7	59.3
202	65	58.0	51.7	59.8
203	65	60.7	53.7	54.8
204	65	45.5	44.9	44.2

## Predictions for Flood Embankment Construction Activities

**Table 12.2.11: Construction Noise Predictions for Flood Embankment Construction Activity (dB)**

Noise Sensitive Receptor ID	Construction Noise Limits dB	Flood Embankment 1		Flood Embankment 2		Flood Embankment 3		Flood Embankment 4		Flood Embankment 5		Flood Embankment 6		Flood Embankment 7	
		Embarkment 1 (dB L <sub>Aeq,T</sub> )	Embarkment 1 (dB L <sub>Aeq,T</sub> )	Embarkment 2 (dB L <sub>Aeq,T</sub> )	Embarkment 2 (dB L <sub>Aeq,T</sub> )	Embarkment 3 (dB L <sub>Aeq,T</sub> )	Embarkment 3 (dB L <sub>Aeq,T</sub> )	Embarkment 4 (dB L <sub>Aeq,T</sub> )	Embarkment 4 (dB L <sub>Aeq,T</sub> )	Embarkment 5 (dB L <sub>Aeq,T</sub> )	Embarkment 5 (dB L <sub>Aeq,T</sub> )	Embarkment 6 (dB L <sub>Aeq,T</sub> )	Embarkment 6 (dB L <sub>Aeq,T</sub> )	Embarkment 7 (dB L <sub>Aeq,T</sub> )	Embarkment 7 (dB L <sub>Aeq,T</sub> )
1	65	63.8	69.8	73.5	80.0	65.7	56.6	64.4							
2	65	63.5	69.4	73.9	78.4	66.1	56.5	64.1							
3	65	62.8	68.5	74.4	75.2	67.1	56.3	63.4							
4	65	62.6	68.1	74.3	74.2	67.5	56.2	63.2							
5	65	62.1	67.6	74.4	72.5	68.5	56.0	62.6							
6	65	61.8	67.1	74.0	71.4	69.3	55.9	62.3							
7	65	61.3	66.4	73.3	70.1	70.4	55.8	61.9							
8	65	61.0	65.9	72.4	69.4	71.1	55.7	61.7							
9	65	60.9	65.4	71.1	69.0	71.0	55.9	61.8							
10	65	60.9	65.2	70.3	69.0	70.5	56.0	62.0							
11	65	61.1	65.2	69.8	69.4	69.6	56.2	62.4							
12	65	61.3	65.4	69.8	70.0	68.8	56.4	62.7							
13	65	60.1	64.8	71.2	66.9	75.7	55.3	60.6							
14	65	59.9	64.6	71.2	66.5	77.1	55.1	60.4							
15	65	59.4	64.0	70.5	65.5	81.3	54.9	59.9							
16	65	59.2	63.6	69.7	65.1	83.8	54.9	59.7							
17	65	60.0	64.2	69.5	66.8	74.6	55.5	60.9							
18	65	59.8	63.8	68.8	66.5	75.0	55.6	60.8							
19	65	59.5	63.0	67.4	65.8	75.5	55.7	60.7							
20	65	59.4	62.8	66.9	65.5	75.4	55.8	60.7							
21	65	59.3	62.5	66.3	65.4	74.7	55.9	60.9							
22	65	59.2	62.3	65.9	65.1	74.5	56.0	60.9							
23	65	58.9	61.7	65.0	64.5	74.8	56.1	60.8							
24	65	58.5	61.6	65.2	63.8	81.5	55.5	59.9							
25	65	60.4	64.1	68.3	67.7	70.8	56.2	61.9							
26	65	60.0	63.3	66.9	66.7	71.1	56.3	61.8							
27	65	60.0	63.1	65.9	66.5	69.6	56.8	62.4							
28	65	59.2	61.9	64.7	64.8	71.6	56.6	61.4							
29	65	63.3	67.8	69.3	74.6	64.9	57.3	65.6							
30	65	63.0	67.5	69.6	74.0	65.4	57.2	65.1							
31	65	62.5	66.2	67.7	71.3	65.1	57.6	65.4							
32	65	62.1	65.6	67.2	70.2	65.4	57.6	65.2							
33	65	61.6	64.8	66.6	69.0	65.8	57.6	64.8							
34	65	61.2	64.2	66.0	68.1	66.2	57.6	64.4							

Noise Sensitive Receptor ID	Construction Noise Limits dB	Flood Embankment 1		Flood Embankment 2		Flood Embankment 3		Flood Embankment 4		Flood Embankment 5		Flood Embankment 6		Flood Embankment 7	
		Embankment 1 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embankment 2 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embankment 3 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embankment 4 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embankment 5 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embankment 6 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embankment 7 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )
35	65	64.6	67.9	66.4	73.1	62.5	58.4	69.3							
36	65	63.9	65.5	64.1	69.4	61.5	59.5	72.2							
37	65	62.3	63.2	62.1	66.0	60.7	60.8	72.4							
38	65	57.2	60.8	65.6	61.4	72.4	53.7	57.5							
39	65	54.7	57.3	60.4	57.8	64.0	52.6	55.3							
40	65	57.6	60.0	62.8	62.2	75.1	55.8	59.5							
41	65	56.9	59.1	61.7	61.0	72.7	55.4	58.7							
42	65	56.9	59.1	61.6	61.0	71.9	55.6	58.8							
43	65	56.2	58.3	60.7	59.9	69.7	55.1	57.9							
44	65	56.1	58.1	60.5	59.8	68.9	55.1	57.9							
45	65	55.8	57.7	60.0	59.3	67.7	55.0	57.6							
46	65	55.7	57.5	59.7	59.0	67.1	54.9	57.4							
47	65	55.4	57.2	59.3	58.7	66.1	54.8	57.1							
48	65	55.3	57.0	59.1	58.5	65.7	54.8	57.0							
49	65	56.7	58.7	61.0	60.6	69.8	55.7	58.8							
50	65	56.6	58.5	60.7	60.4	69.2	55.7	58.6							
51	65	56.3	58.2	60.3	60.0	68.2	55.6	58.3							
52	65	56.2	58.0	60.0	59.7	67.6	55.5	58.2							
53	65	55.9	57.7	59.7	59.4	66.8	55.5	57.9							
54	65	55.8	57.5	59.4	59.1	66.3	55.4	57.8							
55	65	55.5	57.2	59.1	58.8	65.6	55.3	57.5							
56	65	55.4	57.0	58.8	58.5	65.1	55.2	57.3							
57	65	58.3	60.7	63.1	63.1	71.8	56.5	60.6							
58	65	58.4	60.7	63.0	63.2	70.9	56.6	60.8							
59	65	58.5	60.8	62.8	63.3	69.5	56.9	61.2							
60	65	58.6	60.8	62.6	63.2	68.3	57.2	61.5							
61	65	58.7	60.8	62.3	63.2	66.7	57.7	62.1							
62	65	58.4	60.4	61.8	62.7	66.5	57.7	61.8							
63	65	58.2	60.1	61.5	62.3	66.3	57.7	61.5							
64	65	57.8	59.8	61.5	62.0	67.5	57.2	60.7							
65	65	57.8	59.8	61.6	61.9	68.3	56.9	60.5							
66	65	57.7	59.7	61.8	61.9	69.6	56.6	60.1							
67	65	57.6	59.7	61.8	61.8	70.2	56.4	59.9							
68	65	56.9	58.9	60.9	60.8	68.7	56.2	59.2							
69	65	57.0	58.9	60.7	60.8	67.9	56.4	59.5							
70	65	57.1	58.9	60.5	60.8	66.8	56.8	59.8							

APPENDICES

Noise Sensitive Receptor ID	Construction Noise Limits dB	Flood Embankment 1		Flood Embankment 2		Flood Embankment 3		Flood Embankment 4		Flood Embankment 5		Flood Embankment 6		Flood Embankment 7	
		Embarkment 1 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embarkment 2 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embarkment 3 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embarkment 4 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embarkment 5 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embarkment 6 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )	Embarkment 7 (dB L <sub>Aeq,T</sub> )	Flood (dB L <sub>Aeq,T</sub> )
71	65	56.9	58.7	58.7	60.3	60.3	60.6	60.6	66.6	66.6	56.8	59.6	59.6		
72	65	56.6	58.3	58.3	59.8	59.8	60.1	60.1	65.8	65.8	56.7	59.2	59.2		
73	65	56.5	58.1	58.1	59.6	59.6	59.9	59.9	65.5	65.5	56.6	59.1	59.1		
74	65	56.3	58.0	58.0	59.7	59.7	59.8	59.8	66.1	66.1	56.2	58.7	58.7		
75	65	56.3	58.0	58.0	59.7	59.7	59.7	59.7	66.4	66.4	56.1	58.6	58.6		
76	65	55.7	57.3	57.3	58.9	58.9	58.8	58.8	65.0	65.0	55.7	57.8	57.8		
77	65	55.7	57.3	57.3	58.9	58.9	58.9	58.9	64.8	64.8	55.9	58.0	58.0		
78	65	55.8	57.4	57.4	58.8	58.8	58.9	58.9	64.4	64.4	56.3	58.2	58.2		
79	65	55.9	57.4	57.4	58.8	58.8	59.0	59.0	64.1	64.1	56.5	58.4	58.4		
80	65	56.0	57.5	57.5	58.7	58.7	59.0	59.0	63.7	63.7	56.8	58.7	58.7		
81	65	56.0	57.5	57.5	58.6	58.6	59.0	59.0	63.4	63.4	57.0	58.8	58.8		
82	65	54.9	56.1	56.1	57.2	57.2	57.5	57.5	61.5	61.5	56.3	57.3	57.3		
83	65	54.2	55.3	55.3	56.3	56.3	56.5	56.5	60.2	60.2	55.9	56.5	56.5		
84	65	54.1	55.1	55.1	55.9	55.9	56.2	56.2	59.2	59.2	56.7	56.5	56.5		
85	65	54.7	55.8	55.8	56.5	56.5	57.0	57.0	60.0	60.0	57.1	57.4	57.4		
86	65	55.3	56.4	56.4	57.3	57.3	57.8	57.8	61.0	61.0	57.3	58.1	58.1		
87	65	55.7	56.9	56.9	57.8	57.8	58.4	58.4	61.7	61.7	57.5	58.6	58.6		
88	65	56.1	57.4	57.4	58.3	58.3	58.9	58.9	62.3	62.3	57.7	59.1	59.1		
89	65	56.5	57.9	57.9	58.9	58.9	59.5	59.5	63.0	63.0	57.9	59.7	59.7		
90	65	57.0	58.4	58.4	59.2	59.2	60.0	60.0	62.9	62.9	58.4	60.5	60.5		
91	65	57.8	59.5	59.5	60.6	60.6	61.5	61.5	64.7	64.7	58.1	61.3	61.3		
92	65	58.2	60.0	60.0	61.1	61.1	62.1	62.1	65.0	65.0	58.2	61.9	61.9		
93	65	59.1	61.0	61.0	62.0	62.0	63.3	63.3	65.0	65.0	58.5	63.1	63.1		
94	65	59.3	61.1	61.1	61.9	61.9	63.3	63.3	64.2	64.2	58.9	63.7	63.7		
95	65	59.4	60.9	60.9	61.3	61.3	63.0	63.0	62.8	62.8	59.8	64.6	64.6		
96	65	59.2	60.5	60.5	60.9	60.9	62.5	62.5	62.5	62.5	60.0	64.3	64.3		
97	65	58.6	59.9	59.9	60.3	60.3	61.7	61.7	62.2	62.2	60.0	63.4	63.4		
98	65	58.3	59.5	59.5	59.9	59.9	61.2	61.2	62.1	62.1	60.0	62.9	62.9		
99	65	58.0	59.1	59.1	59.4	59.4	60.7	60.7	61.4	61.4	60.5	62.7	62.7		
100	65	58.2	59.2	59.2	59.4	59.4	60.8	60.8	61.0	61.0	61.0	63.2	63.2		
101	65	56.2	57.0	57.0	57.4	57.4	58.3	58.3	59.8	59.8	59.9	59.8	59.8		
102	65	56.5	57.7	57.7	58.3	58.3	59.1	59.1	61.5	61.5	58.8	60.0	60.0		
103	65	56.0	57.1	57.1	57.8	57.8	58.5	58.5	60.9	60.9	58.6	59.4	59.4		
104	65	55.6	56.6	56.6	57.3	57.3	58.0	58.0	60.4	60.4	58.4	58.8	58.8		
105	65	55.4	56.0	56.0	56.3	56.3	57.2	57.2	58.5	58.5	60.1	58.7	58.7		
106	65	54.1	54.7	54.7	55.0	55.0	55.6	55.6	57.1	57.1	60.1	57.0	57.0		

Noise Sensitive Receptor ID	Construction Noise Limits dB	Flood		Flood		Flood		Flood		Flood		Flood	
		Embankment 1 (dB L <sub>Aeq,T</sub> )	Embankment 2 (dB L <sub>Aeq,T</sub> )	Embankment 3 (dB L <sub>Aeq,T</sub> )	Embankment 4 (dB L <sub>Aeq,T</sub> )	Embankment 5 (dB L <sub>Aeq,T</sub> )	Embankment 6 (dB L <sub>Aeq,T</sub> )	Embankment 7 (dB L <sub>Aeq,T</sub> )	Embankment 1 (dB L <sub>Aeq,T</sub> )	Embankment 2 (dB L <sub>Aeq,T</sub> )	Embankment 3 (dB L <sub>Aeq,T</sub> )	Embankment 4 (dB L <sub>Aeq,T</sub> )	Embankment 5 (dB L <sub>Aeq,T</sub> )
107	65	53.8	54.4	54.7	55.3	56.8	60.0	56.6					
108	65	54.1	54.6	54.8	55.5	56.5	61.7	57.1					
109	65	53.9	54.4	54.5	55.2	56.3	61.7	56.8					
110	65	53.3	53.8	54.0	54.6	55.7	61.3	56.0					
111	65	53.4	53.8	53.9	54.6	55.6	61.6	56.0					
112	65	52.5	53.0	53.2	53.7	54.9	60.2	54.9					
113	65	51.9	52.2	52.4	52.9	54.0	59.5	54.1					
114	65	54.0	54.2	54.2	55.1	55.5	64.6	56.9					
115	65	54.7	55.0	54.9	55.9	56.2	64.2	58.0					
116	65	55.2	55.5	55.4	56.5	56.7	63.7	58.7					
117	65	55.6	55.9	55.9	57.0	57.1	63.2	59.3					
118	65	56.1	56.4	56.3	57.6	57.5	63.3	60.0					
119	65	56.2	56.4	56.2	57.5	57.1	64.7	60.2					
120	65	56.0	56.3	56.1	57.4	57.0	64.6	60.0					
121	65	55.8	56.0	55.8	57.1	56.8	64.3	59.6					
122	65	55.6	55.9	55.7	57.0	56.7	64.5	59.4					
123	65	55.4	55.6	55.5	56.7	56.5	64.8	59.1					
124	65	55.3	55.5	55.4	56.6	56.5	64.9	58.9					
125	65	55.1	55.3	55.1	56.3	56.2	65.2	58.5					
126	65	55.0	55.2	55.0	56.2	56.1	65.3	58.4					
127	65	54.7	54.9	54.7	55.8	55.8	65.8	57.9					
128	65	54.6	54.8	54.6	55.7	55.7	65.9	57.8					
129	65	54.4	54.6	54.4	55.5	55.5	66.1	57.5					
130	65	54.3	54.5	54.4	55.4	55.5	66.1	57.4					
131	65	54.0	54.2	54.1	55.1	55.3	66.1	57.0					
132	65	53.9	54.1	54.0	55.0	55.2	66.0	56.9					
133	65	53.8	54.0	53.9	54.9	55.1	66.0	56.7					
134	65	56.1	55.5	54.8	56.5	54.5	81.3	59.5					
135	65	55.7	55.1	54.2	56.0	53.9	82.1	58.8					
136	65	56.8	57.2	57.1	58.5	58.2	63.6	61.3					
137	65	57.4	57.8	57.7	59.2	58.7	63.5	62.2					
138	65	56.9	57.1	56.8	58.4	57.6	65.2	61.4					
139	65	57.0	57.2	56.9	58.5	57.6	65.3	61.6					
140	65	57.3	57.5	57.1	58.8	57.8	65.5	62.1					
141	65	57.4	57.6	57.2	59.0	57.8	65.6	62.3					
142	65	57.8	58.0	57.6	59.5	58.1	65.3	63.0					

Noise Sensitive Receptor ID	Construction Noise Limits dB	Flood		Flood		Flood		Flood		Flood		Flood	
		Embankment 1 (dB L <sub>Aeq,T</sub> )	Embankment 2 (dB L <sub>Aeq,T</sub> )	Embankment 3 (dB L <sub>Aeq,T</sub> )	Embankment 4 (dB L <sub>Aeq,T</sub> )	Embankment 5 (dB L <sub>Aeq,T</sub> )	Embankment 6 (dB L <sub>Aeq,T</sub> )	Embankment 7 (dB L <sub>Aeq,T</sub> )					
143	65	58.0	58.2	57.8	59.7	58.3	65.1	63.3					
144	65	58.3	58.6	58.2	60.1	58.6	64.7	64.0					
145	65	58.5	58.8	58.3	60.4	58.7	64.6	64.3					
146	65	58.9	59.2	58.6	60.8	58.8	64.4	65.1					
147	65	59.1	59.4	58.8	61.1	58.9	64.2	65.5					
148	65	59.5	59.7	59.1	61.5	59.1	63.9	66.2					
149	65	59.7	60.0	59.3	61.8	59.2	63.7	66.7					
150	65	60.2	60.4	59.6	62.4	59.2	63.6	68.0					
151	65	60.5	60.5	59.5	62.4	58.8	64.0	68.6					
152	65	60.5	60.4	59.3	62.3	58.6	64.3	68.6					
153	65	60.4	60.1	59.1	62.0	58.3	64.8	68.3					
154	65	60.3	60.0	58.9	61.8	58.1	65.2	68.1					
155	65	60.1	59.5	58.3	61.2	57.4	66.5	67.1					
156	65	60.0	59.4	58.2	61.0	57.4	66.7	66.8					
157	65	59.5	59.0	58.0	60.6	57.3	67.4	65.9					
158	65	59.4	59.0	57.9	60.5	57.3	67.6	65.7					
159	65	59.0	58.6	57.7	60.1	57.2	68.3	65.0					
160	65	58.8	58.5	57.6	60.0	57.2	68.5	64.7					
161	65	58.4	58.2	57.4	59.6	57.1	69.0	64.0					
162	65	58.3	58.1	57.3	59.5	57.1	69.2	63.7					
163	65	58.0	57.8	57.1	59.2	57.0	69.4	63.2					
164	65	57.8	57.6	57.0	59.0	57.0	69.5	62.9					
165	65	71.3	73.5	66.3	78.1	60.8	57.5	70.5					
166	65	76.8	72.7	66.1	72.1	60.1	57.0	72.6					
167	65	70.9	82.2	69.6	73.3	61.4	56.4	68.2					
168	65	70.9	80.0	69.9	71.8	61.3	56.2	68.2					
169	65	71.0	78.2	69.9	70.9	61.2	56.0	68.3					
170	65	71.0	76.5	69.8	70.1	61.0	55.9	68.4					
171	65	70.9	75.1	69.6	69.3	60.9	55.8	68.4					
172	65	73.4	69.4	66.3	66.5	59.4	55.6	70.7					
173	65	69.0	70.3	68.4	66.0	60.1	55.1	67.2					
174	65	71.1	65.6	64.4	63.3	58.3	54.7	67.2					
175	65	69.5	63.0	62.2	61.4	57.1	54.2	65.5					
176	65	68.0	67.0	66.1	63.6	59.1	54.4	65.7					
177	65	66.5	69.4	68.4	64.4	60.1	54.5	65.1					
178	65	65.8	71.9	70.7	65.2	61.0	54.5	64.5					

Noise Sensitive Receptor ID	Construction Noise Limits dB	Flood Embankment 1		Flood Embankment 2		Flood Embankment 3		Flood Embankment 4		Flood Embankment 5		Flood Embankment 6		Flood Embankment 7	
		Embarkment 1 (dB L <sub>Aeq,T</sub> )	Embarkment 1 (dB L <sub>Aeq,T</sub> )	Embarkment 2 (dB L <sub>Aeq,T</sub> )	Embarkment 2 (dB L <sub>Aeq,T</sub> )	Embarkment 3 (dB L <sub>Aeq,T</sub> )	Embarkment 3 (dB L <sub>Aeq,T</sub> )	Embarkment 4 (dB L <sub>Aeq,T</sub> )	Embarkment 4 (dB L <sub>Aeq,T</sub> )	Embarkment 5 (dB L <sub>Aeq,T</sub> )	Embarkment 5 (dB L <sub>Aeq,T</sub> )	Embarkment 6 (dB L <sub>Aeq,T</sub> )	Embarkment 6 (dB L <sub>Aeq,T</sub> )	Embarkment 7 (dB L <sub>Aeq,T</sub> )	Embarkment 7 (dB L <sub>Aeq,T</sub> )
179	65	62.7	75.1	78.6	68.1	65.8	54.6	61.6							
180	65	62.0	72.5	74.4	66.6	66.0	54.3	60.9							
181	65	62.2	72.3	80.4	68.7	67.5	54.7	61.1							
182	65	61.4	70.4	80.3	66.8	67.9	54.4	60.4							
183	65	60.8	69.0	80.7	65.6	67.7	54.0	59.9							
184	65	60.3	67.7	80.9	64.5	67.4	53.7	59.4							
185	65	59.7	66.4	78.1	63.5	67.0	53.4	58.9							
186	65	54.0	56.7	59.8	56.5	61.0	51.4	54.0							
187	65	52.6	54.7	57.1	54.7	58.2	50.6	52.7							
188	65	60.6	67.2	67.6	62.5	62.5	53.1	59.8							
189	65	58.4	61.6	61.9	58.7	58.9	51.7	57.7							
190	65	57.1	60.6	62.1	58.1	59.2	51.4	56.6							
191	65	56.8	60.6	63.4	58.4	60.4	51.5	56.3							
192	65	56.6	60.6	64.5	58.7	61.8	51.7	56.0							
193	65	55.9	59.5	63.0	57.9	60.8	51.3	55.4							
194	65	55.2	58.5	61.6	57.0	59.9	50.9	54.8							
195	65	54.8	57.9	60.6	56.5	59.1	50.6	54.3							
196	65	54.2	57.0	59.6	55.8	58.3	50.3	53.8							
197	65	54.3	57.0	59.0	55.5	57.5	50.1	53.9							
198	65	52.3	52.6	52.6	51.5	51.4	48.0	51.7							
199	65	56.5	56.5	56.4	54.8	54.2	50.2	55.5							
200	65	60.8	57.5	57.3	56.6	54.1	52.1	59.1							
201	65	59.2	56.0	55.7	55.4	52.9	51.9	57.9							
202	65	57.3	54.9	54.7	54.2	52.2	50.9	56.1							
203	65	57.5	54.5	53.8	54.3	51.6	52.8	56.8							
204	65	44.2	43.5	43.2	43.5	42.5	44.2	44.1							

## Predictions for Sheet Piled Wall Construction Activity

**Table 12.2.12: Construction Noise Predictions for Sheet Piled Wall Construction Activity (dB)**

Noise Sensitive Receptor ID	Construction Noise Limits dB	Sheet Piled Wall 1 (dB) $L_{Aeq,T}$	Sheet Piled Wall 2 (dB) $L_{Aeq,T}$	Sheet Piled Wall 3 (dB) $L_{Aeq,T}$
1	65	82.7	65.0	65.7
2	65	82.6	64.5	65.2
3	65	82.8	63.5	64.1
4	65	82.5	63.1	63.6
5	65	84.4	62.4	62.8
6	65	84.1	61.9	62.3
7	65	82.8	61.2	61.6
8	65	80.3	60.8	61.2
9	65	76.3	60.6	61.1
10	65	74.2	60.7	61.1
11	65	72.6	60.9	61.4
12	65	72.1	61.2	61.8
13	65	82.9	59.5	59.8
14	65	85.5	59.2	59.5
15	65	83.8	58.6	58.9
16	65	80.5	58.4	58.6
17	65	75.4	59.4	59.7
18	65	73.5	59.2	59.5
19	65	70.7	58.7	59.1
20	65	69.6	58.6	59.0
21	65	68.3	58.5	58.9
22	65	67.4	58.4	58.8
23	65	66.0	58.0	58.4
24	65	67.2	57.5	57.8
25	65	70.3	60.0	60.5
26	65	68.1	59.5	59.9
27	65	66.2	59.5	60.0
28	65	64.9	58.3	58.8
29	65	71.8	64.2	65.2
30	65	71.8	63.7	64.6
31	65	68.6	62.8	63.7
32	65	67.6	62.2	63.1
33	65	66.6	61.5	62.3
34	65	65.8	60.9	61.6
35	65	68.6	65.7	67.2
36	65	64.7	63.7	64.9
37	65	61.8	61.3	62.1
38	65	68.7	55.7	55.9
39	65	59.9	52.9	53.1
40	65	63.1	56.4	56.8
41	65	61.9	55.5	55.8
42	65	61.6	55.5	55.9
43	65	60.7	54.7	55.0
44	65	60.3	54.6	54.9
45	65	59.6	54.2	54.5
46	65	59.3	54.0	54.3
47	65	58.7	53.7	54.0
48	65	58.5	53.6	53.8
49	65	60.6	55.3	55.6
50	65	60.3	55.1	55.4
51	65	59.8	54.8	55.1

Noise Sensitive Receptor ID	Construction Noise Limits dB	Sheet Piled Wall 1 (dB LAeq,T)	Sheet Piled Wall 2 (dB LAeq,T)	Sheet Piled Wall 3 (dB LAeq,T)
52	65	59.5	54.6	54.9
53	65	59.0	54.3	54.6
54	65	58.7	54.1	54.4
55	65	58.3	53.9	54.1
56	65	58.0	53.7	53.9
57	65	63.0	57.2	57.6
58	65	62.8	57.3	57.7
59	65	62.3	57.4	57.9
60	65	61.8	57.5	57.9
61	65	61.1	57.6	58.1
62	65	60.6	57.2	57.7
63	65	60.3	57.0	57.4
64	65	60.5	56.5	57.0
65	65	60.8	56.5	56.9
66	65	61.3	56.4	56.8
67	65	61.4	56.3	56.7
68	65	60.3	55.5	55.9
69	65	60.0	55.6	55.9
70	65	59.5	55.6	56.0
71	65	59.3	55.5	55.8
72	65	58.7	55.1	55.4
73	65	58.5	54.9	55.3
74	65	58.7	54.7	55.1
75	65	58.8	54.7	55.0
76	65	57.9	54.0	54.3
77	65	57.8	54.0	54.3
78	65	57.6	54.1	54.4
79	65	57.5	54.2	54.5
80	65	57.3	54.3	54.6
81	65	57.2	54.3	54.7
82	65	55.6	53.0	53.3
83	65	54.6	52.2	52.5
84	65	53.9	52.0	52.3
85	65	54.6	52.7	53.0
86	65	55.5	53.4	53.7
87	65	56.1	53.9	54.2
88	65	56.6	54.3	54.7
89	65	57.2	54.8	55.2
90	65	57.5	55.4	55.8
91	65	59.1	56.4	56.9
92	65	59.6	56.9	57.4
93	65	60.6	58.0	58.5
94	65	60.4	58.1	58.7
95	65	59.9	58.2	58.8
96	65	59.4	57.8	58.4
97	65	58.6	57.1	57.6
98	65	58.2	56.7	57.2
99	65	57.6	56.4	56.8
100	65	57.7	56.5	57.0
101	65	55.3	54.2	54.5
102	65	56.4	54.7	55.1
103	65	55.8	54.2	54.5
104	65	55.2	53.7	54.0
105	65	54.1	53.2	53.6
106	65	52.6	51.8	52.1
107	65	52.3	51.5	51.8

Noise Sensitive Receptor ID	Construction Noise Limits dB	Sheet Piled Wall 1 (dB LAeq,T)	Sheet Piled Wall 2 (dB LAeq,T)	Sheet Piled Wall 3 (dB LAeq,T)
108	65	52.4	51.8	52.1
109	65	52.1	51.6	51.8
110	65	51.5	50.9	51.2
111	65	51.5	50.9	51.2
112	65	50.7	50.1	50.3
113	65	49.9	49.3	49.6
114	65	51.9	51.5	51.7
115	65	52.7	52.3	52.6
116	65	53.2	52.8	53.1
117	65	53.7	53.3	53.6
118	65	54.3	53.8	54.1
119	65	54.2	53.8	54.1
120	65	54.0	53.7	54.0
121	65	53.8	53.4	53.7
122	65	53.6	53.3	53.6
123	65	53.4	53.0	53.3
124	65	53.3	52.9	53.2
125	65	53.0	52.6	52.9
126	65	52.9	52.5	52.8
127	65	52.5	52.2	52.5
128	65	52.4	52.1	52.4
129	65	52.2	51.9	52.1
130	65	52.1	51.8	52.1
131	65	51.8	51.5	51.8
132	65	51.7	51.4	51.7
133	65	51.6	51.3	51.5
134	65	52.8	53.4	53.6
135	65	52.2	52.9	53.2
136	65	55.2	54.7	55.0
137	65	55.8	55.3	55.7
138	65	54.9	54.6	55.0
139	65	55.0	54.7	55.1
140	65	55.3	55.0	55.4
141	65	55.5	55.2	55.5
142	65	55.9	55.6	56.0
143	65	56.1	55.8	56.2
144	65	56.6	56.2	56.6
145	65	56.8	56.5	56.9
146	65	57.2	56.9	57.3
147	65	57.4	57.1	57.5
148	65	57.8	57.5	58.0
149	65	58.0	57.8	58.2
150	65	58.4	58.3	58.8
151	65	58.4	58.5	59.0
152	65	58.2	58.4	58.9
153	65	57.8	58.2	58.7
154	65	57.6	58.1	58.6
155	65	57.0	57.8	58.3
156	65	56.9	57.6	58.1
157	65	56.6	57.1	57.6
158	65	56.5	57.0	57.5
159	65	56.2	56.6	57.0
160	65	56.1	56.4	56.9
161	65	55.8	56.0	56.4
162	65	55.6	55.9	56.3
163	65	55.4	55.6	56.0

Noise Sensitive Receptor ID	Construction Noise Limits dB	Sheet Piled Wall 1 (dB LAeq,T)	Sheet Piled Wall 2 (dB LAeq,T)	Sheet Piled Wall 3 (dB LAeq,T)
164	65	55.2	55.4	55.8
165	65	67.2	80.7	91.9
166	65	64.7	84.7	78.1
167	65	67.4	75.6	72.6
168	65	66.6	73.2	70.8
169	65	66.0	72.0	69.8
170	65	65.4	70.9	68.8
171	65	64.8	69.8	67.9
172	65	61.8	69.6	67.4
173	65	62.1	65.6	64.1
174	65	59.3	64.6	63.6
175	65	57.4	62.2	61.8
176	65	59.9	63.4	62.4
177	65	61.1	63.1	62.0
178	65	62.0	63.3	62.5
179	65	66.4	62.2	61.9
180	65	65.2	61.1	60.9
181	65	68.5	61.8	61.8
182	65	67.0	60.6	60.6
183	65	65.6	59.8	59.7
184	65	64.5	59.0	58.9
185	65	63.9	58.2	58.1
186	65	57.9	52.0	52.0
187	65	55.1	50.4	50.4
188	65	60.1	58.6	58.3
189	65	56.0	55.4	55.1
190	65	56.1	54.5	54.3
191	65	57.3	54.4	54.3
192	65	58.7	54.4	54.3
193	65	57.8	53.7	53.6
194	65	56.8	52.9	52.8
195	65	56.1	52.4	52.3
196	65	55.2	51.8	51.7
197	65	54.4	51.8	51.6
198	65	48.4	48.7	48.5
199	65	51.7	52.5	52.3
200	65	53.0	55.7	55.6
201	65	51.8	54.4	54.4
202	65	50.7	52.8	52.8
203	65	50.5	53.1	53.4
204	65	40.2	40.9	41.0

## Predictions for Flood Wall (Reinforced Concrete Wall) Construction Activity

**Table 12.2.13: Construction Noise Predictions for Flood Wall (Reinforced Concrete Wall) Construction Activity (dB)**

Noise Sensitive Receptor ID	Construction Noise Limits dB	Flood Wall 1 (dB) L <sub>Aeq,T</sub>	Flood Wall 2 (dB) L <sub>Aeq,T</sub>	Flood Wall 3 (dB) L <sub>Aeq,T</sub>
1	65	58.8	65.5	66.9
2	65	58.5	65.0	66.2
3	65	57.9	64.0	64.7
4	65	57.7	63.5	64.2
5	65	57.2	62.8	63.2
6	65	56.9	62.3	62.6
7	65	56.5	61.5	61.8
8	65	56.2	61.0	61.3
9	65	56.1	60.7	61.2
10	65	56.1	60.6	61.3
11	65	56.3	60.8	61.7
12	65	56.5	61.0	62.1
13	65	55.3	59.5	59.6
14	65	55.1	59.3	59.3
15	65	54.7	58.6	58.6
16	65	54.5	58.3	58.3
17	65	55.2	59.3	59.7
18	65	55.1	59.0	59.4
19	65	54.8	58.4	59.0
20	65	54.7	58.2	58.9
21	65	54.6	58.1	58.8
22	65	54.5	57.9	58.7
23	65	54.3	57.4	58.2
24	65	53.9	57.0	57.6
25	65	55.7	59.7	60.6
26	65	55.3	59.0	60.0
27	65	55.4	58.9	60.1
28	65	54.6	57.6	58.7
29	65	58.5	64.0	66.4
30	65	58.2	63.5	65.7
31	65	57.8	62.4	64.5
32	65	57.4	61.7	63.7
33	65	56.9	60.9	62.7
34	65	56.5	60.3	62.0
35	65	60.0	64.9	68.6
36	65	59.4	62.5	65.1
37	65	58.1	59.9	61.7
38	65	52.5	55.4	55.3
39	65	50.2	52.3	52.3
40	65	53.1	55.7	56.4
41	65	52.4	54.7	55.4
42	65	52.4	54.8	55.4
43	65	51.7	53.9	54.5
44	65	51.6	53.7	54.3
45	65	51.3	53.3	53.9
46	65	51.2	53.2	53.7
47	65	50.9	52.8	53.4
48	65	50.8	52.7	53.2
49	65	52.2	54.4	55.2

Noise Sensitive Receptor ID	Construction Noise Limits dB	Flood Wall 1 (dB) LAeq,T	Flood Wall 2 (dB) LAeq,T	Flood Wall 3 (dB) LAeq,T
50	65	52.1	54.2	54.9
51	65	51.8	53.9	54.6
52	65	51.7	53.7	54.4
53	65	51.4	53.4	54.1
54	65	51.3	53.2	53.9
55	65	51.1	52.9	53.6
56	65	50.9	52.7	53.4
57	65	53.7	56.4	57.3
58	65	53.8	56.5	57.5
59	65	53.9	56.6	57.6
60	65	54.0	56.6	57.7
61	65	54.2	56.7	57.9
62	65	54.0	56.4	57.5
63	65	53.7	56.1	57.1
64	65	53.3	55.7	56.6
65	65	53.2	55.6	56.5
66	65	53.1	55.5	56.4
67	65	53.0	55.5	56.3
68	65	52.4	54.6	55.4
69	65	52.5	54.7	55.5
70	65	52.6	54.7	55.6
71	65	52.5	54.6	55.4
72	65	52.2	54.1	54.9
73	65	52.0	54.0	54.7
74	65	51.8	53.8	54.6
75	65	51.8	53.8	54.5
76	65	51.2	53.0	53.7
77	65	51.3	53.1	53.8
78	65	51.4	53.2	53.9
79	65	51.5	53.2	54.0
80	65	51.6	53.3	54.1
81	65	51.6	53.3	54.1
82	65	50.5	52.0	52.6
83	65	49.8	51.1	51.7
84	65	49.7	50.9	51.5
85	65	50.4	51.7	52.3
86	65	50.9	52.3	53.0
87	65	51.3	52.8	53.6
88	65	51.7	53.3	54.1
89	65	52.1	53.8	54.7
90	65	52.6	54.3	55.3
91	65	53.4	55.4	56.5
92	65	53.8	56.0	57.0
93	65	54.6	57.1	58.3
94	65	54.9	57.2	58.5
95	65	55.1	57.1	58.4
96	65	54.8	56.8	58.0
97	65	54.2	56.0	57.2
98	65	53.9	55.6	56.7
99	65	53.7	55.3	56.3
100	65	53.9	55.4	56.4
101	65	51.9	53.1	53.9
102	65	52.2	53.7	54.5
103	65	51.7	53.1	53.9
104	65	51.3	52.6	53.4
105	65	51.1	52.1	52.8

Noise Sensitive Receptor ID	Construction Noise Limits dB	Flood Wall 1 (dB) LAeq,T	Flood Wall 2 (dB) LAeq,T	Flood Wall 3 (dB) LAeq,T
106	65	49.8	50.7	51.3
107	65	49.5	50.4	50.9
108	65	49.9	50.6	51.2
109	65	49.7	50.4	50.9
110	65	49.1	49.8	50.3
111	65	49.1	49.7	50.3
112	65	48.3	48.9	49.4
113	65	47.6	48.2	48.6
114	65	49.8	50.3	50.8
115	65	50.5	51.0	51.6
116	65	51.0	51.6	52.2
117	65	51.4	52.0	52.7
118	65	51.8	52.5	53.3
119	65	52.0	52.5	53.2
120	65	51.9	52.4	53.1
121	65	51.6	52.1	52.8
122	65	51.5	52.0	52.7
123	65	51.2	51.8	52.4
124	65	51.1	51.6	52.3
125	65	50.9	51.3	52.0
126	65	50.8	51.3	51.9
127	65	50.5	50.9	51.5
128	65	50.4	50.8	51.4
129	65	50.2	50.6	51.2
130	65	50.1	50.5	51.1
131	65	49.8	50.3	50.8
132	65	49.7	50.2	50.7
133	65	49.6	50.0	50.6
134	65	52.1	51.7	52.2
135	65	51.7	51.2	51.7
136	65	52.6	53.4	54.2
137	65	53.2	54.0	54.9
138	65	52.7	53.3	54.1
139	65	52.8	53.4	54.2
140	65	53.1	53.7	54.5
141	65	53.3	53.8	54.7
142	65	53.7	54.3	55.2
143	65	53.8	54.5	55.4
144	65	54.2	54.9	55.8
145	65	54.4	55.1	56.1
146	65	54.7	55.5	56.5
147	65	54.9	55.7	56.8
148	65	55.3	56.1	57.2
149	65	55.5	56.4	57.5
150	65	56.1	56.9	58.1
151	65	56.4	57.0	58.1
152	65	56.4	56.9	58.0
153	65	56.3	56.6	57.7
154	65	56.3	56.5	57.5
155	65	56.2	56.0	56.9
156	65	56.0	55.9	56.7
157	65	55.5	55.5	56.3
158	65	55.4	55.4	56.2
159	65	55.0	55.0	55.8
160	65	54.8	54.9	55.7
161	65	54.4	54.5	55.3

Noise Sensitive Receptor ID	Construction Noise Limits dB	Flood Wall 1 (dB) L <sub>Aeq,T</sub>	Flood Wall 2 (dB) L <sub>Aeq,T</sub>	Flood Wall 3 (dB) L <sub>Aeq,T</sub>
162	65	54.3	54.4	55.2
163	65	53.9	54.1	54.9
164	65	53.7	53.9	54.7
165	65	65.9	74.2	75.2
166	65	69.7	71.0	69.3
167	65	64.7	79.0	71.6
168	65	64.7	75.7	69.6
169	65	64.7	73.9	68.5
170	65	64.7	72.2	67.5
171	65	64.6	70.7	66.6
172	65	66.4	65.1	63.3
173	65	62.9	65.3	62.7
174	65	63.0	61.2	59.8
175	65	61.2	58.6	57.6
176	65	61.4	61.9	60.0
177	65	60.8	63.3	60.9
178	65	60.2	64.2	61.5
179	65	57.6	63.7	61.6
180	65	56.9	62.3	60.4
181	65	57.2	63.2	61.5
182	65	56.4	61.6	60.2
183	65	55.9	60.6	59.2
184	65	55.3	59.6	58.4
185	65	54.8	58.7	57.5
186	65	49.4	51.4	51.2
187	65	48.0	49.7	49.6
188	65	55.6	59.0	57.5
189	65	53.4	55.2	54.1
190	65	52.3	54.3	53.3
191	65	52.0	54.3	53.4
192	65	51.8	54.3	53.5
193	65	51.2	53.4	52.7
194	65	50.6	52.6	51.9
195	65	50.1	52.0	51.4
196	65	49.6	51.3	50.8
197	65	49.7	51.3	50.7
198	65	47.4	47.7	47.2
199	65	51.2	51.4	50.7
200	65	54.8	53.1	52.6
201	65	53.6	51.7	51.3
202	65	51.8	50.5	50.1
203	65	52.5	50.4	50.2
204	65	39.8	39.2	39.2

## Predictions for Bridge Replacement Construction Activity

**Table 12.2.14: Construction Noise Predictions for Bridge Replacement Construction Activity (dB)**

Noise Sensitive Receptor ID	Construction Noise Limits dB	New Bridge Area (dB LAeq,T)	Parapet 1 (dB LAeq,T)	Parapet 2 (dB LAeq,T)
1	65	70.1	67.5	69.2
2	65	69.4	67.0	68.6
3	65	67.9	65.8	67.2
4	65	67.3	65.4	66.7
5	65	66.3	64.6	65.8
6	65	65.7	64.1	65.2
7	65	64.9	63.4	64.5
8	65	64.5	63.0	64.0
9	65	64.5	62.9	63.8
10	65	64.7	62.9	63.8
11	65	65.2	63.2	64.2
12	65	65.7	63.6	64.5
13	65	62.7	61.6	62.4
14	65	62.4	61.3	62.1
15	65	61.7	60.7	61.4
16	65	61.4	60.4	61.1
17	65	62.9	61.5	62.4
18	65	62.7	61.3	62.1
19	65	62.4	60.9	61.6
20	65	62.3	60.8	61.5
21	65	62.3	60.7	61.4
22	65	62.2	60.6	61.3
23	65	61.8	60.2	60.8
24	65	61.0	59.6	60.2
25	65	64.1	62.3	63.1
26	65	63.6	61.7	62.5
27	65	63.9	61.8	62.5
28	65	62.4	60.6	61.2
29	65	71.0	67.0	68.3
30	65	70.0	66.4	67.6
31	65	69.3	65.5	66.5
32	65	68.4	64.9	65.7
33	65	67.2	64.1	64.9
34	65	66.4	63.4	64.2
35	65	76.6	69.0	69.7
36	65	71.3	66.7	66.8
37	65	66.8	63.9	63.8
38	65	58.4	57.7	58.2
39	65	55.4	54.8	55.2
40	65	59.9	58.5	59.0
41	65	58.8	57.6	58.1
42	65	58.9	57.7	58.1
43	65	57.9	56.8	57.2
44	65	57.8	56.7	57.0
45	65	57.3	56.3	56.6
46	65	57.1	56.1	56.4
47	65	56.8	55.8	56.1
48	65	56.7	55.6	56.0
49	65	58.7	57.4	57.8
50	65	58.5	57.2	57.6
51	65	58.1	56.9	57.3
52	65	57.9	56.7	57.0

Noise Sensitive Receptor ID	Construction Noise Limits dB	New Bridge Area (dB LAeq,T)	Parapet 1 (dB LAeq,T)	Parapet 2 (dB LAeq,T)
53	65	57.6	56.4	56.8
54	65	57.4	56.2	56.6
55	65	57.0	55.9	56.3
56	65	56.8	55.7	56.1
57	65	61.0	59.4	59.9
58	65	61.2	59.5	60.0
59	65	61.4	59.7	60.1
60	65	61.6	59.7	60.2
61	65	61.8	59.9	60.3
62	65	61.4	59.5	59.9
63	65	61.0	59.2	59.6
64	65	60.4	58.8	59.2
65	65	60.3	58.7	59.1
66	65	60.1	58.6	59.0
67	65	60.0	58.5	58.9
68	65	59.0	57.7	58.1
69	65	59.1	57.7	58.1
70	65	59.3	57.8	58.2
71	65	59.1	57.6	58.0
72	65	58.6	57.2	57.6
73	65	58.4	57.0	57.4
74	65	58.1	56.9	57.2
75	65	58.1	56.8	57.2
76	65	57.2	56.1	56.4
77	65	57.3	56.1	56.4
78	65	57.4	56.2	56.5
79	65	57.5	56.3	56.6
80	65	57.7	56.4	56.7
81	65	57.7	56.5	56.7
82	65	56.2	55.1	55.3
83	65	55.2	54.2	54.5
84	65	55.0	54.1	54.2
85	65	55.9	54.8	55.0
86	65	56.6	55.5	55.7
87	65	57.2	56.0	56.2
88	65	57.8	56.5	56.7
89	65	58.4	57.0	57.3
90	65	59.1	57.6	57.8
91	65	60.3	58.7	59.0
92	65	61.0	59.2	59.5
93	65	62.4	60.3	60.7
94	65	62.7	60.5	60.9
95	65	62.7	60.6	60.8
96	65	62.2	60.2	60.4
97	65	61.3	59.4	59.6
98	65	60.8	59.0	59.2
99	65	60.3	58.6	58.8
100	65	60.5	58.8	58.9
101	65	57.6	56.3	56.5
102	65	58.3	56.9	57.1
103	65	57.6	56.3	56.5
104	65	57.0	55.8	56.0
105	65	56.4	55.3	55.4
106	65	54.8	53.9	54.0
107	65	54.5	53.6	53.7
108	65	54.7	53.8	53.9

Noise Sensitive Receptor ID	Construction Noise Limits dB	New Bridge Area (dB LAeq,T)	Parapet 1 (dB LAeq,T)	Parapet 2 (dB LAeq,T)
109	65	54.5	53.6	53.7
110	65	53.8	53.0	53.0
111	65	53.8	53.0	53.0
112	65	52.8	52.1	52.1
113	65	52.0	51.3	51.4
114	65	54.3	53.5	53.5
115	65	55.2	54.3	54.4
116	65	55.8	54.9	54.9
117	65	56.4	55.4	55.4
118	65	57.0	55.9	55.9
119	65	57.0	55.9	55.9
120	65	56.8	55.8	55.8
121	65	56.5	55.5	55.5
122	65	56.3	55.3	55.3
123	65	56.1	55.1	55.1
124	65	55.9	55.0	55.0
125	65	55.6	54.7	54.7
126	65	55.5	54.6	54.6
127	65	55.1	54.3	54.2
128	65	55.0	54.2	54.1
129	65	54.8	53.9	53.9
130	65	54.7	53.8	53.8
131	65	54.3	53.5	53.5
132	65	54.2	53.4	53.4
133	65	54.1	53.3	53.3
134	65	55.9	55.2	55.0
135	65	55.3	54.7	54.5
136	65	58.0	56.8	56.8
137	65	58.8	57.5	57.5
138	65	57.9	56.8	56.7
139	65	58.0	56.9	56.8
140	65	58.4	57.2	57.1
141	65	58.5	57.3	57.3
142	65	59.1	57.8	57.7
143	65	59.3	58.0	58.0
144	65	59.8	58.4	58.4
145	65	60.1	58.7	58.6
146	65	60.6	59.1	59.0
147	65	60.9	59.3	59.3
148	65	61.4	59.8	59.7
149	65	61.7	60.0	60.0
150	65	62.4	60.6	60.5
151	65	62.5	60.7	60.6
152	65	62.3	60.6	60.5
153	65	62.0	60.4	60.2
154	65	61.8	60.3	60.0
155	65	61.0	59.7	59.5
156	65	60.9	59.6	59.3
157	65	60.4	59.1	58.9
158	65	60.3	59.0	58.8
159	65	59.9	58.6	58.4
160	65	59.7	58.5	58.3
161	65	59.3	58.1	57.9
162	65	59.1	58.0	57.8
163	65	58.8	57.6	57.5
164	65	58.6	57.5	57.3

Noise Sensitive Receptor ID	Construction Noise Limits dB	New Bridge Area (dB LAeq,T)	Parapet 1 (dB LAeq,T)	Parapet 2 (dB LAeq,T)
165	65	86.3	86.3	78.2
166	65	79.5	77.9	74.0
167	65	98.0	77.4	78.9
168	65	88.9	75.0	75.9
169	65	87.6	73.8	74.4
170	65	84.0	72.7	73.0
171	65	80.6	71.6	71.8
172	65	72.2	68.3	67.7
173	65	71.1	67.0	67.0
174	65	66.3	64.0	63.7
175	65	63.2	61.6	61.3
176	65	66.7	64.0	64.0
177	65	67.7	64.7	64.9
178	65	68.2	65.1	65.6
179	65	66.1	63.9	65.0
180	65	64.7	62.9	63.8
181	65	65.5	63.6	64.7
182	65	64.1	62.4	63.4
183	65	63.1	61.6	62.4
184	65	62.2	60.8	61.6
185	65	61.3	60.0	60.7
186	65	54.3	53.8	54.1
187	65	52.6	52.2	52.5
188	65	61.9	60.4	60.9
189	65	58.3	57.2	57.5
190	65	57.2	56.3	56.6
191	65	57.1	56.2	56.6
192	65	57.1	56.2	56.6
193	65	56.3	55.5	55.8
194	65	55.4	54.7	55.1
195	65	54.9	54.2	54.5
196	65	54.2	53.6	53.9
197	65	54.2	53.5	53.8
198	65	50.8	50.3	50.4
199	65	54.7	53.9	54.0
200	65	56.9	56.1	56.0
201	65	55.5	54.8	54.6
202	65	54.1	53.5	53.4
203	65	54.0	53.6	53.3
204	65	42.4	42.3	42.2

## Predictions for Culvert Improvement Activity

**Table 12.2.15: Construction Noise Predictions for Culvert Improvement Activity (dB)**

Noise Sensitive Receptor ID	Construction Noise Limits dB	Culvert Upgrade Area(dB L <sub>Aeq,T</sub> )	Inlet Update Area(dB L <sub>Aeq,T</sub> )
1	65	61.8	47.0
2	65	61.4	47.0
3	65	60.5	47.0
4	65	60.1	47.0
5	65	59.4	47.0
6	65	58.9	46.9
7	65	58.1	46.9
8	65	57.6	46.7
9	65	57.2	46.6
10	65	57.1	46.4
11	65	57.2	46.3
12	65	57.4	46.3
13	65	56.1	46.6
14	65	55.9	46.7
15	65	55.3	46.6
16	65	54.9	46.5
17	65	55.8	46.4
18	65	55.5	46.2
19	65	54.9	45.9
20	65	54.7	45.8
21	65	54.5	45.7
22	65	54.2	45.6
23	65	53.7	45.3
24	65	53.4	45.5
25	65	56.1	46.1
26	65	55.3	45.8
27	65	55.1	45.6
28	65	53.9	45.2
29	65	59.6	46.4
30	65	59.3	46.4
31	65	57.9	46.1
32	65	57.3	45.9
33	65	56.6	45.8
34	65	56.0	45.6
35	65	59.1	46.2
36	65	56.9	45.7
37	65	54.7	45.0
38	65	52.0	46.0
39	65	48.8	44.6
40	65	52.0	44.7
41	65	51.1	44.4
42	65	51.1	44.4
43	65	50.2	44.1
44	65	50.1	44.0
45	65	49.7	43.8
46	65	49.5	43.7
47	65	49.1	43.5
48	65	49.0	43.5
49	65	50.7	44.1
50	65	50.5	44.0
51	65	50.2	43.9

Noise Sensitive Receptor ID	Construction Noise Limits dB	Culvert Upgrade Area(dB LAeq,T)	Inlet Update Area(dB LAeq,T)
52	65	49.9	43.8
53	65	49.7	43.6
54	65	49.5	43.6
55	65	49.2	43.4
56	65	49.0	43.3
57	65	52.6	44.8
58	65	52.7	44.8
59	65	52.7	44.7
60	65	52.7	44.6
61	65	52.6	44.5
62	65	52.3	44.4
63	65	52.0	44.3
64	65	51.7	44.2
65	65	51.7	44.3
66	65	51.7	44.4
67	65	51.6	44.4
68	65	50.8	44.1
69	65	50.8	44.0
70	65	50.8	43.9
71	65	50.6	43.8
72	65	50.2	43.7
73	65	50.0	43.6
74	65	50.0	43.6
75	65	49.9	43.6
76	65	49.2	43.3
77	65	49.2	43.3
78	65	49.3	43.2
79	65	49.3	43.2
80	65	49.4	43.2
81	65	49.3	43.1
82	65	48.0	42.5
83	65	47.2	42.1
84	65	46.9	41.9
85	65	47.6	42.2
86	65	48.3	42.5
87	65	48.8	42.8
88	65	49.2	43.0
89	65	49.8	43.2
90	65	50.2	43.4
91	65	51.3	43.9
92	65	51.8	44.1
93	65	52.8	44.5
94	65	52.8	44.4
95	65	52.6	44.3
96	65	52.2	44.1
97	65	51.6	43.9
98	65	51.2	43.7
99	65	50.8	43.6
100	65	50.9	43.6
101	65	48.8	42.6
102	65	49.5	43.0
103	65	48.9	42.8
104	65	48.5	42.5
105	65	47.8	42.1
106	65	46.5	41.4

Noise Sensitive Receptor ID	Construction Noise Limits dB	Culvert Upgrade Area(dB L <sub>Aeq,T</sub> )	Inlet Update Area(dB L <sub>Aeq,T</sub> )
107	65	46.2	41.3
108	65	46.4	41.3
109	65	46.2	41.2
110	65	45.6	40.9
111	65	45.6	40.9
112	65	44.8	40.4
113	65	44.1	40.0
114	65	46.0	41.1
115	65	46.7	41.5
116	65	47.2	41.8
117	65	47.7	42.0
118	65	48.1	42.3
119	65	48.1	42.3
120	65	48.0	42.2
121	65	47.7	42.1
122	65	47.6	42.0
123	65	47.4	41.9
124	65	47.3	41.8
125	65	47.0	41.7
126	65	46.9	41.6
127	65	46.6	41.5
128	65	46.5	41.4
129	65	46.3	41.3
130	65	46.3	41.3
131	65	46.0	41.1
132	65	45.9	41.1
133	65	45.8	41.0
134	65	47.2	42.0
135	65	46.7	41.9
136	65	48.9	42.7
137	65	49.5	42.9
138	65	48.8	42.6
139	65	48.9	42.7
140	65	49.2	42.8
141	65	49.3	42.9
142	65	49.7	43.0
143	65	49.9	43.1
144	65	50.2	43.3
145	65	50.4	43.4
146	65	50.8	43.5
147	65	51.0	43.6
148	65	51.3	43.8
149	65	51.6	43.9
150	65	52.0	44.1
151	65	52.0	44.1
152	65	51.9	44.1
153	65	51.7	44.0
154	65	51.5	44.0
155	65	51.1	43.9
156	65	51.0	43.8
157	65	50.6	43.6
158	65	50.5	43.6
159	65	50.2	43.4
160	65	50.1	43.4
161	65	49.8	43.2

Noise Sensitive Receptor ID	Construction Noise Limits dB	Culvert Upgrade Area(dB LAeq,T)	Inlet Update Area(dB LAeq,T)
162	65	49.7	43.1
163	65	49.4	43.0
164	65	49.3	42.9
165	65	63.4	47.4
166	65	63.2	47.9
167	65	71.1	48.3
168	65	72.6	48.6
169	65	72.9	48.7
170	65	72.2	48.9
171	65	71.0	49.1
172	65	63.0	49.4
173	65	64.6	50.1
174	65	58.9	50.7
175	65	55.9	51.2
176	65	60.1	51.2
177	65	62.1	50.9
178	65	63.5	50.7
179	65	61.2	49.1
180	65	59.6	49.3
181	65	60.5	48.5
182	65	58.8	48.7
183	65	57.7	48.9
184	65	56.6	49.1
185	65	55.6	49.2
186	65	47.9	45.0
187	65	46.1	43.8
188	65	56.4	51.3
189	65	52.3	54.9
190	65	51.2	53.1
191	65	51.1	51.1
192	65	51.0	49.6
193	65	50.1	49.4
194	65	49.2	49.1
195	65	48.6	48.9
196	65	47.9	48.5
197	65	47.9	49.9
198	65	44.3	52.3
199	65	48.2	72.7
200	65	49.9	52.6
201	65	48.4	50.4
202	65	47.1	50.8
203	65	46.6	46.0
204	65	35.4	35.5

## Predictions for Alterations to Arterial Drainage Embankments Activity

**Table 12.2.16: Construction Noise Predictions for Alterations to Arterial Drainage Embankments Activity (dB)**

Noise Sensitive Receptor ID	Construction Noise Limits dB	Removed Embankment Area 1 (dB LAeq,T)	Removed Embankment Area 1 (dB LAeq,T)
1	65	38.5	54.8
2	65	38.5	54.5
3	65	38.4	54.0
4	65	38.4	53.7
5	65	38.3	53.3
6	65	38.2	53.0
7	65	38.1	52.6
8	65	38.1	52.4
9	65	38.1	52.2
10	65	38.1	52.2
11	65	38.2	52.4
12	65	38.2	52.6
13	65	37.9	51.5
14	65	37.9	51.3
15	65	37.8	50.9
16	65	37.7	50.7
17	65	37.9	51.4
18	65	37.9	51.2
19	65	37.9	50.9
20	65	37.9	50.9
21	65	37.9	50.8
22	65	37.9	50.7
23	65	37.8	50.5
24	65	37.7	50.1
25	65	38.1	51.8
26	65	38.0	51.5
27	65	38.1	51.5
28	65	37.9	50.7
29	65	38.6	54.5
30	65	38.5	54.2
31	65	38.5	53.8
32	65	38.5	53.4
33	65	38.4	53.0
34	65	38.4	52.6
35	65	38.9	55.8
36	65	39.0	55.3
37	65	39.1	54.1
38	65	37.3	48.8
39	65	36.6	46.5
40	65	37.6	49.3
41	65	37.4	48.6
42	65	37.5	48.7
43	65	37.3	48.0
44	65	37.2	47.9
45	65	37.2	47.6
46	65	37.1	47.5
47	65	37.1	47.2
48	65	37.1	47.1
49	65	37.4	48.5
50	65	37.4	48.3

Noise Sensitive Receptor ID	Construction Noise Limits dB	Removed Embankment Area 1 (dB L <sub>Aeq,T</sub> )	Removed Embankment Area 1 (dB L <sub>Aeq,T</sub> )
51	65	37.4	48.1
52	65	37.3	47.9
53	65	37.3	47.7
54	65	37.2	47.6
55	65	37.2	47.4
56	65	37.2	47.2
57	65	37.8	49.9
58	65	37.8	50.0
59	65	37.9	50.1
60	65	37.9	50.2
61	65	38.0	50.4
62	65	38.0	50.1
63	65	38.0	49.9
64	65	37.8	49.6
65	65	37.8	49.5
66	65	37.7	49.4
67	65	37.7	49.3
68	65	37.5	48.7
69	65	37.6	48.7
70	65	37.7	48.8
71	65	37.6	48.7
72	65	37.6	48.4
73	65	37.6	48.3
74	65	37.5	48.1
75	65	37.4	48.1
76	65	37.3	47.5
77	65	37.3	47.5
78	65	37.4	47.7
79	65	37.5	47.7
80	65	37.5	47.8
81	65	37.6	47.9
82	65	37.3	46.8
83	65	37.1	46.1
84	65	37.2	46.0
85	65	37.5	46.7
86	65	37.5	47.2
87	65	37.6	47.6
88	65	37.7	48.0
89	65	37.8	48.4
90	65	37.9	48.9
91	65	38.0	49.6
92	65	38.1	50.0
93	65	38.2	50.8
94	65	38.3	51.0
95	65	38.5	51.2
96	65	38.5	51.0
97	65	38.4	50.4
98	65	38.3	50.1
99	65	38.4	49.9
100	65	38.5	50.1
101	65	38.1	48.1
102	65	37.9	48.4
103	65	37.9	48.0
104	65	37.8	47.6
105	65	38.1	47.4
106	65	37.8	46.2

Noise Sensitive Receptor ID	Construction Noise Limits dB	Removed Embankment Area 1 (dB L <sub>Aeq,T</sub> )	Removed Embankment Area 1 (dB L <sub>Aeq,T</sub> )
107	65	37.7	45.9
108	65	38.0	46.2
109	65	38.0	46.0
110	65	37.8	45.5
111	65	37.9	45.5
112	65	37.6	44.7
113	65	37.4	44.0
114	65	38.3	46.1
115	65	38.4	46.8
116	65	38.5	47.3
117	65	38.5	47.7
118	65	38.6	48.1
119	65	38.8	48.3
120	65	38.8	48.2
121	65	38.7	47.9
122	65	38.7	47.8
123	65	38.7	47.6
124	65	38.7	47.5
125	65	38.6	47.2
126	65	38.6	47.1
127	65	38.6	46.8
128	65	38.6	46.7
129	65	38.5	46.5
130	65	38.5	46.5
131	65	38.5	46.2
132	65	38.4	46.1
133	65	38.4	46.0
134	65	40.0	48.5
135	65	40.3	48.4
136	65	38.7	48.9
137	65	38.7	49.4
138	65	38.9	49.0
139	65	38.9	49.1
140	65	38.9	49.4
141	65	39.0	49.5
142	65	39.0	49.9
143	65	39.0	50.1
144	65	39.0	50.4
145	65	39.0	50.6
146	65	39.0	50.9
147	65	39.1	51.1
148	65	39.1	51.5
149	65	39.1	51.7
150	65	39.2	52.2
151	65	39.3	52.5
152	65	39.3	52.5
153	65	39.4	52.5
154	65	39.5	52.5
155	65	39.7	52.4
156	65	39.7	52.2
157	65	39.6	51.7
158	65	39.6	51.6
159	65	39.5	51.2
160	65	39.5	51.0
161	65	39.5	50.7
162	65	39.4	50.5

Noise Sensitive Receptor ID	Construction Noise Limits dB	Removed Embankment Area 1 (dB L <sub>Aeq,T</sub> )	Removed Embankment Area 1 (dB L <sub>Aeq,T</sub> )
163	65	39.4	50.2
164	65	39.4	50.0
165	65	39.3	61.1
166	65	39.4	64.5
167	65	39.1	60.5
168	65	39.1	60.5
169	65	39.1	60.6
170	65	39.2	60.7
171	65	39.2	60.7
172	65	39.4	62.9
173	65	39.2	59.4
174	65	39.5	60.9
175	65	39.8	59.8
176	65	39.2	58.5
177	65	39.0	57.4
178	65	38.9	56.7
179	65	38.3	53.9
180	65	38.2	53.2
181	65	38.2	53.4
182	65	38.1	52.7
183	65	38.0	52.2
184	65	37.9	51.7
185	65	37.8	51.1
186	65	36.3	45.8
187	65	35.9	44.4
188	65	38.2	52.1
189	65	38.0	50.1
190	65	37.6	48.9
191	65	37.4	48.5
192	65	37.2	48.3
193	65	37.1	47.7
194	65	36.9	47.0
195	65	36.8	46.6
196	65	36.6	46.1
197	65	36.7	46.2
198	65	37.3	44.3
199	65	38.5	48.3
200	65	40.2	52.7
201	65	40.8	51.5
202	65	40.6	49.5
203	65	42.8	52.0
204	65	56.3	37.1

## Predictions for Reinstatement Activity

**Table 12.2.17: Construction Noise Predictions for Reinstatement Activity (dB)**

Noise Sensitive Receptor ID	Construction Noise Limits dB	Reinstatement (dB L <sub>Aeq,T</sub> )
1	65	
2	65	
3	65	
4	65	
5	65	
6	65	
7	65	
8	65	
9	65	
10	65	
11	65	
12	65	
13	65	
14	65	
15	65	
16	65	
17	65	
18	65	
19	65	
20	65	
21	65	
22	65	
23	65	
24	65	
25	65	
26	65	
27	65	
28	65	
29	65	
30	65	
31	65	
32	65	
33	65	
34	65	
35	65	
36	65	
37	65	
38	65	
39	65	
40	65	
41	65	
42	65	
43	65	
44	65	
45	65	
46	65	
47	65	
48	65	
49	65	
50	65	
51	65	

Noise Sensitive Receptor ID	Construction Noise Limits dB	Reinstatement (dB LAeq,T)
52	65	
53	65	
54	65	
55	65	
56	65	
57	65	
58	65	
59	65	
60	65	
61	65	
62	65	
63	65	
64	65	
65	65	
66	65	
67	65	
68	65	
69	65	
70	65	
71	65	
72	65	
73	65	
74	65	
75	65	
76	65	
77	65	
78	65	
79	65	
80	65	
81	65	
82	65	
83	65	
84	65	
85	65	
86	65	
87	65	
88	65	
89	65	
90	65	
91	65	
92	65	
93	65	
94	65	
95	65	
96	65	
97	65	
98	65	
99	65	
100	65	
101	65	
102	65	
103	65	
104	65	
105	65	
106	65	

Noise Sensitive Receptor ID	Construction Noise Limits dB	Reinstatement (dB LAeq,T)
107	65	
108	65	
109	65	
110	65	
111	65	
112	65	
113	65	
114	65	
115	65	
116	65	
117	65	
118	65	
119	65	
120	65	
121	65	
122	65	
123	65	
124	65	
125	65	
126	65	
127	65	
128	65	
129	65	
130	65	
131	65	
132	65	
133	65	
134	65	
135	65	
136	65	
137	65	
138	65	
139	65	
140	65	
141	65	
142	65	
143	65	
144	65	
145	65	
146	65	
147	65	
148	65	
149	65	
150	65	
151	65	
152	65	
153	65	
154	65	
155	65	
156	65	
157	65	
158	65	
159	65	
160	65	
161	65	

Noise Sensitive Receptor ID	Construction Noise Limits dB	Reinstatement (dB LAeq,T)
162	65	
163	65	
164	65	
165	65	
166	65	
167	65	
168	65	
169	65	
170	65	
171	65	
172	65	
173	65	
174	65	
175	65	
176	65	
177	65	
178	65	
179	65	
180	65	
181	65	
182	65	
183	65	
184	65	
185	65	
186	65	
187	65	
188	65	
189	65	
190	65	
191	65	
192	65	
193	65	
194	65	
195	65	
196	65	
197	65	
198	65	
199	65	
200	65	
201	65	
202	65	
203	65	
204	65	