



Project Heartland

Existing Conditions Sound Monitoring Report

CLIENT

Aligned Data
Centers

CLIENT CONTACT

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DATE

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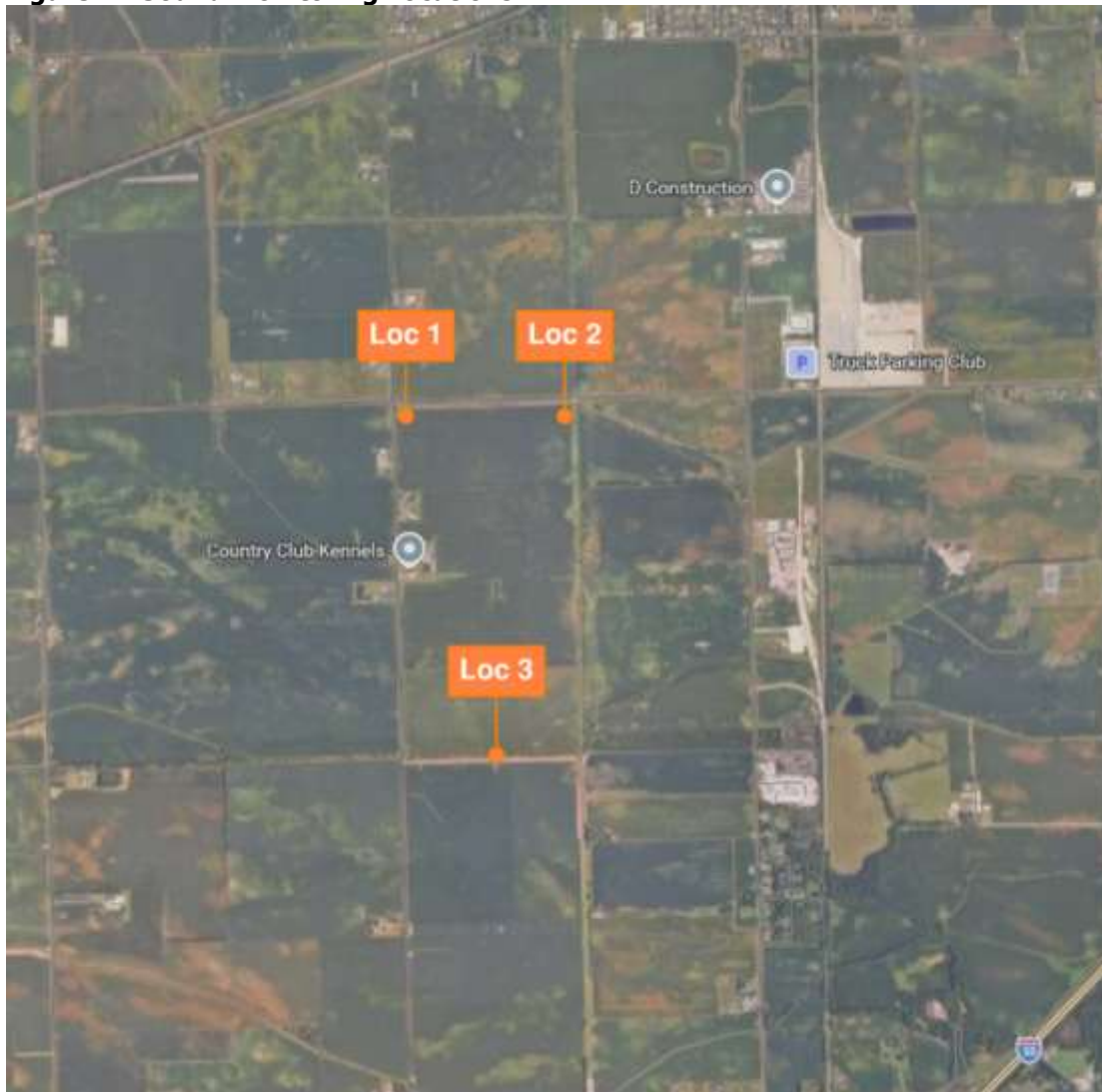
This report presents the results of the existing conditions (ambient) sound monitoring conducted at the Project Heartland site in Coal City, Illinois. Continuous sound level measurements were recorded at three locations around the site over an approximately 24-hour period to characterize the existing daytime and nighttime noise environment prior to development.

1.0 Measurement Methodology

Sound levels were measured at three locations between July 6th-7th, 2026 around the site, shown in Figure 1. Measurements were taken with a Norsonic Nor145 meter at 5ft height.

The noise levels measured on site were recorded in 1-second increments and analyzed over 1-hour periods. In each 1-hour period we determined the L90 noise level – the level exceeded 90% of the time, or the statistical minimum level – which represents the underlying background level of noise when the louder, more intermittent sounds are ignored. One-third octave band L90 levels are reported below for each hour of the measurement period; nighttime hours per the Illinois Pollution Control Board definition are the 10:00 p.m. through 6:00 a.m. hours.

Figure 1: Sound Monitoring Locations



2.0 Measurement Results

2.1 Location 1

Table 1: Measured One-Third Octave Band L90 Levels – Location 1 (dB re 20 µPa)

	Octave Band L90 (dB) at Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	Overall dBA
09:00 AM	51	42	33	29	26	21	22	16	36
10:00 AM	49	43	35	31	30	28	26	21	38
11:00 AM	50	41	34	32	32	29	25	20	38
12:00 PM	49	38	31	29	29	26	24	20	36
01:00 PM	49	43	36	32	31	27	24	19	39
02:00 PM	51	51	40	33	33	30	26	20	42
03:00 PM	48	43	37	33	35	30	26	20	40
04:00 PM	49	45	37	33	34	30	27	21	41
05:00 PM	45	39	32	31	30	28	26	20	37
06:00 PM	44	39	31	30	29	27	26	21	37
07:00 PM	42	38	30	28	22	22	23	18	33
08:00 PM	43	36	28	26	22	20	20	15	34
09:00 PM	43	35	28	26	20	15	17	14	29
10:00 PM	43	34	30	27	19	14	17	14	29
11:00 PM	45	37	32	27	22	15	15	14	31
12:00 AM	44	35	28	25	19	13	15	14	28
01:00 AM	45	35	30	28	20	14	15	14	30
02:00 AM	45	36	30	29	20	13	14	13	30
03:00 AM	46	37	31	30	23	15	15	13	31
04:00 AM	47	38	33	33	27	18	15	14	34
05:00 AM	49	43	38	37	33	28	26	15	40
06:00 AM	53	46	39	38	37	30	27	15	43
07:00 AM	52	45	39	38	34	27	26	16	41
08:00 AM	53	45	36	35	30	24	25	15	39
Daytime lowest Hour	42	34	28	26	19	14	17	14	29
Nighttime lowest Hour	43	34	28	25	19	13	14	13	28

2.2 Location 2

Table 2: Measured One-Third Octave Band L90 Levels – Location 2 (dB re 20 µPa)

	Octave Band L90 (dB) at Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	Overall dBA
10:00 AM	49	43	34	32	31	31	33	34	42
11:00 AM	51	42	34	33	32	32	34	34	42
12:00 PM	48	40	32	31	31	30	31	33	40
01:00 PM	46	40	34	32	30	29	30	31	39
02:00 PM	46	39	33	31	30	30	31	32	40
03:00 PM	44	39	32	30	31	32	33	33	41
04:00 PM	44	40	32	31	32	32	33	33	42
05:00 PM	44	39	31	30	31	32	34	35	42
06:00 PM	44	40	32	32	31	32	34	34	41
07:00 PM	44	41	32	31	28	30	33	33	40
08:00 PM	44	39	30	31	28	28	29	28	38
09:00 PM	45	39	31	31	27	27	43	32	45
10:00 PM	45	39	31	31	27	27	29	29	37
11:00 PM	47	40	33	31	27	26	26	23	36
12:00 AM	46	38	31	30	27	26	28	25	36
01:00 AM	47	39	33	32	27	27	29	30	37
02:00 AM	47	39	33	32	27	26	27	27	41
03:00 AM	48	40	33	34	29	26	27	27	37
04:00 AM	49	42	35	36	30	27	51	39	53
05:00 AM	51	45	39	40	38	36	49	36	52
06:00 AM	53	48	40	41	38	36	43	31	49
07:00 AM	53	46	37	37	35	29	35	27	43
08:00 AM	54	47	38	36	33	28	33	25	42
Daytime lowest Hour	44	39	30	30	27	27	29	25	29
Nighttime lowest Hour	45	38	31	30	27	26	26	23	28

2.3 Location 3

Table 3: Measured One-Third Octave Band L90 Levels – Location 3 (dB re 20 µPa)

	Octave Band L90 (dB) at Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	Overall dBA
10:00 AM	47	41	35	33	32	32	32	29	41
11:00 AM	49	40	33	29	29	28	28	24	37
12:00 PM	48	39	31	28	28	28	27	23	36
01:00 PM	45	39	33	28	27	26	25	22	35
02:00 PM	42	37	31	27	25	24	22	20	33
03:00 PM	42	37	30	27	27	27	26	22	35
04:00 PM	41	37	30	27	27	27	26	22	35
05:00 PM	42	37	31	29	29	29	29	26	37
06:00 PM	43	38	32	31	31	31	31	27	38
07:00 PM	43	39	30	27	25	23	22	18	33
08:00 PM	43	38	28	25	23	18	17	15	31
09:00 PM	44	39	28	26	22	14	15	15	30
10:00 PM	45	39	29	26	22	13	15	15	30
11:00 PM	46	40	30	27	22	13	14	14	31
12:00 AM	44	36	26	25	21	12	13	14	29
01:00 AM	45	37	28	27	23	15	14	15	30
02:00 AM	46	39	29	27	23	14	12	14	30
03:00 AM	46	38	29	28	24	14	12	14	31
04:00 AM	46	40	31	31	26	16	12	14	33
05:00 AM	48	44	35	33	29	20	18	14	36
06:00 AM	52	46	36	35	31	21	17	15	38
07:00 AM	52	46	37	35	31	20	17	15	38
08:00 AM	53	47	36	33	29	19	16	15	37
Daytime lowest Hour	41	37	28	25	22	13	15	15	29
Nighttime lowest Hour	44	38	26	25	21	12	12	14	28

This concludes our summary of the existing conditions sound monitoring.