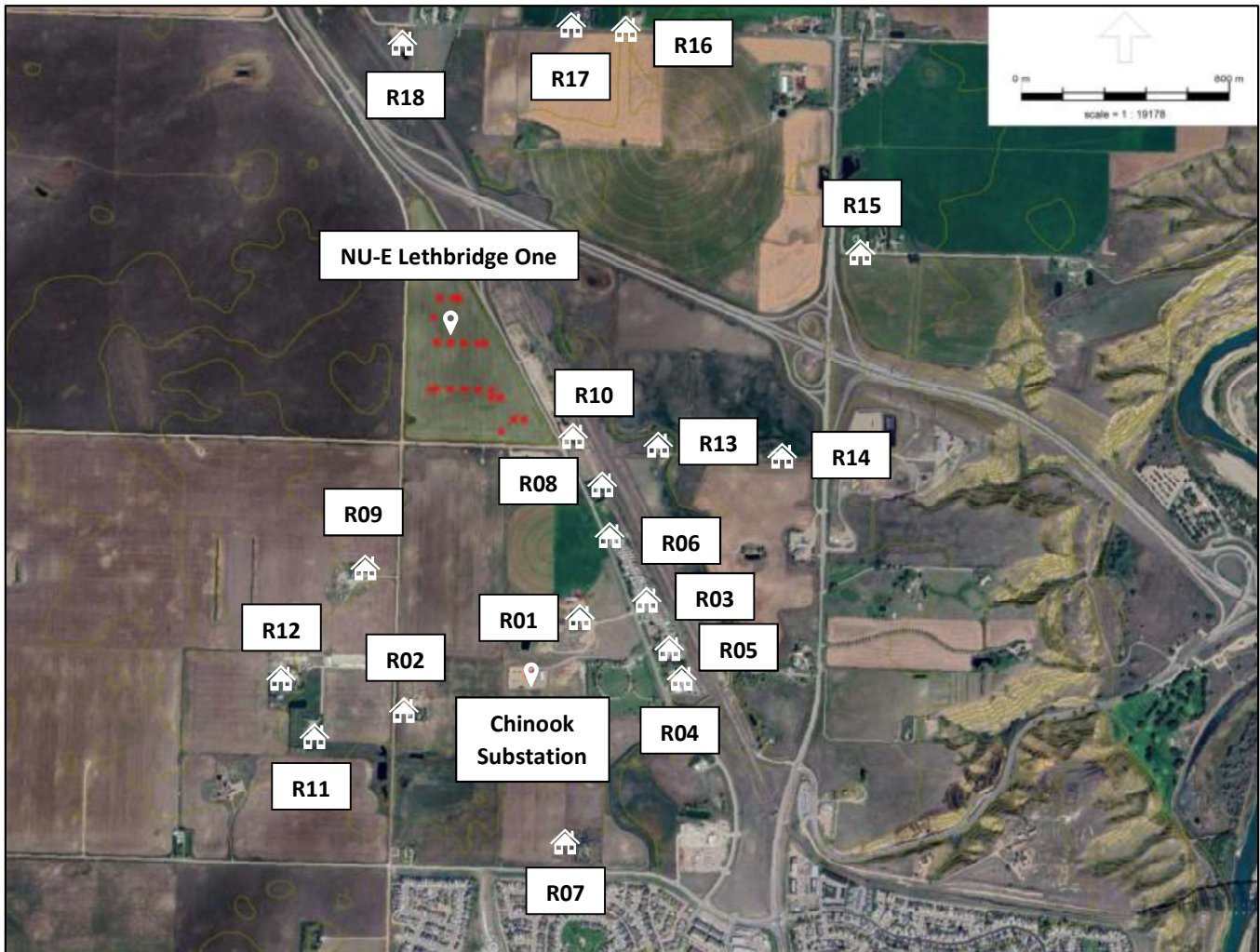


Study Area Description

The NU-E facility is located at LSD 1/4-10-9-22 W4M. Based on the information provided by NU-E representatives and Google Earth, the site is located Northwest of Lethbridge, Alberta, and surrounding area is mainly flat farmland. There are multiple residences within 1500 m from the solar power farm. Figure 1 shows the study area, the location of the farm, and the location of the selected residences.

Figure 1: Study Area



Modeling Results

The predictions for the residences located in the study area are summarized in the Table 6 along with the permissible sound levels (PSLs).

Table 6: Predicted Sound Level at the residences located within 1500 m

Residences	Residences Distance & Direction	Predicted Sound Level		Ambient Sound Level (dBA)	AUC PSL (dBA)	dBC-dBA
		Without Ambient (dBA)	With Ambient (dBA)			
R01	661 m SSE	35.6	43.7	43	48	11
R02	1060 m SSW	32.5	36.9	35	40	12
R03	710 m SSE	31.2	48.1	48	53	12
R04	1000 m SSE	30.7	48.1	48	53	12
R05	950 m SSE	30.4	48.1	48	53	12
R06	430 m SSE	29.7	48.1	48	53	12
R07	1500 m SSE	28.7	35.9	35	40	12
R08	220 m SSE	28.3	48.0	48	53	13
R09	500 m SSW	29.0	45.1	45	50	12
R10	600 m E	27.6	35.7	35	40	13
R11	1200 m SSW	25.6	35.5	35	40	13
R12	1000 m SSE	25.0	35.4	35	40	13
R13	400 m E	25.3	35.4	35	40	13
R14	850 m E	21.4	35.2	35	40	14
R15	860 m NNE	15.0	35.0	35	40	16
R16	1000 m NNE	15.6	35.0	35	40	14
R17	1400 m NE	14.5	35.0	35	40	16
R18	550 m N	14.1	35.0	35	40	15

If Low Frequency Noise is a concern, measurements at the dwelling/s should be performed to confirm the existence of LFN and tonal component.