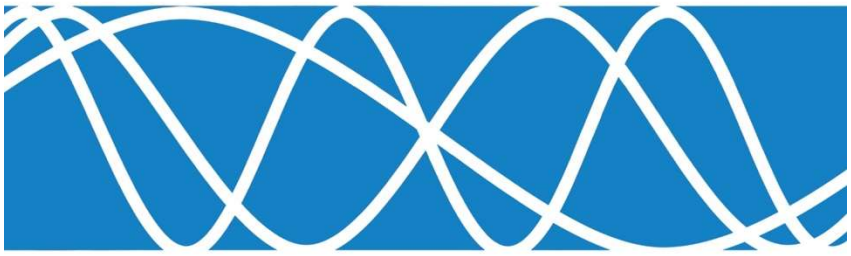
Noise Feasibility Study

Proposed Industrial Development
7072 Sixth Line
Milton, Ontario

June 25, 2025
HGC Project #: 02400423



Prepared for:

Target Truck Sales & Leasing Inc.
6701 Davand Drive
Mississauga, ON, L5T 2R2

HGC
NOISE | VIBRATION | ACOUSTICS

HGC Noise Vibration Acoustics
2000 Argentia Road, Plaza One, Suite 203
Mississauga, Ontario, L5N 1P7
t: 905.826.4044

Version Control
Noise Feasibility Study,
7072 Sixth Line,
Milton, Ontario

Ver.	Date	Version Description	Prepared By
1.0	June 25, 2025	Noise Feasibility Study in support of the Zoning By-law approvals process.	A. Rogers/ S. Paul

Prepared by:

Andrew Rogers, BASc

Reviewed by:

Sheeba Paul, MEng, P.Eng

Howe Gastmeier Chapnik Limited

Limitations

This document was prepared solely for the addressed party and titled project or named part thereof and should not be relied upon or used for any other project without obtaining prior written authorization from HGC Noise Vibration Acoustics (HGC). Further, the input of content from any document produced by HGC or related HGC intellectual property into any Artificial Intelligence tool is expressly prohibited. HGC accepts no responsibility or liability for any consequence of this document being used for a purpose other than for which it was commissioned. Any person or party using or relying on the document for such other purpose agrees and will by such use or reliance be taken to confirm their agreement to indemnify HGC for all loss or damage resulting therefrom. HGC accepts no responsibility or liability for this document to any person or party other than the party by whom it was commissioned.

Any conclusions and/or recommendations herein reflect the judgment of HGC based on information available at the time of preparation and were developed in good faith on information provided by others, as noted in the report, which has been assumed to be factual and accurate. Changed conditions or information occurring or becoming known after the date of this report could affect the results and conclusions presented.

Table of Contents

1 INTRODUCTION AND SUMMARY

HGC Noise Vibration Acoustics was retained by Target Truck Sales & Leasing Inc. to undertake a noise assessment for a proposed industrial development located at 7072 Sixth Line in Milton, Ontario. The noise study is required as part of the approvals process, specifically for Zoning By-law Amendment. The study has been completed in accordance with the guidelines of the Ministry of Environment, Conservation and Parks (MECP).

An investigation of the potential noise impact from the proposed industrial warehousing/logistics development and truck trailer parking onto the existing sensitive receptors was conducted. The analysis is based on information obtained from discussion with Target Truck Sales & Leasing Inc. personnel, site visits, and HGC's past experience with similar facilities. The analysis includes assessment of the noise emissions of the anticipated trucking activities and rooftop mechanical equipment with respect to the closest existing residences.

The results of the analysis indicate the development is feasible at the site and can be within the limits of the MECP guidelines with the inclusion of noise control measures, including noise barriers. The reader is referred to the main body of the report for assumptions and results of the analysis.

The acoustic recommendations may be subject to modifications if the site plan is changed significantly, if operating scenarios are significantly different to those assumed in the assessment, or if there is a significant increase in background sound levels.

2 SITE DESCRIPTION

The site is located on the southwest side of Sixth Line, northwest of Derry Road in Milton, Ontario. Figure 1 shows a key plan of the area. One industrial warehousing building with parking areas, trucking routes, and loading areas is indicated on the site plan prepared by Glen Schnarr & Associates Inc. dated January 21, 2025, and is attached as Figure 2.

HGC visited the site in January 2025 to confirm the locations of the existing sensitive receptors and observe the acoustical environment. The area surrounding the subject site is best categorized as a Class 2 (Semi-Urban) acoustical environment, under MECP noise assessment guidelines where the daytime sound levels are dominated by human activities and road traffic. The most potentially impacted residences are located to the north, east and southeast of the site on Future Development zoned lands. South and west of the site are agricultural lands on Future Development zoned lands. South of the site is a proposed industrial development on Industrial zoned lands and a business park on Business Park zoned lands. Further west is an industrial development on Industrial zoned lands. The Milton Official Plan outlines that new residential dwellings are not permitted on the Future Development zoned lands.

2.1 Noise Source Description

The primary sources of sound associated with the proposed building will be arriving, departing, and idling trucks, loading/unloading and coupling/decoupling of trucks, and rooftop air conditioning equipment. The facility will primarily operate during daytime and evening hours only, with limited activity during nighttime hours.

3 NOISE LEVEL CRITERIA

3.1 D1 – D6 Guidelines for Land Use Compatibility

The requirements for this study requested by the Municipality refers to determining if the proposed development is feasible and compatible with adjacent existing residential uses. The MECP D1 and D6 Guidelines address issues of compatibility between industrial and noise sensitive land uses in relation to land use changes.

For planning purposes for greenfield sites, the potential zone of influence of a Class I industrial use is 70 m and the minimum recommended distance setback is 20 m. The potential zone of influence of a Class II industry is 300 m and the minimum recommended distance setback is 70 m. For infill projects or projects located in transitional areas the recommended minimum distance setbacks can be reduced, based on the results of technical studies such as this study.

For the size and use of the industrial building, the proposed development can be considered a Class II industrial use. Typically, the recommended minimum distance setbacks apply between the property lines of the facilities, but exceptions can be made if the property lines are adjoined and portions of the residential or industrial lands are reserved for non-noise related uses, such as driveways, snow storage, parking lots or earth berms. In this case, there is approximately 90 m between the nearest existing residence and the property of the subject site. This meets the minimum separation distance for a Class II industry. Furthermore, the results from the assessment in Section 5 indicated that the MECP limits can be met with the inclusion of noise controls.

3.2 Criteria Governing Stationary Noise Sources

MECP Guideline NPC-300 is the MECP guideline for use in investigating Land Use Compatibility issues with regard to noise. An industrial or commercial facility is classified in the MECP Guideline NPC-300 as a stationary source of sound (as compared to sources such as traffic or construction, for example) for noise assessment purposes. Stationary noise sources encompass the noise from all

the activities and equipment within the property boundary of a facility including regular on-site truck traffic, material handling and mechanical equipment. In terms of background sound, the development is located in a semi-urban Class 2 acoustical environment which is characterized by an acoustical environment dominated by road traffic and human activity during the daytime hours.

Non-Impulsive Sources

NPC-300 is intended for use in the planning of both residential and commercial/industrial land uses and provides the acceptability limits for sound due to commercial operations in that regard. The façade of a residence (i.e., in the plane of a window), or any associated usable outdoor area (within 30 m of a dwelling façade) are considered the sensitive points of reception. NPC-300 stipulates that the exclusionary non-impulsive sound level limit for a stationary noise source in a semi-urban Class 2 area is taken to be 50 dBA during daytime/evening hours (07:00 to 23:00), and 45 dBA during nighttime hours (23:00 to 07:00) at the plane of the windows of noise sensitive spaces, and 50 dBA during daytime hours (07:00 to 19:00) and 45 dBA during the evening hours (19:00 to 23:00) at outdoor areas. If the background sound levels due to road traffic exceed the exclusionary limits, then that background sound level becomes the criterion. The background sound level is defined as the sound level that occurs when the source under consideration is not operating, and may include traffic noise and natural sounds. As a conservative assessment, the exclusionary minimum limits are used in the following sections of this report as the criteria by which the impact of the proposed operations are assessed.

Commercial activities such as the occasional movement of customer/employee vehicles and garbage collection are not of themselves considered to be significant noise sources in the MECP guidelines. Accordingly, these sources have not been considered in this study. Noise from safety equipment (e.g. back-up beepers) is also exempt from consideration as they are required in accordance with Ministry of Labour and good safety practices.

Impulsive Sources

Acceptability limits for frequently occurring sounds that are impulsive in character (such as those from coupling and decoupling of trailers) are also provided in NPC-300. The limit is determined in a similar fashion to non-impulsive sounds and the same limits apply in this case with the exception of the evening limit in the OLA where the sound level limit is 50 dBAI.

Five existing residences near the site are considered to be the representative noise sensitive receptors (R1 to R5) in this study. R1 and R4 are 1-storey houses and R2, R3, and R5 are 2-storey houses. Receptor locations are shown on Figures 3, 4, 5, and 7.

The table below summarizes the applicable sound level limits to which the operation of the proposed industrial facility is assessed.

Table 1: Applicable Sound Level Limits, L_{EQ}/L_{LM} [dBA/dBAI]

Receptor	Daytime 7:00 – 19:00	Evening 19:00 – 23:00	Nighttime 23:00 – 7:00
R1 – R5, Facade	50	50	45
R1 – R5, OLA	50	45*	--

* For impulsive sources, the limit is 50 dBAI in the OLA during evening hours

Compliance with MECP criteria generally results in acceptable levels of sound at the sensitive receptors although there may be residual audibility during periods of low background sound.

4 ASSESSMENT METHODOLOGY

Predictive noise modelling was used to assess the potential noise impact of mechanical equipment and trucking activities at the residential receptors. Assumed operational information outlined below and surrounding building locations obtained from aerial photography were used as input to a predictive computer model (Cadna/A 2025 build: 209.5501), in order to estimate the sound levels from the proposed buildings at the existing receptors. Cadna/A is a

computer implementation of ISO Standard 9613-2 which considers attenuation due to distance (geometrical spreading), shielding by intervening structures (such as barriers), air attenuation and ground absorption. Additional modeling information is provided in Appendix A.

The building is assumed to be ventilated passively and only the office is provided with air conditioning. Target Truck Sale & Leasing personnel have indicated that the facility will primarily operate during daytime and evening hours only, with limited nighttime activity. It has been assumed truck engines will idle for 5 minutes out of each hour to adhere to the Milton By-law No. 133-2012.

Figures 3 and 4 show the steady noise source locations and Figures 5 and 7 show the impulsive noise source locations. Truck idling, rooftop HVAC units, and truck loading/unloading/coupling noise sources are shown as green crosses. Truck pass-bys are shown as a green line. In this impact assessment, we have considered the following worst-case (busiest hour) scenarios for the daytime, evening, and nighttime hours.

Assumed day/evening worst-case hour scenario:

- 4 trucks arrive and depart the facility (8 truck trips);
- Trucks are assumed to idle in the loading bay or parking area for 5 minutes;
- All rooftop equipment operates at full capacity for the full hour.

Assumed night worst-case hour scenario:

- 2 truck arrives and departs the facility (4 truck trips);
- Trucks are assumed to idle in the loading bay or parking area for 5 minutes;
- All rooftop equipment operates at full capacity for 30 minutes.

Additional information and assumptions used in the analysis:

- The height of the building is 8 m;
- The facility is assumed to operate during all daytime, evening and nighttime hours;
- Rooftop HVAC units are assumed to be 1.5 m tall.

Sound emission data for the trucking activities and rooftop equipment was obtained from HGC project files which were measured from past similar

projects. The sound power levels for the stationary noise sources used in the analysis are summarized in Table 2.

Table 2: Existing Source Sound Power Levels [dB re 10-12 W]

Source	Octave Band Centre Frequency [Hz]								Overall [dBA]
	63	125	250	500	1k	2k	4k	8k	
HVAC Unit, 10-ton	91	89	86	84	84	78	76	67	88
Truck, idling	96	91	88	88	91	90	81	70	95
Truck, movement	101	100	94	96	97	95	91	86	101
Trailer Coupling/Decoupling (Impulsive)	97	111	107	112	113	108	103	103	116
Trailer Loading/Unloading by Forklift (Impulsive)	106	110	109	98	89	84	78	82	103

Impulsive noises are assessed separately from the non-impulsive sound sources. Two types of impulsive sounds are expected to be emitted from the facility: loading/unloading of trailers by forklifts and coupling/uncoupling of trucks to/from trailers. The impulsive noise sources sound power levels were calculated based on measurements conducted by HGC for similar past projects. Based on conversations with Target Truck Sale & Leasing personnel, the impulsive sounds will only be emitted during daytime and evening hours.

5 ASSESSMENT RESULTS AND RECOMMENDATIONS

Non-Impulsive Sources

The predicted sound levels due to the trucking activities (arriving, idling and departing) and rooftop mechanical equipment at the representative receptors (R1 to R5) during a worst-case busiest hour operating scenario, are summarized in the following table and shown on Figures 3 and 4. Cadna/A calculation summaries are provided in Appendix B.

Table 3: Predicted Non-Impulsive Source Sound Levels at Residential Receptors (Without Mitigation), L_{EQ} [dBA]

Receptor	Description	Daytime OLA	Daytime Façade	Evening OLA	Evening/ Nighttime Facade
R1	7201 Sixth Line	<40	<40	<35	<35
R2	7075 Sixth Line	<40	<40	<35	<35
R3	7035 Sixth Line	<40	<40	<35	<35
R4	7015 Sixth Line	<40	<40	<35	<35
R5	11880 Derry Road	<40	<40	<35	<35

Impulsive Sources

The predicted impulsive sound levels are provided in Figure 5 and also summarized in Table 4.

Table 4: Predicted Impulsive Source Sound Levels at Residential Receptors (Without Mitigation), L_{LM} [dBAI]

Receptor	Description	Predicted Impulsive Sound Levels, Façade (dBAI)	Predicted Impulsive Sound Levels, OLA (dBAI)
R1	7201 Sixth Line	46	44
R2	7075 Sixth Line	51	50
R3	7035 Sixth Line	49	50
R4	7015 Sixth Line	46	49
R5	11880 Derry Road	48	46

The results of this analysis indicate that the predicted sound levels due to the impulsive noise sources at the proposed facility are expected to exceed the applicable limits at the closest noise sensitive receptors to the facility during an assumed worst-case operational scenario. Noise control measures are required and provided in Section 5.1.

5.1 Recommendations

Feasible means exist to reduce sound levels from the proposed industrial development at the nearest residential receptors to meet MECP criteria. Recommended mitigation is presented below.

Calculations indicate that a 2.0 m high noise barrier (approximately 35 m in length), relative to proposed grade, north of the three trailer parking spaces on the north side of the site, extending to the east and west of this parking area, as shown in Figure 6, will provide sufficient noise mitigation.

A noise barrier can consist of an earth berm or a noise wall on top of an earth berm. The noise wall can be constructed from a variety of materials such as wood, metal, brick, pre-cast concrete or other concrete/wood composite systems provided that it is free of gaps or cracks and has a solid construction, with a surface density of no less than 20 kg/m^2. Barrier height requirements should also be reviewed when tenant and their operational information such as trucking activities are available.

The predicted impulsive sound levels with the inclusion of the recommended noise barriers mentioned above are provided in Figure 7 and also summarized in Table 5.

Table 5: Predicted Impulsive Source Sound Levels at Residential Receptors (With Noise Barriers), L_{LM} [dBAI]

Receptor	Description	Predicted Impulsive Sound Levels, Façade (dBAI)	Predicted Impulsive Sound Levels, OLA (dBAI)
R1	7201 Sixth Line	46	44
R2	7075 Sixth Line	50	50
R3	7035 Sixth Line	49	50
R4	7015 Sixth Line	46	49
R5	11880 Derry Road	48	46

It should be noted that if the residential receptors are redeveloped to a commercial or industrial use, the mitigation for the subject site may be removed.

6 CONCLUSIONS

Assuming typical worst-case mechanical equipment and operating scenarios associated with the proposed industrial development as described above, the acoustical analysis indicates that the potential noise impact from the industrial site can meet the applicable MECP criteria at the nearest existing dwellings with the noise mitigation measures recommended herein. A noise barrier should be included for the north side of the truck parking area.

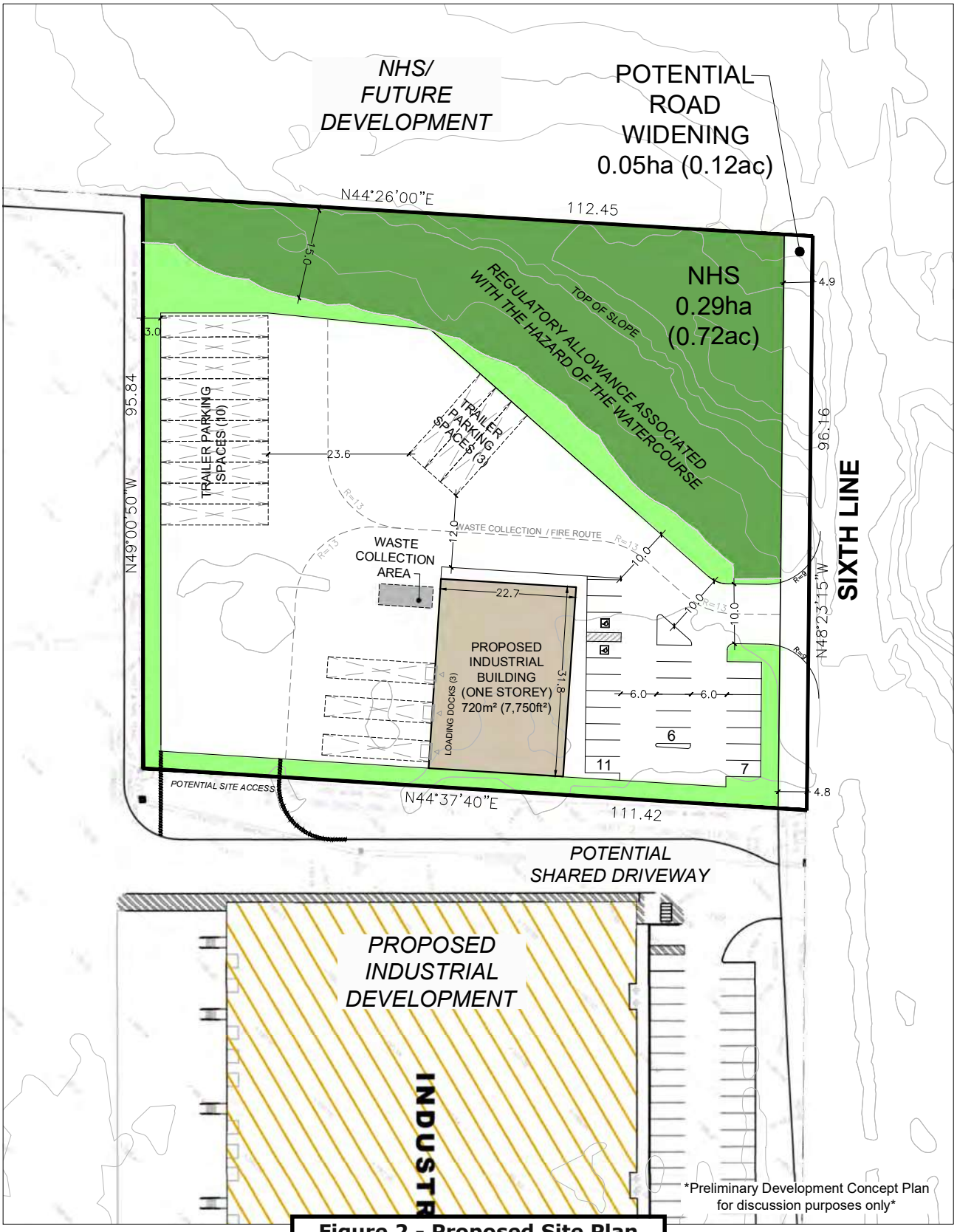
The acoustic recommendations may be subject to modifications if the site plan is changed significantly, operating scenarios are significantly different to those assumed in the assessment, or there is a significant increase in background sound levels.

6.1 Implementation

Prior to the issuance of building permits for this development or at appropriate approvals stage by the municipality, a Professional Engineer qualified to provide acoustical engineering services in Ontario shall review the site, building plans, rooftop mechanical specification and grading plans to confirm that the assumptions are in accordance with the approved noise study.

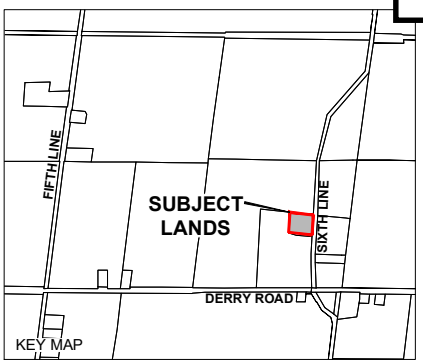
Figure 1 – Key Plan

P:\1573-001\4. Drawings\2025 01 January\DCP Jan 21 25.dwg



Preliminary Development Concept Plan for discussion purposes only

Figure 2 - Proposed Site Plan



DEVELOPMENT CONCEPT PLAN

7072 SIXTH LINE
PART LOT 11,CONCESSION 6
TRAFALGAR, NEW SURVEY
PART 1 ON 20R11806
TOWN OF MILTON
REGION OF HALTON

DEVELOPMENT STATISTICS

TOTAL AREA:	**1.07ha (2.64ac)**
POTENTIAL ROAD WIDENING:	0.05ha (0.12ac)
NHS (+15m BUFFER) AREA:	0.29ha (0.72ac)
LANDSCAPED AREA:	0.11ha (0.27ac)
SITE PLAN AREA:	0.62ha (1.53ac)

PARKING CALCULATIONS

INDUSTRIAL* - 720m² (1/30m²):	24 SPACES
TOTAL SPACES PROVIDED:	**24 SPACES**

**PARKING RATE AS PER TOWN OF MILTON M2 ZONE STANDARDS*

TOTAL TRAILER SPACES PROVIDED:	**13 SPACES**
TYPICAL PARKING SPACE:	2.75m x 5.80m
TYPICAL TYPE 'A' ACCESSIBLE SPACE:	3.40m x 5.80m
TYPICAL TYPE 'B' ACCESSIBLE SPACE:	2.75m x 5.80m
TYPICAL TRAILER SPACE:	3.50m x 18.00m

NOTES
-WITHIN CONSERVATION HALTON REGULATED AREA, GRAVEL AND FILL TO BE REMOVED AND GRADES TO BE RESTORED TO PRE-DISTURBANCE CONDITIONS

SCALE 1:600
JANUARY 21, 2025

GSAI
Glen Schnarr & Associates Inc.

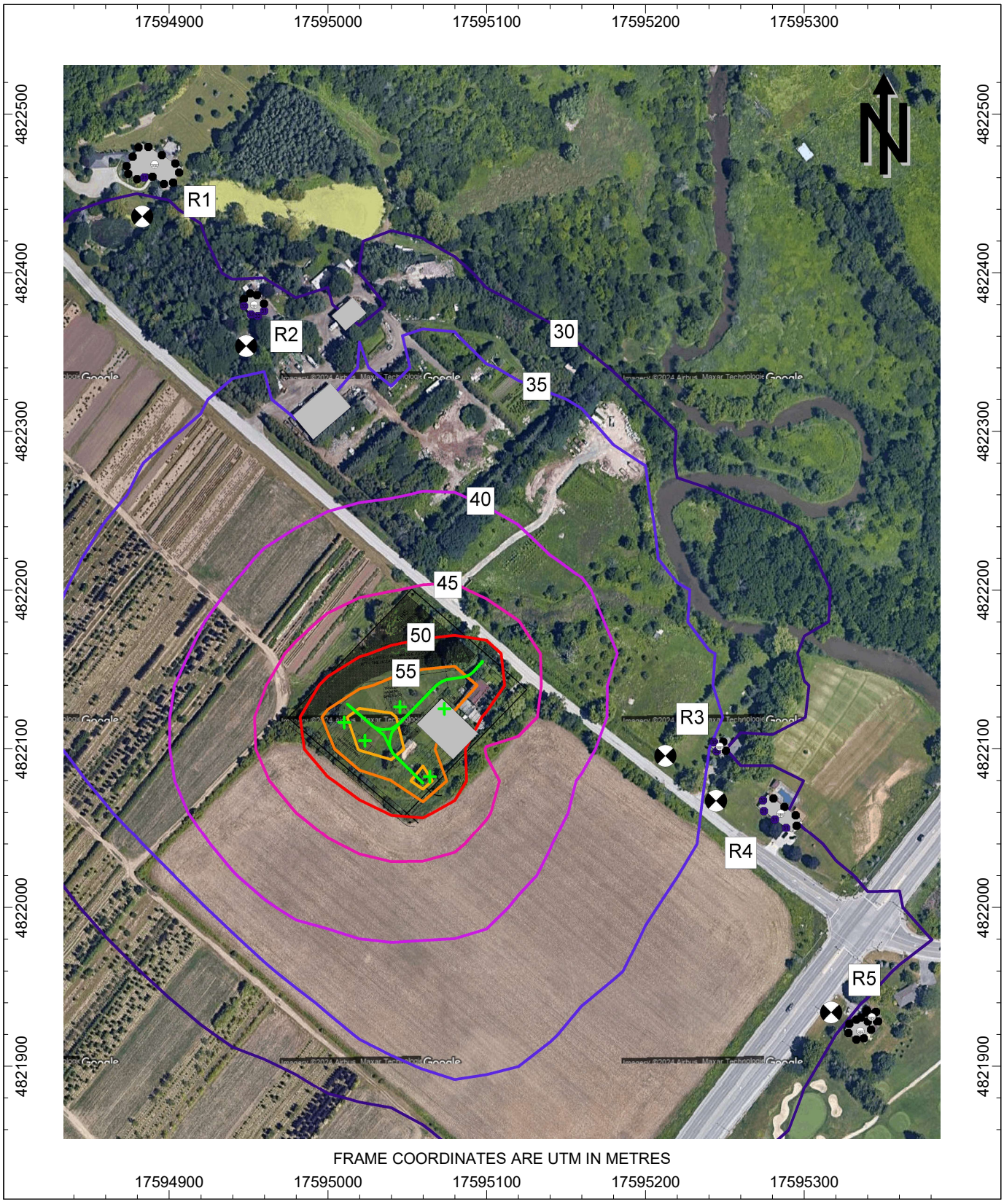


Figure 3 - Predicted Daytime Hour Steady Sources Sound Level Contours, Without Mitigation

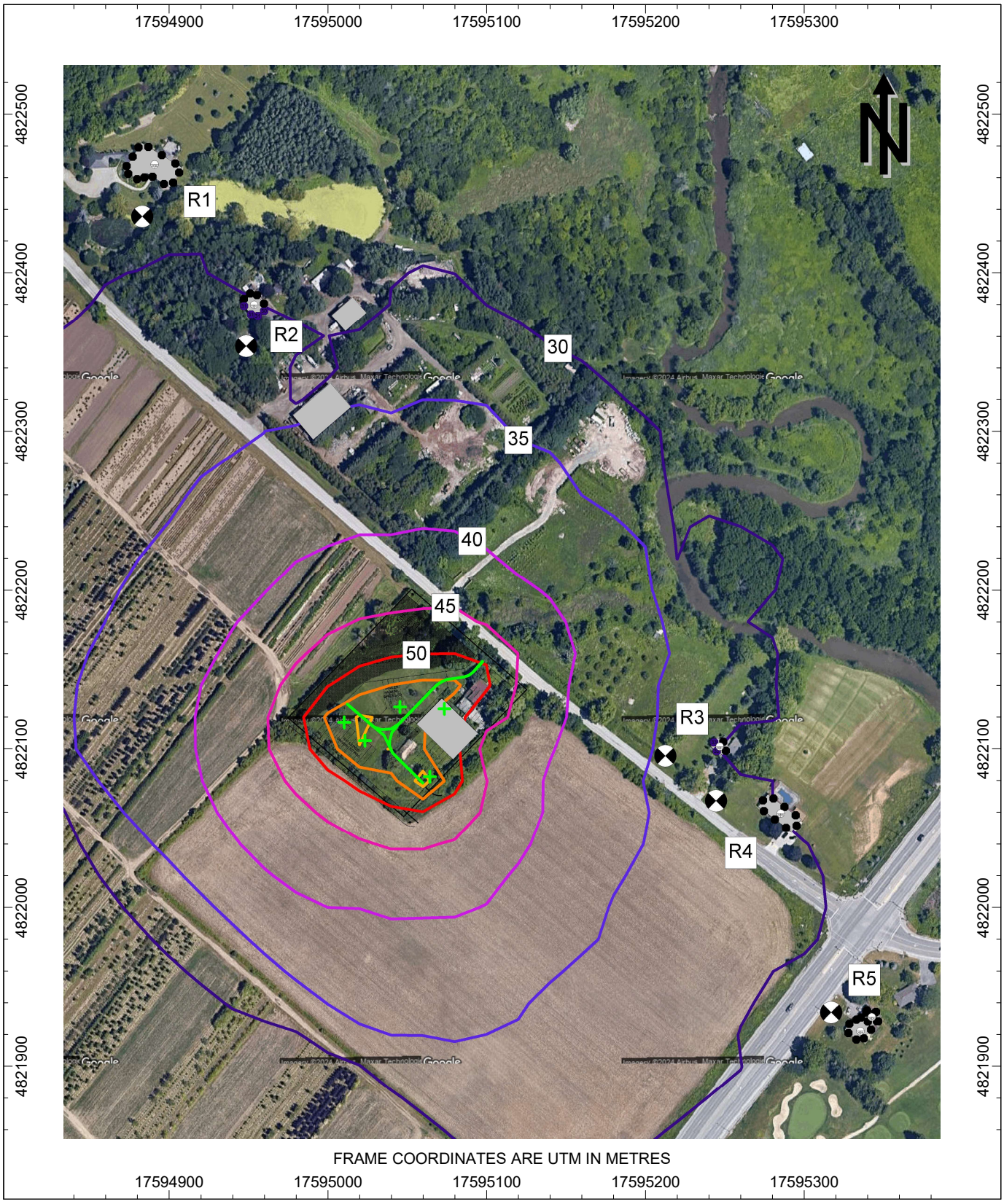


Figure 4 - Predicted Evening/Nighttime Hour Steady Sources Sound Level Contours, Without Mitigation

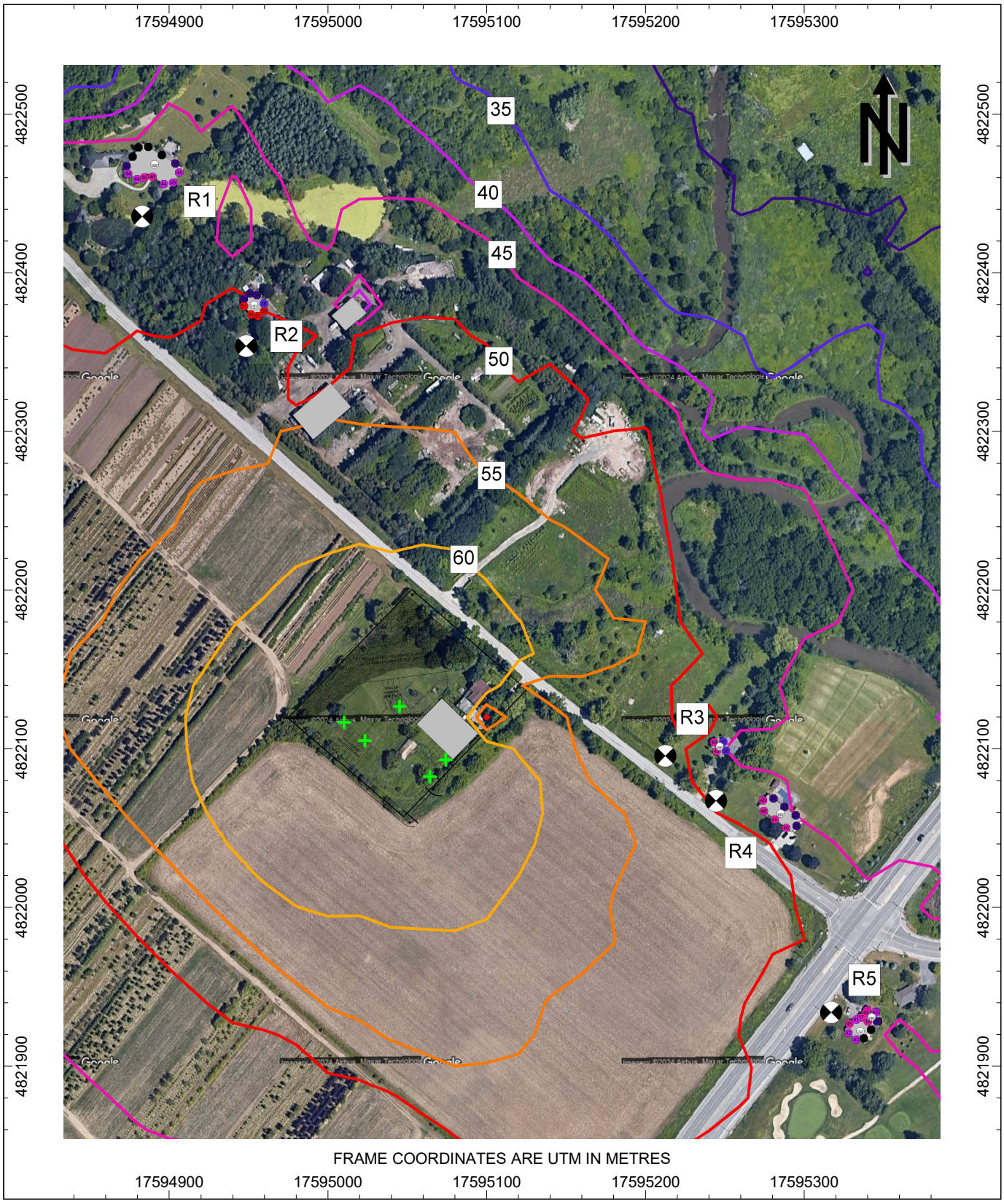
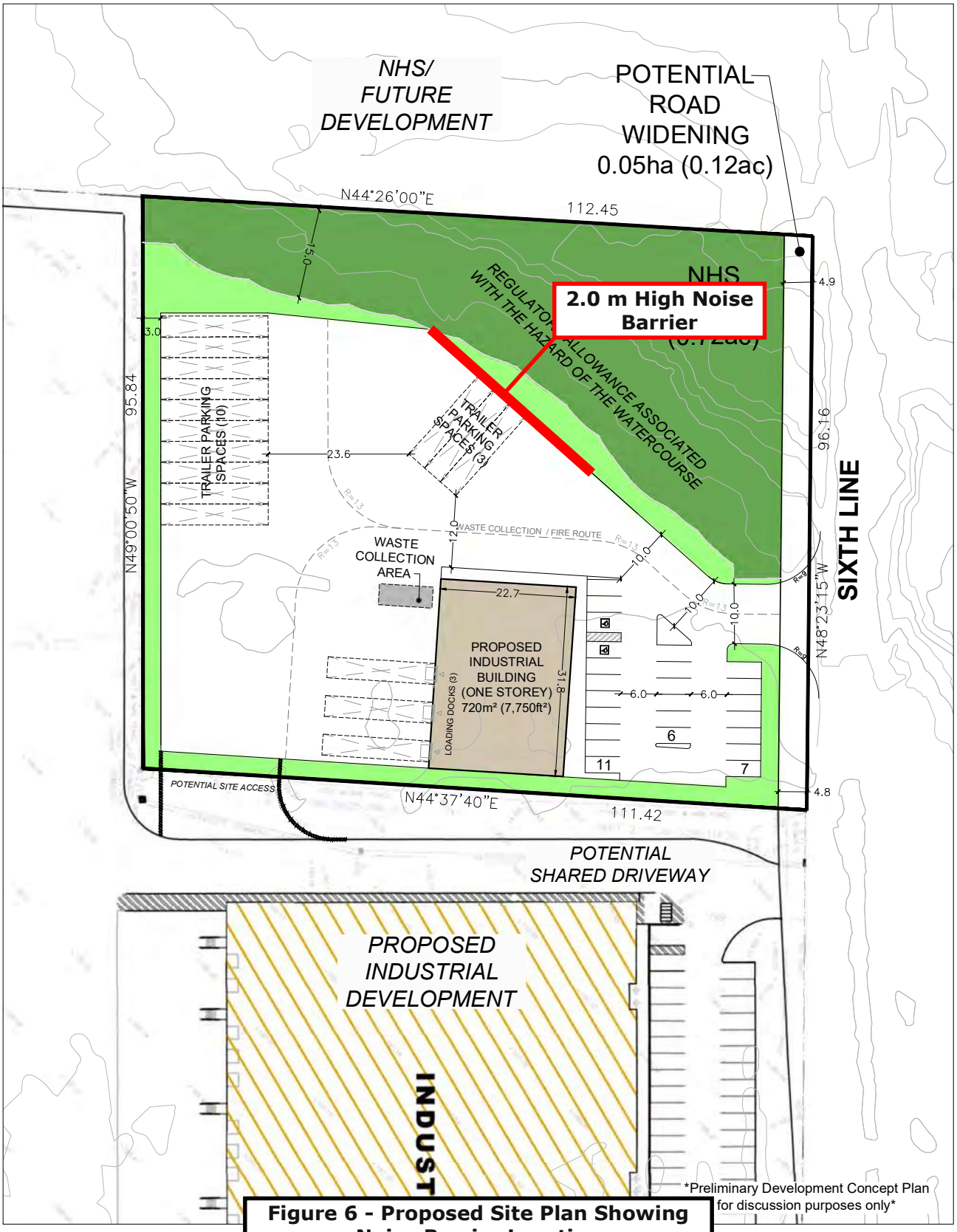


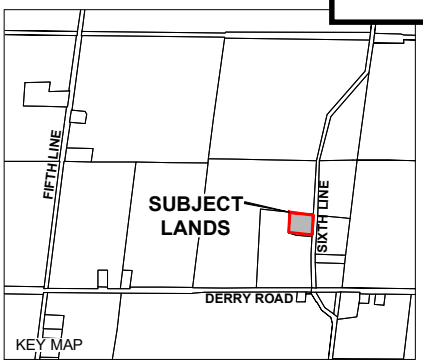
Figure 5 - Predicted Impulsive Sources Sound Level Contours, Without Mitigation

P:\1573-001\4. Drawings\2025 01 January\DCP Jan 21 25.dwg



Preliminary Development Concept Plan for discussion purposes only

Figure 6 - Proposed Site Plan Showing Noise Barrier Location



7072 SIXTH LINE
PART LOT 11,CONCESSION 6
TRAFALGAR, NEW SURVEY
PART 1 ON 20R11806
TOWN OF MILTON
REGION OF HALTON

DEVELOPMENT STATISTICS

TOTAL AREA:	**1.07ha (2.64ac)**
POTENTIAL ROAD WIDENING:	0.05ha (0.12ac)
NHS (+15m BUFFER) AREA:	0.29ha (0.72ac)
LANDSCAPED AREA:	0.11ha (0.27ac)
SITE PLAN AREA:	0.62ha (1.53ac)

KING CALCULATIONS

INDUSTRIAL* - 720m² (1/30m²):	24 SPACES
TOTAL SPACES PROVIDED:	**24 SPACES**

**PARKING RATE AS PER TOWN OF MILTON M2 ZONE STANDARDS*

TOTAL TRAILER SPACES PROVIDED: **13 SPACES**

TYPICAL PARKING SPACE:	2.75m x 5.80m
TYPICAL TYPE 'A' ACCESSIBLE SPACE:	3.40m x 5.80m
TYPICAL TYPE 'B' ACCESSIBLE SPACE:	2.75m x 5.80m
TYPICAL TRAILER SPACE:	3.50m x 18.00m

NOTES
-WITHIN CONSERVATION HALTON REGULATED AREA, GRAVEL AND FILL TO BE REMOVED AND GRADES TO BE RESTORED TO PRE-DISTURBANCE CONDITIONS

SCALE 1:600
JANUARY 21, 2025

GSAI
Glen Schnarr & Associates Inc.

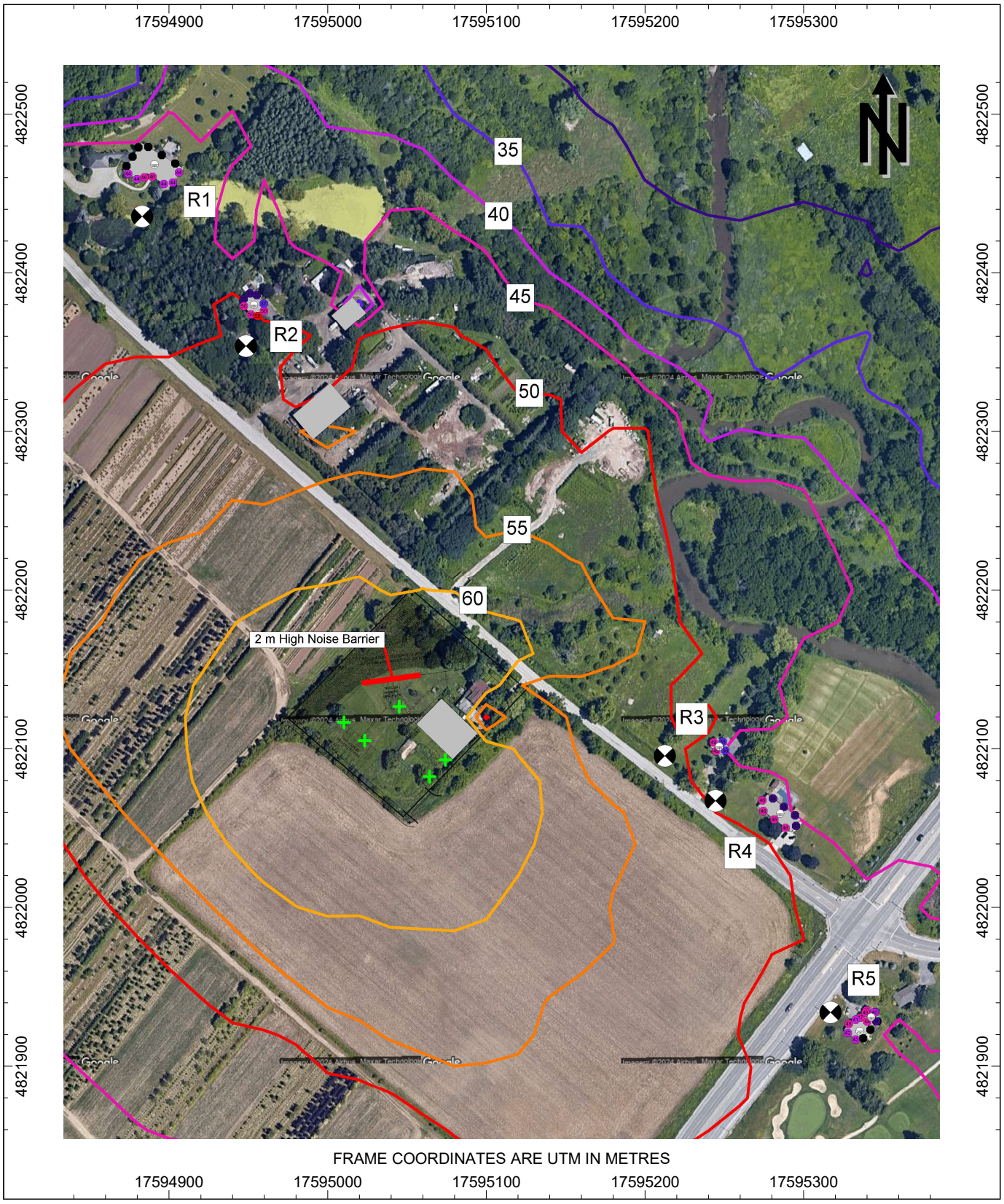


Figure 7 - Predicted Impulsive Sources Sound Level Contours, With Mitigation

Appendix A
Acoustical Assessment Methods

The predictive model used for this Assessment (*Cadna-A version 2025, Build 209.5501*) is based on methods from ISO Standard 9613-2.2 "Acoustics - Attenuation of Sound During Propagation Outdoors", which accounts for reduction in sound level with distance due to geometrical spreading, air absorption, ground attenuation and acoustical shielding by intervening structures such as buildings. This modeling technique is acceptable to the MECP.

The subject site and surrounding area were modelled based on observations during the site visit. Foliage was not included in the modelling. Ground attenuation was assumed to be spectral for all sources, with a ground factor (G) of 0.25 for paved areas, 0.5 for gravel areas, and 1.0 for grass areas. The temperature and relative humidity were assumed to be 10° C and 70%, respectively. The reference times were Daytime 07:00 to 19:00, Evening 19:00 to 23:00 and Nighttime 23:00 to 07:00. All buildings in the model had an absorption coefficient alpha of 0.2.

The predictive modelling considered one order of reflection, the sufficiency of which was verified through an iterative convergence analysis, using successively increasing orders of reflection.

The existing rooftop HVAC equipment, idling trucks, and loading/unloading/coupling trucks were modeled as point sources of sound, shown as green crosses in Figures 3, 4, 5, and 7. Truck pass-bys were modelled as line sources of sound, shown as green lines in Figure 3 and 4.

Appendix B
Cadna/A Calculation Summary

R1 Check	17594884	4822460	192.5																
Src Name	X	Y	Z	LxD	LxN	Adiv	K0	Dc	Agnd	Abar	Aatm	Afol	Ahous	CmetD	CmetN	ReflD	ReflN	LrD	LrN
Idling TT	17595042	4822128	192.5	84	84	62.4	0	0.0	0.6	0.0	2.3	0.0	0.0	0.0	0.0	3.9	3.9	23	23
Idling TT	17595010	4822118	192.5	84	84	62.3	0	0.0	0.8	0.0	2.2	0.0	0.0	0.0	0.0	2.4	2.4	21	21
Idling TT	17595018	4822105	192.5	84	84	62.6	0	0.0	0.5	0.0	2.3	0.0	0.0	0.0	0.0	2.4	2.4	21	21
Idling TT	17595070	4822082	192.5	84	84	63.4	0	0.0	-0.1	0.0	2.5	0.0	0.0	0.0	0.0	2.4	2.4	21	21
RTU 10T	17595074	4822126	199.5	88	85	62.7	0	0.0	1.9	0.1	1.7	0.0	0.0	0.0	0.0	2.3	2.3	24	21
Truck Passby	17595122	4822118	192.5	90	87	62.6	0	0.0	0.9	0.6	2.3	0.0	0.0	0.0	0.0	2.7	2.7	26	23

R2 Check	17594950	4822376	195.5																
Src Name	X	Y	Z	LxD	LxN	Adiv	K0	Dc	Agnd	Abar	Aatm	Afol	Ahous	CmetD	CmetN	ReflD	ReflN	LrD	LrN
Idling TT	17595042	4822128	192.5	84	84	59.5	0	0.0	-0.3	0.1	1.7	0.0	0.0	0.0	0.0	0.9	0.9	24	24
Idling TT	17595010	4822118	192.5	84	84	59.5	0	0.0	-0.1	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	23	23
Idling TT	17595018	4822105	192.5	84	84	60.0	0	0.0	-0.4	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	23	23
Idling TT	17595070	4822082	192.5	84	84	61.0	0	0.0	-1.2	0.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	22	22
RTU 10T	17595074	4822126	199.5	88	85	59.9	0	0.0	-0.5	3.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	23	20
Truck Passby	17595140	4822115	192.5	90	87	59.9	0	0.0	-0.4	1.3	1.8	0.0	0.0	0.0	0.0	0.0	0.0	28	25

R3 Check	17595242	4822103	193.9																
Src Name	X	Y	Z	LxD	LxN	Adiv	K0	Dc	Agnd	Abar	Aatm	Afol	Ahous	CmetD	CmetN	ReflD	ReflN	LrD	LrN
Idling TT	17595042	4822128	192.5	84	84	56.9	0	0.0	-0.4	16.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	10	10
Idling TT	17595010	4822118	192.5	84	84	58.3	0	0.0	-0.9	13.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	12	12
Idling TT	17595018	4822105	192.5	84	84	57.8	0	0.0	-0.5	13.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	12	12
Idling TT	17595070	4822082	192.5	84	84	56.1	0	0.0	0.1	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	27	27
RTU 10T	17595074	4822126	199.5	88	85	55.6	0	0.0	-0.2	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	31	28
Truck Passby	17595154	4822109	192.5	90	87	55.8	0	0.0	-0.5	3.5	1.4	0.0	0.0	0.0	0.0	1.0	1.0	31	28

R4 Check	17595272	4822066	190.7																
Src Name	X	Y	Z	LxD	LxN	Adiv	K0	Dc	Agnd	Abar	Aatm	Afol	Ahous	CmetD	CmetN	ReflD	ReflN	LrD	LrN
Idling TT	17595042	4822128	192.5	84	84	58.4	0	0.0	1.3	16.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	7	7
Idling TT	17595010	4822118	192.5	84	84	59.5	0	0.0	0.8	11.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	11	11
Idling TT	17595018	4822105	192.5	84	84	59.0	0	0.0	0.8	7.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	16	16
Idling TT	17595070	4822082	192.5	84	84	57.4	0	0.0	0.6	1.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	24	24
RTU 10T	17595074	4822126	199.5	88	85	57.4	0	0.0	1.3	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	28	25
Truck Passby	17595154	4822110	192.5	90	87	57.6	0	0.0	0.5	3.6	2.1	0.0	0.0	0.0	0.0	0.7	0.7	27	24

R5 Check	17595338	4821935	194.1																
Src Name	X	Y	Z	LxD	LxN	Adiv	K0	Dc	Agnd	Abar	Aatm	Afol	Ahous	CmetD	CmetN	ReflD	ReflN	LrD	LrN
Idling TT	17595042	4822128	192.5	84	84	61.9	0	0.0	-0.3	17.1	1.3	0.0	0.0	0.0	0.0	1.6	1.6	6	6
Idling TT	17595010	4822118	192.5	84	84	62.5	0	0.0	-1.1	0.0	2.3	0.0	0.0	0.0	0.0	2.5	2.5	23	23
Idling TT	17595018	4822105	192.5	84	84	62.1	0	0.0	-0.8	0.0	2.2	0.0	0.0	0.0	0.0	2.5	2.5	23	23
Idling TT	17595070	4822082	192.5	84	84	60.8	0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	2.5	2.5	24	24
RTU 10T	17595074	4822126	199.5	88	85	61.3	0	0.0	-0.1	1.7	2.0	0.0	0.0	0.0	0.0	2.5	2.5	25	22
Truck Passby	17595148	4822113	192.5	90	87	61.6	0	0.0	-0.5	1.0	2.2	0.0	0.0	0.0	0.0	2.6	2.6	28	25

R1 Check	17594884	4822460	192.5																
Src Name	X	Y	Z	LxD	LxN	Adiv	K0	Dc	Agnd	Abar	Aatm	Afol	Ahous	CmetD	CmetN	ReflD	ReflN	LrD	LrN
Coupling Imp	17595046	4822127	191.3	107	107	62.4	0	0.0	2.7	1.9	2.6	0.0	0.0	0.0	0.0	4.1	4.1	41	41
Coupling Imp	17595010	4822117	191.3	107	107	62.3	0	0.0	2.9	2.8	1.1	0.0	0.0	0.0	0.0	2.4	2.4	40	40
Coupling Imp	17595024	4822106	191.3	107	107	62.6	0	0.0	2.1	1.4	3.0	0.0	0.0	0.0	0.0	2.4	2.4	40	40
Coupling Imp	17595064	4822083	191.3	107	107	63.4	0	0.0	1.5	2.3	2.6	0.0	0.0	0.0	0.0	2.5	2.5	39	39
Forklift Imp	17595074	4822094	192.0	100	100	63.3	0	0.0	4.8	7.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	24	24

R2 Check	17594950	4822376	195.5																
Src Name	X	Y	Z	LxD	LxN	Adiv	K0	Dc	Agnd	Abar	Aatm	Afol	Ahous	CmetD	CmetN	ReflD	ReflN	LrD	LrN
Coupling Imp	17595046	4822127	191.3	107	107	59.5	0	0.0	0.8	1.7	2.3	0.0	0.0	0.0	0.0	1.9	1.9	44	44
Coupling Imp	17595010	4822117	191.3	107	107	59.5	0	0.0	1.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	44	44
Coupling Imp	17595024	4822106	191.3	107	107	60.0	0	0.0	-0.2	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	45	45
Coupling Imp	17595064	4822083	191.3	107	107	61.0	0	0.0	-1.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	45	45
Forklift Imp	17595074	4822094	192.0	100	100	60.8	0	0.0	1.0	11.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	27	27

R3 Check	17595242	4822103	193.9																
Src Name	X	Y	Z	LxD	LxN	Adiv	K0	Dc	Agnd	Abar	Aatm	Afol	Ahous	CmetD	CmetN	ReflD	ReflN	LrD	LrN
Coupling Imp	17595046	4822127	191.3	107	107	56.9	0	0.0	-0.4	16.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	32	32
Coupling Imp	17595010	4822117	191.3	107	107	58.3	0	0.0	-0.6	14.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	33	33
Coupling Imp	17595024	4822106	191.3	107	107	57.8	0	0.0	-0.4	14.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	34	34
Coupling Imp	17595064	4822083	191.3	107	107	56.1	0	0.0	1.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	48	48
Forklift Imp	17595074	4822094	192.0	100	100	55.5	0	0.0	4.1	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	40	40

R4 Check	17595272	4822066	190.7																
Src Name	X	Y	Z	LxD	LxN	Adiv	K0	Dc	Agnd	Abar	Aatm	Afol	Ahous	CmetD	CmetN	ReflD	ReflN	LrD	LrN
Coupling Imp	17595046	4822127	191.3	107	107	58.4	0	0.0	1.7	17.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	28	28
Coupling Imp	17595010	4822117	191.3	107	107	59.5	0	0.0	1.6	11.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	33	33
Coupling Imp	17595024	4822106	191.3	107	107	59.0	0	0.0	1.0	7.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0	38	38
Coupling Imp	17595064	4822083	191.3	107	107	57.4	0	0.0	1.0	2.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0	44	44
Forklift Imp	17595074	4822094	192.0	100	100	57.0	0	0.0	5.6	1.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	35	35

R5 Check	17595338	4821935	194.1																
Src Name	X	Y	Z	LxD	LxN	Adiv	K0	Dc	Agnd	Abar	Aatm	Afol	Ahous	CmetD	CmetN	ReflD	ReflN	LrD	LrN
Coupling Imp	17595046	4822127	191.3	107	107	61.9	0	0.0	-0.3	17.9	1.3	0.0	0.0	0.0	0.0	1.4	1.4	27	27
Coupling Imp	17595010	4822117	191.3	107	107	62.5	0	0.0	-0.9	0.0	2.0	0.0	0.0	0.0	0.0	2.5	2.5	46	46
Coupling Imp	17595024	4822106	191.3	107	107	62.1	0	0.0	-0.8	0.0	2.0	0.0	0.0	0.0	0.0	2.5	2.5	46	46
Coupling Imp	17595064	4822083	191.3	107	107	60.8	0	0.0	1.4	0.0	1.8	0.0	0.0	0.0	0.0	2.5	2.5	45	45
Forklift Imp	17595074	4822094	192.0	100	100	60.7	0	0.0	4.1	0.0	0.7	0.0	0.0	0.0	0.0	2.5	2.5	37	37