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Our ref: 12649115

October 11, 2024

Wheelwright Group  
110 Fenmar Drive  
Toronto, Ontario  
M9L 1M5

Attn: Ruth Wheelwright

Subject: **Traffic Impact Study**  
**Proposed Industrial Building Development**  
**12155 Coleraine Drive, Bolton, Town of Caledon**

Dear Ruth,

## 1. Introduction and background

GHD is pleased to submit this Traffic Impact Study for the proposed development of an industrial building located at 12155 Coleraine Drive in Bolton. The site location is shown in **Figure 1**.

Based on the current site plan, the proposed development consists of an industrial building with a total gross floor area (GFA) of 3,281.48 m<sup>2</sup> including 803.2 m<sup>2</sup> office, 1,050.22 m<sup>2</sup> warehouse and 1,428.06 m<sup>2</sup> maintenance shop uses with 66 passenger vehicle parking spaces provided.

The property has an existing access on Coleraine Drive. The proposed site access will be a right-in /right-out access. **Figure 2** shows the proposed industrial building and the access location. The current site plan is provided in **Appendix A**.

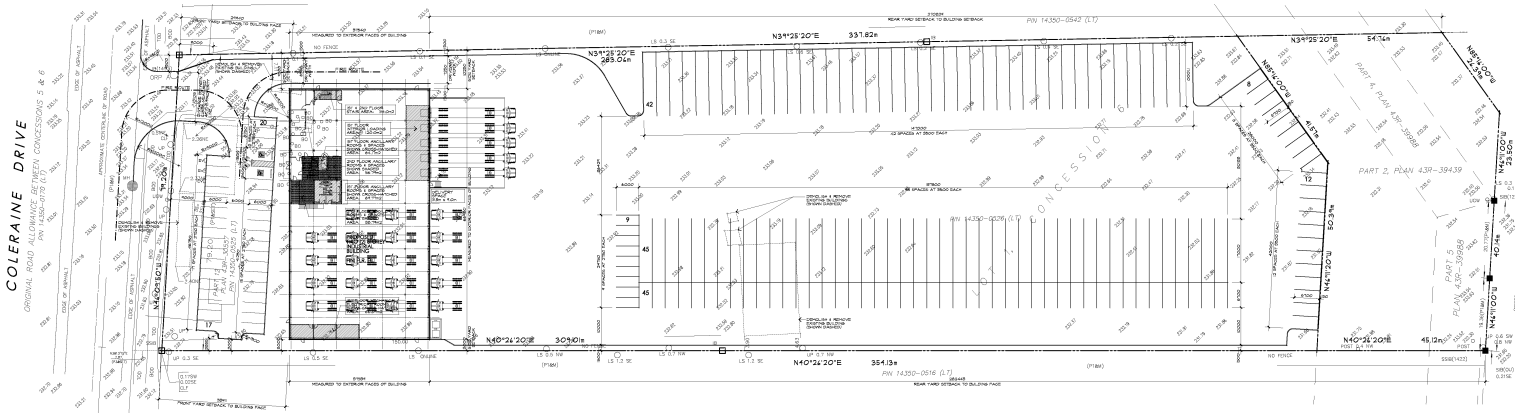
The objective of this study is to determine the anticipated traffic volumes generated by the proposed development during the critical weekday AM and weekday PM peak hour periods; to assess the impact of this traffic on the nearby roadways; to confirm that the proposed parking supply meets Caledon zoning by-law parking requirements, and to demonstrate that the vehicle sweep paths can be accommodated by the proposed site plan.

A Transportation Impact Study for the industrial block at Coleraine Drive and Mayfield Road bounded by Coleraine Drive, Parr Boulevard, future Simpson Road, and Mayfield Road was conducted (including the subject site) in November 2023 (referred to herein as the **November 2023 TIS**). The background traffic forecasts are built on the information contained in that traffic study.

This study establishes the existing traffic volumes for the critical weekday AM and PM peak hour periods, derives and assesses the other background traffic, estimates and assigns new site related traffic volumes onto the road network, and documents the expected site-related impacts from the proposed developments.



**Figure 1**    **Site location**



**Figure 2 Site plan**

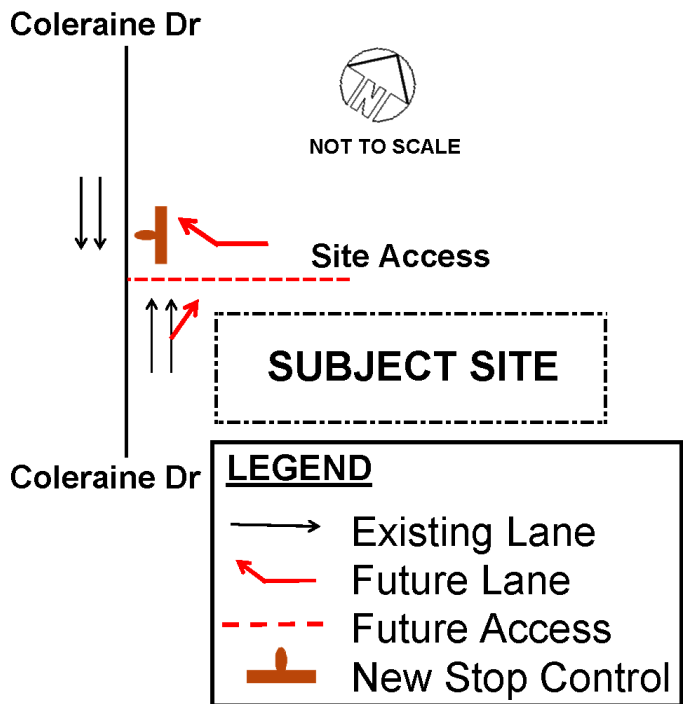
**2. Existing traffic**

**2.1 Study area**

The study intersection for capacity analysis is the intersection of Coleraine Drive and Site Access.

**2.2 Road network**

The following describes the existing road infrastructure in this study area. **Figure 3** shows the lane configurations and traffic controls for the study intersection.



**Figure 3 Intersection Lane configurations**

## Regional Road 150 (Coleraine Drive)

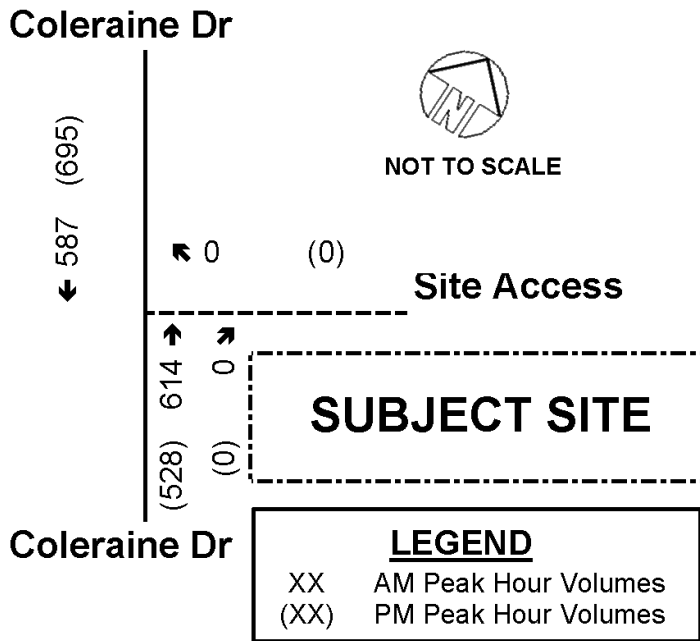
Coleraine Drive (Regional Road 150) is a north-south arterial roadway under the jurisdiction of the Region of Peel. It has a four-lane cross-section in the vicinity of the subject site with a posted speed limit of 70 km/h. It is straight and level. There is no sidewalks and no bicycle lanes along Coleraine Drive in the vicinity of the subject site.

### 2.3 Existing traffic data

The most recent weekday turning movement counts for the existing intersections of Coleraine Drive / Mayfield Road and Coleraine Drive / Parr Boulevard were obtained from Region of Peel and were conducted by Spectrum Inc. on Wednesday, April 17, 2024, as provided in **Appendix B**.

Based on review of the existing traffic data, the study uses the higher link volumes on Coleraine Drive counted at the Coleraine Drive / Mayfield Road during the weekday AM and PM peak hours, to be conservative.

**Figure 4** shows the existing traffic volumes for weekday AM and PM peak hours at the study intersection.



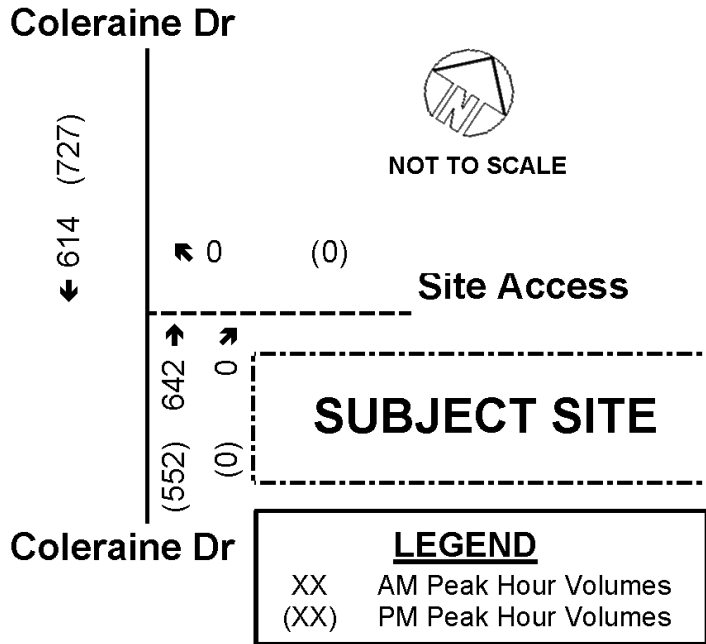
**Figure 4 Existing traffic volumes**

## 3. Background traffic

### 3.1 Future traffic growth

The **November 2023 TIS** applied an annual growth rate of 0.5% to through volumes on Coleraine Drive. In this analysis applied a growth rate of 0.5% per year to the northbound and southbound traffic (Figure 4) to forecast the growth for the 2033 study horizon, consistent with the **November 2023 TIS**.

The background traffic due to growth (existing traffic plus background traffic growth) is shown in **Figure 5**.

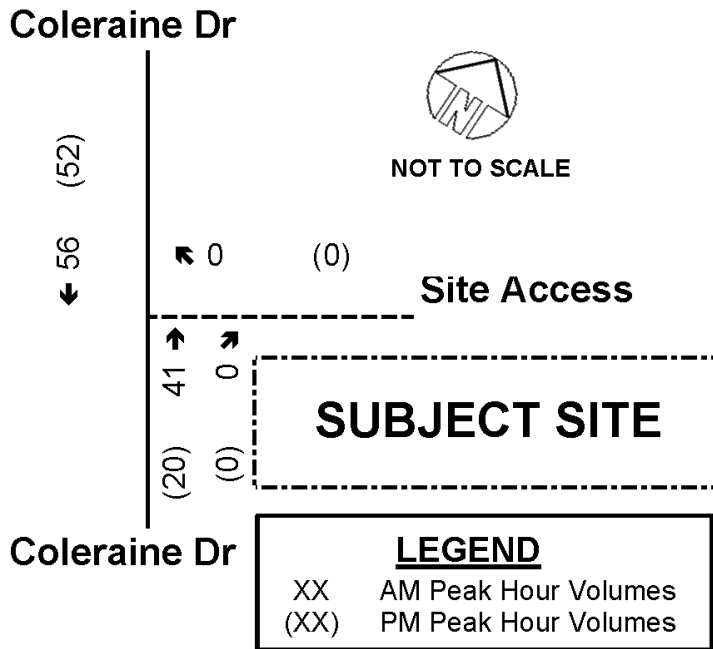


**Figure 5** Background traffic volumes due to growth

### 3.2 Background development traffic

In this traffic study, other background development traffic volume is derived by calculating the existing 2023 volumes with background growth traffic volumes and subtracting from the 2033 future total traffic volumes (Figure 6-3, November 2023 TIS). The excerpts of **November 2023 TIS** report and background growth traffic volumes are provided in **Appendix C**.

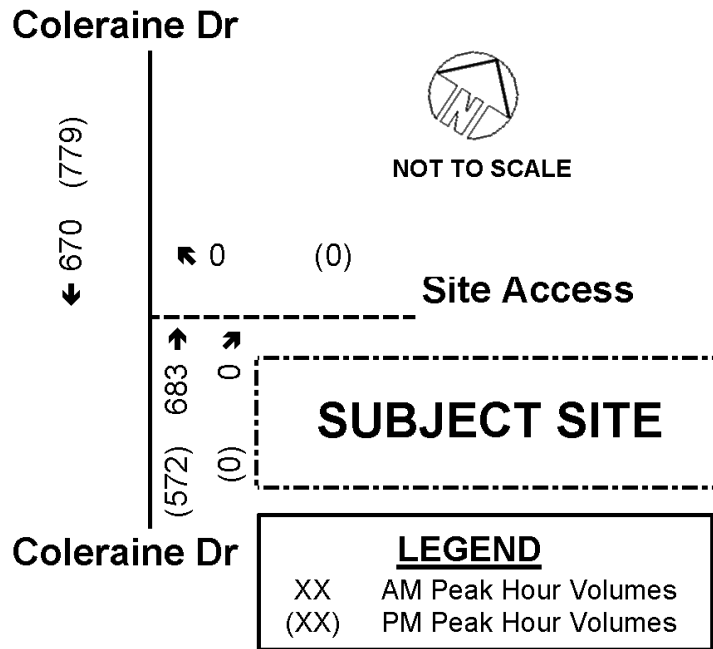
The background development traffic volumes are shown in **Figure 6**.



**Figure 6** Other background development traffic volumes

**3.3 Future background traffic volumes**

The Future Background Traffic Volumes, shown in **Figure 7**, were derived by combining the background traffic growth (**Figure 5**) and other background development traffic volumes (**Figure 6**).



**Figure 7** Future background traffic volumes

#### 4. Proposed site generated traffic

Based on the current site plan, the proposed development consists of an industrial building with a total gross floor area (GFA) of 3,281.48 m<sup>2</sup> (35,321.6 ft<sup>2</sup>) including 803.2 m<sup>2</sup> (8,645.6 ft<sup>2</sup>) office, 1,050.22 m<sup>2</sup> (11,304.5 ft<sup>2</sup>) warehouse and 1,428.06 m<sup>2</sup> (15,371.6 ft<sup>2</sup>) maintenance shop uses.

The subject site vehicular trips were estimated based on the trip rates of General Office (Land Use Code #710), Warehouse (LUC #150) and Automobile Care Center (LUC #942) provided by Trip Generation, 11th Edition, published by the Institute of Transportation Engineers (ITE). The Automobile Care Centre (LUC #942) was selected since it closely represents the expected activity at the site. The maintenance shop is to repair trucks. There are approximately 12 work stations, therefore 24 vehicle trips entering and the 26 trip exiting estimated during the AM and PM peak hours (Table 1), are an over-estimation, however conservative for the purpose of assessing the traffic capacity of the site access.

Considering the proposed site land use GFAs may be modified, this analysis increases and rounds the land use GFAs, as conservative conditions.

The ITE's Trip Generation Manual provides two different methods to generate the trips: either using average rates or using the fitted curve equations. The estimated trips related to the proposed developments are summarized in **Table 1. Appendix D** contains the ITE Trip Generation details.

**Table 1 Site trip generation**

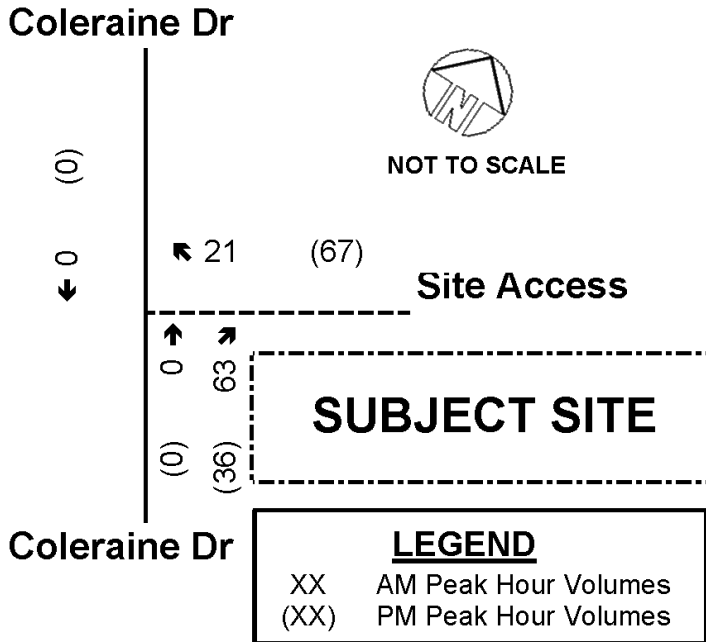
Site Development	GFA (1000 ft <sup>2</sup> )	Parameter	Weekday AM Peak Hour			Weekday PM Peak Hour		
			In	Out	Total	In	Out	Total
Office (LUC 710)	10	New Trips (Average Rate)	13	2	15	2	12	14
		<b>New Trips (Fitted Curve)</b>	<b>20</b>	<b>3</b>	<b>23</b>	<b>4</b>	<b>21</b>	<b>25</b>
Warehouse (LUC 150)	12	New Trips (Average Rate)	2	0	2	1	1	2
		<b>New Trips (Fitted Curve)</b>	<b>19</b>	<b>6</b>	<b>25</b>	<b>8</b>	<b>20</b>	<b>28</b>
Maintenance Shop (LUC 942)	16	<b>New Trips (Average Rate)</b>	<b>24</b>	<b>12</b>	<b>36</b>	<b>24</b>	<b>26</b>	<b>50</b>
		New Trips (Fitted Curve)	-	-	-	24	26	50
<b>Total New Trips</b>			<b>63</b>	<b>21</b>	<b>84</b>	<b>36</b>	<b>67</b>	<b>103</b>

To be conservative, this study uses the larger trips of the average rate and fitted curve equations (resulting in more trips) to estimate trips generated by the proposed subject site.

Although there could be an allowance for transit and active transportation modes, vehicle trip reductions were not considered for this analysis, to be conservative. Accordingly, the site trips are expected to be 84 two-way vehicle trips during the weekday AM peak hour and 103 two-way vehicle trips during the weekday PM peak hour.

The site trips are assigned to the roadway network via the proposed right-in /right-out access.

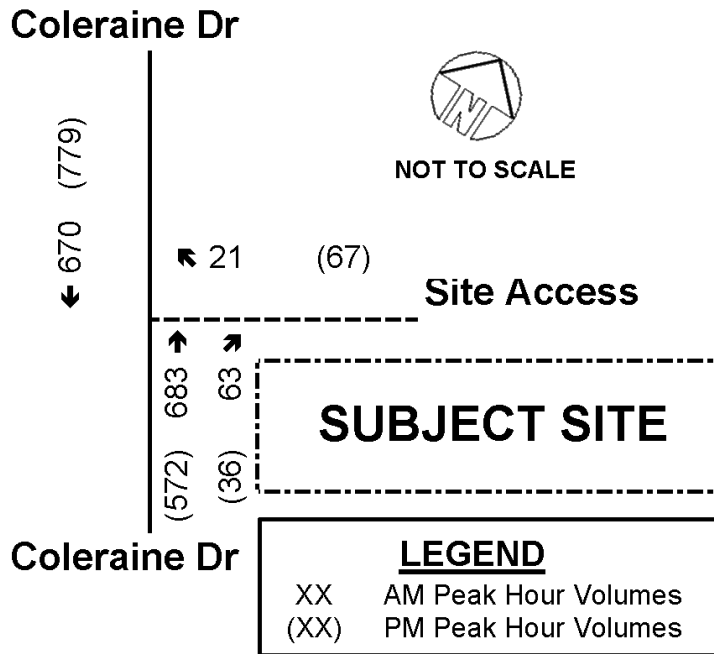
**Figure 8** shows the resulting site generated trips assigned to the study intersection during the weekday AM and PM peak hours, respectively.



**Figure 8 Site traffic volumes**

**5. Future total traffic**

The future background traffic volumes (Figure 7) were combined with the estimated site trips (Figure 8) to estimate the total weekday AM and weekday PM traffic volumes. The total traffic volumes for the weekday AM and PM peak hours are presented in Figure 9.



**Figure 9 Future total traffic volumes**



## 6. Future traffic conditions

This section presents the traffic impact analysis and summarizes the traffic operations of the future street network after the introduction of the subject site generated traffic.

Measuring projecting future traffic volumes quantifies traffic flow for the study intersection. To assess quality of flow, roadway capacity analyses were conducted with respect to future traffic volume conditions, assuming the proposed development is constructed.

The effectiveness of an intersection's operations is measured in terms of Level-of-Service (LOS). LOS ranges from LOS 'A' to LOS 'F', with LOS 'A' being the best level of operation for an intersection representing free flow conditions where the general level of comfort and convenience experienced by motorists is excellent, and LOS 'F' representing an at-capacity condition with congestion, and occasionally severe delays and queuing.

For analysis purposes, 'critical' intersection movements are defined as traffic movements where:

- Volume to capacity (V/C) ratio of through movement or shared through/turning movement exceeds 0.85; or
- Volume to capacity (V/C) ratio of an exclusive turning movement exceeds 1.0.

These capacity analyses are based on the methodology contained in the Highway Capacity Manual, which assigns an intersection Level of Service (LOS) based on the average control delay experienced by each vehicle passing through that intersection. Synchro software was utilized to conduct the analysis.

The existing intersection peak hour factors were based on the traffic count data and used for future scenarios in the Synchro analysis.

**Table 2** summarizes the future total traffic operations for the study intersection. Detailed intersection capacity analysis reports can be found in **Appendix E**.

**Table 2 Total traffic conditions**

Intersection	Control Type	AM Peak Hour			PM Peak Hour		
		Overall v/c (LOS) Delay in Seconds	Critical/ Key Movements v/c(LOS) Delay in Seconds	95th % ile Queues (m)	Overall v/c (LOS) Delay in Seconds	Critical/ Key Movements v/c(LOS) Delay in Seconds	95th % ile Queues (m)
Coleraine Drive & Site Access	Unsignalized	WBR 0.04 (B) 11	WBR = 0.04 (B) 11 NBT = 0.29 (A) 0 NBTR = 0.19 (A) 0 SBT = 0.21 (A) 0 SBT = 0.21 (A) 0	WBR = 5 m NBT = 0 m NBTR = 0 m SBT = 0 m SBT = 0 m	WBR 0.11 (B) 11	WBR = 0.11 (B) 11 NBT = 0.24 (A) 0 NBTR = 0.14 (A) 0 SBT = 0.25 (A) 0 SBT = 0.25 (A) 0	WBR = 5 m NBT = 0 m NBTR = 0 m SBT = 0 m SBT = 0 m

A review of **Table 2** indicates that under future total traffic conditions, all movements at the study intersection are expected to operate with LOS 'B' or better during the weekday AM and PM peak hours, with delays less than 11 seconds. The v/c ratios during the weekday peak hours are 0.29 or less, indicating that all movements have substantial reserve capacity.

Based on the above analysis, the subject site development does not add significant adverse impacts onto the study area roadway and intersection. The proposed development traffic can be accommodated by the adjacent street system without operational issues at the study intersection. There is no road improvements triggered as a result of the subject site development.

## 7. Parking supply review

Based on the current site plan, the proposed development consists of an industrial building with a total gross floor area (GFA) of 3,281.48 m<sup>2</sup> including 803.2 m<sup>2</sup> office, 1,050.22 m<sup>2</sup> warehouse and 1,428.06 m<sup>2</sup> maintenance shop uses with 66 passenger vehicle parking spaces provided.

### 7.1 Review of Town's parking By-Law requirements

Based on our review of the Town of Caledon Zoning By-law parking requirements (Section 5, provided in Appendix F), Table 3 summarizes the Town's requirements for the number of parking spaces.

**Table 3** Town's parking requirements

Land Use	GFA (m <sup>2</sup> )	By-Law Requirement	
		Parking Rate	Parking Spaces
Office	803.2	1.0 space / 30 m <sup>2</sup>	27
Warehouse	1,050.22	1.0 space / 90 m <sup>2</sup>	12
Maintenance Shop	1,428.06	1.0 space / 90 m <sup>2</sup>	16
<b>Total</b>			<b>55</b>

Therefore, the proposed parking supply of 66 passenger vehicle spaces exceeds the Town's By-law requirement of 55 spaces with an extra 11 parking spaces.

## 8. Site circulation review

The site plan was reviewed with respect to design vehicle circulation using AutoTURN software.

Based on the analysis, the vehicle sweep path review confirms that the proposed site plan is sufficient to accommodate the circulation requirements of WB-20 tractor-trailers as illustrated in the figures provided in Appendix G.

Therefore, the proposed site plan has been reviewed and found to be acceptable in terms of vehicular flow, loading, and parking space accessibility. The proposed site access is sufficient to accommodate circulation requirements of the typical service and transport trucks.

## 9. Conclusions and recommendations

- The objective of this study is to determine the anticipated traffic volumes generated by the proposed development (12155 Coleraine Drive) during the critical weekday AM and weekday PM peak hours; to assess the impact of this traffic on the nearby roadways; to confirm that the proposed parking supply meets Town of Caledon bylaw parking requirements, and to demonstrate that vehicle circulation can be accommodated by the proposed site plan.

- A Transportation Impact Study for the industrial block at Coleraine Drive and Mayfield Road bounded by Coleraine Drive, Parr Boulevard, future Simpson Road, and Mayfield Road was conducted (including the subject site) in November 2023 (referred to herein as the **November 2023 TIS**). The background traffic forecasts are built on the information contained in that traffic study.
- Based on the current site plan, the proposed development consists of an industrial building with a total gross floor area (GFA) of 3,281.48 m<sup>2</sup> including 803.2 m<sup>2</sup> office, 1,050.22 m<sup>2</sup> warehouse and 1,428.06 m<sup>2</sup> maintenance shop uses with 66 passenger vehicle parking spaces provided.
- The property has an existing access on Coleraine Drive. The proposed site access will be a right-in /right-out access.
- The subject development is expected to generate 84 two-way vehicle trips during the weekday AM peak hour and 103 two-way vehicle trips during the weekday PM peak hour.
- The capacity analyses concludes that the proposed development can be satisfactorily accommodated by the abutting roadway system. Traffic generated by the proposed development does not add significant adverse impacts on the study area roadway and intersection. No road and intersection improvements are triggered as a result of this development.
- Based on our review of the Town of Caledon Zoning By-law parking requirements, the proposed parking supply of 66 passenger vehicle spaces exceeds the Town's By-law requirement of 55 spaces with a surplus of 11 parking spaces.
- The vehicle sweep path review confirms that the proposed site plan is sufficient to accommodate the circulation requirements of WB-20 tractor-trailers.

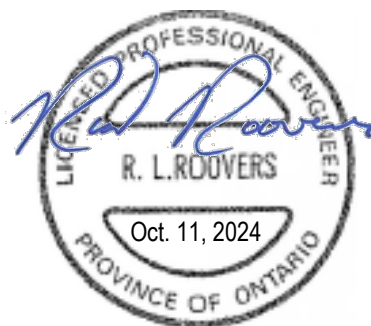
Based on the foregoing, it is our opinion that the future road network can easily accommodate the estimated subject site traffic without impact and that there are no anticipated operational issues at the study area roadways.

We trust the enclosed is sufficient for your needs, but please do not hesitate to contact the undersigned should you require any additional assistance.

Sincerely,

GHD

**Hong Shen, M.Eng., P.Eng.**  
Senior Project Engineer  
hong.shen@ghd.com



**Roland Roovers, P.Eng.**  
Senior Manager, Transportation Planning  
roland.roovers@ghd.com

Attach. **Appendices A-G**

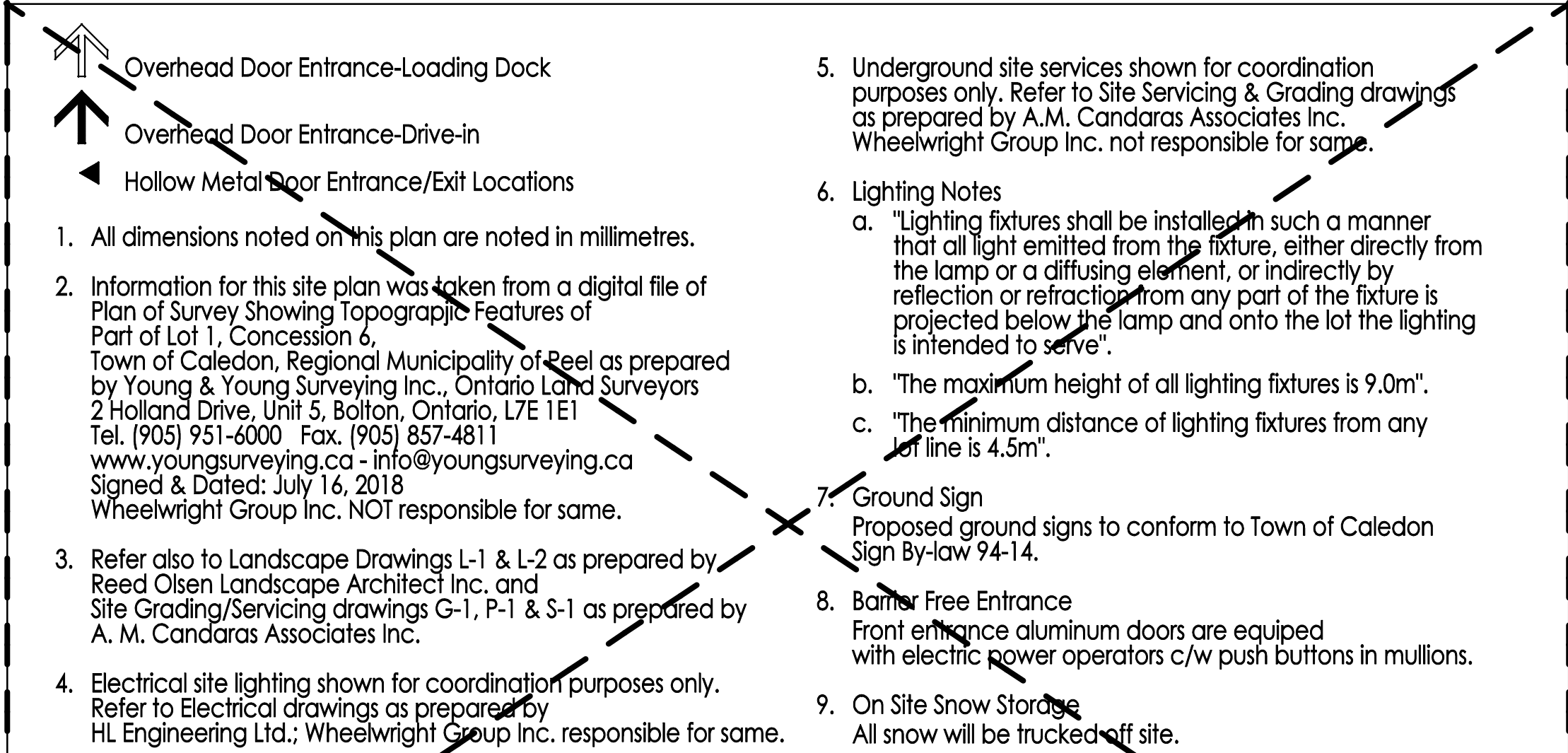
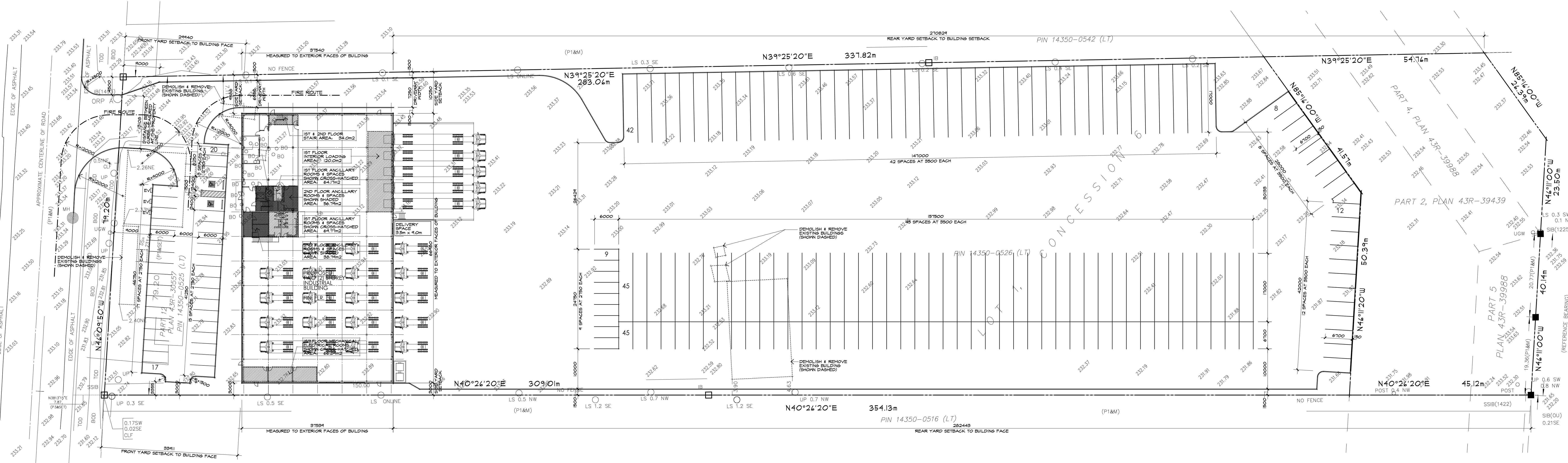
RR/hs

# Appendix A

## Site Plan

**COLERAIN DRIVE**

ORIGINAL ROAD ALLOWANCE BETWEEN CONCESSIONS 5 & 6  
PIN 14350-0170 (LT)



**GENERAL NOTES & LEGEND**  
SCALE: N.T.S.

A-1 Site Plan, Site Statistics & Matrices	A-2.4 Door & Room Finish Schedules & Detailed Plans at Work Area	A-5.1 Plan Details & Wall Section Details
A-2.1 Foundation & Ground Floor Plans	A-3.1 Elevations	A-5.2 Wall Section Details
A-2.2 Upper Level & Roof Plans	A-4.1 Building Cross-Sections	A-5.3 Wall Section Details
A-2.3 Detailed Plans		

**DRAWING LIST**  
SCALE: N.T.S.

4 A-1 ZONING MATRIX N.T.S.
-------------------------------

MUNICIPAL ADDRESS - 8522 MAYFIELD ROAD, BOLTON, ONTARIO

PARCEL OF LOT 1 - CONCESSION 6, GEOGRAPHIC TOWNSHIP OF ALBION  
TOWNSHIP OF CALEDON, REGIONAL MUNICIPALITY OF PEEL  
ZONING: MP - PRESTIGE INDUSTRIAL and MS - SERVICED INDUSTRIAL

LOT AREA (Minimum)	m <sup>2</sup>	#12	PLANTING STRIP WIDTH (Minimum)	m <sup>2</sup>	#12
Minimum Required Lot Area = 925.0 m <sup>2</sup> (0.0925 ha)			From Front Lot Line (West Side - Coleraine Drive)	1.5m	9.0m
EXISTING LOT AREA (2.89 ha)	28,900.00	311,077.01	From Rear Lot Line (East Side)	1.5m	3.0m
TOTAL LOT AREA	28,900.00	311,077.01	From Interior Side Lot Line (North Side)	1.5m	3.329m
			From Interior Side Lot Line (South Side)	1.5m	3.0m
LOT FRONTAGE (Minimum)	REQUIRED	PROVIDED	DRIVEWAY SETBACKS (Minimum)		
	30.0m	79.20m	From Front Lot Line (West Side - Coleraine Drive)	1.5m	15.0m
BUILDING AREA (Max. Permitted 50% of Lot Area)	PERMITTED	PROVIDED	From Rear Lot Line (East Side)	1.5m	9.0m
BUILDING AREA / LOT AREA	2,514.43 / 28,900.00 = 8.7%	2,514.43 m <sup>2</sup>	From Interior Side Lot Line (North Side)	1.5m	1.5m
			From Interior Side Lot Line (South Side)	1.5m	1.5m
BUILDING AREA BREAKDOWN	m <sup>2</sup>	#12	PARKING SPACE SETBACK (Minimum)		
PROPOSED INDUSTRIAL			From Front Lot Line (West Side - Coleraine Drive)	6.0m	15.0m
OVERALL GROSS FLOOR AREA (1st & 2nd Floors)	2,912.76	31,352.69	From Rear Lot Line (East Side)	3.0m	3.0m
1st FLOOR AREA	2,514.43	27,065.10	From Interior Side Lot Line (North Side)	3.0m	3.0m
Warehouse Storage & Repair Garage	2,145.53	23,837.00	From Interior Side Lot Line (South Side)	3.0m	3.0m
Office	299.90	3,228.10	ACCESSORY USES	Not Applicable	Not Applicable
2nd FLOOR AREA	398.33	4,287.59	GARBAGE ENCLOSURES	Provided Outside the Building	
Warehouse Storage & Repair Garage	98.43	1,059.49	PARKING STANDARDS	REQUIRED	PROVIDED
Office	299.90	3,228.10	NON-RESIDENTIAL PARKING REQUIREMENTS		
TOTAL BUILDING GROSS FLOOR AREA	2,912.76	31,352.69	INDUSTRIAL USE - NET FLOOR AREAS:		
BUILDING SETBACKS			Total Gross Floor Area:	2,312.96 m <sup>2</sup>	
FRONT YARD MINIMUM (Coleraine Drive)	REQUIRED	PROVIDED	(Warehouse & Repair Garage)	295.45 m <sup>2</sup>	
TO WEST PROPERTY LINE	9.0m	29.90m	Net Floor Area:	2,017.51 m <sup>2</sup>	
INTERIOR SIDE YARD MINIMUM (North Side)	6.0m	9.588m	(1 Space / 90m <sup>2</sup> of Net Floor Area)	22.42 or 23	23 Spaces
TO NORTH PROPERTY LINE			Total Gross Floor Area:	599.80 m <sup>2</sup>	
INTERIOR SIDE YARD MINIMUM (South Side)	6.0m	3.0m	(Office)	154.96 m <sup>2</sup>	
TO SOUTH PROPERTY LINE			Desired Allowable Areas		
REAR YARD MINIMUM	7.5m	270.829m	Outlined on Site Plan:		
TO EAST PROPERTY LINE			Net Floor Area:	444.84 m <sup>2</sup>	
GASOLINE PUMP ISLAND	Not Applicable	Not Applicable	(1 Space / 30m <sup>2</sup> of Net Floor Area)	15.26 or 15	15 Spaces
ACCESSORY SETBACKS (Minimum)			Total Parking Spaces:	38 Spaces	47 Spaces
ACCESSORY OPEN STORAGE	Not Applicable	Not Applicable	Barrier Free Parking (13 to 100)	2 Spaces	2 Spaces
AREA SETBACKS (Minimum)			Parking Requirement 4% of Required Spaces (38 x 0.25 = 9.5 or 10)		
ACCESSORY OUTSIDE SALES OR DISPLAY AREA SETBACK (Minimum)	Not Applicable	Not Applicable	TOTAL PARKING (Including Barrier Free)	38 Spaces	47 Spaces
BUILDING HEIGHTS (Maximum)	18.0m	10.5 & 11.5m	NON-RESIDENTIAL PARKING REQUIREMENTS		
			TRANSPORTATION TRUCK PARKING		
LANDSCAPED AREA (Min. Required 10% of Lot Area)	1,105.73 m <sup>2</sup>	1,821.52 m <sup>2</sup>	Total Gross Floor Area:	2,312.96 m <sup>2</sup>	
Acad. Landscaped Area	1,221.52 / 11,057.34 = 16.47 %		LOADING & DELIVERY STANDARDS		
			LOADING SPACES: DRIVE-UP DOCKS	1 Space	5 Spaces
			LOADING: (3.5m x 14.0m x 3.35m high)		
			DELIVERY: (3.5m x 9.0m)	1 Space	5 Spaces
			TOTAL LOADING	2 Spaces	6 Spaces

Firm Name: **Wheelwright Group Inc.**  
John B. Wheelwright, P. Eng.  
110 Fenner Drive  
Toronto, Ontario, M9L 1M5

Name of Project: **INDUSTRIAL BUILDING**  
Location: **8522 Mayfield Road Bolton, Ontario**

Name & Address of Owner: **VESPA PACKAGING ENGINEERS INC.**  
10 Automatic Road  
Brampton, Ontario, L6S 5N3

Item	Ontario's 2012 Building Code		B.C. REFERENCE	
	Existing	New	Part 11	Part 9
1 Project Description:	<input type="checkbox"/> New <input type="checkbox"/> Part 11 <input type="checkbox"/> Part 9 <input type="checkbox"/> Addition <input type="checkbox"/> Part 11 <input type="checkbox"/> Part 9 <input type="checkbox"/> Change of Use <input type="checkbox"/> Alteration			
2 Major Occupancy(s)	Medium Hazard Industrial (Manufacturing and Offices)			
3 Building Area (sq.m.)	Existing: 0.00	New: 5,194.51	Total: 5,194.51	1.4.1.2 (A) & 8.10.1.3
4 Gross Area (sq.m.)	Existing: 0.00	New: 5,194.51	Total: 5,194.51	1.4.1.2 (A) & 8.10.1.3
5 Number of Storeys	Above grade: 1	Below grade: 0		1.4.1.2 (A) & 8.10.1.3
6 Number of Streets/Fire Fighter Access	1			
7 Building Classification	3.2.2.70 Group F, Division 2, up to 4 Storeys, Increased Area, Sprinklered			
8 Sprinkler System Proposed	<input type="checkbox"/> Entire building <input type="checkbox"/> Selected compartments <input type="checkbox"/> Selected floor areas <input type="checkbox"/> Basement <input type="checkbox"/> In Lieu of Roof Rating <input type="checkbox"/> Not Required			
9 Standpipe required	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
10 Fire Alarm required	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
11 Water Service/Supply is Adequate	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
12 High Building	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
13 Construction Restrictions	<input type="checkbox"/> Combustible permitted <input type="checkbox"/> Non-combustible required <input type="checkbox"/> Combustible <input type="checkbox"/> Non-combustible <input type="checkbox"/> Both			
14 Mezzanine(s) Area (sq.m.)	N/A			
15 Occupant load based on	<input type="checkbox"/> sq.m./person <input type="checkbox"/> Design of building			
16 Barrier-free Design	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain)			
17 Hazardous Substances	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
18 Fire Resistance Rating (FRR)	Horizontal Assemblies: FRR (Hours) <input type="checkbox"/> 0.75 <input checked="" type="checkbox"/> 1.0 Floors: FRR (Hours) <input type="checkbox"/> 0.75 <input checked="" type="checkbox"/> 1.0 Roof: FRR (Hours) <input type="checkbox"/> 0.75 <input checked="" type="checkbox"/> 1.0 Mezzanine: FRR (Hours) <input type="checkbox"/> 0.75 <input checked="" type="checkbox"/> 1.0 FRR of Supporting Members: <input type="checkbox"/> 0.75 <input checked="" type="checkbox"/> 1.0 Listed Design No. or Description (SB-3): <input type="checkbox"/> No second floor or mezzanine			
19 Spatial Separation - Construction of Exterior Walls	Wall Area of EBF (sq.m.): North 400.73, East 1394.91, South 401.70, West 1498.36 L.D. (m): North 15.26, East 18.30, South 50.55, West 3.33 U/L or H/L: North N/A, East N/A, South N/A, West N/A Permitted Max % of Openings: North 100, East 100, South 100, West 11.2 Proposed % of Openings: North 6.79, East 10.12, South 37.64, West 3.87 FRR (Hours): North N/A, East N/A, South N/A, West 2.0 Listed Design No. or Description (SB-3): North N/A, East N/A, South N/A, West N/A Comb. Const.: North Non-combustible, East Non-combustible, South Non-combustible, West Non-combustible Comb. Const. Cladding: North Non-combustible, East Non-combustible, South Non-combustible, West Non-combustible			

owner: **EVEREST TRANSPORTATION INC.**  
12155 Coleraine Drive  
Bolton, Ontario, L7E 3E4

project name: **PROPOSED INDUSTRIAL BUILDING**  
12155 Coleraine Drive, Bolton, Ontario  
Town of Caledon Site Plan File No. SPA-

**WHEELWRIGHT GROUP INC.**  
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Scale: 1:400  
drawn: DM  
date: August 2024  
checked: [initials]

title: Overall Key Site Plan  
project & drawing no.: WG-555  
**A-1**

Custom Sheet Size 30" x 42"

# Appendix B

Traffic Data



Turning Movement Count (436 . MAYFIELD RD & COLERAINE DR) CustID: 01401354

Start Time	Southbound COLERAINE DR						Westbound MAYFIELD RD						Northbound COLERAINE DR						Eastbound MAYFIELD RD						Int. Total (15 min)	
	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total		
07:00:00	24	94	55	0	0	173	8	49	10	0	0	67	7	72	15	0	0	94	68	44	8	0	0	120	454	
07:15:00	31	86	37	0	0	154	4	48	15	0	0	67	11	79	8	0	0	98	87	49	6	0	0	142	461	
07:30:00	28	69	34	0	0	131	7	50	11	0	0	68	6	56	8	0	0	70	64	50	4	0	0	118	387	
07:45:00	15	85	29	0	0	129	9	62	10	0	0	81	4	53	10	0	0	67	89	77	10	0	0	176	453	
Hourly	98	334	155	0	0	587	28	209	46	0	0	263	28	260	41	0	0	329	308	220	28	0	0	556	1755	
08:00:00	17	61	28	0	0	106	12	53	10	0	0	75	9	68	2	0	0	79	66	61	8	0	0	135	395	
08:15:00	11	87	25	0	0	123	5	54	14	0	0	73	2	56	9	0	0	67	50	54	7	0	0	111	374	
08:30:00	24	69	33	0	0	126	9	48	7	0	0	64	5	64	7	0	0	76	73	58	14	0	0	145	411	
08:45:00	18	57	36	0	0	111	5	44	10	0	0	59	6	89	6	0	0	101	69	62	8	0	0	139	410	
Hourly	70	274	122	0	0	466	31	199	41	0	0	271	22	277	24	0	0	323	258	235	37	0	0	530	1590	
***BREAK***																										
11:00:00	18	45	31	0	0	94	4	42	19	0	0	65	10	38	4	0	0	52	26	49	9	0	1	84	295	
11:15:00	9	33	28	0	0	70	8	45	16	0	0	69	5	53	6	0	0	64	34	48	6	0	0	88	291	
11:30:00	20	48	36	0	0	104	13	38	12	0	0	63	5	33	3	0	0	41	31	46	8	0	0	85	293	
11:45:00	19	44	18	0	0	81	7	44	12	0	0	63	3	41	4	0	0	48	41	49	11	0	0	101	293	
Hourly	66	170	113	0	0	349	32	169	59	0	0	260	23	165	17	0	0	205	132	192	34	0	1	358	1172	
12:00:00	23	42	38	0	0	103	3	48	10	0	0	61	5	32	5	0	0	42	27	51	10	0	0	88	294	
12:15:00	22	35	26	0	0	83	3	44	11	0	0	58	4	38	3	0	0	45	37	39	9	0	0	85	271	
12:30:00	22	66	27	0	0	115	6	52	15	0	0	73	3	44	2	0	0	49	30	47	9	0	0	86	323	
12:45:00	13	48	32	0	0	93	7	30	13	0	0	50	3	48	2	0	0	53	37	54	8	0	0	99	295	
Hourly	80	191	123	0	0	394	19	174	49	0	0	242	15	162	12	0	0	189	131	191	36	0	0	358	1183	
13:00:00	19	43	28	0	0	90	6	62	12	0	0	80	7	38	3	0	0	48	28	39	7	0	0	74	292	
13:15:00	13	61	36	0	0	110	10	52	19	0	0	81	6	43	7	0	0	56	49	38	9	0	0	96	343	
13:30:00	16	51	45	0	0	112	4	46	14	0	0	64	10	47	6	0	0	63	40	38	8	0	0	86	325	
13:45:00	14	51	47	0	0	112	3	48	19	0	0	70	9	56	5	0	0	70	47	30	9	0	0	86	338	
Hourly	62	206	156	0	0	424	23	208	64	0	0	295	32	184	21	0	0	237	164	145	33	0	0	342	1298	
***BREAK***																										
15:00:00	17	82	111	0	0	210	11	63	15	0	0	89	7	67	4	0	0	78	43	65	6	0	0	114	491	
15:15:00	23	78	66	0	1	167	9	62	20	0	0	91	13	94	7	0	0	114	48	66	7	0	0	121	493	
15:30:00	15	96	70	0	0	181	24	95	12	0	0	131	6	69	7	0	0	82	38	57	13	0	0	108	502	
15:45:00	23	61	52	1	0	137	10	59	13	0	0	82	6	68	8	0	0	82	41	70	8	0	0	119	420	
Hourly	78	317	299	1	1	695	54	279	60	0	0	393	32	298	26	0	0	356	170	258	34	0	0	462	1906	
16:00:00	20	92	89	0	0	201	7	71	15	0	0	93	6	66	10	0	0	82	38	50	4	0	0	92	468	
16:15:00	14	72	69	0	0	155	6	61	17	0	0	84	6	70	9	0	0	85	39	62	7	0	0	108	432	
16:30:00	17	86	72	0	0	175	9	83	15	0	0	107	9	62	9	0	0	80	31	46	6	0	0	83	445	
16:45:00	8	53	48	0	0	109	10	84	13	0	0	107	7	61	5	0	0	73	37	53	4	0	0	94	383	
Hourly	59	303	278	0	0	640	32	299	60	0	0	391	28	259	33	0	0	320	145	211	21	0	0	377	1728	
17:00:00	20	115	88	0	0	223	13	91	17	0	0	121	9	72	4	0	0	85	54	48	5	0	0	107	536	
17:15:00	8	57	58	0	0	123	15	67	14	0	0	96	6	73	7	0	0	86	44	59	4	0	0	107	412	
17:30:00	9	74	93	0	0	176	5	70	16	0	0	91	8	81	6	0	0	95	43	56	2	0	0	101	463	
17:45:00	15	52	66	1	0	134	4	49	16	0	0	69	6	80	8	0	0	94	65	51	4	0	0	120	417	
Hourly	52	298	305	1	0	656	37	277	63	0	0	377	29	306	25	0	0	360	206	214	15	0	0	435	1828	
Grand Total	565	2093	1551	2	1	4211	256	1814	442	0	0	2512	209	1911	199	0	0	2319	1514	1666	238	0	1	3418	12460	
Approach%	13.4%	49.7%	36.8%	0%	-	-	10.2%	72.2%	17.6%	0%	-	9%	82.4%	8.6%	0%	-	44.3%	48.7%	7%	0%	-	-	-	-		
Totals %	4.5%	16.8%	12.4%	0%	-	33.8%	2.1%	14.6%	3.5%	0%	-	20.2%	1.7%	15.3%	1.6%	0%	-	18.6%	12.2%	13.4%	1.9%	0%	-	27.4%		



Turning Movement Count  
Location Name: MAYFIELD RD & COLERAINE DR  
Date: Wed, Apr 17, 2024 Deployment Lead: David Chu

Peel Region  
SUITE B 10 PEEL CENTRE DR  
BRAMPTON ONTARIO, L6T 4B9  
CANADA

Heavy	459	76	358	0	-	37	331	337	0	-	36	94	45	0	-	373	315	33	0	-	-
Heavy %	81.2%	3.6%	23.1%	0%	-	14.5%	18.2%	76.2%	0%	-	17.2%	4.9%	22.6%	0%	-	24.6%	18.9%	13.9%	0%	-	-
Bicycles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycle %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





**Peak Hour: 07:00 AM - 08:00 AM Weather: Moderate Rain (5.84 °C)**

Start Time	Southbound COLERAINE DR						Westbound MAYFIELD RD						Northbound COLERAINE DR						Eastbound MAYFIELD RD						Int. Total (15 min)
	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	
07:00:00	24	94	55	0	0	173	8	49	10	0	0	67	7	72	15	0	0	94	68	44	8	0	0	120	454
07:15:00	31	86	37	0	0	154	4	48	15	0	0	67	11	79	8	0	0	98	87	49	6	0	0	142	461
07:30:00	28	69	34	0	0	131	7	50	11	0	0	68	6	56	8	0	0	70	64	50	4	0	0	118	387
07:45:00	15	85	29	0	0	129	9	62	10	0	0	81	4	53	10	0	0	67	89	77	10	0	0	176	453
<b>Grand Total</b>	<b>98</b>	<b>334</b>	<b>155</b>	<b>0</b>	<b>0</b>	<b>587</b>	<b>28</b>	<b>209</b>	<b>46</b>	<b>0</b>	<b>0</b>	<b>283</b>	<b>28</b>	<b>260</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>329</b>	<b>308</b>	<b>220</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>556</b>	<b>1755</b>
<b>Approach%</b>	16.7%	56.9%	26.4%	0%	-	-	9.9%	73.9%	16.3%	0%	-	-	8.5%	79%	12.5%	0%	-	-	55.4%	39.6%	5%	0%	-	-	-
<b>Totals %</b>	5.6%	19%	8.8%	0%	33.4%	1.6%	11.9%	2.6%	0%	16.1%	1.6%	14.8%	2.3%	0%	18.7%	17.5%	12.5%	1.6%	0%	31.7%	-	-	-		
<b>PHF</b>	0.79	0.89	0.7	0	0.85	0.78	0.84	0.77	0	0.87	0.64	0.82	0.68	0	0.84	0.87	0.71	0.7	0	0.79	-	-	-		
<b>Heavy</b>	80	8	38	0	126	1	36	32	0	69	3	7	12	0	22	32	44	0	0	76	-	-	-		
<b>Heavy %</b>	81.6%	2.4%	24.5%	0%	21.5%	3.6%	17.2%	69.6%	0%	24.4%	10.7%	2.7%	29.3%	0%	6.7%	10.4%	20%	0%	0%	13.7%	-	-	-		
<b>Lights</b>	18	326	117	0	461	27	173	14	0	214	25	253	29	0	307	276	176	28	0	480	-	-	-		
<b>Lights %</b>	18.4%	97.6%	75.5%	0%	78.5%	96.4%	82.8%	30.4%	0%	75.6%	89.3%	97.3%	70.7%	0%	93.3%	89.6%	80%	100%	0%	86.3%	-	-	-		
<b>Single-Unit Trucks</b>	37	5	15	0	57	0	11	16	0	27	0	6	0	0	6	11	12	0	0	23	-	-	-		
<b>Single-Unit Trucks %</b>	37.8%	1.5%	9.7%	0%	9.7%	0%	5.3%	34.8%	0%	9.5%	0%	2.3%	0%	0%	1.8%	3.6%	5.5%	0%	0%	4.1%	-	-	-		
<b>Buses</b>	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	-	-	-		
<b>Buses %</b>	0%	0%	0%	0%	0%	0%	2.4%	0%	0%	1.8%	0%	0%	0%	0%	0%	0%	1.4%	0%	0%	0.5%	-	-	-		
<b>Articulated Trucks</b>	43	3	23	0	69	1	20	16	0	37	3	1	12	0	16	21	29	0	0	50	-	-	-		
<b>Articulated Trucks %</b>	43.9%	0.9%	14.8%	0%	11.8%	3.6%	9.6%	34.8%	0%	13.1%	10.7%	0.4%	29.3%	0%	4.9%	6.8%	13.2%	0%	0%	9%	-	-	-		
<b>Pedestrians</b>	-	-	-	-	0	-	-	-	-	0	-	-	-	0	-	-	-	-	-	0	-	-	-		
<b>Pedestrians%</b>	-	-	-	-	0%	-	-	-	-	0%	-	-	-	0%	-	-	-	-	-	0%	-	-	-		



**Peak Hour: 01:00 PM - 02:00 PM Weather: Light Rain (4.57 °C)**

Start Time	Southbound COLERAINE DR						Westbound MAYFIELD RD						Northbound COLERAINE DR						Eastbound MAYFIELD RD						Int. Total (15 min)	
	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total		
13:00:00	19	43	28	0	0	90	6	62	12	0	0	80	7	38	3	0	0	48	28	39	7	0	0	74	292	
13:15:00	13	61	36	0	0	110	10	52	19	0	0	81	6	43	7	0	0	56	49	38	9	0	0	96	343	
13:30:00	16	51	45	0	0	112	4	46	14	0	0	64	10	47	6	0	0	63	40	38	8	0	0	86	325	
13:45:00	14	51	47	0	0	112	3	48	19	0	0	70	9	56	5	0	0	70	47	30	9	0	0	86	338	
<b>Grand Total</b>	<b>62</b>	<b>206</b>	<b>156</b>	<b>0</b>	<b>0</b>	<b>424</b>	<b>23</b>	<b>208</b>	<b>64</b>	<b>0</b>	<b>0</b>	<b>295</b>	<b>32</b>	<b>184</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>237</b>	<b>164</b>	<b>145</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>342</b>	<b>1298</b>	
<b>Approach%</b>	14.6%	48.6%	36.8%	0%		-	7.8%	70.5%	21.7%	0%		-	13.5%	77.6%	8.9%	0%		-	48%	42.4%	9.6%	0%		-	-	
<b>Totals %</b>	4.8%	15.9%	12%	0%		32.7%	1.8%	16%	4.9%	0%		22.7%	2.5%	14.2%	1.6%	0%		18.3%	12.6%	11.2%	2.5%	0%		26.3%	-	
<b>PHF</b>	0.82	0.84	0.83	0		0.95	0.58	0.84	0.84	0		0.91	0.8	0.82	0.75	0		0.85	0.84	0.93	0.92	0		0.89	-	
<b>Heavy</b>	57	10	56	0		123	5	38	55	0		98	3	20	7	0		30	54	33	4	0		91	-	
<b>Heavy %</b>	91.9%	4.9%	35.9%	0%		29%	21.7%	18.3%	85.9%	0%		33.2%	9.4%	10.9%	33.3%	0%		12.7%	32.9%	22.8%	12.1%	0%		26.6%	-	
<b>Lights</b>	5	196	100	0		301	18	170	9	0		197	29	164	14	0		207	110	112	29	0		251	-	
<b>Lights %</b>	8.1%	95.1%	64.1%	0%		71%	78.3%	81.7%	14.1%	0%		66.8%	90.6%	89.1%	66.7%	0%		87.3%	67.1%	77.2%	87.9%	0%		73.4%	-	
<b>Single-Unit Trucks</b>	16	9	20	0		45	2	18	13	0		33	2	18	2	0		22	20	17	1	0		38	-	
<b>Single-Unit Trucks %</b>	25.8%	4.4%	12.8%	0%		10.6%	8.7%	8.7%	20.3%	0%		11.2%	6.3%	9.8%	9.5%	0%		9.3%	12.2%	11.7%	3%	0%		11.1%	-	
<b>Buses</b>	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	0	0	0	0		0	-	
<b>Buses %</b>	0%	0%	0%	0%		0%	0%	0.5%	0%	0%		0.3%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	-	
<b>Articulated Trucks</b>	41	1	36	0		78	3	19	42	0		64	1	2	5	0		8	34	16	3	0		53	-	
<b>Articulated Trucks %</b>	66.1%	0.5%	23.1%	0%		18.4%	13%	9.1%	65.6%	0%		21.7%	3.1%	1.1%	23.8%	0%		3.4%	20.7%	11%	9.1%	0%		15.5%	-	
<b>Pedestrians</b>	-	-	-	-	0		-	-	-	-	0		-	-	-	-	0		-	-	-	-	0		-	-
<b>Pedestrians%</b>	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-



**Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (5.56 °C)**

Start Time	Southbound COLERAINE DR						Westbound MAYFIELD RD						Northbound COLERAINE DR						Eastbound MAYFIELD RD						Int. Total (15 min)
	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	
15:00:00	17	82	111	0	0	210	11	63	15	0	0	89	7	67	4	0	0	78	43	65	6	0	0	114	491
15:15:00	23	78	66	0	1	167	9	62	20	0	0	91	13	94	7	0	0	114	48	66	7	0	0	121	493
15:30:00	15	96	70	0	0	181	24	95	12	0	0	131	6	69	7	0	0	82	38	57	13	0	0	108	502
15:45:00	23	61	52	1	0	137	10	59	13	0	0	82	6	68	8	0	0	82	41	70	8	0	0	119	420
<b>Grand Total</b>	<b>78</b>	<b>317</b>	<b>299</b>	<b>1</b>	<b>1</b>	<b>695</b>	<b>54</b>	<b>279</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>393</b>	<b>32</b>	<b>298</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>356</b>	<b>170</b>	<b>258</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>462</b>	<b>1906</b>
<b>Approach%</b>	11.2%	45.6%	43%	0.1%	-	-	13.7%	71%	15.3%	0%	-	-	9%	83.7%	7.3%	0%	-	-	36.8%	55.8%	7.4%	0%	-	-	-
<b>Totals %</b>	4.1%	16.6%	15.7%	0.1%	36.5%	2.8%	14.6%	3.1%	0%	20.6%	1.7%	15.6%	1.4%	0%	18.7%	8.9%	13.5%	1.8%	0%	24.2%	-	-	-	-	-
<b>PHF</b>	0.85	0.83	0.67	0.25	0.83	0.56	0.73	0.75	0	0.75	0.62	0.79	0.81	0	0.78	0.89	0.92	0.65	0	0.95	-	-	-	-	-
<b>Heavy</b>	59	10	47	0	116	6	50	45	0	101	8	9	4	0	21	43	49	8	0	100	-	-	-	-	-
<b>Heavy %</b>	75.6%	3.2%	15.7%	0%	16.7%	11.1%	17.9%	75%	0%	25.7%	25%	3%	15.4%	0%	5.9%	25.3%	19%	23.5%	0%	21.6%	-	-	-	-	-
<b>Lights</b>	19	307	252	1	579	48	229	15	0	292	24	289	22	0	335	127	209	26	0	362	-	-	-	-	-
<b>Lights %</b>	24.4%	96.8%	84.3%	100%	83.3%	88.9%	82.1%	25%	0%	74.3%	75%	97%	84.6%	0%	94.1%	74.7%	81%	76.5%	0%	78.4%	-	-	-	-	-
<b>Single-Unit Trucks</b>	14	9	11	0	34	2	9	10	0	21	2	9	0	0	11	17	18	3	0	38	-	-	-	-	-
<b>Single-Unit Trucks %</b>	17.9%	2.8%	3.7%	0%	4.9%	3.7%	3.2%	16.7%	0%	5.3%	6.3%	3%	0%	0%	3.1%	10%	7%	8.8%	0%	8.2%	-	-	-	-	-
<b>Buses</b>	0	0	0	0	0	1	4	2	0	7	0	0	0	0	0	1	3	1	0	5	-	-	-	-	-
<b>Buses %</b>	0%	0%	0%	0%	0%	1.9%	1.4%	3.3%	0%	1.8%	0%	0%	0%	0%	0%	0.6%	1.2%	2.9%	0%	1.1%	-	-	-	-	-
<b>Articulated Trucks</b>	45	1	36	0	82	3	37	33	0	73	6	0	4	0	10	25	28	4	0	57	-	-	-	-	-
<b>Articulated Trucks %</b>	57.7%	0.3%	12%	0%	11.8%	5.6%	13.3%	55%	0%	18.6%	18.8%	0%	15.4%	0%	2.8%	14.7%	10.9%	11.8%	0%	12.3%	-	-	-	-	-
<b>Pedestrians</b>	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-
<b>Pedestrians%</b>	-	-	-	-	100%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-

Peak Hour: 07:00 AM - 08:00 AM Weather: Moderate Rain (5.84 °C)



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Peak Hour: 01:00 PM - 02:00 PM Weather: Light Rain (4.57 °C)



mapbox

© Mapbox © OpenStreetMap

Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (5.56 °C)



mapbox

© Mapbox © OpenStreetMap



Turning Movement Count (734 . COLERAINE DR & PARR BLVD) CustID: 15003830

Start Time	Southbound COLERAINE DR						Westbound PARR BLVD						Northbound COLERAINE DR						Eastbound WEST DRIVEWAY						Int. Total (15 min)	
	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total		
07:00:00	14	124	1	0	0	139	16	1	9	0	0	26	4	140	12	0	0	156	2	1	2	0	0	5	326	
07:15:00	20	129	1	0	0	150	8	0	14	0	0	22	3	155	21	0	0	179	0	0	0	0	0	0	351	
07:30:00	12	107	2	0	0	121	3	0	4	0	0	7	3	104	17	0	0	124	1	0	0	0	0	1	253	
07:45:00	12	113	3	0	0	128	3	2	3	0	0	8	8	108	26	0	0	142	1	0	1	0	0	2	280	
Hourly	58	473	7	0	0	538	30	3	30	0	0	63	18	507	76	0	0	601	4	1	3	0	0	8	1210	
08:00:00	16	86	4	0	0	106	7	0	14	0	0	21	5	118	20	0	0	143	0	0	0	0	0	0	270	
08:15:00	15	113	0	0	0	128	4	2	5	0	0	11	5	102	13	0	0	120	0	0	2	0	0	2	261	
08:30:00	17	103	1	0	0	121	14	1	6	0	0	21	6	88	37	0	0	131	2	0	3	0	0	5	278	
08:45:00	18	83	1	0	0	102	20	1	12	0	0	33	7	118	38	0	0	163	0	0	1	0	0	1	299	
Hourly	66	385	6	0	0	457	45	4	37	0	0	86	23	426	108	0	0	557	2	0	6	0	0	8	1108	
***BREAK***																										
11:00:00	3	78	3	0	0	84	5	1	17	0	0	23	0	71	5	0	0	76	5	0	1	0	1	6	189	
11:15:00	7	67	6	0	0	80	4	2	12	0	0	18	4	83	13	0	0	100	2	0	2	0	0	4	202	
11:30:00	13	93	6	0	0	112	4	1	7	0	0	12	5	62	13	0	0	80	5	1	1	0	0	7	211	
11:45:00	3	66	2	0	0	71	7	0	13	0	0	20	6	65	6	0	0	77	0	1	4	0	0	5	173	
Hourly	26	304	17	0	0	347	20	4	49	0	0	73	15	281	37	0	0	333	12	2	8	0	1	22	775	
12:00:00	7	86	2	0	0	95	6	0	11	0	0	17	3	58	5	0	0	66	2	2	0	0	0	4	182	
12:15:00	3	69	3	0	0	75	6	1	10	0	0	17	5	69	12	0	0	86	1	1	1	0	0	3	181	
12:30:00	7	97	3	0	0	107	2	3	16	0	0	21	7	61	14	0	0	82	0	0	2	0	0	2	212	
12:45:00	9	76	3	0	0	88	5	2	15	0	0	22	4	72	9	0	0	85	1	1	1	0	0	3	198	
Hourly	26	328	11	0	0	365	19	6	52	0	0	77	19	260	40	0	0	319	4	4	4	0	0	12	773	
13:00:00	3	76	8	0	0	87	4	5	9	0	0	18	5	64	14	0	0	83	3	3	2	0	0	8	196	
13:15:00	5	83	9	0	0	97	9	4	10	0	1	23	10	70	20	0	0	100	10	5	2	0	0	17	237	
13:30:00	1	87	7	0	0	95	10	2	22	0	0	34	8	78	18	0	0	104	2	2	2	0	0	6	239	
13:45:00	4	78	8	0	0	90	8	2	16	0	0	26	19	74	11	0	0	104	6	0	2	0	0	8	228	
Hourly	13	324	32	0	0	369	31	13	57	0	1	101	42	286	63	0	0	391	21	10	8	0	0	39	900	
***BREAK***																										
15:00:00	14	174	1	2	0	191	11	1	18	0	0	30	3	107	18	0	0	128	5	4	28	0	0	37	386	
15:15:00	10	130	1	0	0	141	20	0	23	0	0	43	2	122	21	0	0	145	2	0	6	0	0	8	337	
15:30:00	13	130	0	0	0	143	33	1	30	0	0	64	5	103	15	1	0	124	2	1	6	0	0	9	340	
15:45:00	1	121	3	0	0	125	8	2	20	0	0	30	3	98	15	0	0	116	2	0	3	0	0	5	276	
Hourly	38	555	5	2	0	600	72	4	91	0	0	167	13	430	69	1	0	513	11	5	43	0	0	59	1339	
16:00:00	15	144	0	0	0	159	30	0	19	0	0	49	1	97	9	2	0	109	0	1	6	0	0	7	324	
16:15:00	6	119	1	0	0	126	11	1	23	0	0	35	1	99	13	0	0	113	0	3	5	0	0	8	282	
16:30:00	5	137	0	0	0	142	20	0	29	0	0	49	1	95	10	0	0	106	1	0	3	0	0	4	301	
16:45:00	3	82	1	0	0	86	12	0	14	0	0	26	1	87	12	0	0	100	1	1	3	0	0	5	217	
Hourly	29	482	2	0	0	513	73	1	85	0	0	159	4	378	44	2	0	428	2	5	17	0	0	24	1124	
17:00:00	5	157	0	0	0	162	43	1	34	0	0	78	6	128	5	0	0	139	2	1	4	0	0	7	386	
17:15:00	7	98	1	0	0	106	9	0	16	0	0	25	0	117	7	2	0	126	0	3	2	0	0	5	262	
17:30:00	7	150	0	0	0	157	13	0	26	0	0	39	0	118	8	0	0	126	0	0	2	0	0	2	324	
17:45:00	6	95	2	0	0	103	13	0	12	0	0	25	4	156	5	0	0	165	1	0	7	0	0	8	301	
Hourly	25	500	3	0	0	528	78	1	88	0	0	167	10	519	25	2	0	556	3	4	15	0	0	22	1273	
Grand Total	281	3351	83	2	0	3717	368	36	489	0	1	893	144	3087	462	5	0	3698	59	31	104	0	1	194	8502	
Approach%	7.6%	90.2%	2.2%	0.1%	-	-	41.2%	4%	54.8%	0%	-	-	3.9%	83.5%	12.5%	0.1%	-	30.4%	16%	53.6%	0%	-	-	-	-	
Totals %	3.3%	39.4%	1%	0%	-	43.7%	4.3%	0.4%	5.8%	0%	-	10.5%	1.7%	36.3%	5.4%	0.1%	43.5%	0.7%	0.4%	1.2%	0%	-	-	2.3%	-	



Turning Movement Count  
 Location Name: COLERAINE DR & PARR BLVD  
 Date: Wed, Apr 17, 2024 Deployment Lead: David Chu

Peel Region  
 SUITE B 10 PEEL CENTRE DR  
 BRAMPTON ONTARIO, L6T 4B9  
 CANADA

Heavy	89	696	17	0	-	42	18	195	0	-	43	560	76	1	-	6	3	6	0	-	-
Heavy %	31.7%	20.8%	20.5%	0%	-	11.4%	50%	39.9%	0%	-	29.9%	18.1%	16.5%	20%	-	10.2%	9.7%	5.8%	0%	-	-
Bicycles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycle %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





**Peak Hour: 07:00 AM - 08:00 AM Weather: Moderate Rain (5.84 °C)**

Start Time	Southbound COLERAINE DR						Westbound PARR BLVD						Northbound COLERAINE DR						Eastbound WEST DRIVEWAY						Int. Total (15 min)
	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	
07:00:00	14	124	1	0	0	139	16	1	9	0	0	26	4	140	12	0	0	156	2	1	2	0	0	5	326
07:15:00	20	129	1	0	0	150	8	0	14	0	0	22	3	155	21	0	0	179	0	0	0	0	0	0	351
07:30:00	12	107	2	0	0	121	3	0	4	0	0	7	3	104	17	0	0	124	1	0	0	0	0	1	253
07:45:00	12	113	3	0	0	128	3	2	3	0	0	8	8	108	26	0	0	142	1	0	1	0	0	2	280
<b>Grand Total</b>	<b>58</b>	<b>473</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>538</b>	<b>30</b>	<b>3</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>18</b>	<b>507</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>601</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>1210</b>
<b>Approach%</b>	10.8%	87.9%	1.3%	0%	-	-	47.6%	4.8%	47.6%	0%	-	3%	84.4%	12.6%	0%	-	50%	12.5%	37.5%	0%	-	-	-	-	
<b>Totals %</b>	4.8%	39.1%	0.6%	0%	44.5%	2.5%	2.5%	0.2%	2.5%	0%	5.2%	1.5%	41.9%	6.3%	0%	49.7%	0.3%	0.1%	0.2%	0%	0.7%	-	-	-	
<b>PHF</b>	0.73	0.92	0.58	0	0.9	0.47	0.38	0.54	0	0.61	0.56	0.82	0.73	0	0.84	0.5	0.25	0.38	0	0.4	-	-	-	-	
<b>Heavy</b>	20	64	0	0	84	1	2	11	0	14	0	54	7	0	61	2	0	1	0	3	-	-	-	-	
<b>Heavy %</b>	34.5%	13.5%	0%	0%	15.6%	3.3%	66.7%	36.7%	0%	22.2%	0%	10.7%	9.2%	0%	10.1%	50%	0%	33.3%	0%	37.5%	-	-	-	-	
<b>Lights</b>	38	409	7	0	454	29	1	19	0	49	18	453	69	0	540	2	1	2	0	5	-	-	-	-	
<b>Lights %</b>	65.5%	86.5%	100%	0%	84.4%	96.7%	33.3%	63.3%	0%	77.8%	100%	89.3%	90.8%	0%	89.9%	50%	100%	66.7%	0%	62.5%	-	-	-	-	
<b>Single-Unit Trucks</b>	10	26	0	0	36	0	2	2	0	4	0	17	3	0	20	0	0	0	0	0	-	-	-	-	
<b>Single-Unit Trucks %</b>	17.2%	5.5%	0%	0%	6.7%	0%	66.7%	6.7%	0%	6.3%	0%	3.4%	3.9%	0%	3.3%	0%	0%	0%	0%	0%	-	-	-	-	
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
<b>Buses %</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-	-	
<b>Articulated Trucks</b>	10	38	0	0	48	1	0	9	0	10	0	37	4	0	41	2	0	1	0	3	-	-	-	-	
<b>Articulated Trucks %</b>	17.2%	8%	0%	0%	8.9%	3.3%	0%	30%	0%	15.9%	0%	7.3%	5.3%	0%	6.8%	50%	0%	33.3%	0%	37.5%	-	-	-	-	
<b>Pedestrians</b>	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	
<b>Pedestrians%</b>	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	



**Peak Hour: 01:00 PM - 02:00 PM Weather: Light Rain (4.57 °C)**

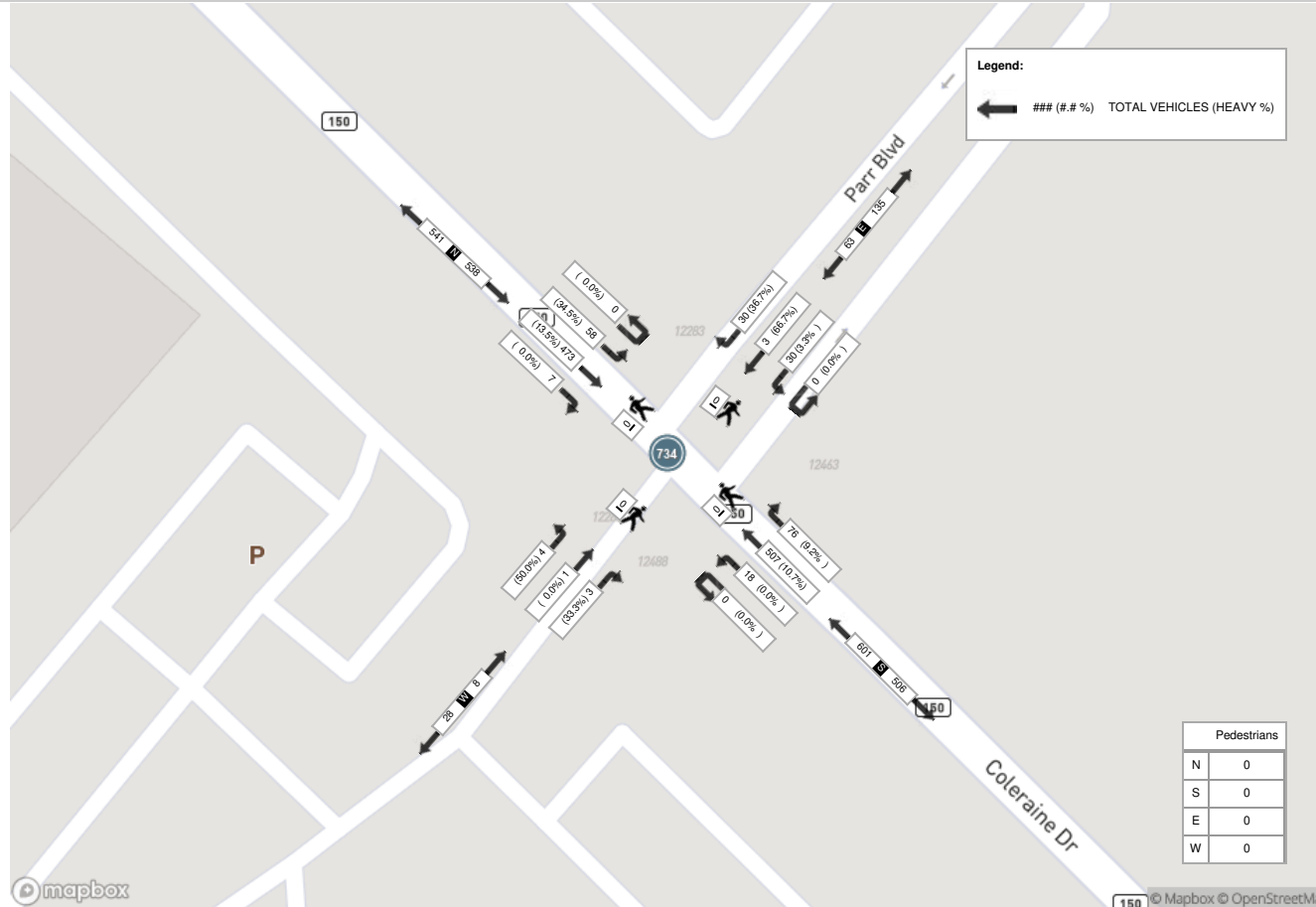
Start Time	Southbound COLERAINE DR						Westbound PARR BLVD						Northbound COLERAINE DR						Eastbound WEST DRIVEWAY						Int. Total (15 min)	
	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total		
13:00:00	3	76	8	0	0	87	4	5	9	0	0	18	5	64	14	0	0	83	3	3	2	0	0	8	196	
13:15:00	5	83	9	0	0	97	9	4	10	0	1	23	10	70	20	0	0	100	10	5	2	0	0	17	237	
13:30:00	1	87	7	0	0	95	10	2	22	0	0	34	8	78	18	0	0	104	2	2	2	0	0	6	239	
13:45:00	4	78	8	0	0	90	8	2	16	0	0	26	19	74	11	0	0	104	6	0	2	0	0	8	228	
<b>Grand Total</b>	<b>13</b>	<b>324</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>369</b>	<b>31</b>	<b>13</b>	<b>57</b>	<b>0</b>	<b>1</b>	<b>101</b>	<b>42</b>	<b>286</b>	<b>63</b>	<b>0</b>	<b>0</b>	<b>391</b>	<b>21</b>	<b>10</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>900</b>	
<b>Approach%</b>	3.5%	87.8%	8.7%	0%		-	30.7%	12.9%	56.4%	0%		-	10.7%	73.1%	16.1%	0%		-	53.8%	25.6%	20.5%	0%		-	-	
<b>Totals %</b>	1.4%	36%	3.6%	0%		41%	3.4%	1.4%	6.3%	0%		11.2%	4.7%	31.8%	7%	0%		43.4%	2.3%	1.1%	0.9%	0%		4.3%	-	
<b>PHF</b>	0.65	0.93	0.89	0		0.95	0.78	0.65	0.65	0		0.74	0.55	0.92	0.79	0		0.94	0.53	0.5	1	0		0.57	-	
<b>Heavy</b>	6	106	7	0		119	7	5	31	0		43	6	80	16	0		102	1	0	0	0		1	-	
<b>Heavy %</b>	46.2%	32.7%	21.9%	0%		32.2%	22.6%	38.5%	54.4%	0%		42.6%	14.3%	28%	25.4%	0%		26.1%	4.8%	0%	0%	0%		2.6%	-	
<b>Lights</b>	7	218	25	0		250	24	8	26	0		58	36	206	47	0		289	20	10	8	0		38	-	
<b>Lights %</b>	53.8%	67.3%	78.1%	0%		67.8%	77.4%	61.5%	45.6%	0%		57.4%	85.7%	72%	74.6%	0%		73.9%	95.2%	100%	100%	0%		97.4%	-	
<b>Single-Unit Trucks</b>	2	38	4	0		44	3	3	11	0		17	4	34	3	0		41	1	0	0	0		1	-	
<b>Single-Unit Trucks %</b>	15.4%	11.7%	12.5%	0%		11.9%	9.7%	23.1%	19.3%	0%		16.8%	9.5%	11.9%	4.8%	0%		10.5%	4.8%	0%	0%	0%		2.6%	-	
<b>Buses</b>	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	-	
<b>Buses %</b>	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	-	
<b>Articulated Trucks</b>	4	68	3	0		75	4	2	20	0		26	2	46	13	0		61	0	0	0	0		0	-	
<b>Articulated Trucks %</b>	30.8%	21%	9.4%	0%		20.3%	12.9%	15.4%	35.1%	0%		25.7%	4.8%	16.1%	20.6%	0%		15.6%	0%	0%	0%	0%		0%	-	
<b>Pedestrians</b>	-	-	-	-	0		-	-	-	-	1		-	-	-	-	0		-	-	-	-	0		-	-
<b>Pedestrians%</b>	-	-	-	-	0%		-	-	-	-	100%		-	-	-	-	0%		-	-	-	-	0%		-	-



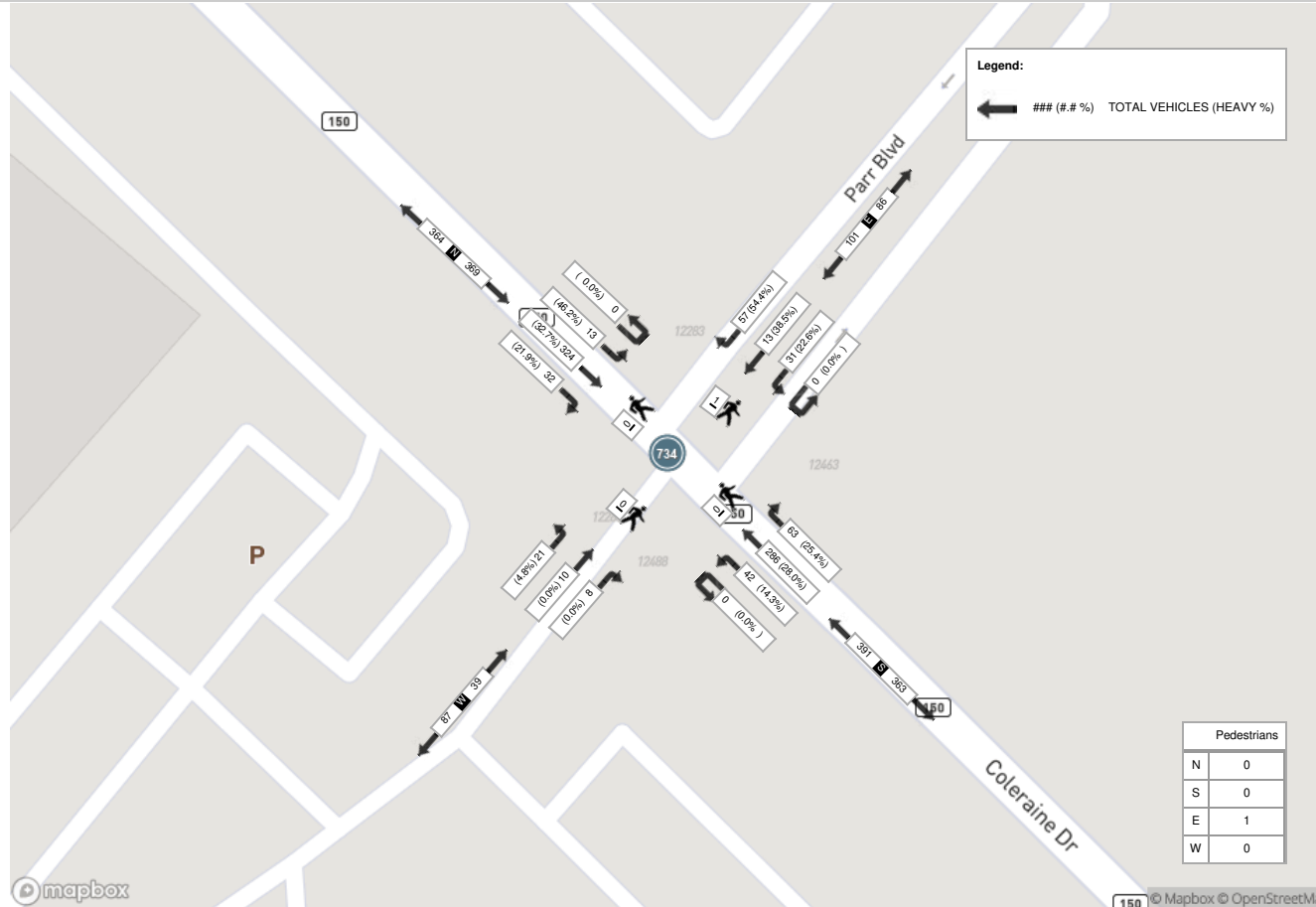
**Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (5.56 °C)**

Start Time	Southbound COLERAINE DR						Westbound PARR BLVD						Northbound COLERAINE DR						Eastbound WEST DRIVEWAY						Int. Total (15 min)
	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	
15:00:00	14	174	1	2	0	191	11	1	18	0	0	30	3	107	18	0	0	128	5	4	28	0	0	37	386
15:15:00	10	130	1	0	0	141	20	0	23	0	0	43	2	122	21	0	0	145	2	0	6	0	0	8	337
15:30:00	13	130	0	0	0	143	33	1	30	0	0	64	5	103	15	1	0	124	2	1	6	0	0	9	340
15:45:00	1	121	3	0	0	125	8	2	20	0	0	30	3	98	15	0	0	116	2	0	3	0	0	5	276
<b>Grand Total</b>	<b>38</b>	<b>555</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>600</b>	<b>72</b>	<b>4</b>	<b>91</b>	<b>0</b>	<b>0</b>	<b>167</b>	<b>13</b>	<b>430</b>	<b>69</b>	<b>1</b>	<b>0</b>	<b>513</b>	<b>11</b>	<b>5</b>	<b>43</b>	<b>0</b>	<b>0</b>	<b>59</b>	<b>1339</b>
<b>Approach%</b>	6.3%	92.5%	0.8%	0.3%	-	-	43.1%	2.4%	54.5%	0%	-	-	2.5%	83.8%	13.5%	0.2%	-	-	18.6%	8.5%	72.9%	0%	-	-	-
<b>Totals %</b>	2.8%	41.4%	0.4%	0.1%	44.8%	5.4%	0.3%	6.8%	0%	12.5%	1%	32.1%	5.2%	0.1%	38.3%	0.8%	0.4%	3.2%	0%	4.4%	-	-	-	-	-
<b>PHF</b>	0.68	0.8	0.42	0.25	0.79	0.55	0.5	0.76	0	0.65	0.65	0.88	0.82	0.25	0.88	0.55	0.31	0.38	0	0.4	-	-	-	-	-
<b>Heavy</b>	12	101	0	0	113	8	3	28	0	39	5	62	15	0	82	0	2	1	0	3	-	-	-	-	-
<b>Heavy %</b>	31.6%	18.2%	0%	0%	18.8%	11.1%	75%	30.8%	0%	23.4%	38.5%	14.4%	21.7%	0%	16%	0%	40%	2.3%	0%	5.1%	-	-	-	-	-
<b>Lights</b>	26	454	5	2	487	64	1	63	0	128	8	368	54	1	431	11	3	42	0	56	-	-	-	-	-
<b>Lights %</b>	68.4%	81.8%	100%	100%	81.2%	88.9%	25%	69.2%	0%	76.6%	61.5%	85.6%	78.3%	100%	84%	100%	60%	97.7%	0%	94.9%	-	-	-	-	-
<b>Single-Unit Trucks</b>	6	31	0	0	37	2	2	9	0	13	1	23	5	0	29	0	2	0	0	2	-	-	-	-	-
<b>Single-Unit Trucks %</b>	15.8%	5.6%	0%	0%	6.2%	2.8%	50%	9.9%	0%	7.8%	7.7%	5.3%	7.2%	0%	5.7%	0%	40%	0%	3.4%	-	-	-	-	-	-
<b>Buses</b>	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	-	-	-	-	-
<b>Buses %</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%	2.9%	0%	0.6%	0%	0%	0%	0%	0%	-	-	-	-	-
<b>Articulated Trucks</b>	6	70	0	0	76	6	1	19	0	26	4	38	8	0	50	0	0	1	0	1	-	-	-	-	-
<b>Articulated Trucks %</b>	15.8%	12.6%	0%	0%	12.7%	8.3%	25%	20.9%	0%	15.6%	30.8%	8.8%	11.6%	0%	9.7%	0%	0%	2.3%	0%	1.7%	-	-	-	-	-
<b>Pedestrians</b>	-	-	-	-	0	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-
<b>Pedestrians%</b>	-	-	-	-	0%	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	-

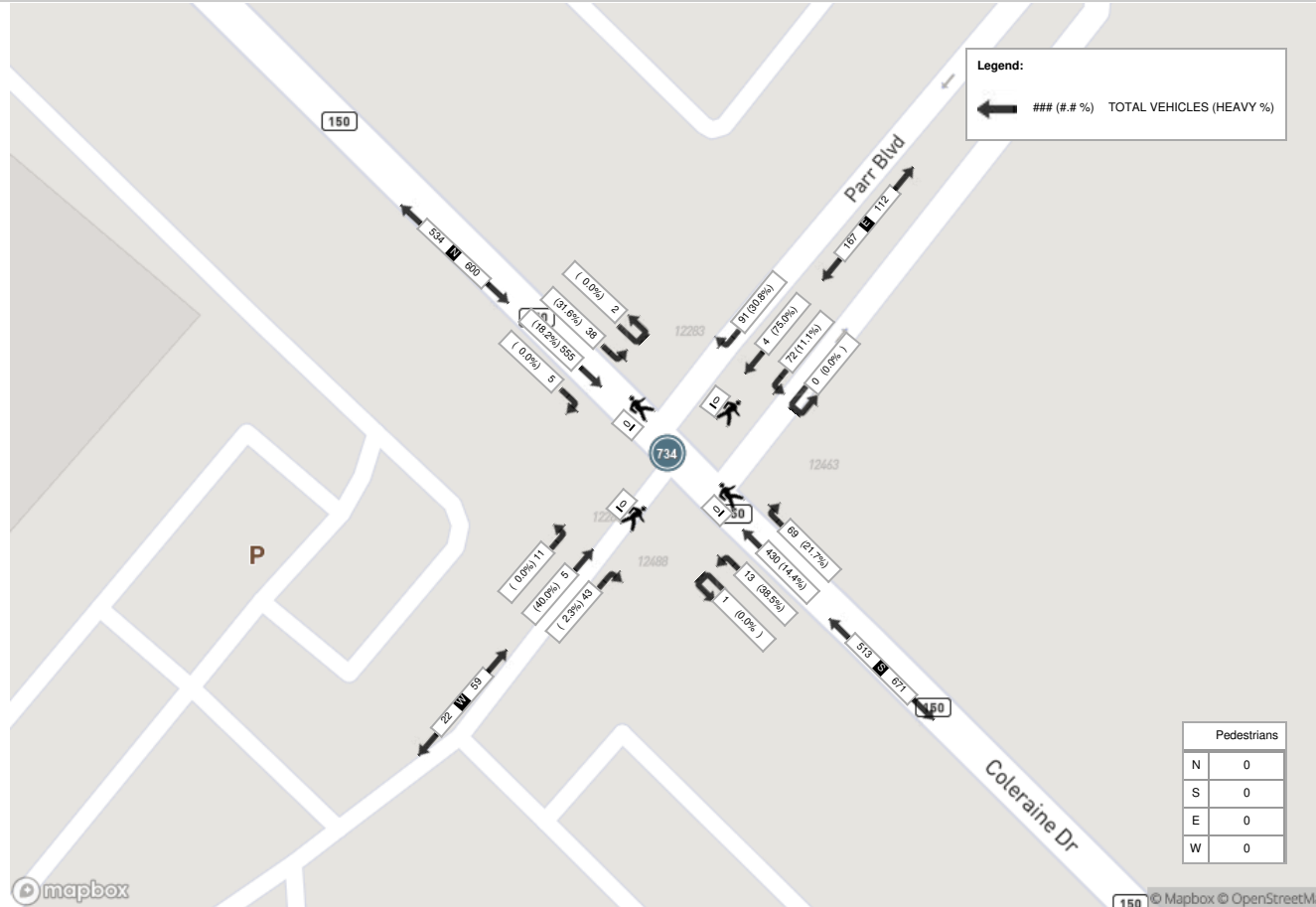
Peak Hour: 07:00 AM - 08:00 AM Weather: Moderate Rain (5.84 °C)



Peak Hour: 01:00 PM - 02:00 PM Weather: Light Rain (4.57 °C)



Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (5.56 °C)



# Appendix C

## Background Traffic



LEA Consulting Ltd.  
625 Cochrane Drive, 5<sup>th</sup> Floor  
Markham, ON, L3R 9R9 Canada  
T | 905 470 0015 F | 905 470 0030  
WWW.LEA.CA

November 7, 2023

Reference Number: 24085

Simpson Road Landowners Group Inc.  
c/o Helen Mihailidi  
7501 Keele Street, Suite 200  
Vaughan, ON  
L4K 1Y2


Dear Helen Mihailidi,

RE: Transportation Impact Study  
Proposed Industrial Development  
Coleraine Drive and Mayfield Road, Town of Caledon

LEA Consulting Ltd. (LEA) is pleased to present the findings of our Transportation Impact Study for the proposed development of an industrial block located at the northeast corner of Coleraine Drive and Mayfield Road in the Town of Caledon. This report concludes that the proposed development is expected to have an acceptable impact on the road network operations in the surrounding area.

Should you have any questions regarding this Transportation Impact Study, please do not hesitate to contact the undersigned.

Yours truly,  
LEA CONSULTING LTD.

  
Zana Georgis, M. Eng., P. Eng.  
Project Manager, Transportation Planning and Engineering

Encl. Transportation Impact Study – Coleraine Drive and Mayfield Road, Proposed Industrial Development, Town of Caledon (November 2023)



## 1.1 PROPOSED LAND USE PLAN

The block plan consists of 12 blocks. It is noted that some parcels in the block plan are categorized as “pending participation” or “non-participating landowners” due to the pending finalization of the development plan. Figure 1-2 illustrates the current ownership mapping with a breakdown of the parcels.

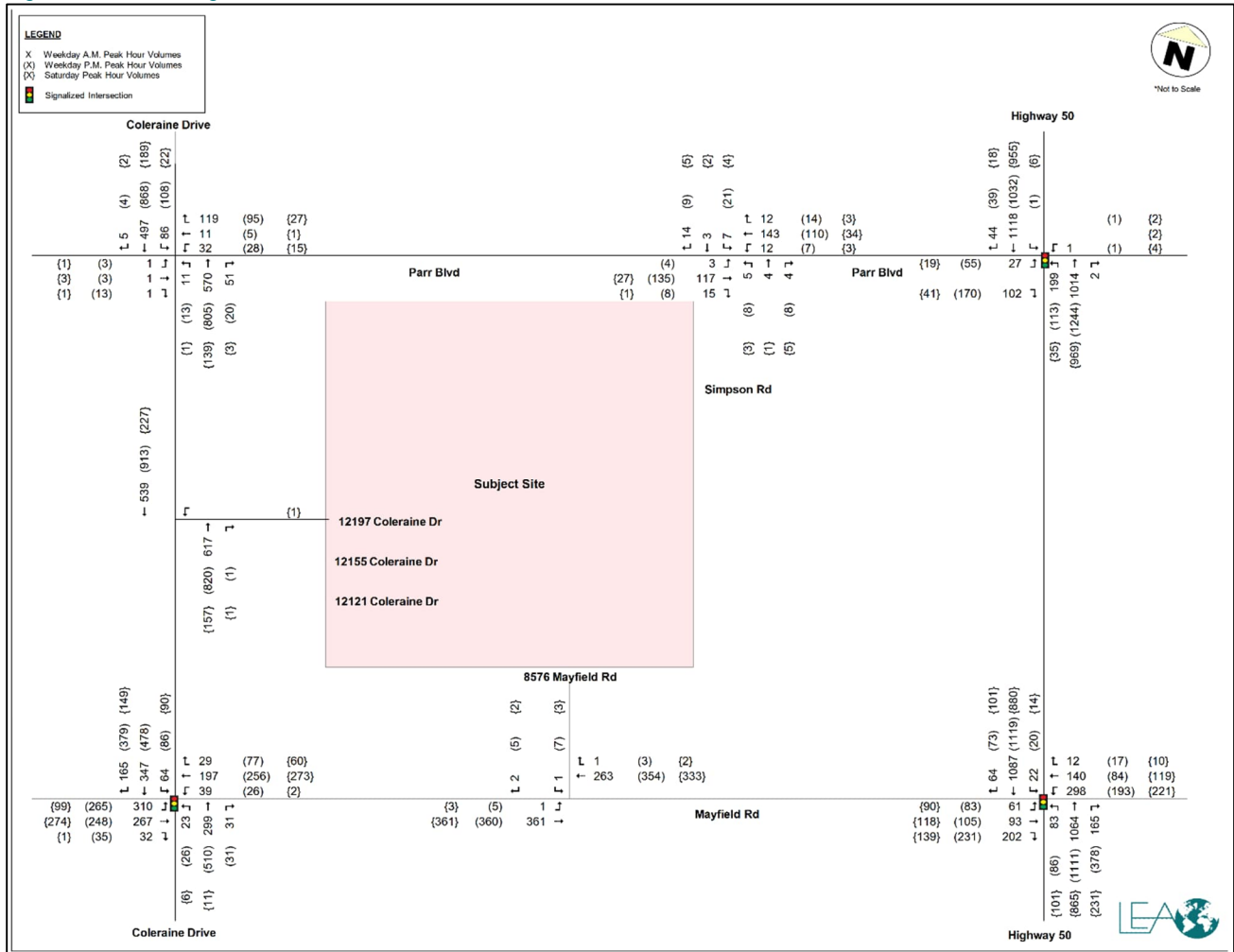
Figure 1-2: Subject Land’s Parcel Mapping



Source: Weston Consulting, July 2023

As this TIS is for the whole block plan, for the parcels that do not yet have development plans, it was assumed that these sites would occupy 50% lot coverage. Further, the subject lands are planned for warehouse and office uses. A breakdown of the proposed GFA by parcel is summarized in Table 1-1.

Figure 3-5: Existing Traffic Volumes



## 4 FUTURE BACKGROUND TRAFFIC CONDITIONS

For the analysis of future background traffic conditions, this study considers a five- and ten-year horizon from the existing year 2023 to the future years 2028 and 2033, respectively. Future background conditions include the traffic added to the network from other future developments, corridor growth, and road network improvements. The future background conditions will be used as the baseline for evaluating the impact of the proposed development.

### 4.1 CORRIDOR GROWTH

The Region of Peel provided growth rates for the study area corridors, which were subsequently applied to all through movements in addition to major movements at the studied intersections. Table 4-1 summarizes the applied growth rates.

Table 4-1: Corridor Growth

Corridor	AM/PM/Sat Peak Annual Growth
Mayfield Rd EB	0.5%
Mayfield Rd WB	1%
Coleraine Dr NB	0.5%
Coleraine Dr SB	0.5%
Hwy 50 NB	0.5%
Hwy 50 SB	0.5%

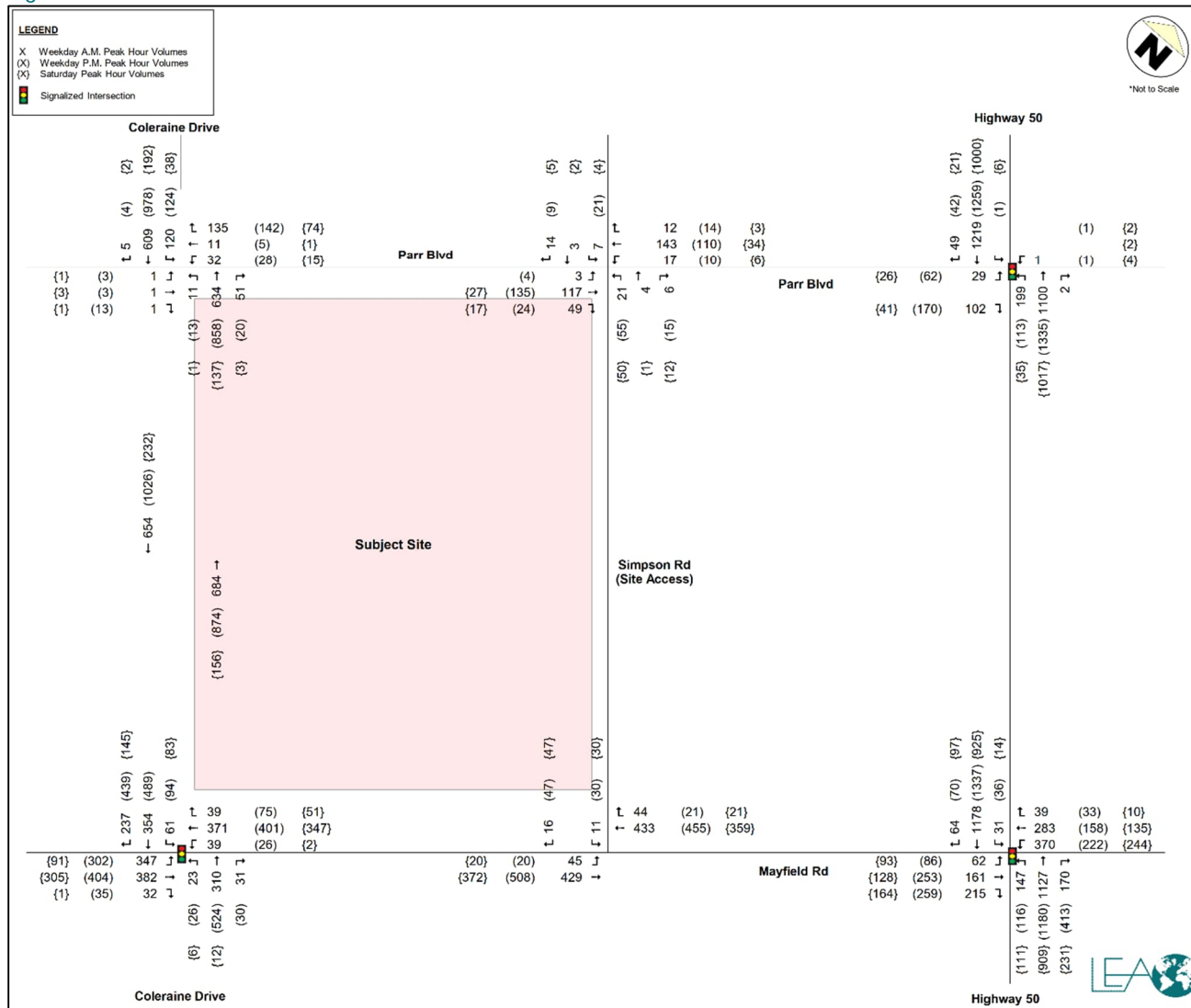
### 4.2 BACKGROUND DEVELOPMENTS

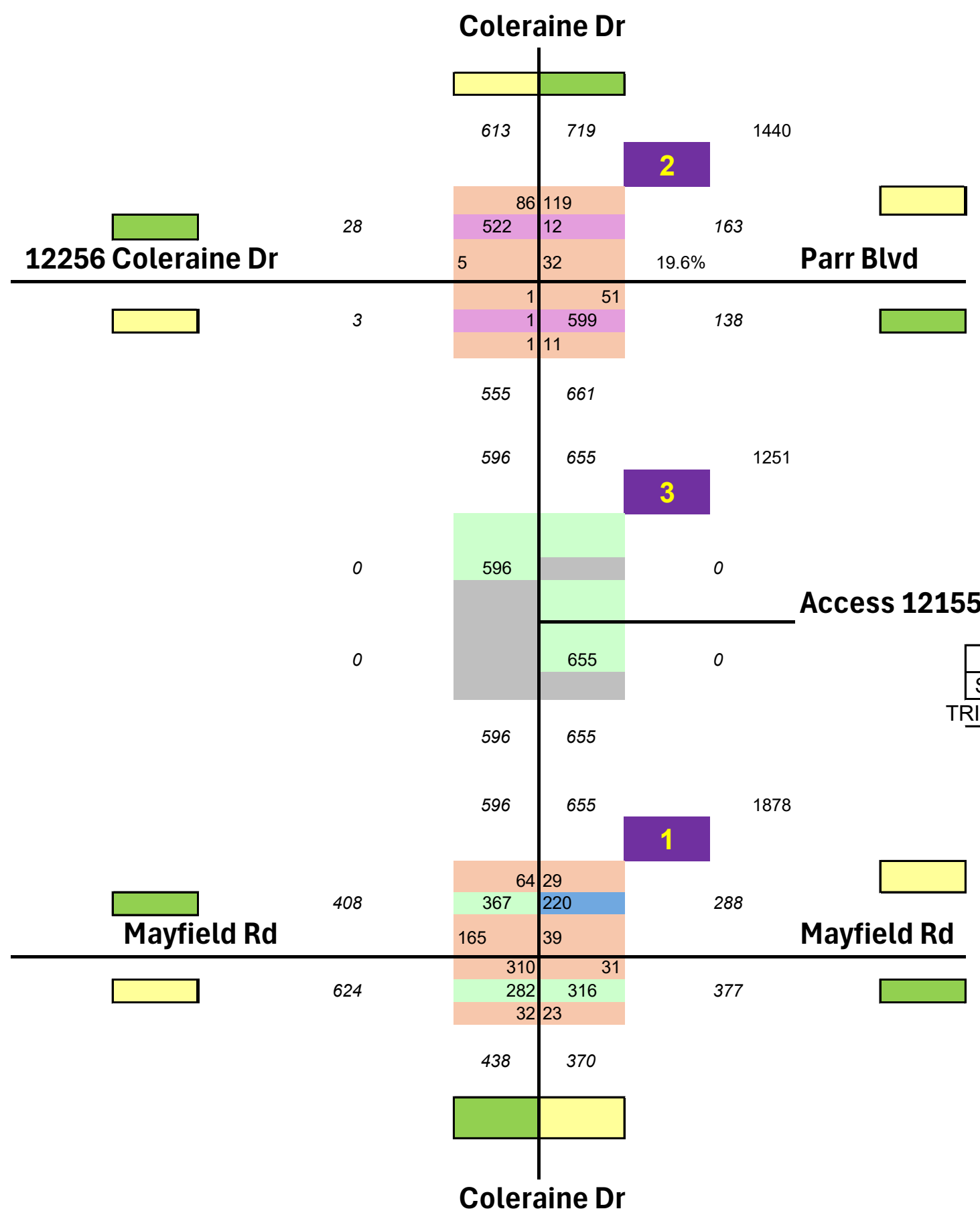
Five (5) background developments located within or near the study area were considered under future background conditions. Detailed information on the background developments included in the analysis was obtained from the Town's development application online inventory. The site statistics of the background developments are summarized below in Table 4-2 and the location of each background development relative to the location of the subject site is illustrated below in Figure 4-1

Table 4-2: Background Developments

#	Location	Proposed Development	Anticipated Horizon	Source of Traffic Volumes
1	12544 Highway 50	Gas Station 279 m <sup>2</sup> of retail GFA 461 m <sup>2</sup> of retail GFA	2028	TIS dated March 2017 (Figure 5-1) LMM Engineering Inc.
2	12563 & 12599 Highway 50 (Phase 1)	2,238 residential units; 3,179 m <sup>2</sup> Retail	2033	TIS dated January 2022 (Figure 21 & 24) BA Group
3	12148 Albion Vaughan Road	306 residential units; 225m <sup>2</sup> commercial space	2028	TIS dated September 2021 (Figure 4.2A -4.2B) Paradigm
4	Triangle Lands	406,000 m <sup>2</sup> of industrial GFA	2028	TIS dated Sept 2023 LEA Estimate
5	Humber Station Lands (Phase 1)	2,028 Jobs/Employee Warehousing	2028	TIS Dated Sept 2023 (Figure 5-1:5-4) LEA Consulting Ltd
	Humber Station Lands (Full Buildout)	2,548 Jobs/Employee Warehousing	2033	

Figure 6-3: 2033 Future Total Peak Hour Traffic Volumes





Growth Rate 1.00%  
 Baseline Year 2022  
 Horizon Year 2033  
 No. of Years 11  
 Growth Factor 1.11567

Table 4-1 of Lea TIS Nov 2023

Growth Rate 0.00%  
 Baseline Year 2022  
 Horizon Year 2033  
 No. of Years 11  
 Growth Factor 1.00000

Table 4-1 of Lea TIS Nov 2023

Growth Rate 0.50%  
 Baseline Year 2022  
 Horizon Year 2033  
 No. of Years 11  
 Growth Factor 1.05640

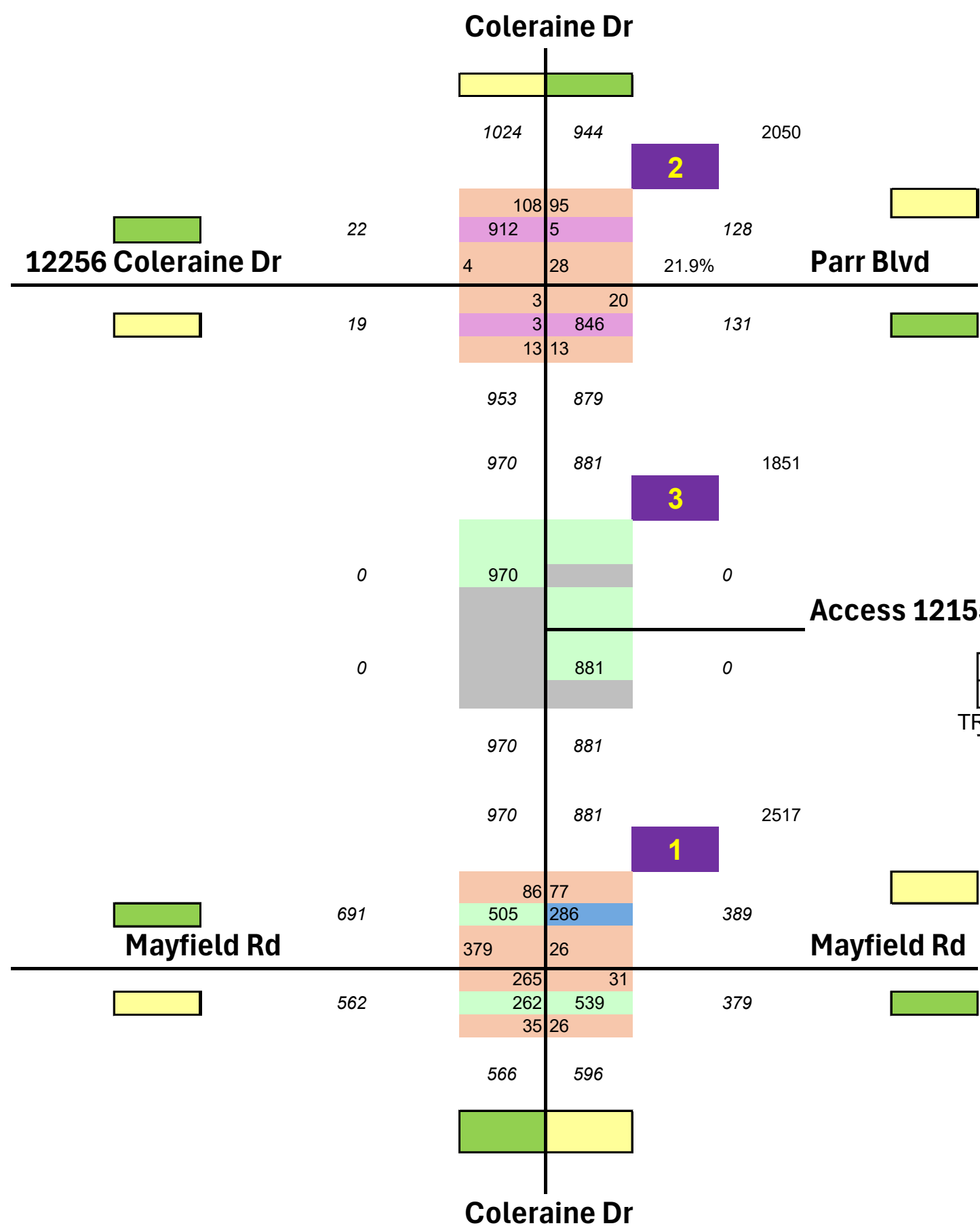
Table 4-1 of Lea TIS Nov 2023

Growth Rate 0.50%  
 Baseline Year 2023  
 Horizon Year 2033  
 No. of Years 10  
 Growth Factor 1.05114

Table 4-1 of Lea TIS Nov 2023

	IN	OUT	TOTAL
SHEET	0	0	0
TRIP GEN			0

# AM Growth Traffic from 2023Data



Growth Rate 1.00%  
 Baseline Year 2022  
 Horizon Year 2033  
 No. of Years 11  
 Growth Factor 1.11567

Table 4-1 of Lea TIS Nov 2023

Growth Rate 0.00%  
 Baseline Year 2022  
 Horizon Year 2033  
 No. of Years 11  
 Growth Factor 1.00000

Table 4-1 of Lea TIS Nov 2023

Growth Rate 0.50%  
 Baseline Year 2022  
 Horizon Year 2033  
 No. of Years 11  
 Growth Factor 1.05640

Table 4-1 of Lea TIS Nov 2023

Growth Rate 0.50%  
 Baseline Year 2023  
 Horizon Year 2033  
 No. of Years 10  
 Growth Factor 1.05114

Table 4-1 of Lea TIS Nov 2023

	IN	OUT	TOTAL
SHEET	0	0	0
TRIP GEN			0

# PM Growth Traffic from 2023 Data

# **Appendix D**

## **ITE Trip Generation**

# Trip Generation 12649115, ITE Office (LUC 710): 10,000 ft<sup>2</sup> AM Peak Hour (vehicles)

ITETripGen Web-based App

Help Will Maria

## Graph Look Up

Change Password

Account Settings

Query Filter

**DATA SOURCE:**  
Trip Generation Manual, 11th Ed

**SEARCH BY LAND USE CODE:**  
710

**LAND USE GROUP:**  
(700-799) Office

**LAND USE :**  
710 - General Office Building

**LAND USE SUBCATEGORY:**  
All Sites

**SETTING/LOCATION:**  
General Urban/Suburban

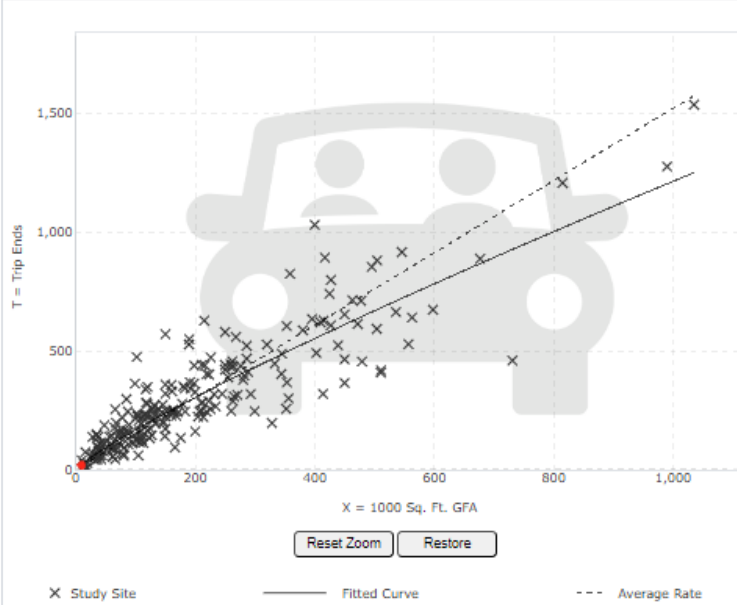
**INDEPENDENT VARIABLE (IV):**  
1000 Sq. Ft. GFA

**TIME PERIOD:**  
Weekday, Peak Hour of Adjacent Street Traffic

**TRIP TYPE:**  
Vehicle

**ENTER IV VALUE TO CALCULATE TRIP #:**  
10

### Data Plot and Equation



### DATA STATISTICS

<b>Land Use:</b>	General Office Building (710) <a href="#">Click for Description and Data Plots</a>
<b>Independent Variable:</b>	1000 Sq. FL GFA
<b>Time Period:</b>	Weekday Peak Hour of Adjacent Street Traffic One Hour Between 7 and 9 a.m.
<b>Setting/Location:</b>	General Urban/Suburban
<b>Trip Type:</b>	Vehicle
<b>Number of Studies:</b>	221
<b>Avg. 1000 Sq. FL GFA:</b>	201
<b>Average Rate:</b>	1.52
<b>Range of Rates:</b>	0.32 - 4.93
<b>Standard Deviation:</b>	0.58
<b>Fitted Curve Equation:</b>	$\ln(T) = 0.86 \ln(X) + 1.16$
<b>R<sup>2</sup>:</b>	0.78
<b>Directional Distribution:</b>	88% entering, 12% exiting
<b>Calculated Trip Ends:</b>	Average Rate: 15 (Total), 13 (Entry), 2 (Exit) Fitted Curve: 23 (Total), 20 (Entry), 3 (Exit)

# PM Peak Hour (vehicles)

ITETripGen Web-based App

Help Will Maria

## Graph Look Up

Change Password

Account Settings

Query Filter

**DATA SOURCE:**  
Trip Generation Manual, 11th Ed

**SEARCH BY LAND USE CODE:**  
710

**LAND USE GROUP:**  
(700-799) Office

**LAND USE :**  
710 - General Office Building

**LAND USE SUBCATEGORY:**  
All Sites

**SETTING/LOCATION:**  
General Urban/Suburban

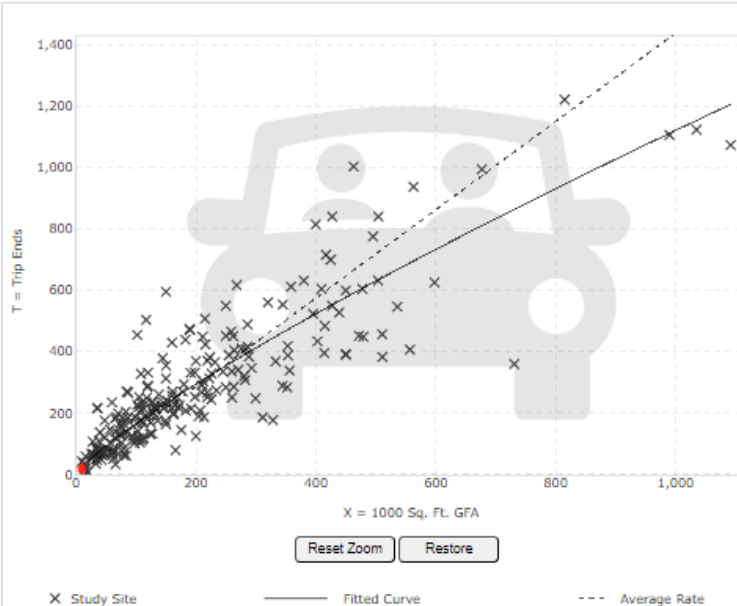
**INDEPENDENT VARIABLE (IV):**  
1000 Sq. Ft. GFA

**TIME PERIOD:**  
Weekday, Peak Hour of Adjacent Street Traffic

**TRIP TYPE:**  
Vehicle

**ENTER IV VALUE TO CALCULATE TRIP #:**  
10

### Data Plot and Equation



### DATA STATISTICS

<b>Land Use:</b>	General Office Building (710) <a href="#">Click for Description and Data Plots</a>
<b>Independent Variable:</b>	1000 Sq. FL GFA
<b>Time Period:</b>	Weekday Peak Hour of Adjacent Street Traffic One Hour Between 4 and 6 p.m.
<b>Setting/Location:</b>	General Urban/Suburban
<b>Trip Type:</b>	Vehicle
<b>Number of Studies:</b>	232
<b>Avg. 1000 Sq. FL GFA:</b>	199
<b>Average Rate:</b>	1.44
<b>Range of Rates:</b>	0.26 - 6.20
<b>Standard Deviation:</b>	0.60
<b>Fitted Curve Equation:</b>	$\ln(T) = 0.83 \ln(X) + 1.29$
<b>R<sup>2</sup>:</b>	0.77
<b>Directional Distribution:</b>	17% entering, 83% exiting
<b>Calculated Trip Ends:</b>	Average Rate: 14 (Total), 2 (Entry), 12 (Exit) Fitted Curve: 25 (Total), 4 (Entry), 21 (Exit)



# Trip Generation 12649115, ITE Warehouse (LUC 150): 12,000 ft<sup>2</sup> AM Peak Hour (vehicles)

## Graph Look Up

**Query** Filter

DATA SOURCE:  
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:  
150

LAND USE GROUP:  
(100-199) Industrial

LAND USE:  
150 - Warehousing

LAND USE SUBCATEGORY:  
All Sites

SETTING/LOCATION:  
General Urban/Suburban

INDEPENDENT VARIABLE (IV):  
1000 Sq. Ft. GFA

TIME PERIOD:  
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:  
Vehicle

ENTER IV VALUE TO CALCULATE TRIP #:  
12 Calculate

**Data Plot and Equation**

X = 1000 Sq. Ft. GFA

Reset Zoom Restore

X Study Site — Fitted Curve - - - Average Rate

**DATA STATISTICS**

Land Use:  
Warehousing (150) [Click for Description and Data Plots](#)

Independent Variable:  
1000 Sq. Ft. GFA

Time Period:  
Weekday  
Peak Hour of Adjacent Street Traffic  
One Hour Between 7 and 9 a.m.

Setting/Location:  
General Urban/Suburban

Trip Type:  
Vehicle

Number of Studies:  
36

Avg. 1000 Sq. Ft. GFA:  
448

Average Rate:  
0.17

Range of Rates:  
0.02 - 1.93

Standard Deviation:  
0.19

Fitted Curve Equation:  
 $T = 0.12(X) + 23.62$

R<sup>2</sup>:  
0.69

Directional Distribution:  
77% entering, 23% exiting

Calculated Trip Ends:  
Average Rate: 2 (Total), 2 (Entry), 0 (Exit)  
Fitted Curve: 25 (Total), 19 (Entry), 6 (Exit)

# PM Peak Hour (vehicles)

## Graph Look Up

**Query** Filter

DATA SOURCE:  
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:  
150

LAND USE GROUP:  
(100-199) Industrial

LAND USE:  
150 - Warehousing

LAND USE SUBCATEGORY:  
All Sites

SETTING/LOCATION:  
General Urban/Suburban

INDEPENDENT VARIABLE (IV):  
1000 Sq. Ft. GFA

TIME PERIOD:  
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:  
Vehicle

ENTER IV VALUE TO CALCULATE TRIP #:  
12 Calculate

**Data Plot and Equation**

X = 1000 Sq. Ft. GFA

Reset Zoom Restore

X Study Site — Fitted Curve - - - Average Rate

**DATA STATISTICS**

Land Use:  
Warehousing (150) [Click for Description and Data Plots](#)

Independent Variable:  
1000 Sq. Ft. GFA

Time Period:  
Weekday  
Peak Hour of Adjacent Street Traffic  
One Hour Between 4 and 6 p.m.

Setting/Location:  
General Urban/Suburban

Trip Type:  
Vehicle

Number of Studies:  
49

Avg. 1000 Sq. Ft. GFA:  
400

Average Rate:  
0.18

Range of Rates:  
0.01 - 1.80

Standard Deviation:  
0.18

Fitted Curve Equation:  
 $T = 0.12(X) + 26.48$

R<sup>2</sup>:  
0.65

Directional Distribution:  
28% entering, 72% exiting

Calculated Trip Ends:  
Average Rate: 2 (Total), 1 (Entry), 1 (Exit)  
Fitted Curve: 28 (Total), 8 (Entry), 20 (Exit)

# Trip Generation 12649115, ITE Automobile Care Center (LUC 942): 16,000 ft<sup>2</sup> AM Peak Hour (vehicles)

ITETripGen Web-based App

## Graph Look Up

**Query** Filter

DATA SOURCE:  
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:  
942

LAND USE GROUP:  
(900-999) Services

LAND USE:  
942 - Automobile Care Center

LAND USE SUBCATEGORY:  
All Sites

SETTING/LOCATION:  
General Urban/Suburban

INDEPENDENT VARIABLE (IV):  
1000 Sq. Ft. GFA

TIME PERIOD:  
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:  
Vehicle

ENTER IV VALUE TO CALCULATE TRIP #:  
16 Calculate

### Data Plot and Equation

X = 1000 Sq. Ft. GFA

Reset Zoom Restore

X Study Site      --- Average Rate

### DATA STATISTICS

**Land Use:**  
Automobile Care Center (942) [Click for Description and Data Plots](#)

**Independent Variable:**  
1000 Sq. Ft. GFA

**Time Period:**  
Weekday  
Peak Hour of Adjacent Street Traffic  
One Hour Between 7 and 9 a.m.

**Setting/Location:**  
General Urban/Suburban

**Trip Type:**  
Vehicle

**Number of Studies:**  
6

**Avg. 1000 Sq. Ft. GFA:**  
17

**Average Rate:**  
2.25

**Range of Rates:**  
1.20 - 5.30

**Standard Deviation:**  
1.49

**Fitted Curve Equation:**  
Not Given

**R<sup>2</sup>:**  
\*\*\*\*

**Directional Distribution:**  
66% entering, 34% exiting

**Calculated Trip Ends:**  
Average Rate: 36 (Total), 24 (Entry), 12 (Exit)

# PM Peak Hour (vehicles)

ITETripGen Web-based App

## Graph Look Up

**Query** Filter

DATA SOURCE:  
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:  
942

LAND USE GROUP:  
(900-999) Services

LAND USE:  
942 - Automobile Care Center

LAND USE SUBCATEGORY:  
All Sites

SETTING/LOCATION:  
General Urban/Suburban

INDEPENDENT VARIABLE (IV):  
1000 Sq. Ft. GFA

TIME PERIOD:  
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:  
Vehicle

ENTER IV VALUE TO CALCULATE TRIP #:  
16 Calculate

### Data Plot and Equation

X = 1000 Sq. Ft. GFA

Reset Zoom Restore

X Study Site      — Fitted Curve      --- Average Rate

### DATA STATISTICS

**Land Use:**  
Automobile Care Center (942) [Click for Description and Data Plots](#)

**Independent Variable:**  
1000 Sq. Ft. GFA

**Time Period:**  
Weekday  
Peak Hour of Adjacent Street Traffic  
One Hour Between 4 and 6 p.m.

**Setting/Location:**  
General Urban/Suburban

**Trip Type:**  
Vehicle

**Number of Studies:**  
6

**Avg. 1000 Sq. Ft. GFA:**  
17

**Average Rate:**  
3.11

**Range of Rates:**  
1.87 - 5.65

**Standard Deviation:**  
1.09

**Fitted Curve Equation:**  
 $T = 2.41(X) + 11.83$

**R<sup>2</sup>:**  
0.83

**Directional Distribution:**  
48% entering, 52% exiting

**Calculated Trip Ends:**  
Average Rate: 50 (Total), 24 (Entry), 26 (Exit)  
Fitted Curve: 50 (Total), 24 (Entry), 26 (Exit)

# **Appendix E**

**Synchro Report**

Lanes, Volumes, Timings  
3: Coleraine Drive & Site Access










GHD  
10/09/2024



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕↗			↕↖
Traffic Volume (vph)	0	21	683	63	0	670
Future Volume (vph)	0	21	683	63	0	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0		0.0	0.0	
Storage Lanes	0	1		0	0	
Taper Length (m)	2.5				2.5	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.865	0.987			
Flt Protected						
Satd. Flow (prot)	0	1629	3532	0	0	3579
Flt Permitted						
Satd. Flow (perm)	0	1629	3532	0	0	3579
Link Speed (k/h)	40		70			70
Link Distance (m)	94.2		154.9			145.4
Travel Time (s)	8.5		8.0			7.5
Confl. Peds. (#/hr)	1					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	23	742	68	0	728
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	23	810	0	0	728
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	30.9%			ICU Level of Service A		
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis  
 3: Coleraine Drive & Site Access

GHD  
 10/09/2024

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	21	683	63	0	670
Future Volume (Veh/h)	0	21	683	63	0	670
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	23	742	68	0	728
Pedestrians			1			
Lane Width (m)			3.7			
Walking Speed (m/s)			1.1			
Percent Blockage			0			
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1141	405			810	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1141	405			810	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	194	595			812	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	23	495	315	364	364	
Volume Left	0	0	0	0	0	
Volume Right	23	0	68	0	0	
cSH	595	1700	1700	1700	1700	
Volume to Capacity	0.04	0.29	0.19	0.21	0.21	
Queue Length 95th (m)	0.9	0.0	0.0	0.0	0.0	
Control Delay (s)	11.3	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.3	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			30.9%		ICU Level of Service	A
Analysis Period (min)			15			










Lanes, Volumes, Timings  
3: Coleraine Drive & Site Access



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕↗			↕↖
Traffic Volume (vph)	0	67	572	36	0	779
Future Volume (vph)	0	67	572	36	0	779
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0		0.0	0.0	
Storage Lanes	0	1		0	0	
Taper Length (m)	2.5				2.5	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.865	0.991			
Flt Protected						
Satd. Flow (prot)	0	1629	3546	0	0	3579
Flt Permitted						
Satd. Flow (perm)	0	1629	3546	0	0	3579
Link Speed (k/h)	40		70			70
Link Distance (m)	94.2		154.9			145.4
Travel Time (s)	8.5		8.0			7.5
Confl. Peds. (#/hr)	1					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	73	622	39	0	847
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	73	661	0	0	847
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	27.8%			ICU Level of Service A		
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis  
 3: Coleraine Drive & Site Access

GHD  
 10/09/2024

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	67	572	36	0	779
Future Volume (Veh/h)	0	67	572	36	0	779
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	73	622	39	0	847
Pedestrians			1			
Lane Width (m)			3.7			
Walking Speed (m/s)			1.1			
Percent Blockage			0			
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1066	330			661	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1066	330			661	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	89			100	
cM capacity (veh/h)	217	665			923	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	73	415	246	424	424	
Volume Left	0	0	0	0	0	
Volume Right	73	0	39	0	0	
cSH	665	1700	1700	1700	1700	
Volume to Capacity	0.11	0.24	0.14	0.25	0.25	
Queue Length 95th (m)	2.8	0.0	0.0	0.0	0.0	
Control Delay (s)	11.1	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.1	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			27.8%		ICU Level of Service	A
Analysis Period (min)			15			

# **Appendix F**

**Parking By-law Requirement**



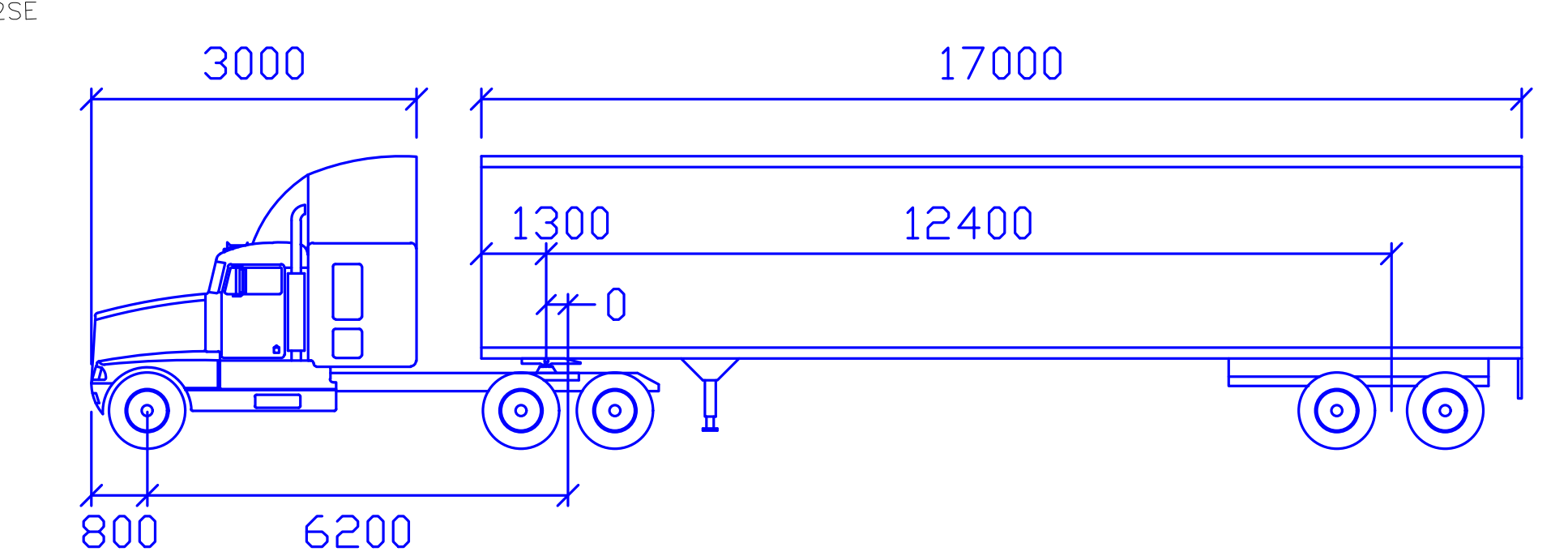
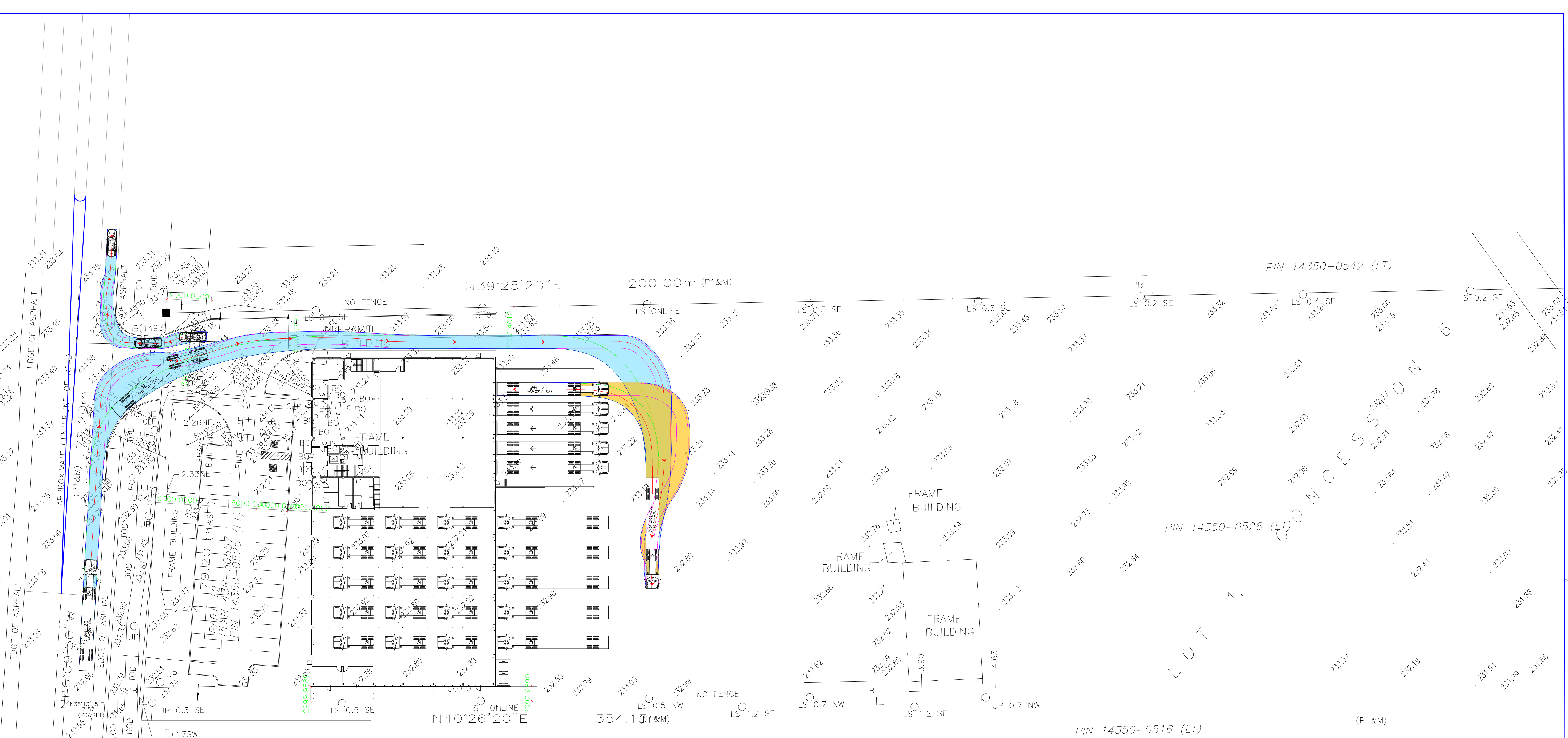
<i>Artist Studio &amp; Gallery</i>	1 <i>parking space</i> per 100 m <sup>2</sup> of <i>net floor area</i> or portion thereof where no retail; 1 per 60 m <sup>2</sup> or portion thereof where retail component
<i>Bakery</i>	1 <i>parking space</i> per 20 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Business Office</i>	1 <i>parking space</i> per 30 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Cannabis-Related Use – Indoor</i>	1 <i>parking space</i> per 100 m <sup>2</sup> of <i>gross floor area</i> or portion thereof
<i>Clinic</i>	1 <i>parking space</i> per 16.5 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Club</i>	1 <i>parking space</i> per 15 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Community Centre</i>	1 <i>parking space</i> per 15 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Day Nursery</i>	1 <i>parking space</i> per staff member + 1 <i>parking space</i> per 30 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Dry Cleaning or Laundry Plant</i>	1 <i>parking space</i> per 20 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Dry Cleaning or Laundry Outlet</i>	1 <i>parking space</i> per 20 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Factory Outlet</i>	1 <i>parking space</i> per 20 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Financial Institution</i>	1 <i>parking space</i> per 25 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Fitness Centre</i>	1 <i>parking space</i> per 15 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Funeral Home</i>	1 <i>parking space</i> per 20 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Golf Course</i>	12 <i>parking spaces</i> per hole
<i>Hospital</i>	1.5 <i>parking spaces</i> per bed
<i>Hotel</i>	1 <i>parking space</i> per <i>guest room</i> , plus 1 <i>parking space</i> per 10 m <sup>2</sup> or portion thereof of <i>net floor area</i> devoted to meeting, dining and banquet facilities.
<i>Industrial Hemp-Related Use - Indoor</i>	1 <i>parking space</i> per 100m <sup>2</sup> of <i>gross floor area</i> or portion thereof
<i>Industrial Use</i>	<p>a) If accessory office and retail <i>net floor areas</i> are 15% or less of the total <i>net floor area</i>:</p> <ul style="list-style-type: none"> <li>• Up to 5,000 m<sup>2</sup> – 1 <i>parking space</i> per 60 m<sup>2</sup> <i>net floor area</i> or portion thereof</li> <li>• 5,000 to 10,000 m<sup>2</sup> – 83 <i>parking spaces</i>, plus 1 <i>parking space</i> per 90 m<sup>2</sup> of <i>net floor area</i> or portion thereof over 5,000 m<sup>2</sup></li> <li>• Over 10,000 m<sup>2</sup> – 139 <i>parking spaces</i>, plus 1 <i>parking space</i> per 170 m<sup>2</sup> or portion thereof of <i>net floor area</i> or portion thereof over 10,000 m<sup>2</sup></li> </ul>

<i>Place of Worship</i>	the greater of 1 <i>parking space</i> per 6 persons design capacity of the worship area or 1 <i>parking space</i> for 10 m <sup>2</sup> of <i>net floor area</i> or portion thereof of the worship areas and any <i>accessory use</i> areas, excluding residential uses.
<i>Printing &amp; Processing Service Shop</i>	1 <i>parking space</i> per 20 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Recreational Use</i>	30 <i>parking spaces</i> per ball field 30 <i>parking spaces</i> per soccer field 4 <i>parking spaces</i> per tennis court
<i>Research Establishment</i>	1 <i>parking space</i> per 30 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Restaurant</i>	1 <i>parking space</i> per 15 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Retail Store</i>	1 <i>parking space</i> per 20 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Sales Service and Repair Shop</i>	1 <i>parking space</i> per 20 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>School</i>	Elementary – 1 <i>parking space</i> per 100 m <sup>2</sup> of <i>gross floor area</i> or portion thereof and 1 <i>parking space</i> per portable  Secondary – 1.5 <i>parking spaces</i> per 100 m <sup>2</sup> of <i>gross floor area</i> or portion thereof and 1 <i>parking space</i> per portable classroom
<i>Sports Arena</i>	1 <i>parking space</i> per 15 m <sup>2</sup> of <i>net floor area</i> or portion thereof
<i>Training Facility</i>	1 <i>parking space</i> per 30 m <sup>2</sup> of <i>net floor area</i> or portion thereof
	a) If associated office or retail <i>net floor areas</i> are 15% or less of the total <i>net floor area</i> :
<i>Transportation Depot</i>	<ul style="list-style-type: none"> <li>Up to 7,000 m<sup>2</sup> – 1 <i>parking space</i> per 90 m<sup>2</sup> <i>net floor area</i> or portion thereof 7,000 to 20,000 m<sup>2</sup> – 78 <i>parking spaces</i>, plus 1 <i>parking space</i> per 145 m<sup>2</sup> of <i>net floor area</i> or portion thereof over 7000 m<sup>2</sup></li> <li>Over 20,000 m<sup>2</sup> – 168 <i>parking spaces</i>, plus 1 <i>parking space</i> per 170 m<sup>2</sup> of <i>net floor area</i> or portion thereof over 20,000 m<sup>2</sup></li> </ul> <p>b) If associated office or retail <i>net floor areas</i> are more than 15% of the total <i>net floor area</i>:</p> <p>In addition to the standards contained above in (a), the applicable <i>net floor areas</i> exceeding 15% shall be subject to the applicable office or retail parking requirements</p>
	a) If associated office or retail <i>net floor areas</i> are 15% or less of the total <i>net floor area</i> :
<i>Warehouse</i>	<ul style="list-style-type: none"> <li>Up to 7,000 m<sup>2</sup> – 1 <i>parking space</i> per 90 m<sup>2</sup> <i>net floor area</i> or portion thereof 7,000 to 20,000 m<sup>2</sup> – 78 <i>parking spaces</i>, plus 1 <i>parking space</i> per 145 m<sup>2</sup> of <i>net floor area</i> or portion thereof over 7000 m<sup>2</sup></li> </ul>

# **Appendix G**

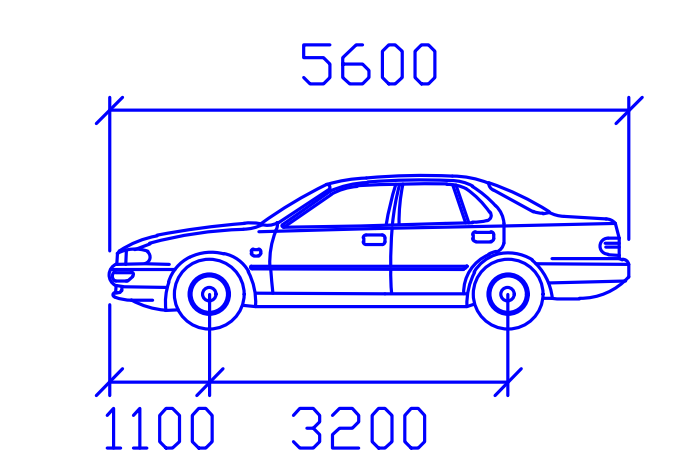
## **Vehicle Sweep Paths**

COLERAINE DRIVE  
ORIGINAL ROAD ALLOWANCE BETWEEN CONCESSIONS 5 & 6



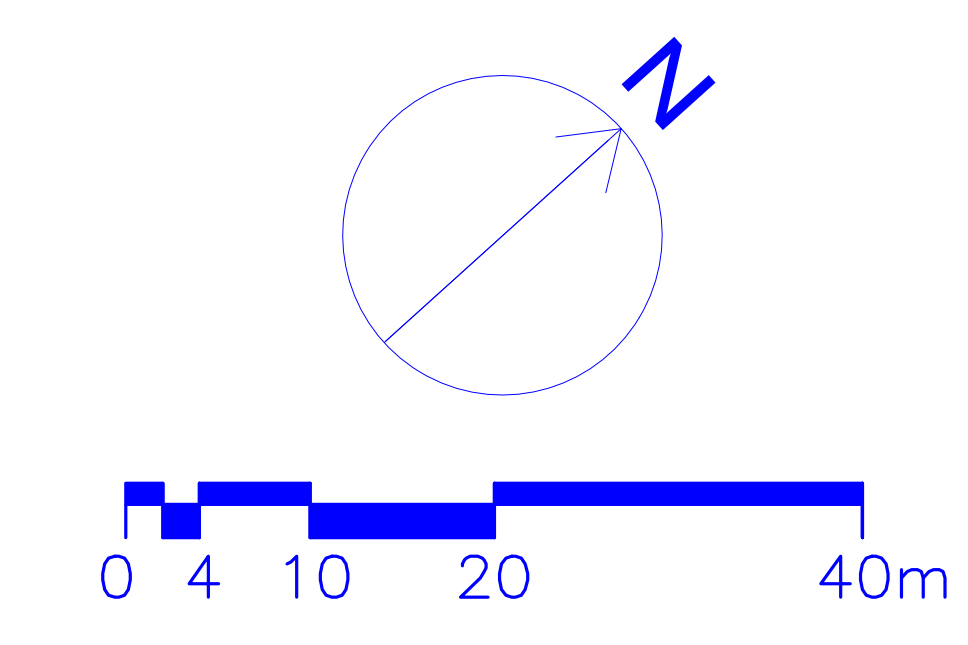
WB-20

Tractor Width	: 2600	Lock to Lock Time	: 6.0
Trailer Width	: 2600	Steering Angle	: 28.2
Tractor Track	: 2600	Articulating Angle	: 70.0
Trailer Track	: 2600		



P

Width	: 2000
Track	: 2000
Lock to Lock Time	: 6.0
Steering Angle	: 35.9



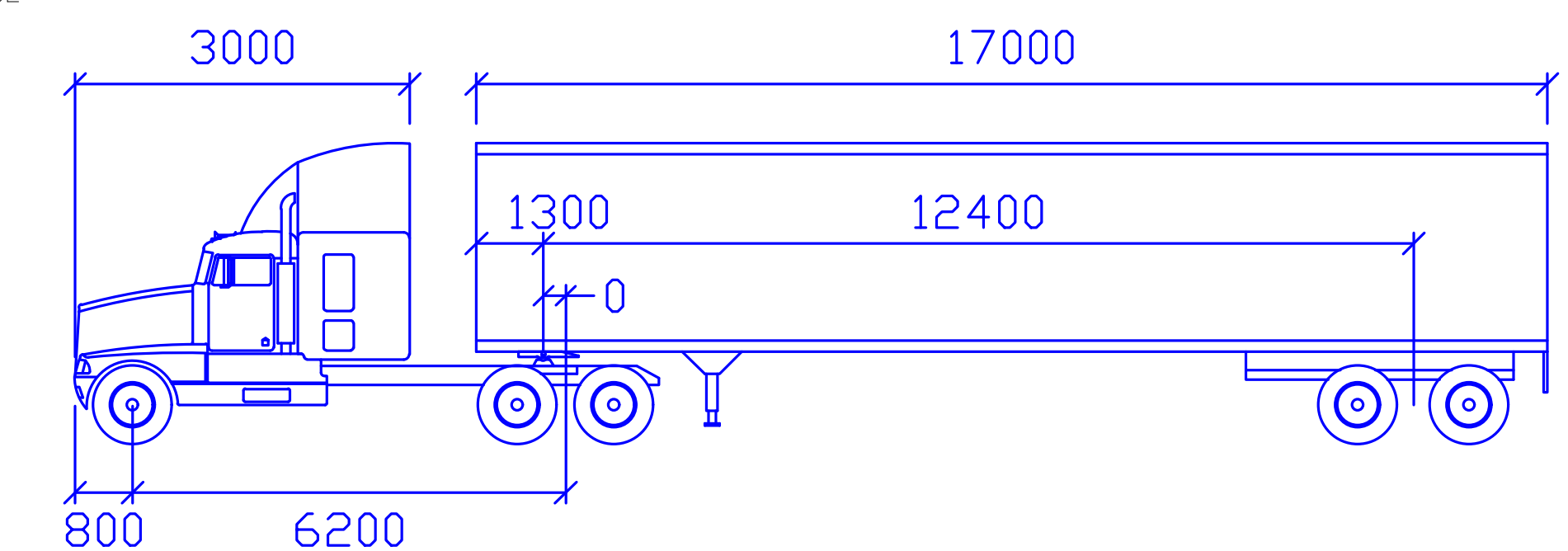
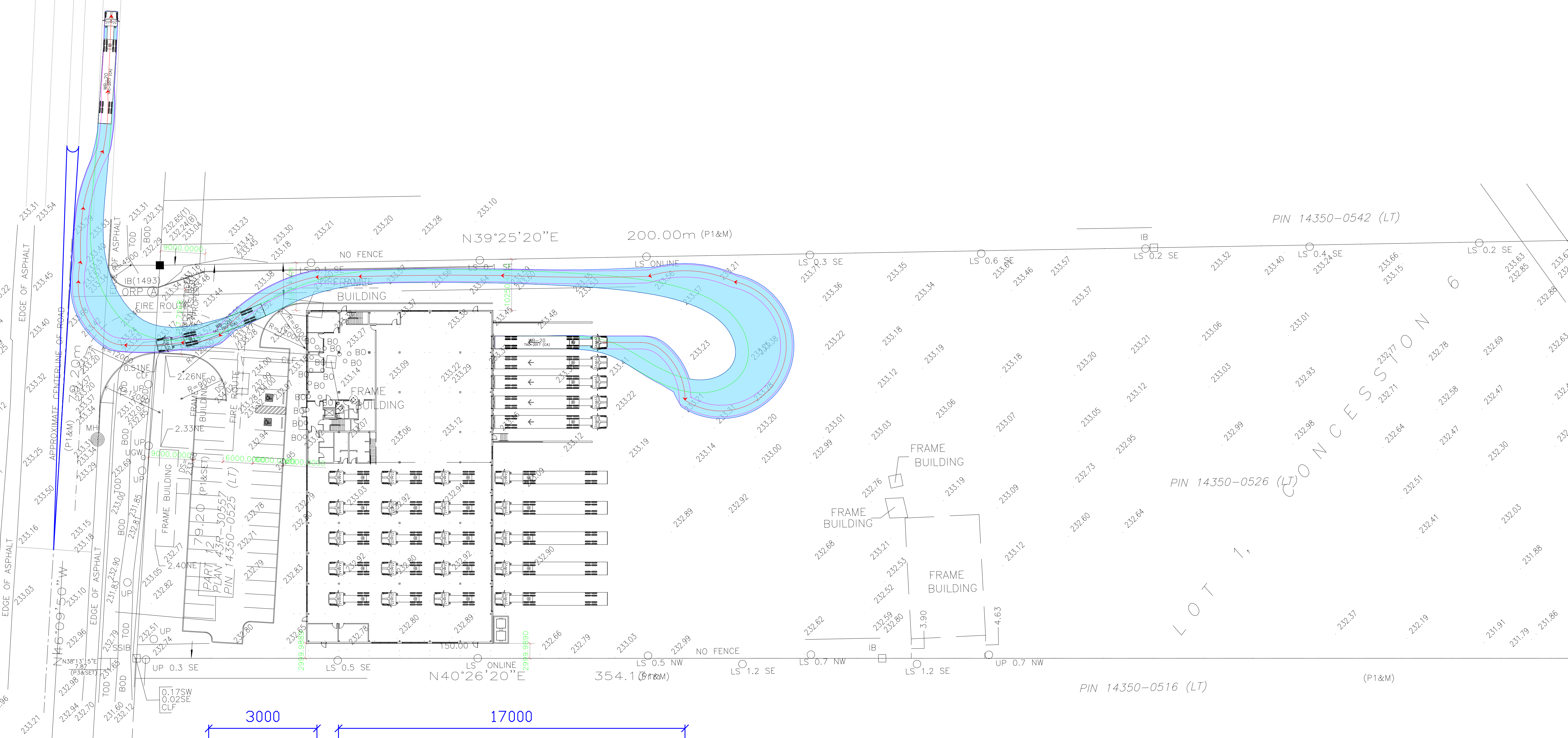
# CIRCULATION REVIEW - 12155 COLERAINE DRIVE, BOLTON

## WB-20 Tractor-Semitrailer (IN1) - SITE ACCESS / COLERAINE DRIVE

Figure AT-1	
Project No.	12649115
Date	Sep. 12, 2024

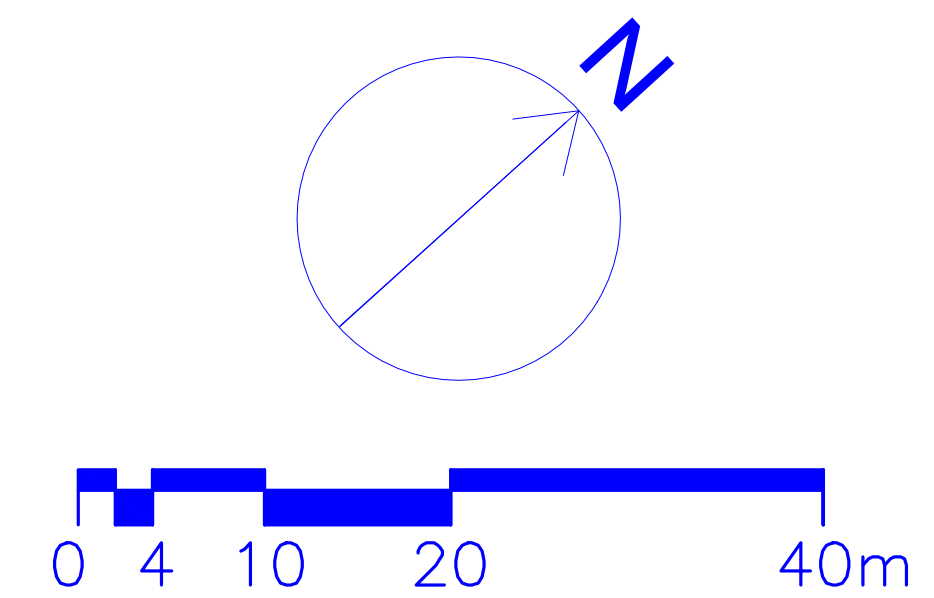
**COLERAINE DRIVE**

ORIGINAL ROAD ALLOWANCE BETWEEN CONCESSIONS 5 & 6  
PIN 14350-0170 (LT)



WB-20

	mm		
Tractor Width	: 2600	Lock to Lock Time	: 6.0
Trailer Width	: 2600	Steering Angle	: 28.2
Tractor Track	: 2600	Articulating Angle	: 70.0
Trailer Track	: 2600		

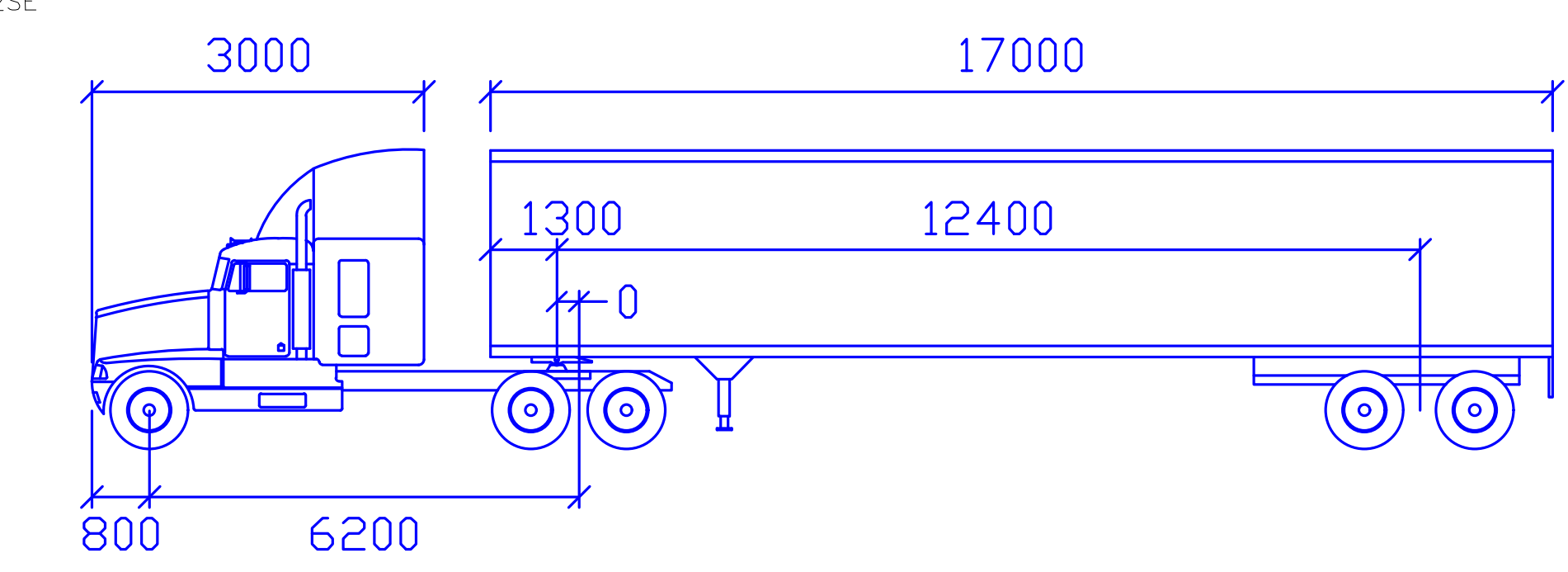
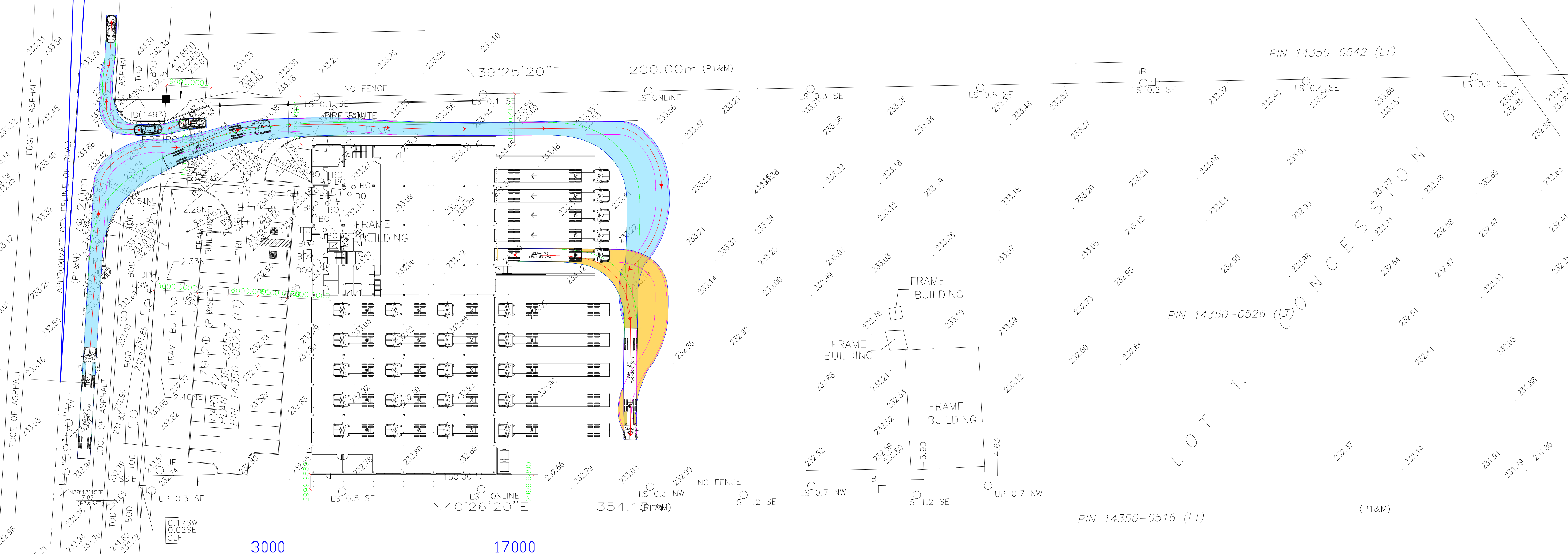


**CIRCULATION REVIEW - 12155 COLERAINE DRIVE, BOLTON**  
**WB-20 Tractor-Semitrailer (OUT1) - SITE ACCESS / COLERAINE DRIVE**

<b>Figure AT-2</b>	
Project No.	12649115
Date	Sep. 12, 2024

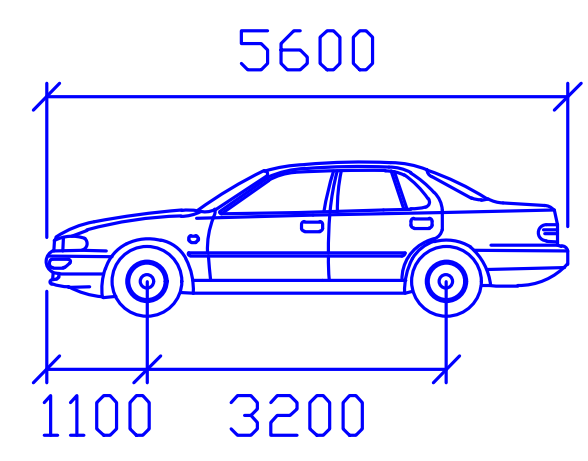
**COLERAINE DRIVE**

ORIGINAL ROAD ALLOWANCE BETWEEN CONCESSIONS 5 & 6  
PIN 14350-0170 (LT)



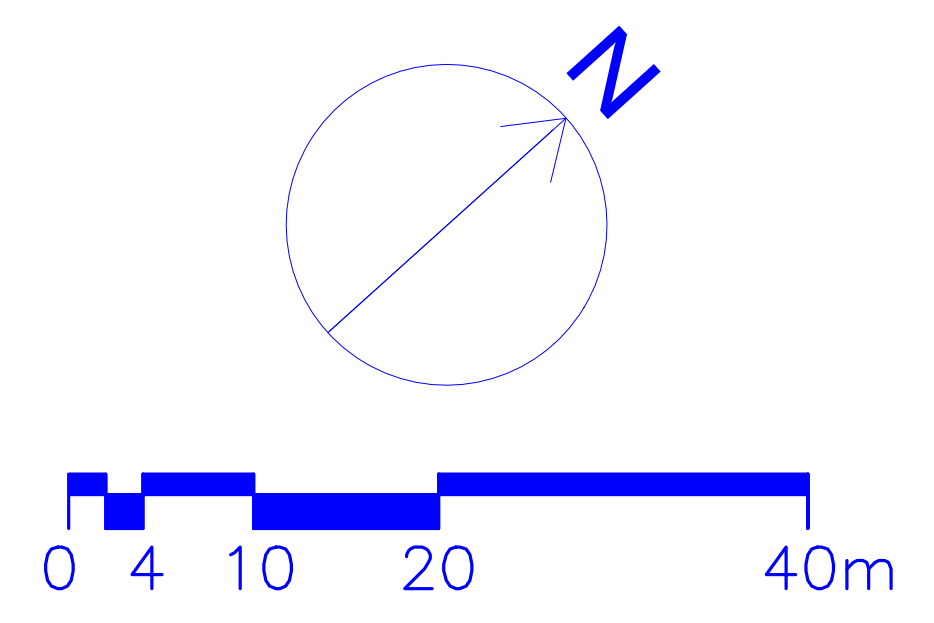
WB-20

Tractor Width	: 2600	Lock to Lock Time	: 6.0
Trailer Width	: 2600	Steering Angle	: 28.2
Tractor Track	: 2600	Articulating Angle	: 70.0
Trailer Track	: 2600		



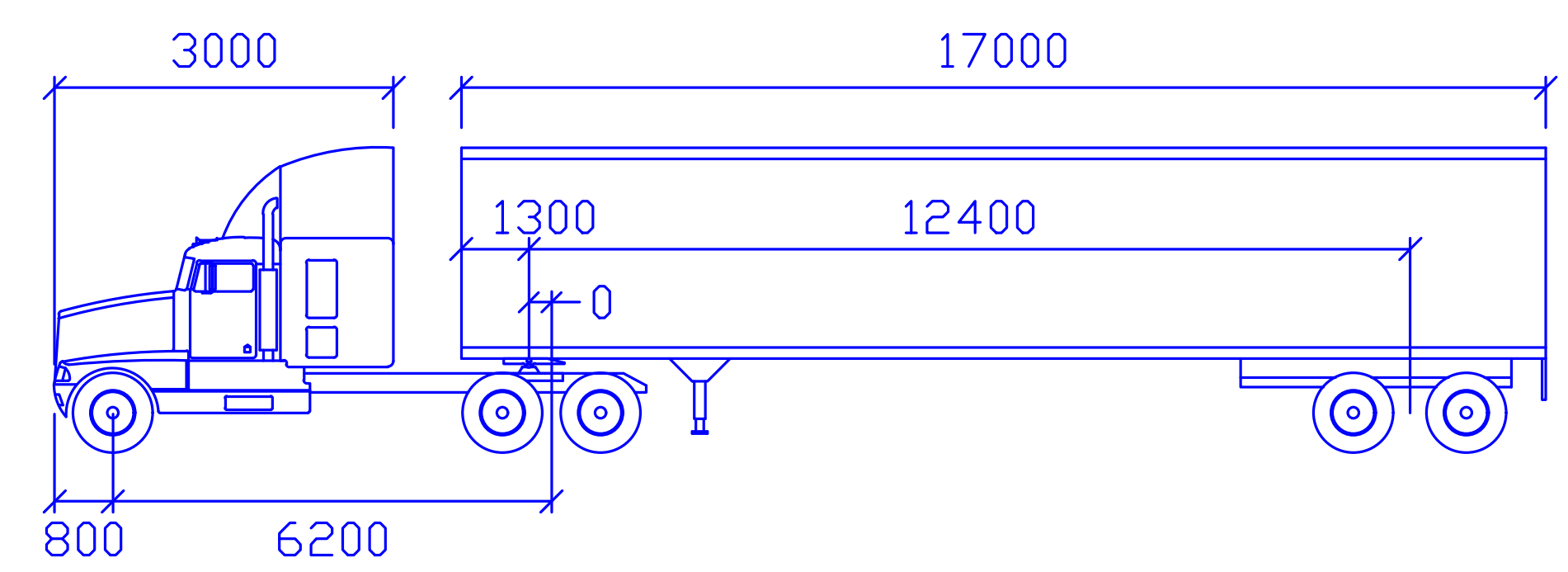
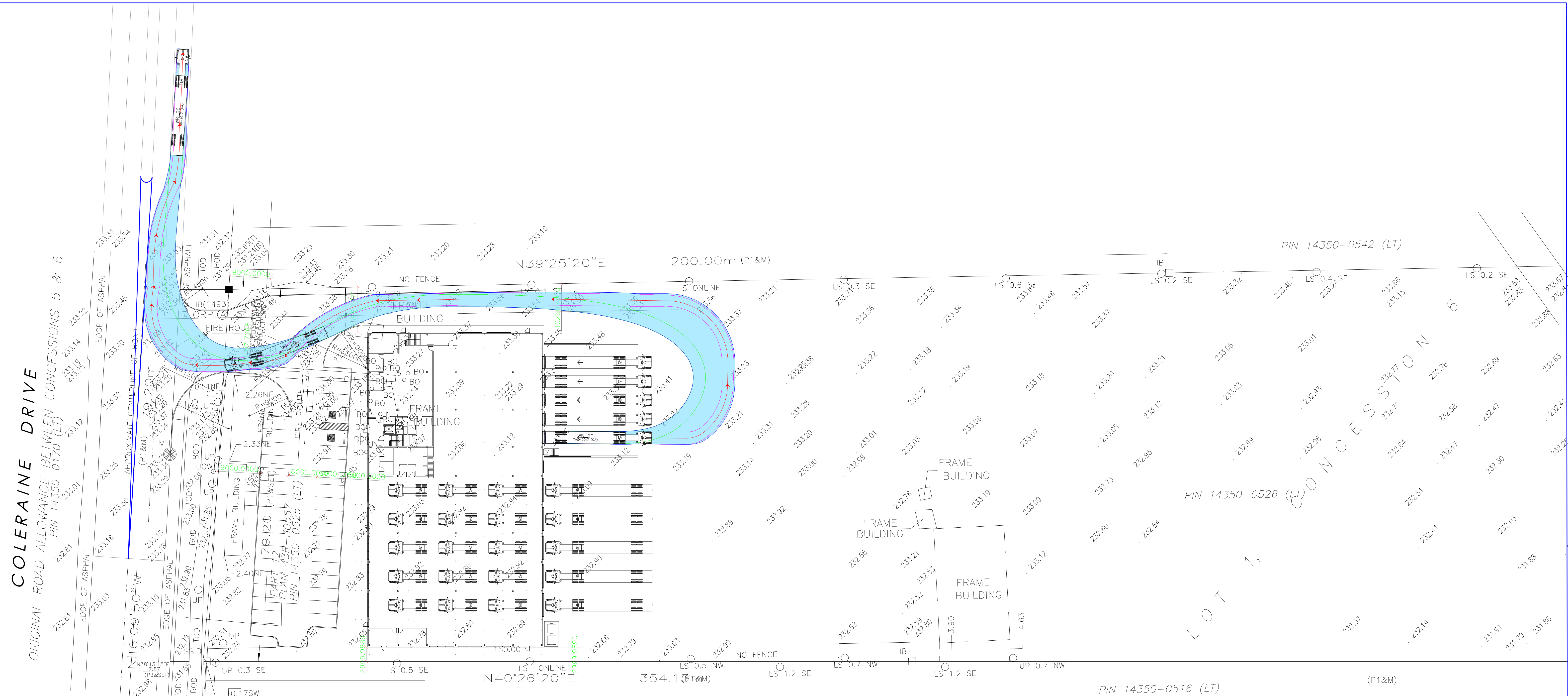
P

Width	: 2000
Track	: 2000
Lock to Lock Time	: 6.0
Steering Angle	: 35.9



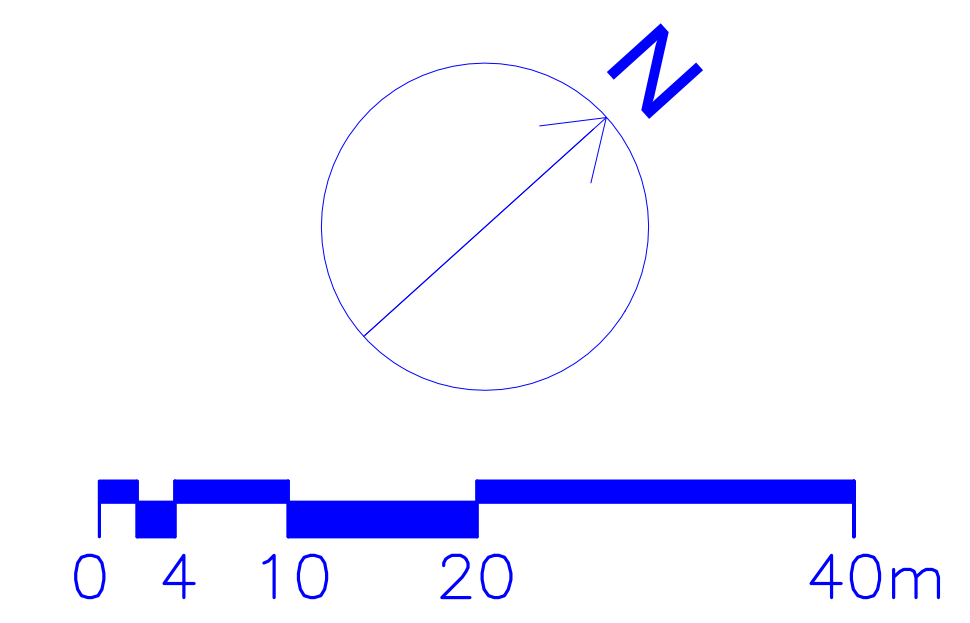
**CIRCULATION REVIEW - 12155 COLERAINE DRIVE, BOLTON**  
**WB-20 Tractor-Semitrailer (IN2) - SITE ACCESS / COLERAINE DRIVE**

<b>Figure AT-3</b>	
Project No.	12649115
Date	Sep. 12, 2024



WB-20

mm			
Tractor Width	: 2600	Lock to Lock Time	: 6.0
Trailer Width	: 2600	Steering Angle	: 28.2
Tractor Track	: 2600	Articulating Angle	: 70.0
Trailer Track	: 2600		



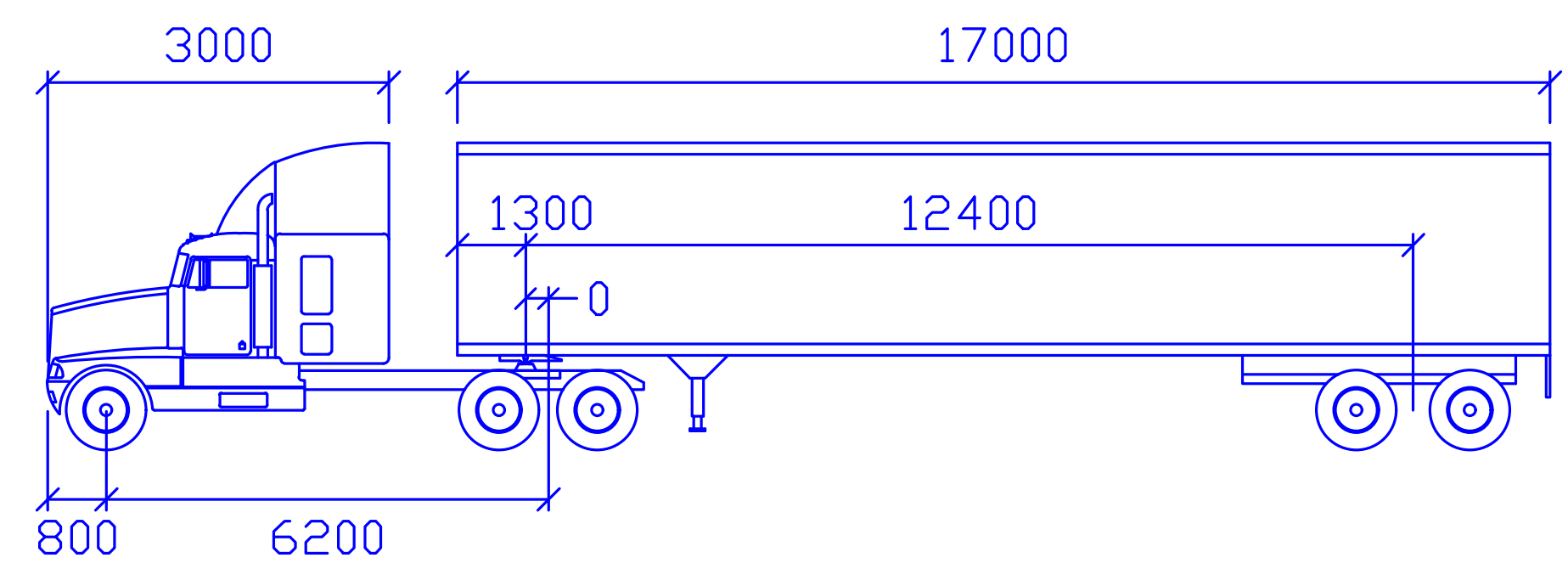
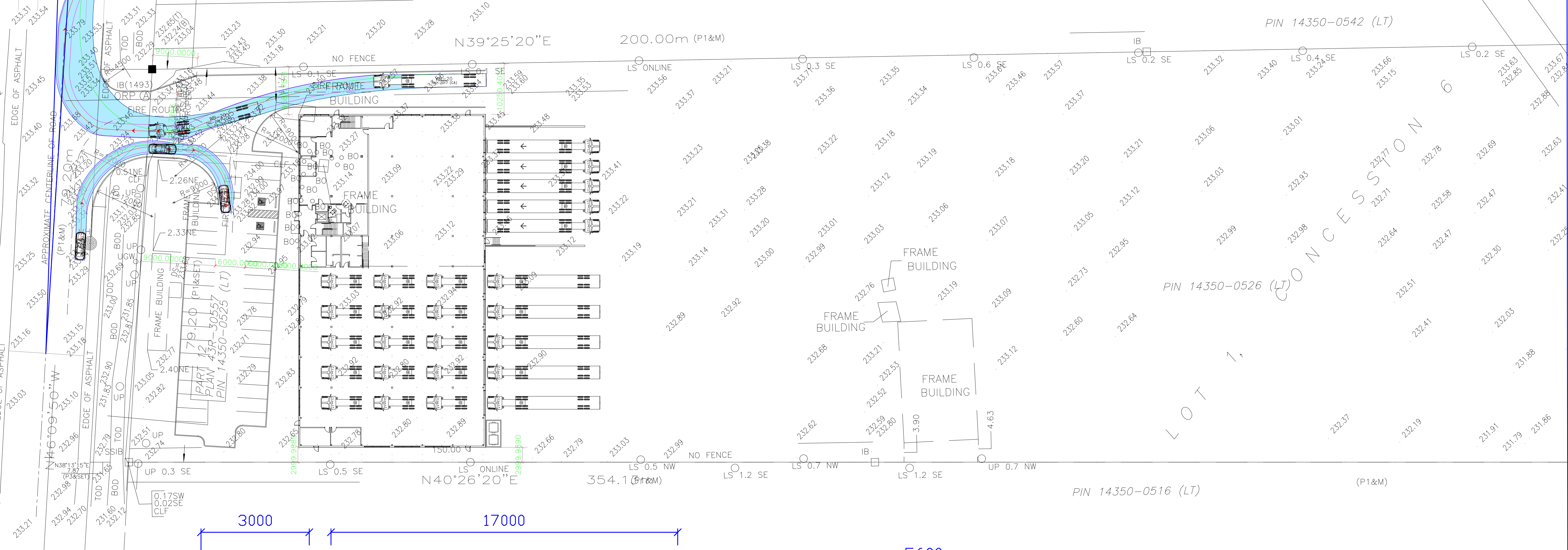
# CIRCULATION REVIEW - 12155 COLERAINE DRIVE, BOLTON

## WB-20 Tractor-Semitrailer (OUT2) - SITE ACCESS / COLERAINE DRIVE

Figure AT-4	
Project No.	12649115
Date	Sep. 12, 2024

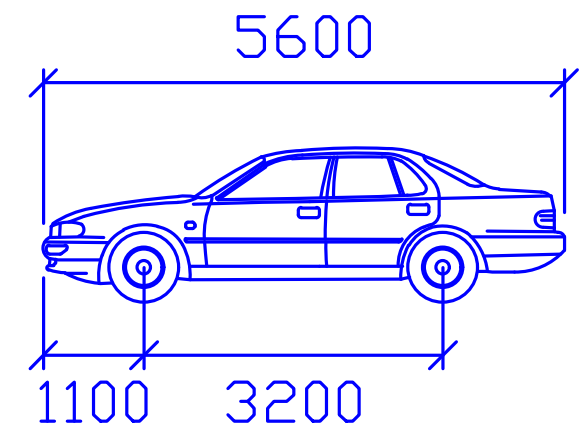
**COLERAINE DRIVE**

ORIGINAL ROAD ALLOWANCE BETWEEN CONCESSIONS 5 & 6  
PIN 14350-0170 (LT)



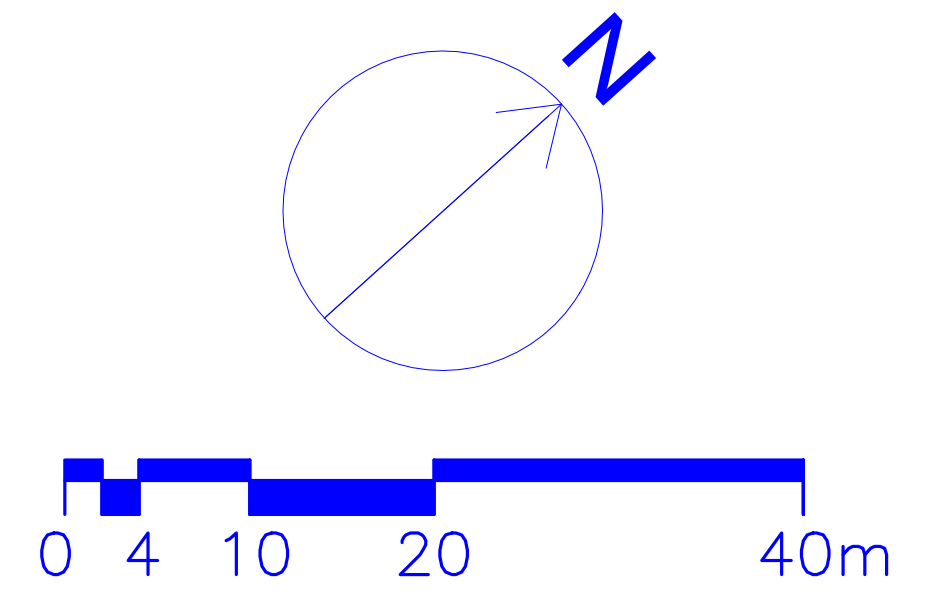
WB-20

mm	
Tractor Width	: 2600
Trailer Width	: 2600
Tractor Track	: 2600
Trailer Track	: 2600
Lock to Lock Time	: 6.0
Steering Angle	: 28.2
Articulating Angle	: 70.0



P

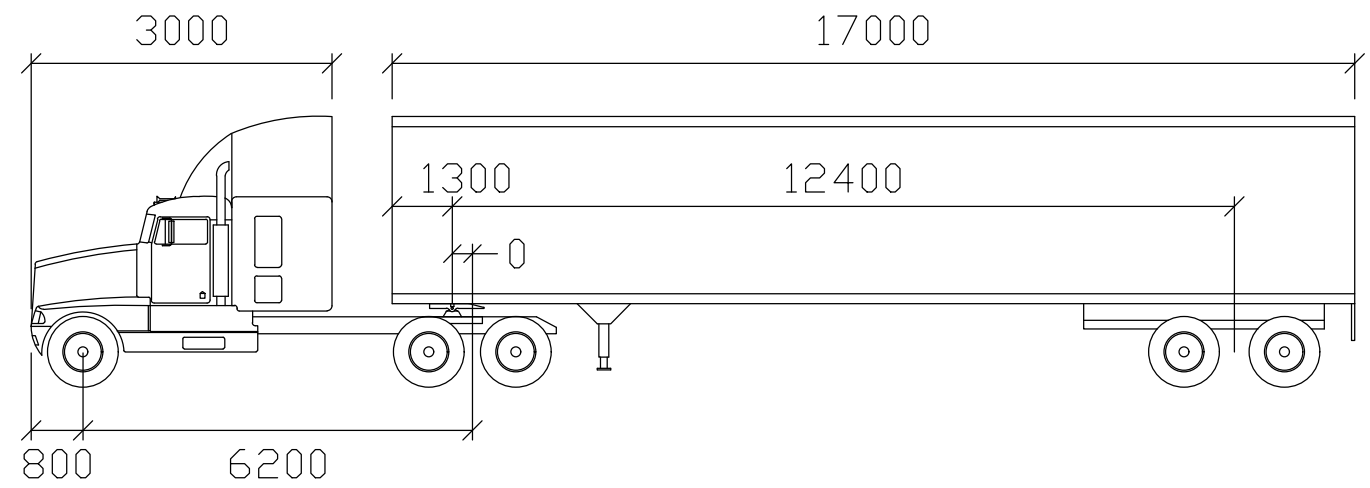
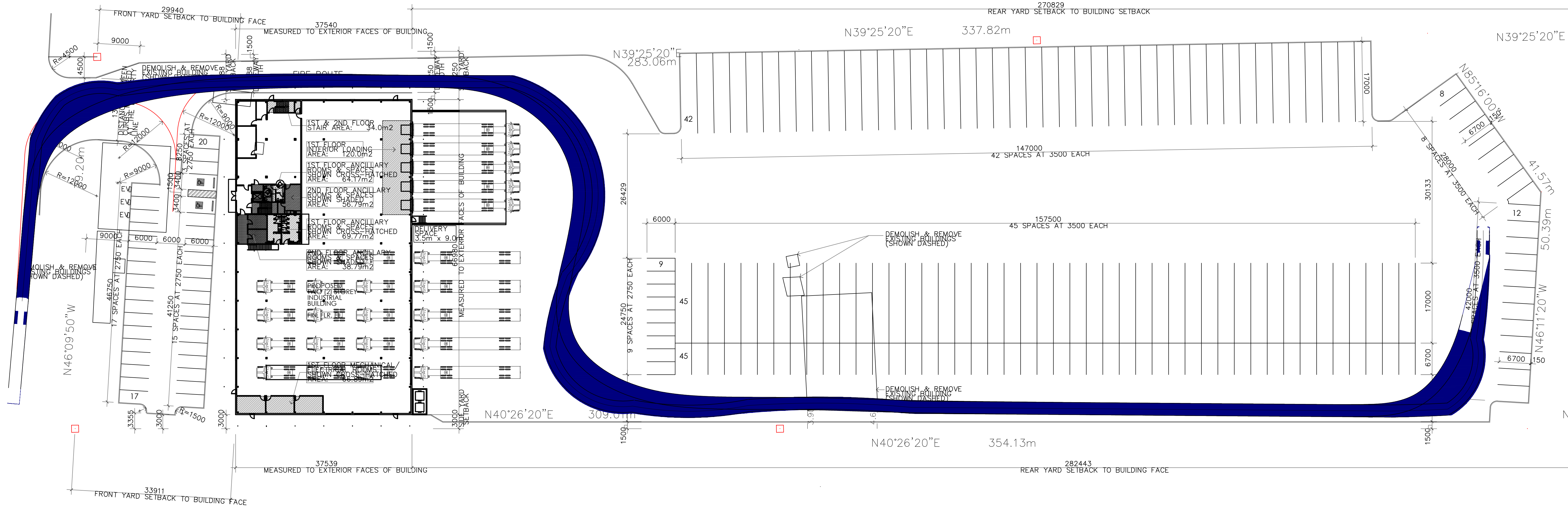
mm	
Width	: 2000
Track	: 2000
Lock to Lock Time	: 6.0
Steering Angle	: 35.9



**CIRCULATION REVIEW - 12155 COLERAINE DRIVE, BOLTON**  
**WB-20 Tractor-Semitrailer (OUT3) - SITE ACCESS / COLERAINE DRIVE**

<b>Figure AT-5</b>	
<b>Project No.</b>	<b>12649115</b>
<b>Date</b>	<b>Sep. 12, 2024</b>





WB-20

Tractor Width	: 2600	Lock to Lock Time	: 6.0
Trailer Width	: 2600	Steering Angle	: 28.2
Tractor Track	: 2600	Articulating Angle	: 70.0
Trailer Track	: 2600		

# Circulation Review - 12155 Coleraine Drive, Bolton

## WB-20 Tractor-Semitrailer (Access)

Figure AT - 1

Project No. 12649115

Date September 24, 2024

270829

REAR YARD SETBACK TO BUILDING SETBACK

N39°25'20"E

337.82m

N39°25'20"E

54.76m

N85°16'00"W  
26.39m

147000  
42 SPACES AT 3500 EACH

157500  
45 SPACES AT 3500 EACH

DEMOLISH & REMOVE  
EXISTING BUILDINGS  
(SHOWN DASHED)

DEMOLISH & REMOVE  
EXISTING BUILDING  
(SHOWN DASHED)

N40°26'20"E

354.13m

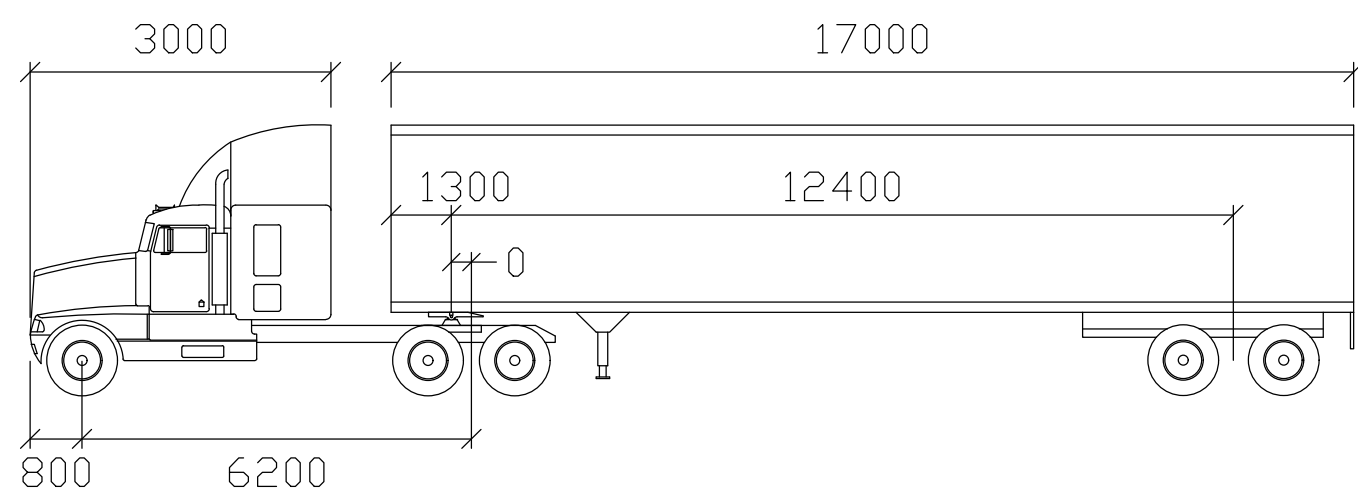
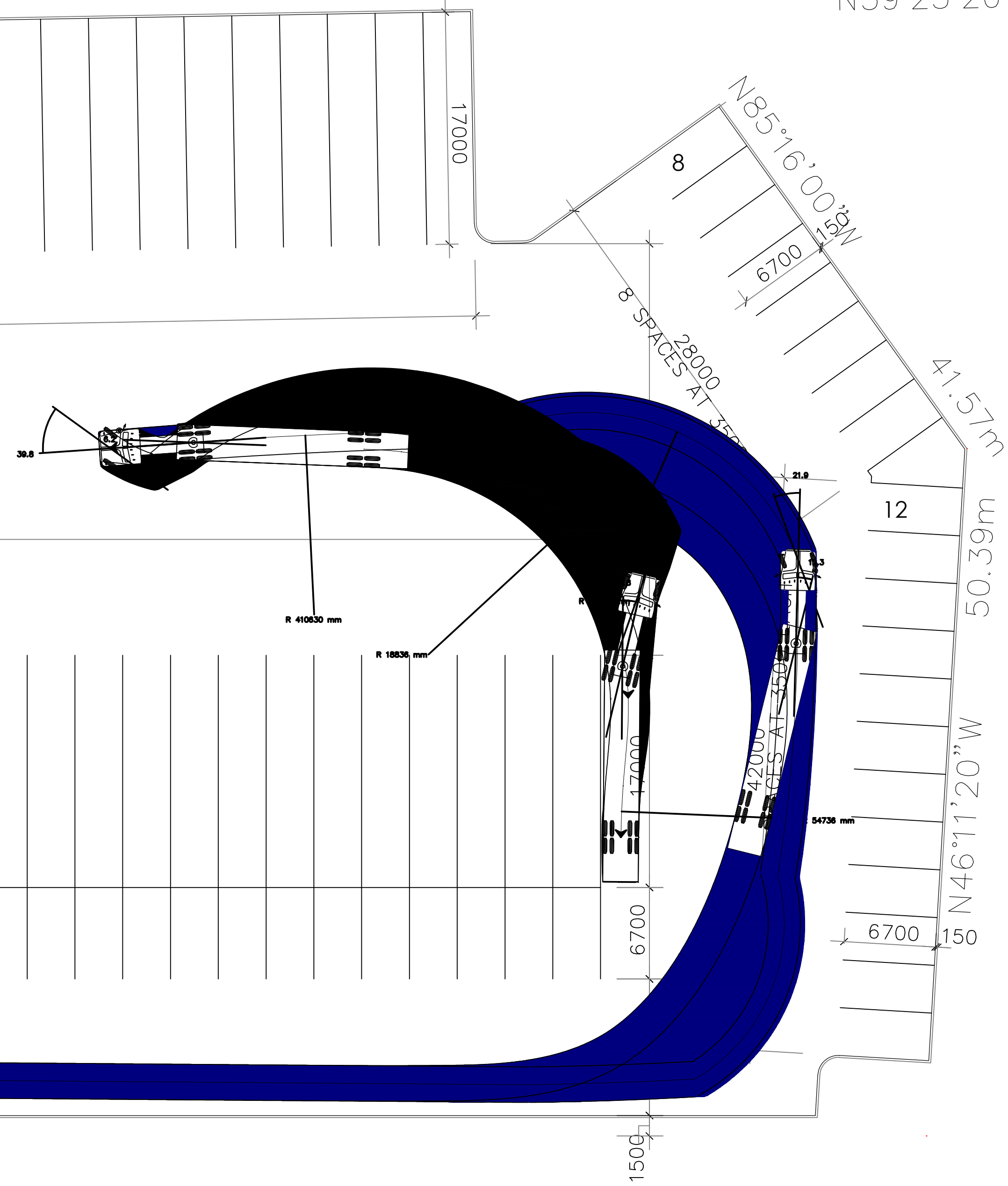
N40°26'20"E

45.12m

N46°11'00"W

40.14m

N46°11'00"W  
23.50m



WB-20

mm			
Tractor Width	: 2600	Lock to Lock Time	: 6.0
Trailer Width	: 2600	Steering Angle	: 28.2
Tractor Track	: 2600	Articulating Angle	: 70.0
Trailer Track	: 2600		

# Circulation Review - 12155 Coleraine Drive, Bolton

## WB-20 Tractor-Semitrailer (In 1)

Figure AT - 2

Project No. 12649115

Date September 24, 2024

270829  
REAR YARD SETBACK TO BUILDING SETBACK

N39°25'20"E 337.82m

N39°25'20"E 54.76m

N85°16'00"W  
26.39m

147000  
42 SPACES AT 3500 EACH

157500  
45 SPACES AT 3500 EACH

DEMOLISH & REMOVE  
EXISTING BUILDINGS  
(SHOWN DASHED)

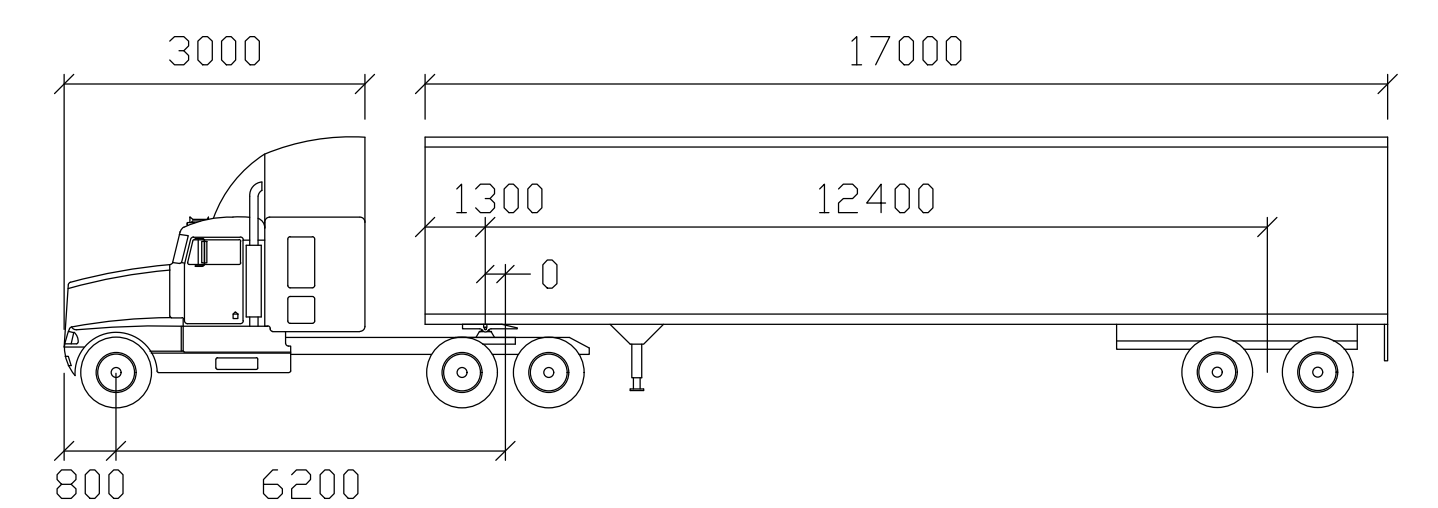
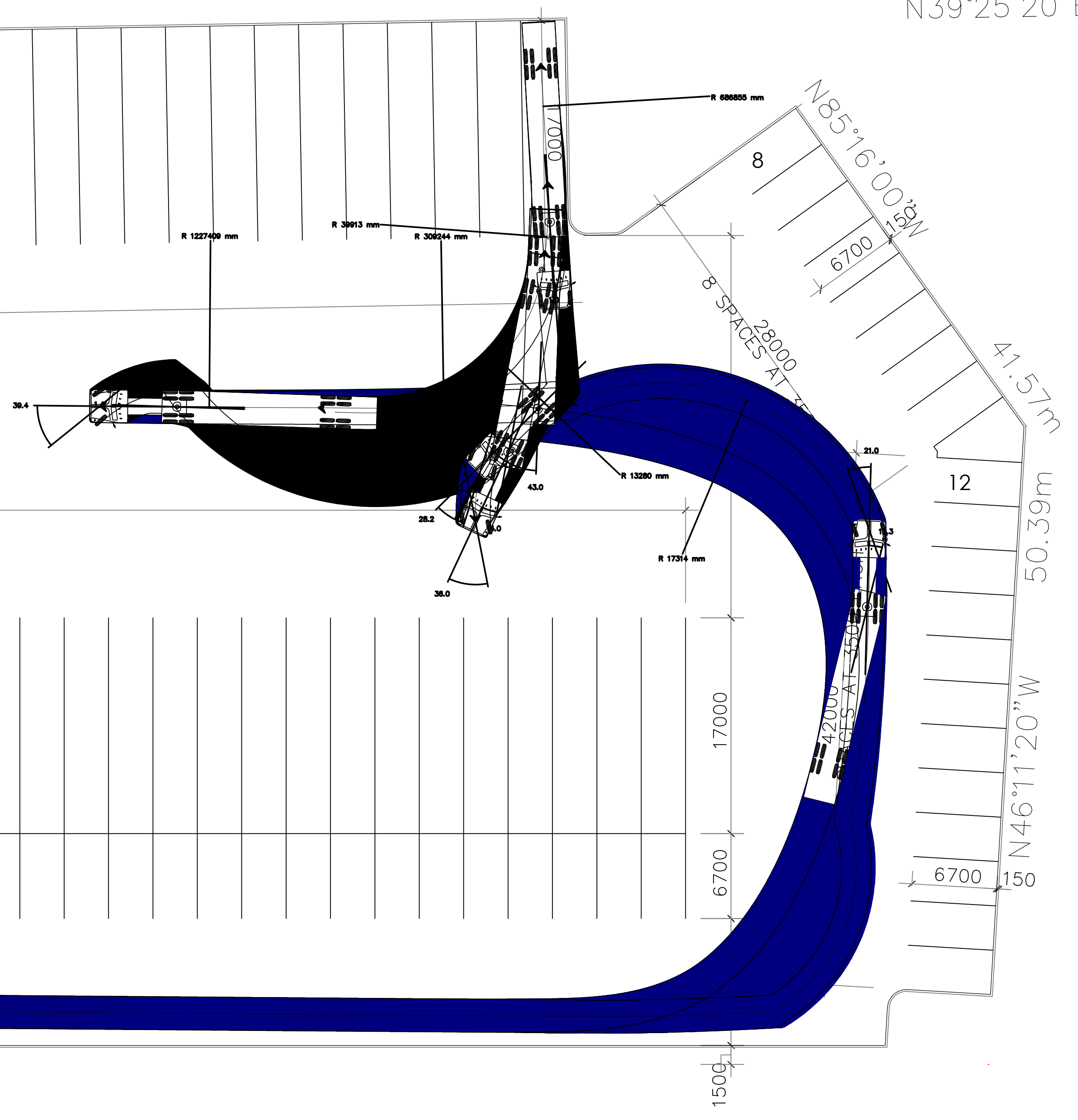
DEMOLISH & REMOVE  
EXISTING BUILDING  
(SHOWN DASHED)

N40°26'20"E 354.13m

N40°26'20"E 45.12m

N46°11'00"W  
40.14m

N46°11'00"W  
23.50m



WB-20

mm			
Tractor Width	: 2600	Lock to Lock Time	: 6.0
Trailer Width	: 2600	Steering Angle	: 28.2
Tractor Track	: 2600	Articulating Angle	: 70.0
Trailer Track	: 2600		

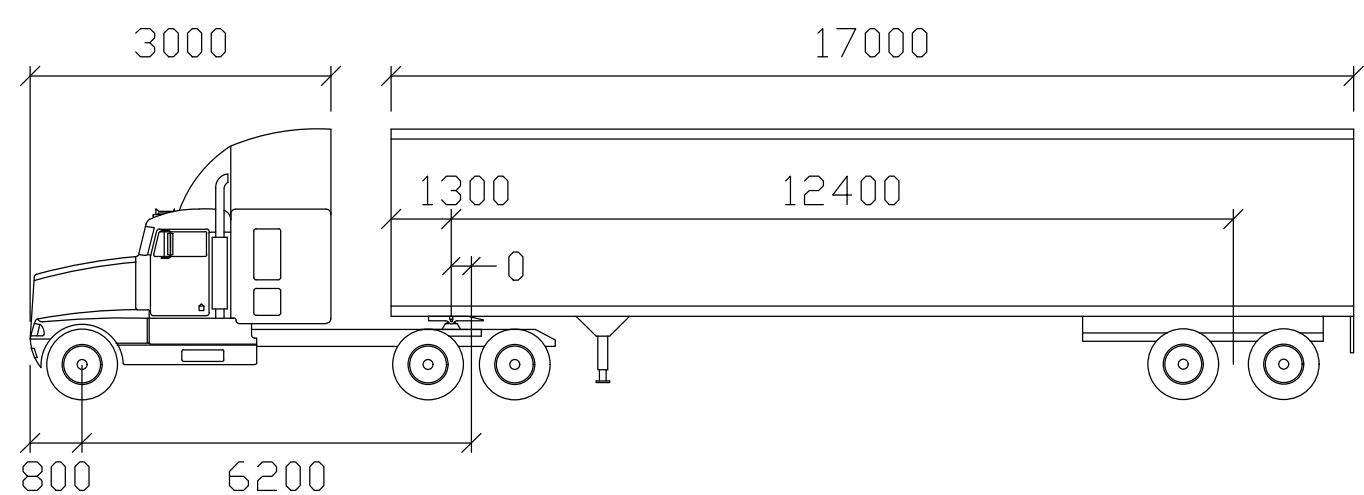
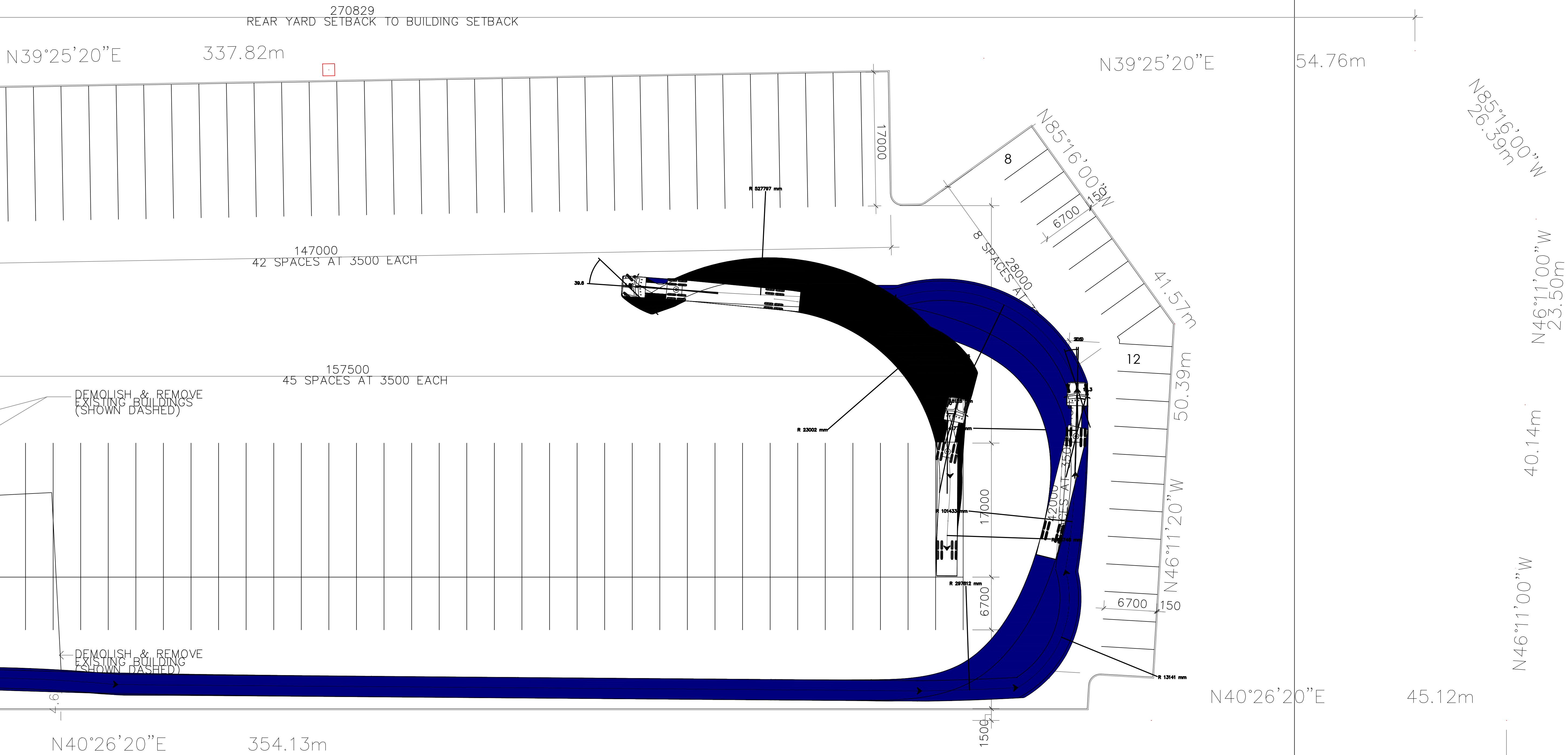
# Circulation Review - 12155 Coleraine Drive, Bolton

## WB-20 Tractor-Semitrailer (In 2)

Figure AT - 3

Project No. 12649115

Date September 24, 2024



WB-20

mm			
Tractor Width	: 2600	Lock to Lock Time	: 6.0
Trailer Width	: 2600	Steering Angle	: 28.2
Tractor Track	: 2600	Articulating Angle	: 70.0
Trailer Track	: 2600		

# Circulation Review - 12155 Coleraine Drive, Bolton

## WB-20 Tractor-Semitrailer (In 3)

Figure AT - 4

Project No. 12649115

Date September 24, 2024

270829  
REAR YARD SETBACK TO BUILDING SETBACK

N39°25'20"E 337.82m

N39°25'20"E 54.76m

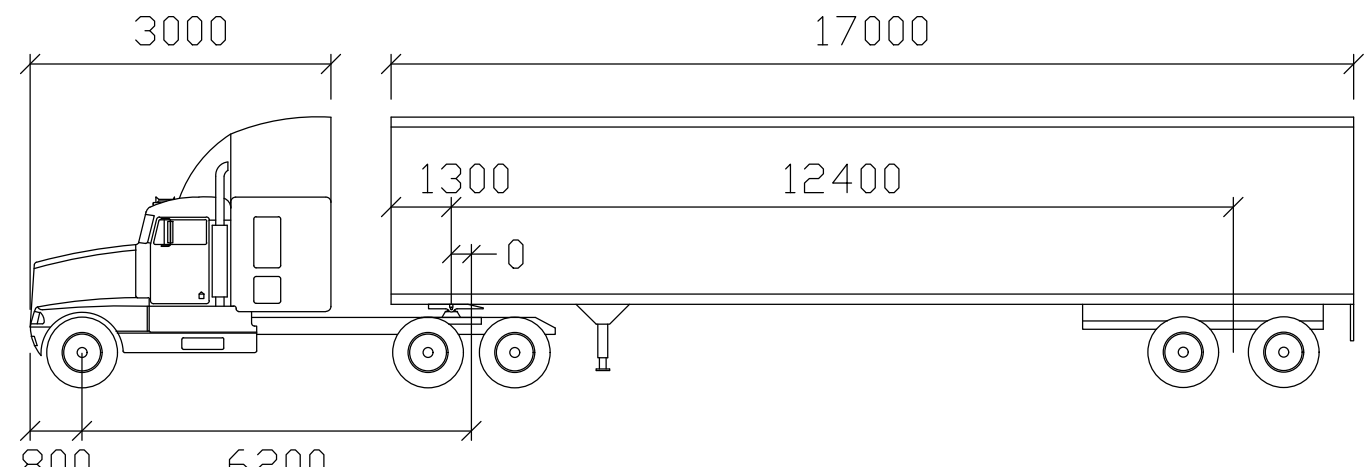
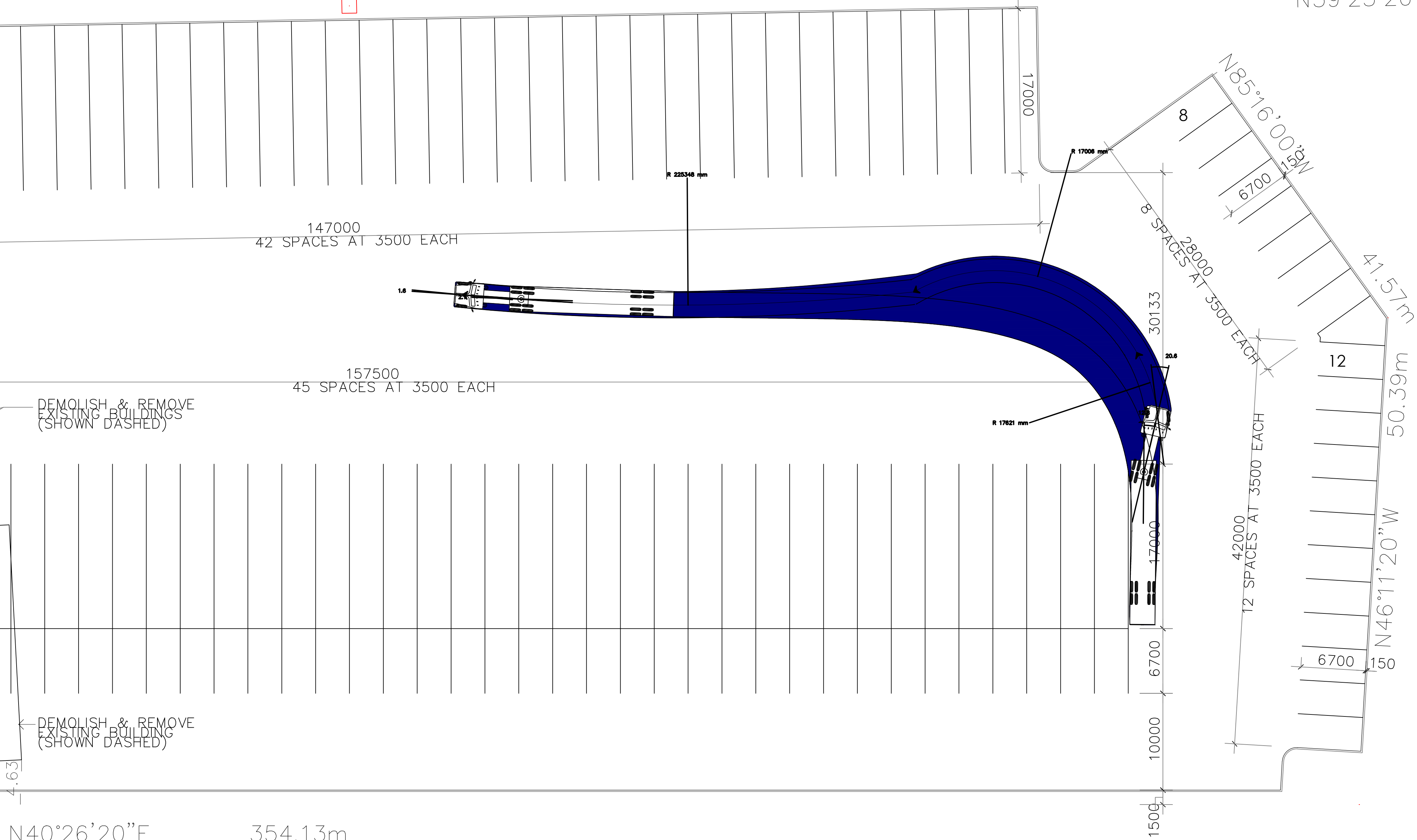
N85°16'00"W  
26.39m

N46°11'00"W  
23.50m

40.14m

N46°11'00"W

N40°26'20"E 45.12m



WB-20

mm			
Tractor Width	: 2600	Lock to Lock Time	: 6.0
Trailer Width	: 2600	Steering Angle	: 28.2
Tractor Track	: 2600	Articulating Angle	: 70.0
Trailer Track	: 2600		

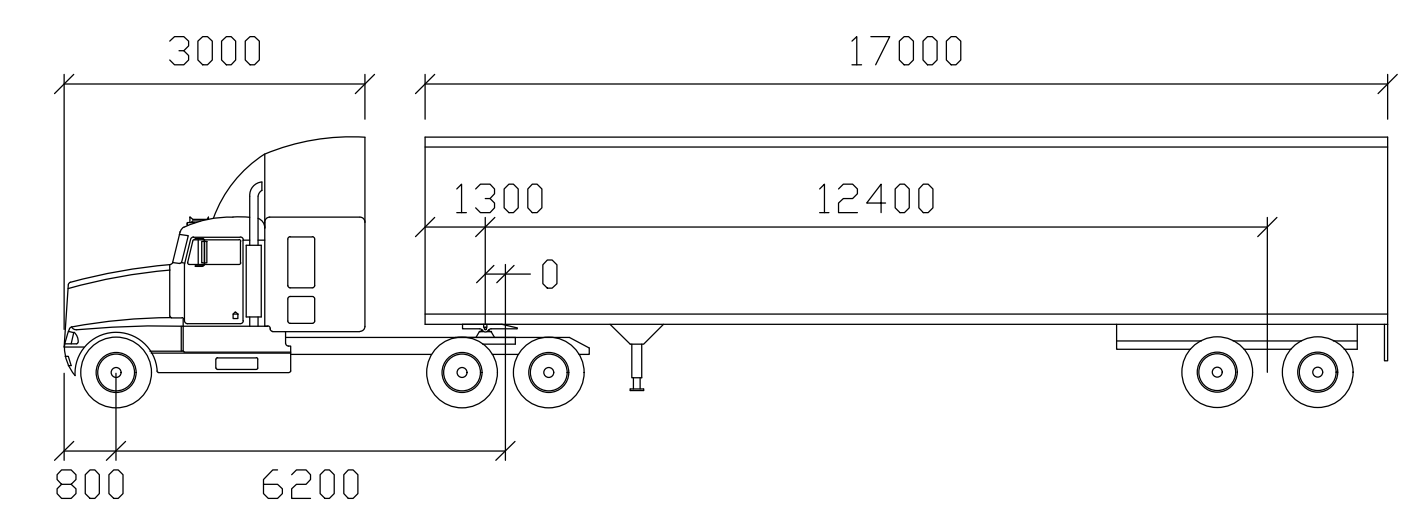
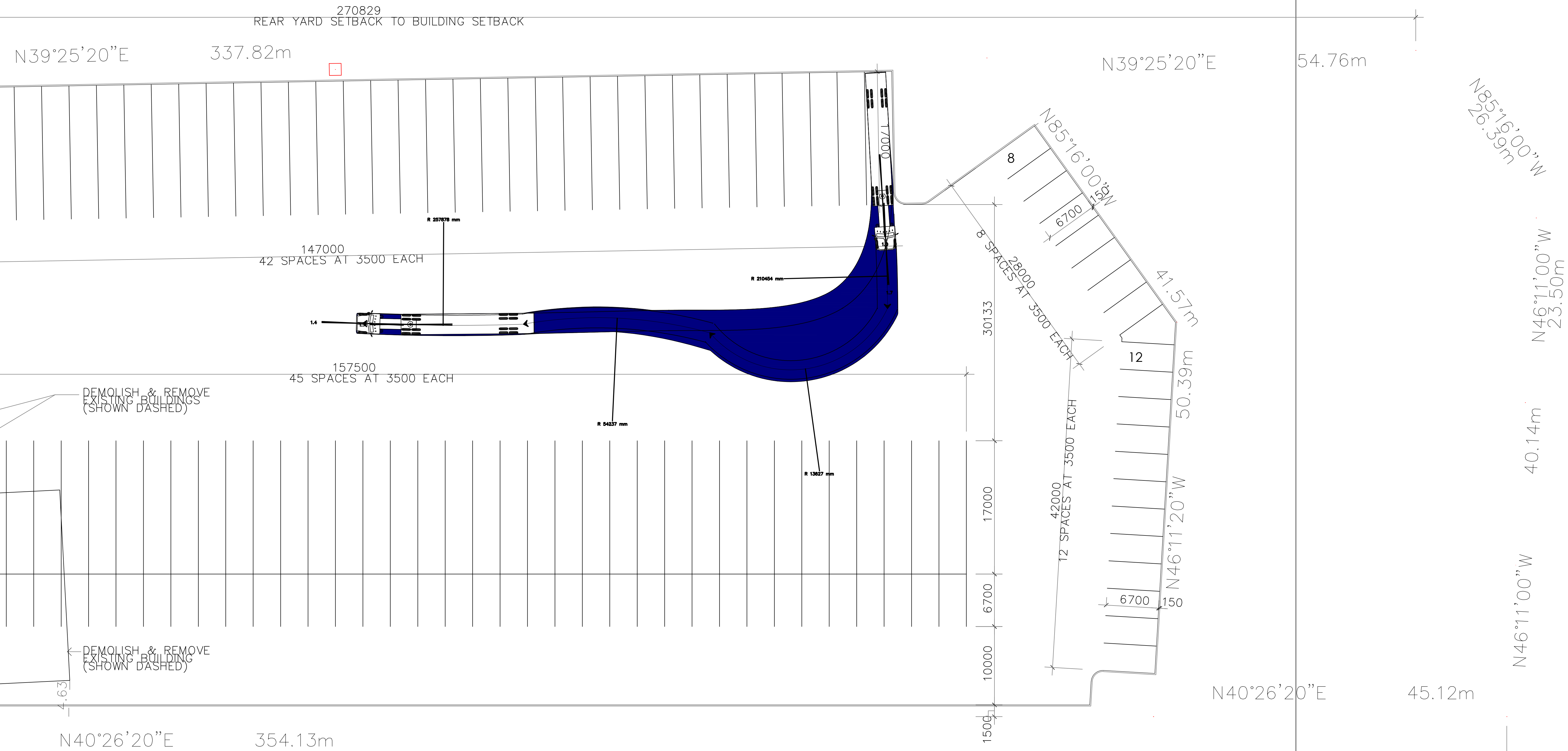
# Circulation Review - 12155 Coleraine Drive, Bolton

## WB-20 Tractor-Semitrailer (Out 1)

Figure AT - 5

Project No. 12649115

Date September 24, 2024



WB-20

	mm		
Tractor Width	: 2600	Lock to Lock Time	: 6.0
Tractor Track	: 2600	Steering Angle	: 28.2
Trailer Width	: 2600	Articulating Angle	: 70.0
Trailer Track	: 2600		

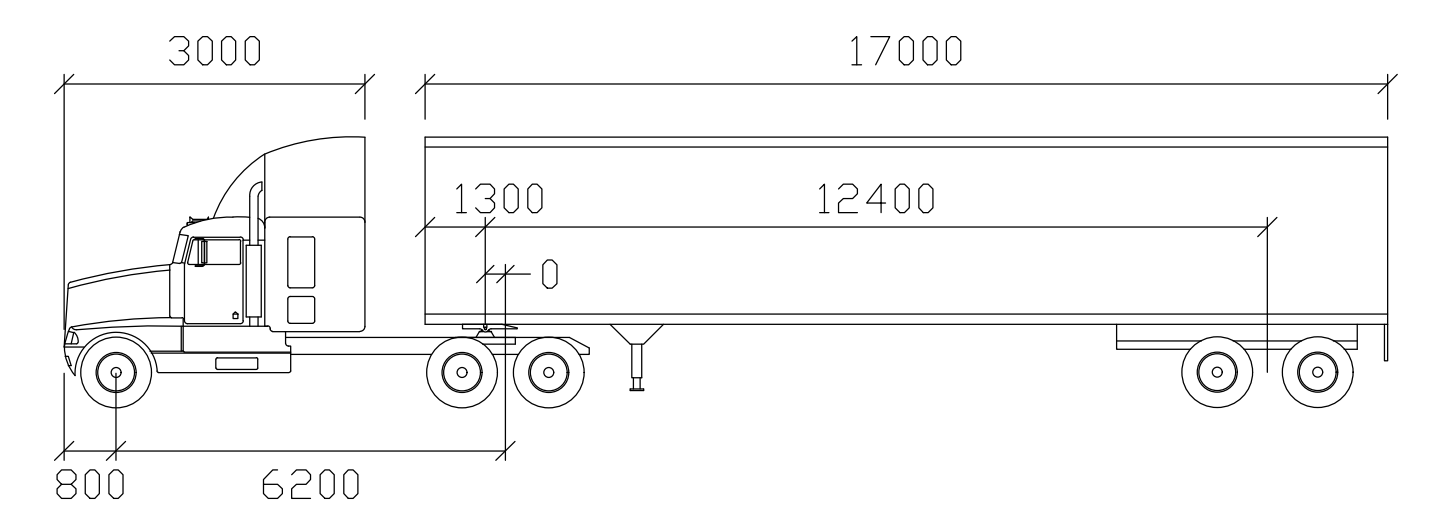
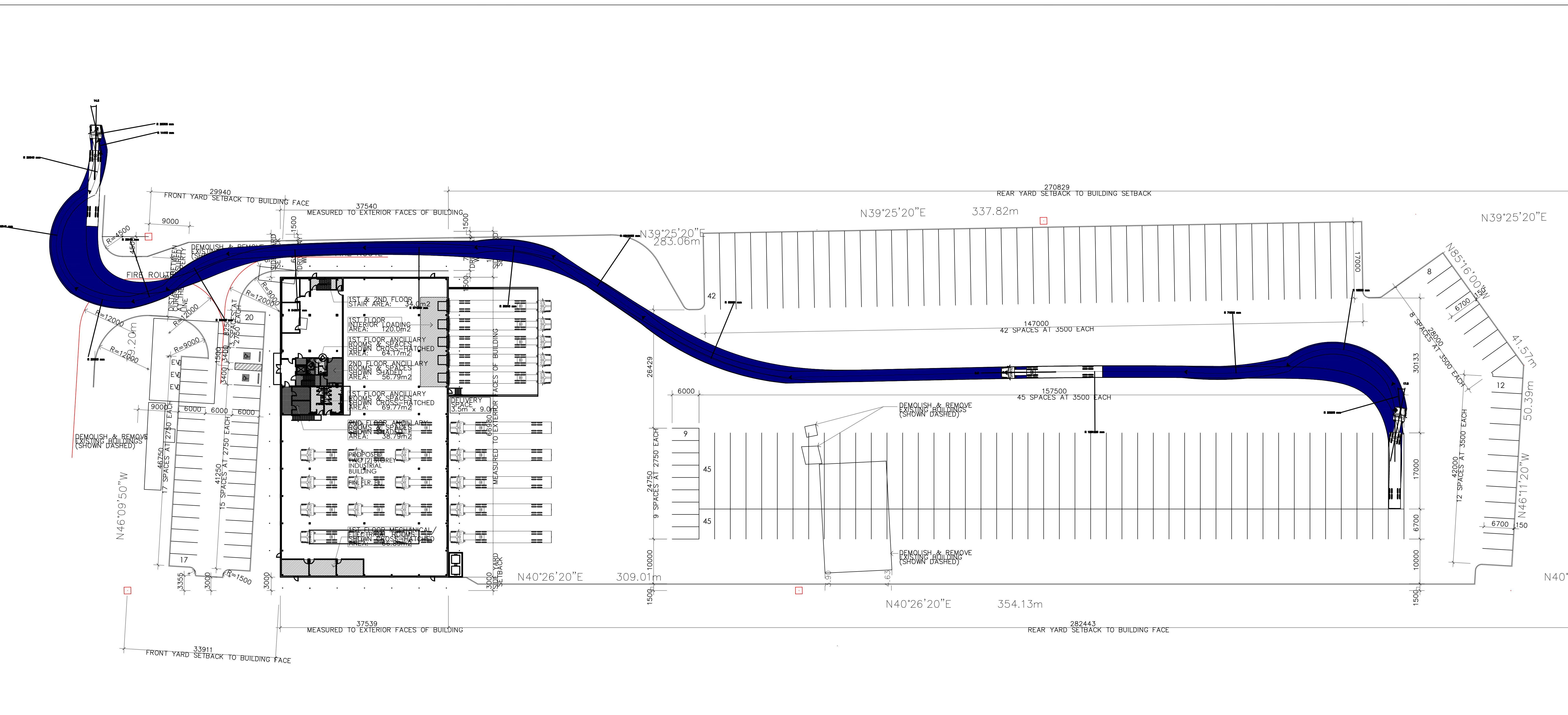
# Circulation Review - 12155 Coleraine Drive, Bolton

## WB-20 Tractor-Semitrailer (Out 2)

Figure AT - 6

Project No. 12649115

Date September 24, 2024



WB-20

Tractor Width	: 2600	Lock to Lock Time	: 6.0
Trailer Width	: 2600	Steering Angle	: 28.2
Tractor Track	: 2600	Articulating Angle	: 70.0
Trailer Track	: 2600		

# Circulation Review - 12155 Coleraine Drive, Bolton

## WB-20 Tractor-Semitrailer (Out 3)

Figure AT - 7

Project No. 12649115

Date September 24, 2024