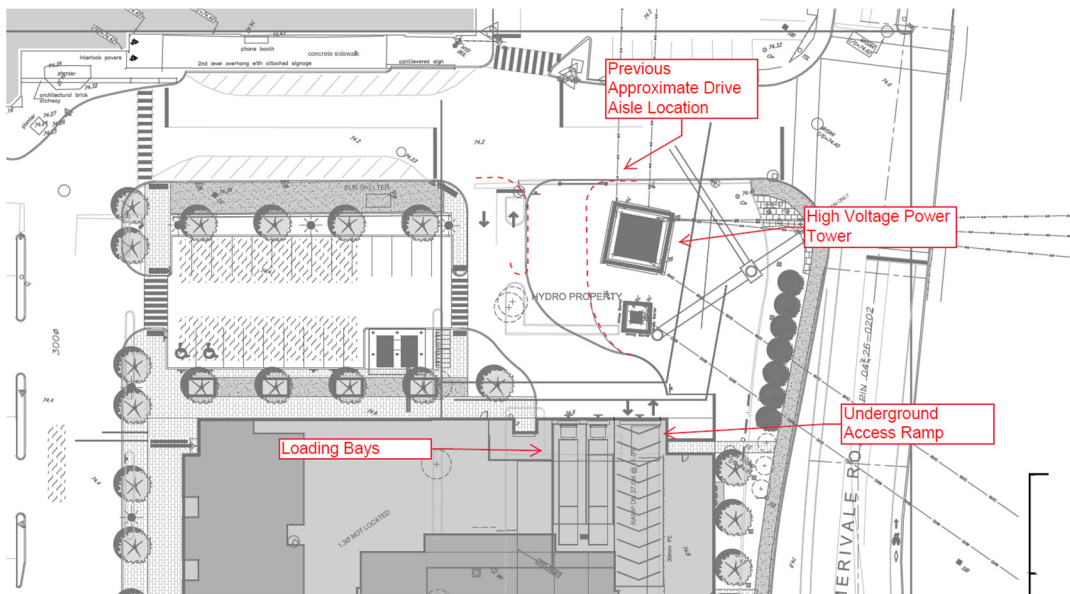


Subject: Westgate Mall Redevelopment Phase 1 – Site Plan Update Letter

Based on information provided to Parsons, it is understood that minor adjustments to the Westgate Phase 1 Site Plan have been made. The site plan now proposes 213 residential units, 17,355 ft² of retail and 2,95 ft² of restaurant space this is a change from the TIA prepared in August 2019 that proposed 203 residential units, 17,758 ft² of retail and 2,381 ft² of restaurant space. As for the geometric changes, the high voltage power tower requires approximately 10m of clearance space between the base of the tower and the proposed driveway to allow additional room for servicing. The tower is located at the southwest corner of the Mall's Merivale driveway (approximately 90 meters north of Merivale/Carling intersection). The additional clearance requirement has caused the eastern most drive aisle (closest to the hydro tower) to shift approximately 7m west and has affected vehicle operations accessing the two loading bays and the underground parking ramp. Figure 1, displays the described drive aisle affected in this change.

Figure 1: Drive Aisle Relocation



Trip Generation Changes

The changes to the site statistics are related to a small decrease of retail space (~400 ft²), a decrease of of restaurant area (~300 ft²), and increase of 10 residential units. Using the same rates included in the TIA, the Trips were calculated for the updated residential (213 units), retail space (17,355 ft²) and restaurant area (2,095 ft²), with the results of each respectively shown in Table 1,

Table 2, and Table 3

Table 1: Updated TRANS Residential Site Generated Person Trips

Travel Mode	Mode Share		AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
	AM	PM	In	Out	Total	In	Out	Total
Auto Driver	37%	40%	12	39	51	35	23	58
Auto Passenger	8%	9%	3	8	11	8	4	12
Transit	41%	37%	13	44	57	32	21	53
Non-motorized	14%	14%	4	15	19	12	8	20
Total Person Trips	100%		32	106	138	89	55	144
Total 'New' Auto Trips			12	39	51	35	23	58

Table 2: Updated Retail Site Generated Person Trips

Travel Mode	Mode Share	AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
	AM	In	Out	Total	In	Out	Total
Auto Driver	45%	0	0	0	19	21	40
Auto Passenger	10%	0	0	0	4	5	9
Transit	30%	0	0	0	12	13	25
Non-motorized	15%	0	0	0	6	6	12
Total Person Trips	100%	0	0	0	41	45	86
Less Pass-by (10%)		0	0	0	-2	-2	-4
Total 'New' Auto Trips		0	0	0	17	19	36

Table 3: Updated Restaurant Site Generated Person Trips

Travel Mode	Mode Share	AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
	AM	In	Out	Total	In	Out	Total
Auto Driver	45%	0	0	0	8	5	13
Auto Passenger	10%	0	0	0	2	2	4
Transit	30%	0	0	0	4	3	7
Non-motorized	15%	0	0	0	2	1	3
Total Person Trips	100%	0	0	0	16	11	27
Less Pass-by (0%)		0	0	0	0	0	0
Total 'New' Auto Trips		0	0	0	8	5	13

Table 4: Updated Total Site Generated Person Trips

Travel Mode	AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
	In	Out	Total	In	Out	Total
Auto Driver	12	39	51	47	39	86
Auto Passenger	3	8	11	10	9	19
Transit	13	44	57	39	31	70
Non-motorized	4	15	19	16	12	28
Total Person Trips	32	106	138	114	90	204
Less Pass-by (0%)	0	0	0	-2	-2	-4
Total 'New' Auto Trips	12	39	51	45	37	82

As shown in Table 4 above the updated site is anticipated to generate a total 51 veh/h during the morning peak hour and 82 veh/h during the afternoon peak hour.

Table 5, has been prepared assess the change in vehicle trips generated in the TIA (prepared in August 2019) and the updated site plan.

Table 5: Difference in Total Site Generated Trips between TIA and Updated Site Plan

Land Use	Site Plan August, 2019 Vehicle Trips (veh/h)		Current Site Plan Vehicle Trips (veh/h)		Difference Vehicle Trips (veh/h)	
	AM	PM	AM	PM	AM	PM
Residential	49	55	51	58	2	3
Retail	0	36	0	36	0	0
Proposed Restaurant	0	15	0	13	0	-2
Existing Restaurant	0	-25	0	-25	0	0
Total	49	81	51	82	2	1

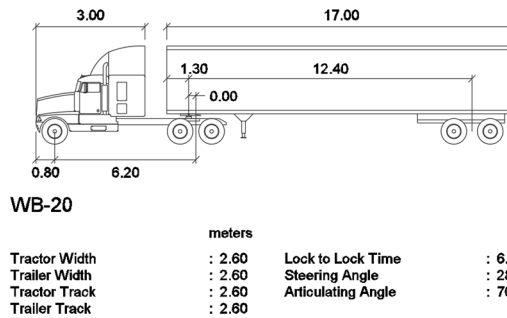
As shown in Table 5, the total change in vehicle trips from the TIA prepared in August 2019, is approximately 2 additional veh/h during the morning peak hour and 1 veh/h during the afternoon peak hour. This change will have no to little impact on the operation of the site with regard to the TIA.

Loading Bay Truck Maneuvering

Since the drive aisle is no longer located directly in front of the loading bays and the underground parking ramp, vehicle maneuvering for WB 20, WB 15, WB 12 and Passenger vehicles have been reviewed and summarized as follows:

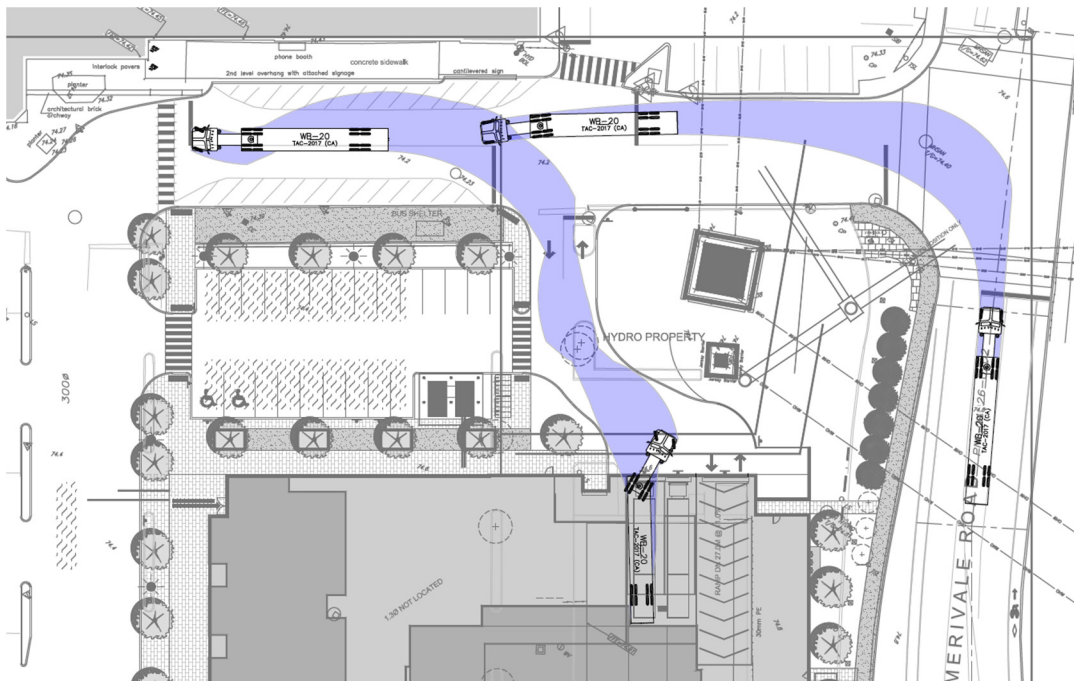
WB 20

Figure 2: WB 20 Vehicle Profile



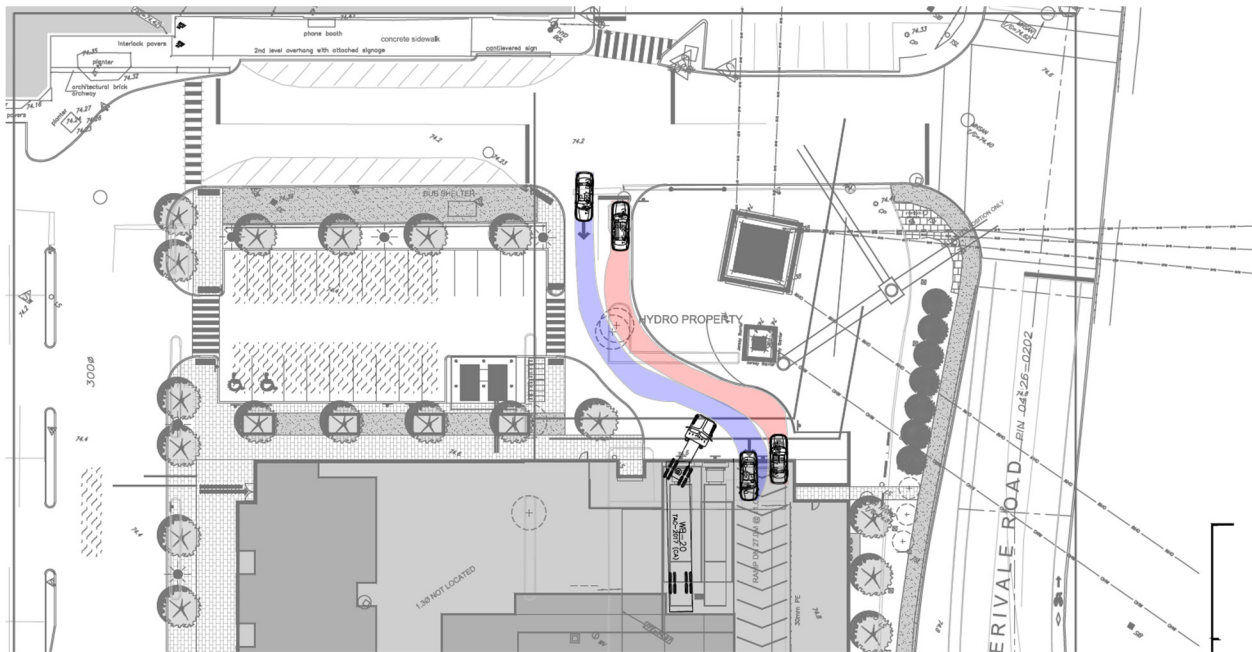
As Illustrated in Figure 3, a WB 20 is able to back into the western loading bay. However due to the size of the bay it will likely block a second vehicle from using the adjacent loading bay. Assuming the frequency of the transports is low and are likely to occur off peak.

Figure 3: WB 20 Reversing into Loading Bay



While the WB20 is parked within the loading bay, passenger vehicles retain access to the underground parking even with the reduced drive aisle width as shown in Figure 4.

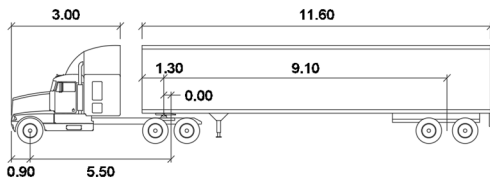
Figure 4: Garage Access While WB-20 is Parked



WB 15

WB 15 vehicles appear to be able to access both loading bays; However, transports maneuvering into the east bay may have difficulty gaining access if the west bay is occupied by a transport truck. Figure 6, shows the reverse maneuvers for both loading bays.

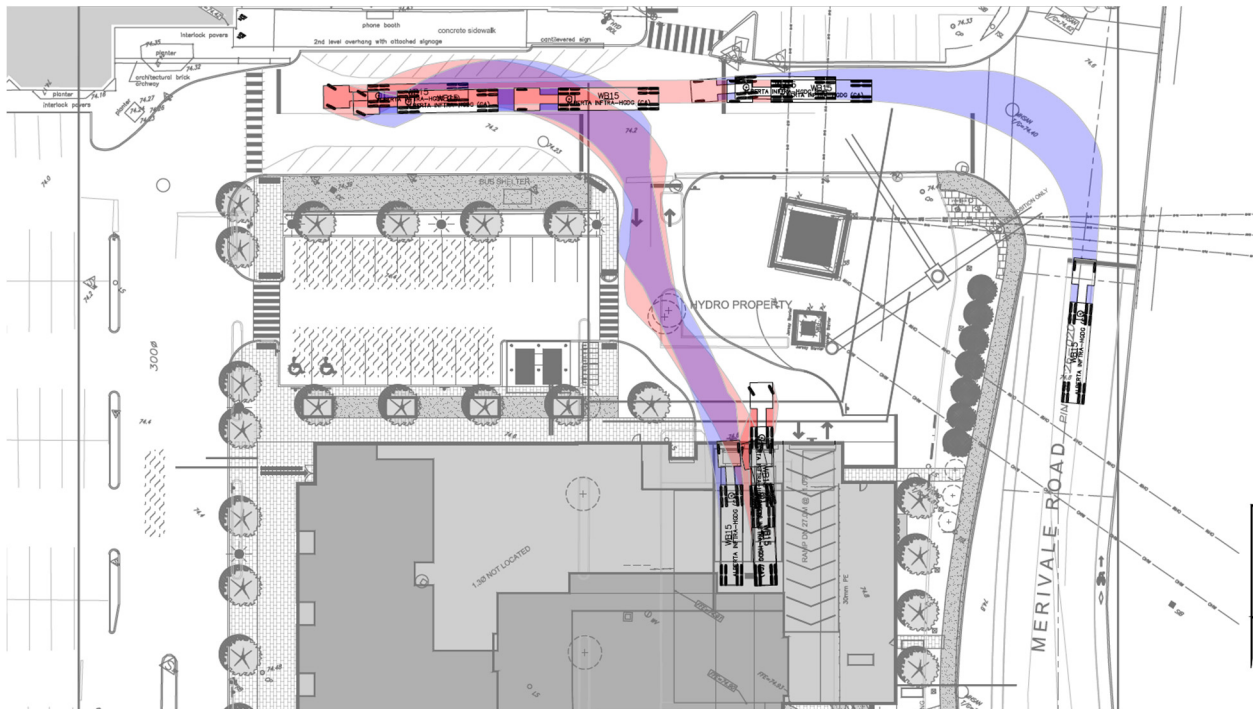
Figure 5: WB 15 Vehicle Profile



WB15

	meeters		
Tractor Width	: 2.60	Lock to Lock Time	: 6.0
Trailer Width	: 2.60	Steering Angle	: 26.0
Tractor Track	: 2.60	Articulating Angle	: 70.0
Trailer Track	: 2.60		

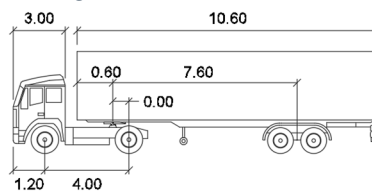
Figure 6: WB 15 Reversing into Loading Bay



WB 12

WB 12 sized vehicles operate better than the WB 20 and WB 15 sized vehicles and likely under normal operations be able to access both loading bays while the adjacent bay is occupied. Figure 8, displays the WB 12 truck movements while reversing into the loading bays.

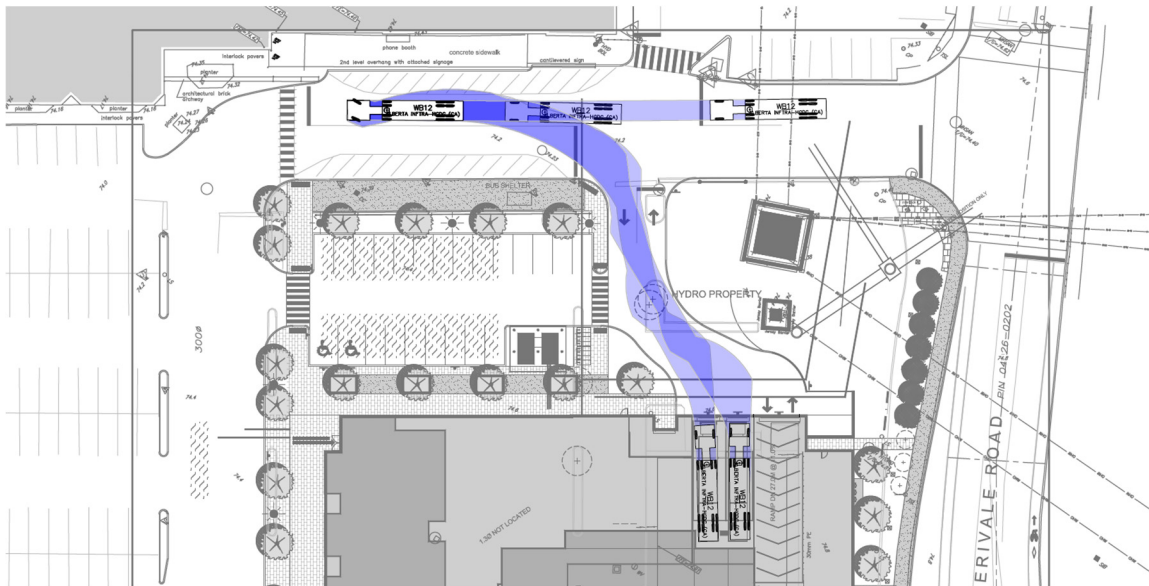
Figure 7: WB 12 Vehicle Profile



WB12

Tractor Width	: 2.60	Lock to Lock Time	: 6.0
Trailer Width	: 2.60	Steering Angle	: 21.3
Tractor Track	: 2.60	Articulating Angle	: 70.0
Trailer Track	: 2.60		

Figure 8: WB 12 Reversing into Loading Bay



Summary

The summary of the the sections prepared above are as follows:

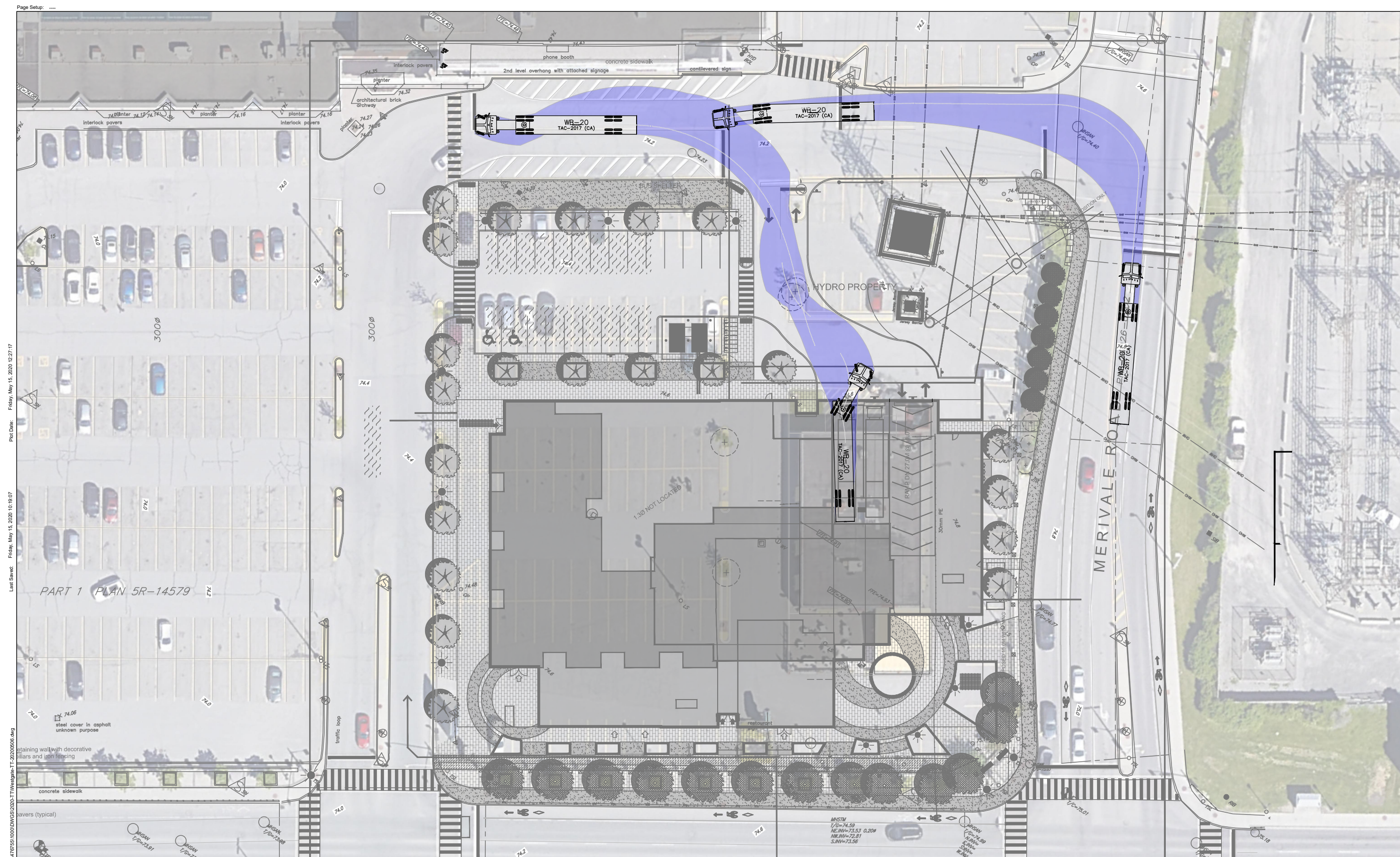
- Total site generated trips of 51 veh/h and 82 veh/h during the morning and afternoon peak hours, respectively. This results in an increase of 1 veh/h during the morning peak period, and increase of 2 veh/h during the afternoon peak hour.
- Largest vehicle accessing a single loading bay with the proposed configuration is WB 20 (which will limit the use of the second bay due to space constraints)
- Largest vehicle accessing both loading bays at the same time is WB 12.

Please call if you have any questions.

Sincerely,

Matthew Mantle, P. Eng.
Transportation Engineer

Attachements.



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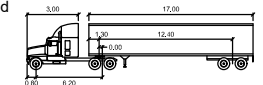


PARSONS

NOTE: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.



Legend



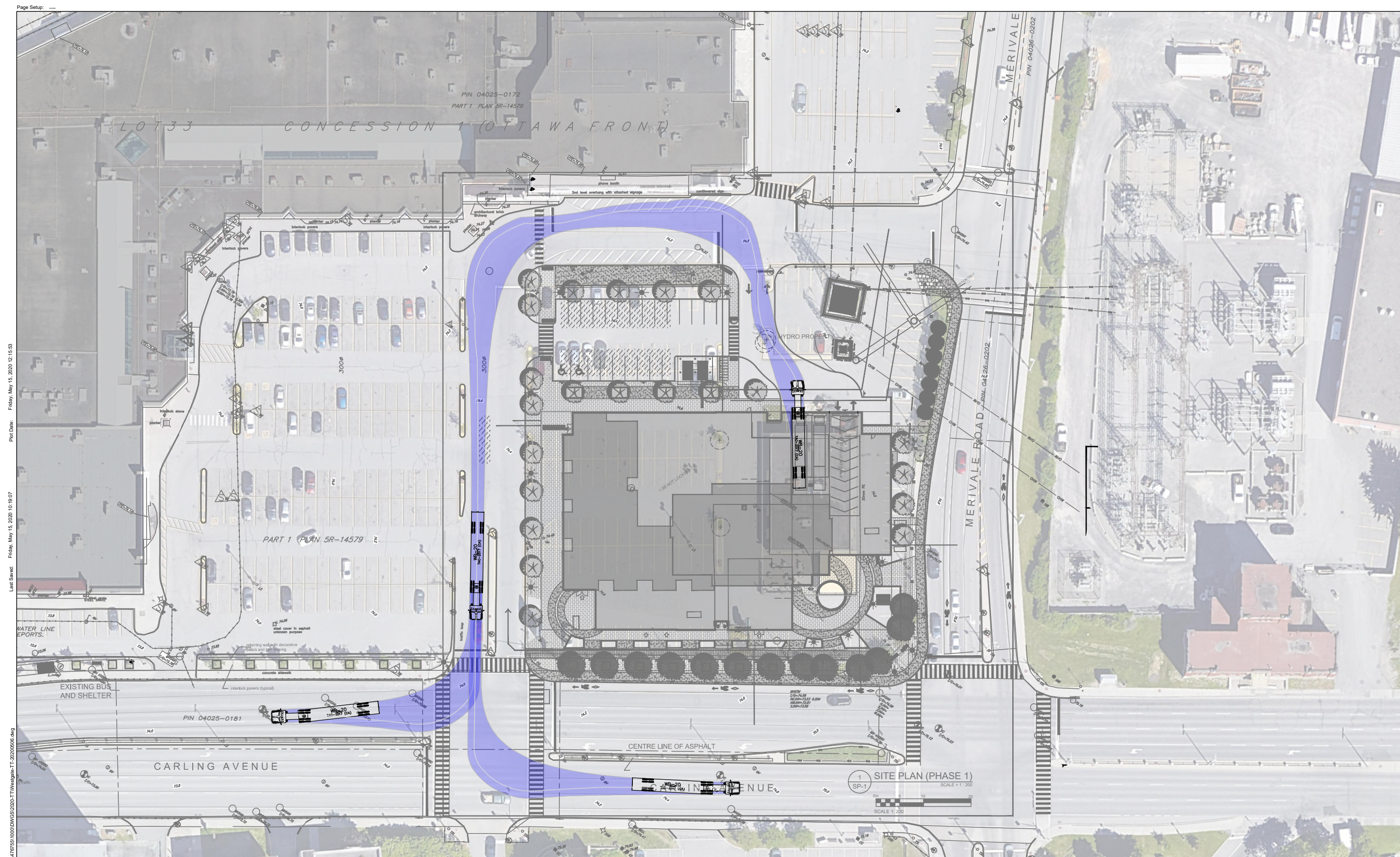
WB-20

Tractor Width	3.00	Tractor Length	12.00
Tractor Width	2.80	Tractor Length	12.00
Tractor Width	2.80	Tractor Length	12.00
Tractor Width	2.80	Tractor Length	12.00
Tractor Width	2.80	Tractor Length	12.00

Tractor Width: 2.80
Tractor Length: 12.00
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Tractor Width: 2.80
Tractor Length: 12.00

Not to Scale

Drawing Description			
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Project Number	476755 - 01000	Figure Number	001
Project Description		Wetgate Mall Phase 1 Redevelopment	

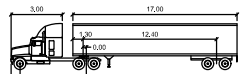


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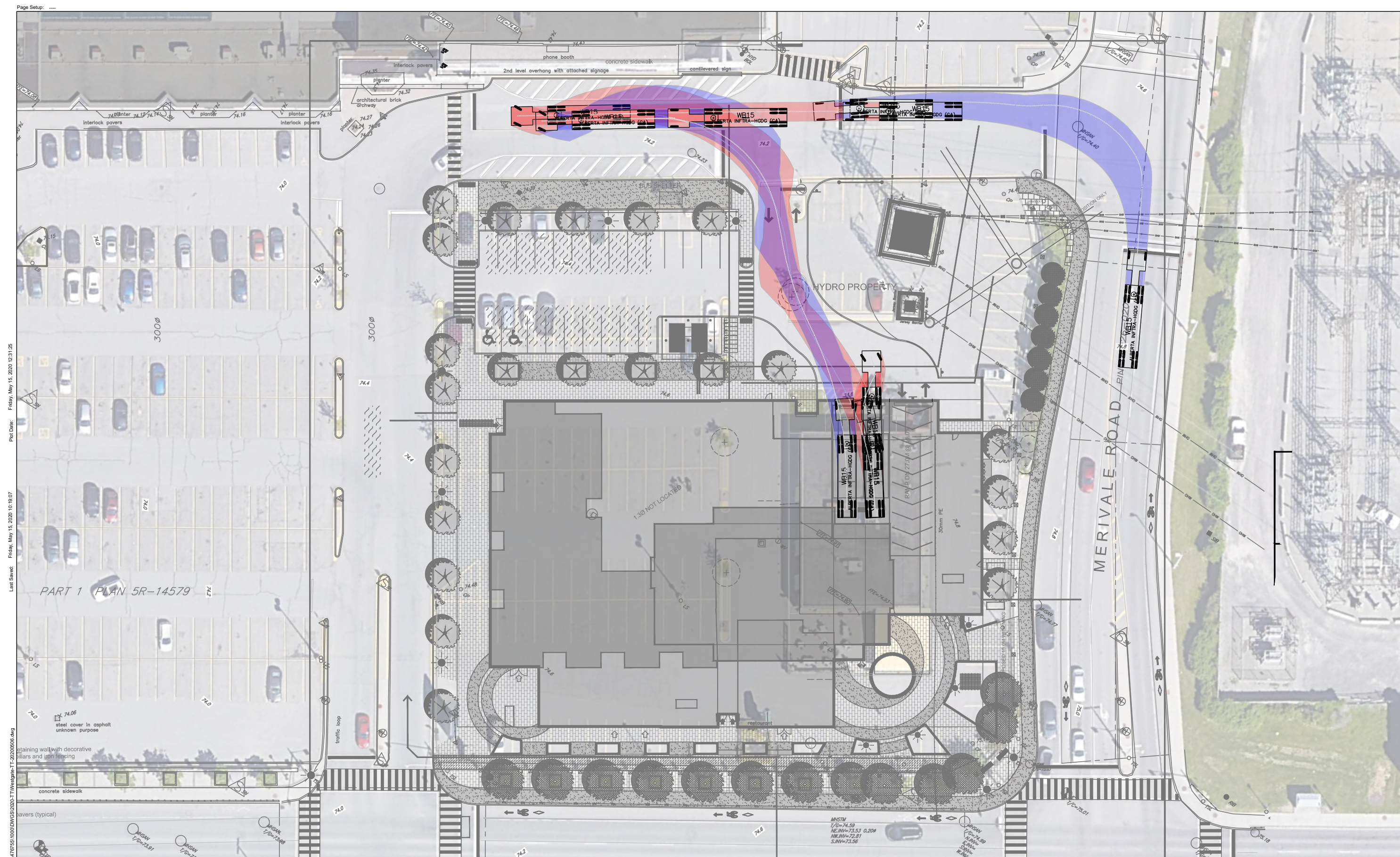


	Tractor	Trailer
Tractor Width	3.00	12.00
Trailer Width	6.20	12.00
Tractor Track	2.80	2.80
Trailer Track	2.80	2.80

Not to Scale

Drawing Description		
Client	RioCan	
Project Number	476755 - 01000	

Transport Truck (WB-20) Maneuvering - Exit	
Date	May 11, 2020
Figure Number	002
Project Description	Wetgate Mall Phase 1 Redevelopment



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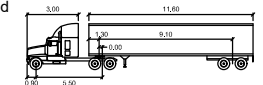


PARSONS

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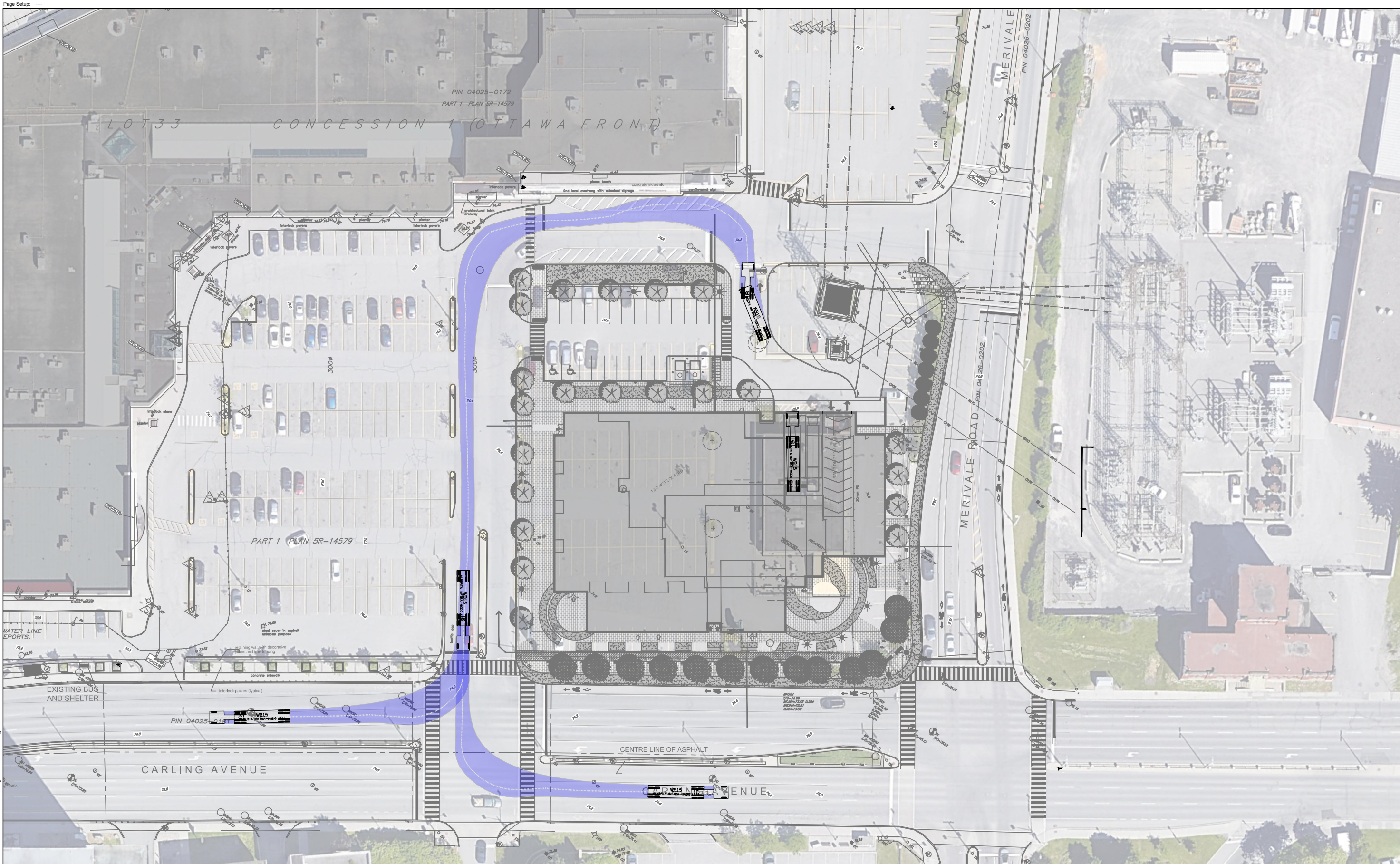


WB15

Tractor Width	3.00	Lock to Lock Time	6.0
Tractor Width	2.80	Swinging Angle	28.0
Tractor Track	2.80	Approaching Angle	70.0
Tractor Track	2.80		

Not to Scale

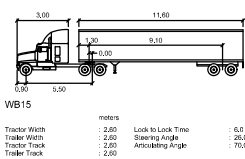
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Client	RioCan	Date	May 11, 2020
Project Number	476755 - 01000	Figure Number	003
Project Description		Wetgate Mall Phase 1 Redevelopment	



NOTE: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

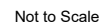


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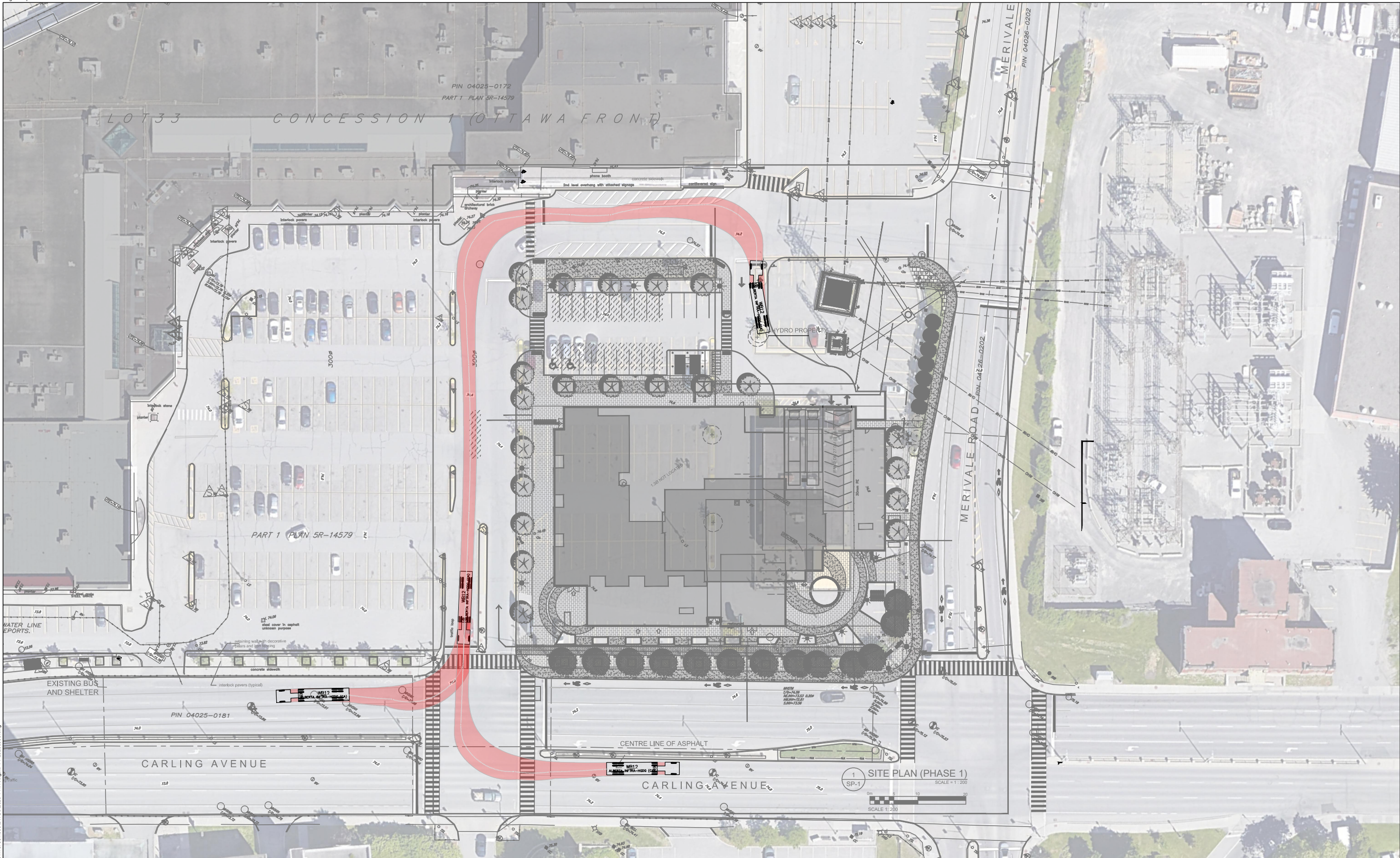
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Client	RioCan	Date	May 11, 2020
Project Number	476755 - 01000	Figure Number	004
Project Description		Wetgate Mall Phase 1 Redevelopment	



Legend



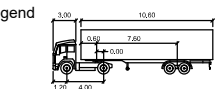
Wetgate Mall Phase 1 Redevelopment



NOTE: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.



Legend



WB12	Trailer Width	3.00	Trailer Length	10.80
	Trailer Wheel	7.50	Trailer Track	1.20
	Trailer Track	1.20		

Trailer Width	3.00	Trailer Length	10.80
Trailer Wheel	7.50	Trailer Track	1.20
Trailer Track	1.20		

Trailer Width	3.00	Trailer Length	10.80
Trailer Wheel	7.50	Trailer Track	1.20
Trailer Track	1.20		

Not to Scale

Drawing Description

Transport Truck (WB-12) Maneuvering - Exit

Client

RioCan

Date

May 11, 2020

Figure Number

006

Project Number

476755 - 01000

Project Description

Wetgate Mall Phase 1 Redevelopment