



MEMO

TO: Waleed Nawaz, P.Eng, PMP, Dunpar Development Inc.
CC:
FROM: David Lukezic, M.Eng., LEL, RPP and Nima Farid, P.Eng., WSP
SUBJECT: Proposed Residential Development at 2620 Chalkwell Close, City of Mississauga – Traffic Memo
DATE: November 14, 2024

By way of background, WSP previously prepared a Traffic Impact Study (TIS) for the proposed development, dated December 14, 2023, which was included as part of the first Official Plan Amendment (OPA) and Zoning By-law Amendment (ZBA) applications.

The City has requested vehicle turning diagrams for the revised road network. This Memorandum documents vehicle turning simulations of design vehicles based on a site plan provided to WSP on November 11, 2024. The AutoTURN 11.0 turning template software was used to simulate the circulation of the required design vehicles, as detailed below.

WSP reviewed the site circulation for passenger vehicles using a P-TAC vehicle (5.6 metres long, per TAC 2017 standards), as shown in **Figure 1**. The review shows no projected conflicts for passenger vehicle circulation on the site.

The critical parking spaces were tested. **Figure 2** to **Figure 6** show that P-TAC vehicles can access and egress these critical parking spaces with no issues.

WSP reviewed the site circulation for a loading vehicle. A medium single unit (MSU) loading truck (10.0 metres long, per TAC 2017 standards) was used as illustrated in **Figure 7**. The review shows that the loading truck can circulate the site with no projected issues.

As shown in **Figure 8** and **Figure 9**, the circulation of a standard City of Mississauga fire truck (12.8 metres long) was reviewed, and the review shows that the fire truck can circulate and exit the site with no issues, and the required reversing distance is below the maximum requirement of 90 metres per Ontario Building Code (OBC).

A sightline review was completed at the key locations based on TAC 2017 Table 2.5.2 with a design speed of 20 km/h. **Figure 10** and **Figure 11** shows the sightline review at two critical areas.

The proposed pavement marking and signage plan for the site is provided in **Figure 12**.

Stop signs are proposed in accordance with the Ontario Traffic Manual (OTM) Books 2 and 5. A stop bar and solid line dividing the two directions of traffic shall be placed in



accordance with OTM book 11 at these locations. Fire route signs are to be placed along the proposed fire route at the locations indicated in the figure. Visitor parking signs should be placed on the end stalls at each of the parking rows.

Should you have any questions, please do not hesitate to contact David Lukezic at 289-982-4742 or by e-mail at david.lukezic@wsp.com.

Yours Truly,

A handwritten signature in blue ink that reads "David Lukezic".

David Lukezic, M.Eng., LEL, RPP
Senior Project Manager

Figures:

Figure 1 – P-TAC Circulation Test

Figure 2 – Critical Parking Space Tests – Blocks A/E

Figure 3 – Critical Parking Space Tests – Blocks A/B

Figure 4 – Critical Parking Space Tests – Blocks C/D

Figure 5 – Critical Parking Space Tests – Blocks D/H

Figure 6 – Critical Parking Space Tests – Blocks E/F

Figure 7 – MSU Circulation Test

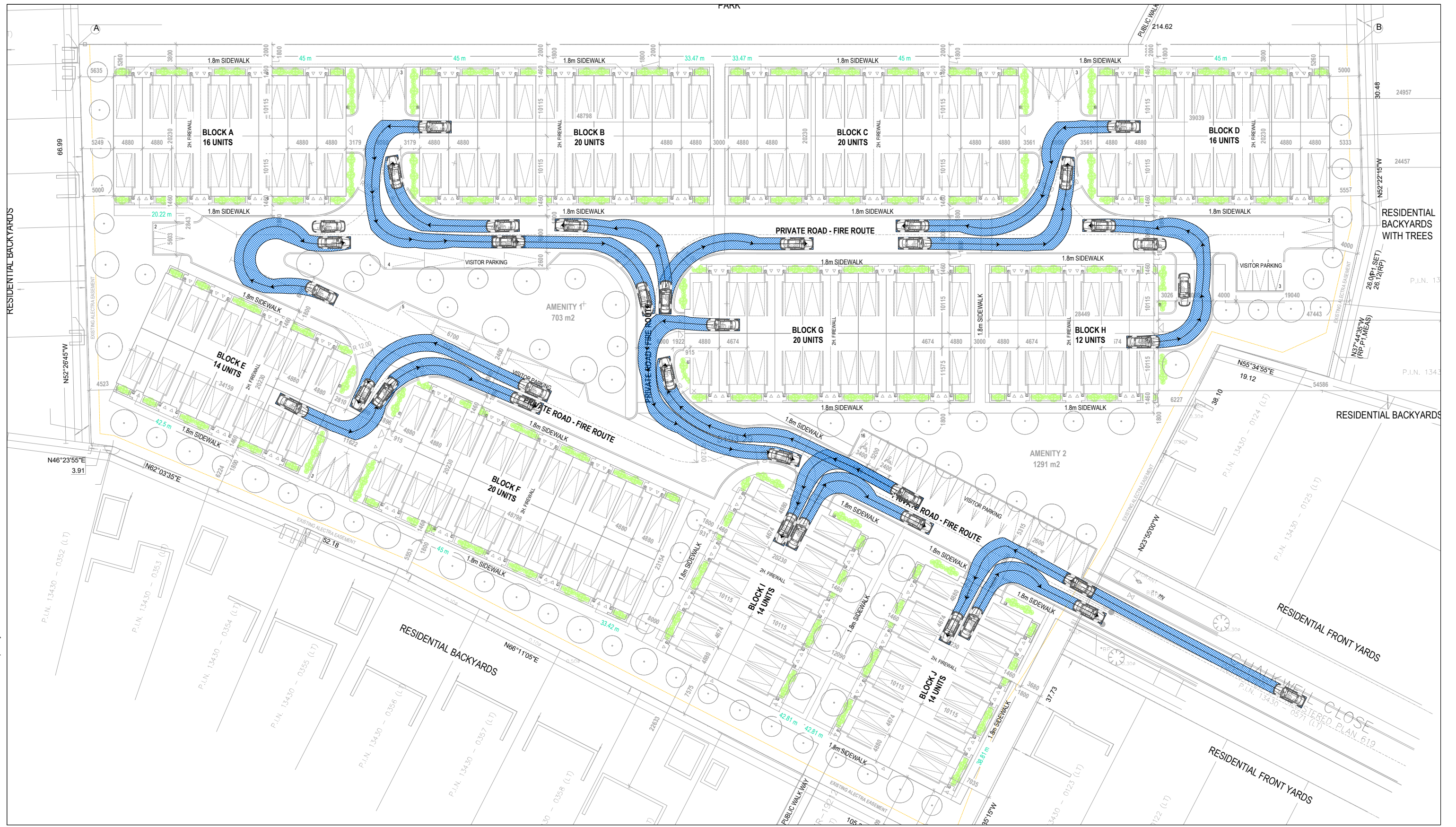
Figure 8 – Fire Truck Access Test – Inbound

Figure 9 – Fire Truck Access Test – Outbound

Figure 10 – Sightline Analysis Test – Critical Intersections

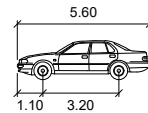
Figure 11 – Sightline Analysis Test – Parked Vehicles

Figure 12 – Pavement Marking and Signage Plan



Date Site Plan Received: 2024-11-11

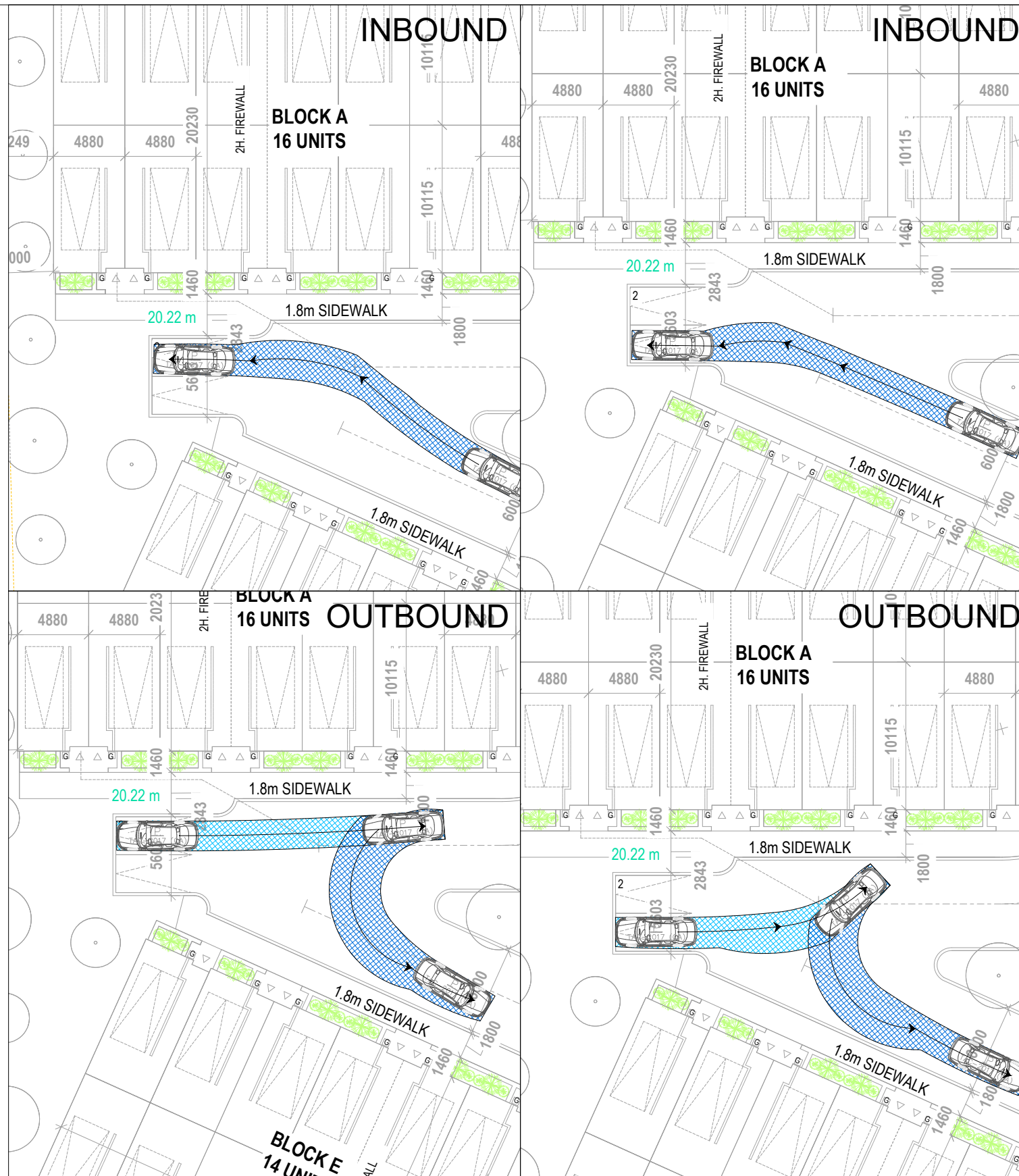
Scale: 1:600



P	
Width	: 2.00 meters
Track	: 2.00 meters
Lock to Lock Time	: 6.0 seconds
Steering Angle	: 35.9 degrees

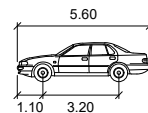
Figure 1
PTAC Circulation Test
2620 Chalkwell Close, Mississauga, ON

C:\Users\nima.farid\OneDrive - WSP\OneDrive\Projects\CA0016714_5694-CA-2620 Chalkwell Close\2024-11-13\CAD



Date Site Plan Received: 2024-11-11

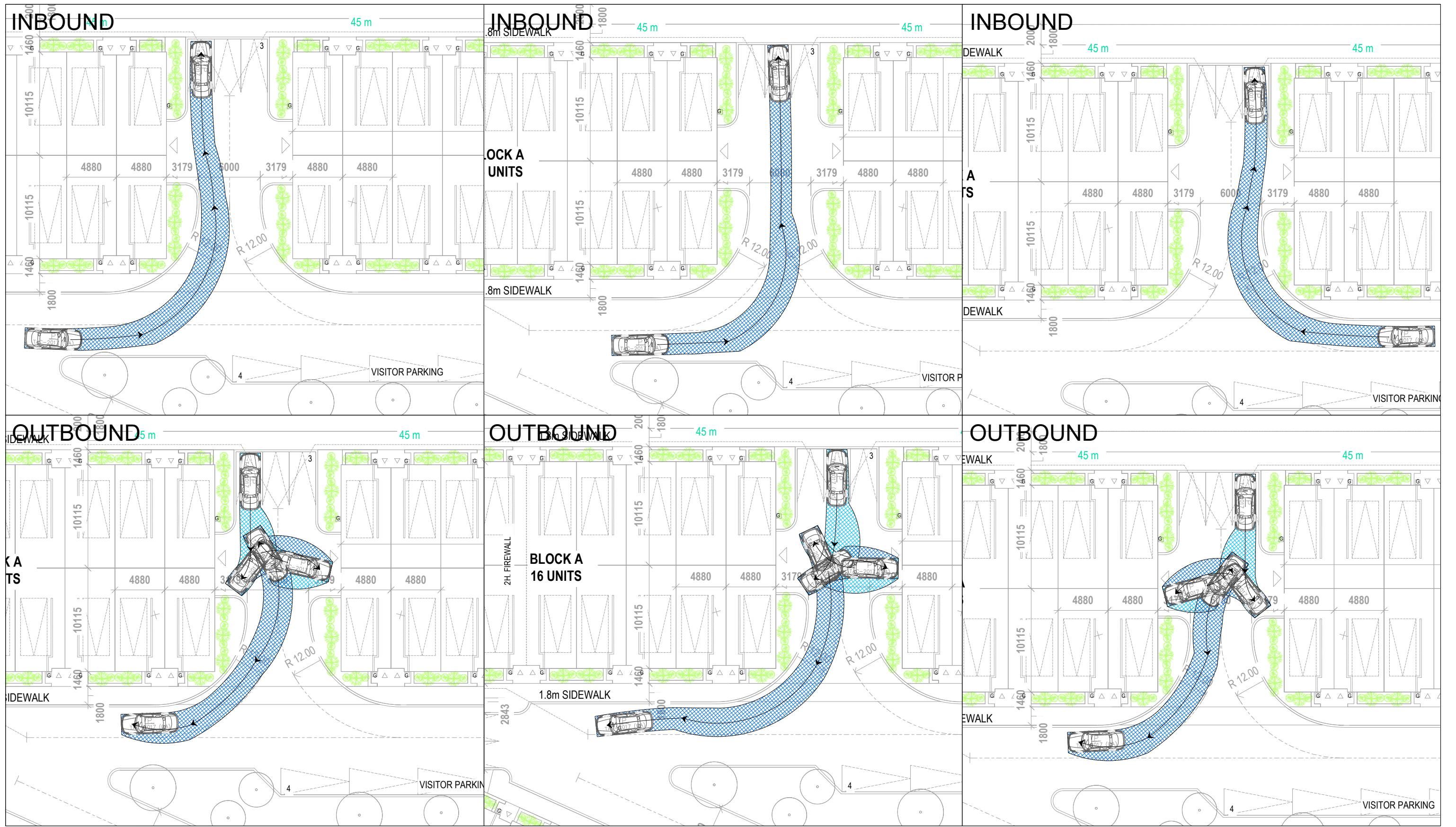
Scale: 1:350



P		units
Width	:	2.00
Track	:	2.00
Lock to Lock Time	:	6.0
Steering Angle	:	35.9

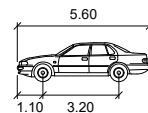
Figure 2
Critical Parking Space Tests - Blocks A/E
2620 Chalkwell Close, Mississauga, ON

C:\Users\nima.farid\OneDrive - WSP\0385\Desktop\Projects\CA0016714_5694-CA-2620 Chalkwell Close\2024-11-13\CAD



Date Site Plan Received: 2024-11-11

Scale: 1:350



P	parameters	values
Width	: 2.00	meters
Track	: 2.00	meters
Lock to Lock Time	: 6.0	seconds
Steering Angle	: 35.9	degrees

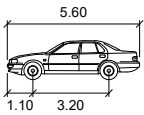
Figure 3
Critical Parking Space Tests - Blocks A/B
2620 Chalkwell Close, Mississauga, ON



C:\Users\nima.farid\OneDrive - WSP\3085\Desktop\Projects\CA0016714_5694-CA-2620 Chalkwell Close\2024-11-13\CAD

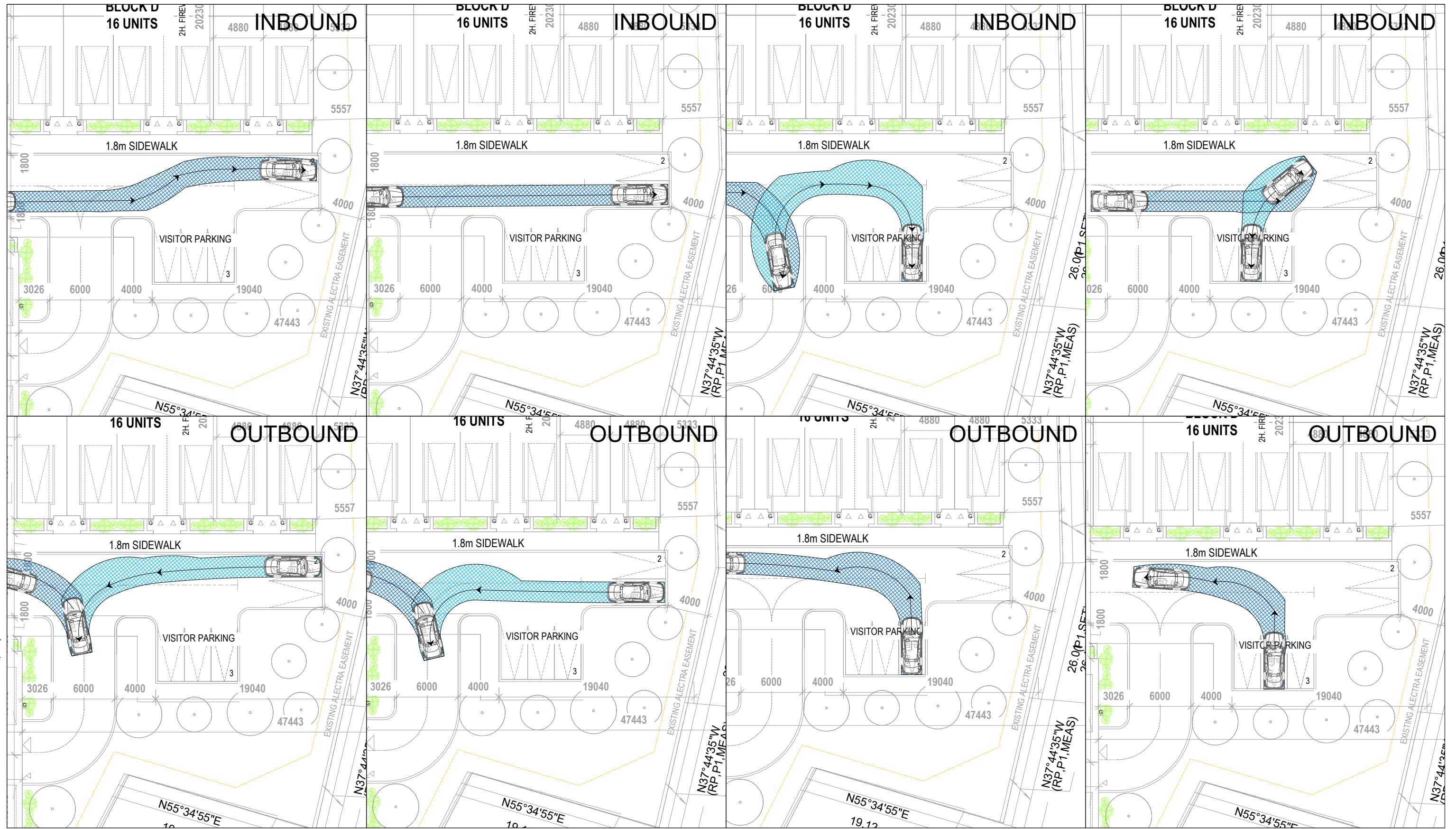
Date Site Plan Received: 2024-11-11

Scale: 1:350



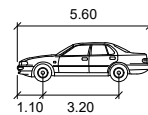
P		units
Width	: 2.00	meters
Track	: 2.00	meters
Lock to Lock Time	: 6.0	seconds
Steering Angle	: 35.9	degrees

Figure 4
Critical Parking Space Tests - Blocks C/D
2620 Chalkwell Close, Mississauga, ON



Date Site Plan Received: 2024-11-11

Scale: 1:350



P	units
Width	: 2.00
Track	: 2.00
Lock to Lock Time	: 6.0
Steering Angle	: 35.9

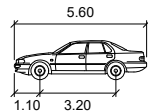
Figure 5
Critical Parking Space Tests - Blocks D/H
2620 Chalkwell Close, Mississauga, ON



C:\Users\nima.farid\OneDrive - WSP\365\Desktop\Projects\CA0016714.5694-CA-2620 Chalkwell Close\2024-11-13\CAD

Date Site Plan Received: 2024-11-11

Scale: 1:350



P		units
Width	:	2.00
Track	:	2.00
Lock to Lock Time	:	6.0
Steering Angle	:	35.9

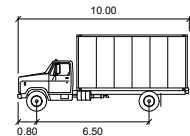
Figure 6
Critical Parking Space Tests - Blocks E/F
2620 Chalkwell Close, Mississauga, ON



C:\Users\nima.fard\OneDrive - WSP\365\Desktop\Projects\CA0016714.5694-CA-2620 Chalkwell Close\2024-11-13\CAD

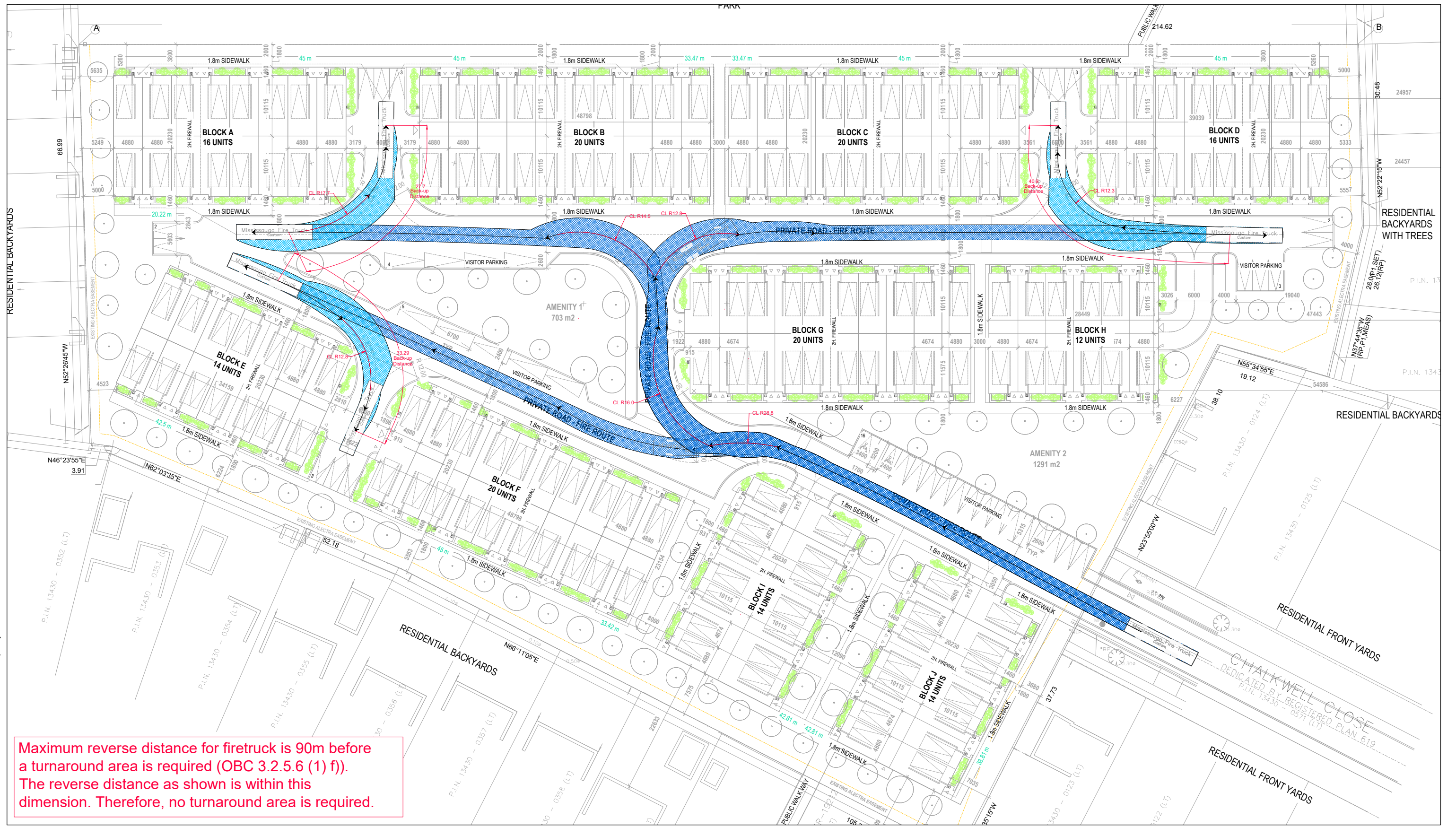
Date Site Plan Received: 2024-11-11

Scale: 1:600



MSU	
Width	: 2.60 meters
Track	: 2.60 meters
Lock to Lock Time	: 6.0 seconds
Steering Angle	: 40.2 degrees

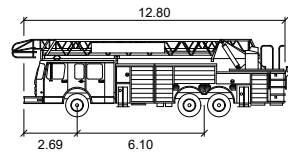
Figure 7
MSU Circulation Test
2620 Chalkwell Close, Mississauga, ON



Maximum reverse distance for firetruck is 90m before a turnaround area is required (OBC 3.2.5.6 (1) f). The reverse distance as shown is within this dimension. Therefore, no turnaround area is required.

Date Site Plan Received: 2024-11-11

Scale: 1:600



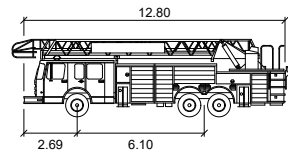
Mississauga Fire Truck		units
Width		: 2.54
Track		: 2.54
Lock to Lock Time		: 6.0
Steering Angle		: 37.0

Figure 8
Fire Truck Access Test - Inbound
2620 Chalkwell Close, Mississauga, ON



Date Site Plan Received: 2024-11-11

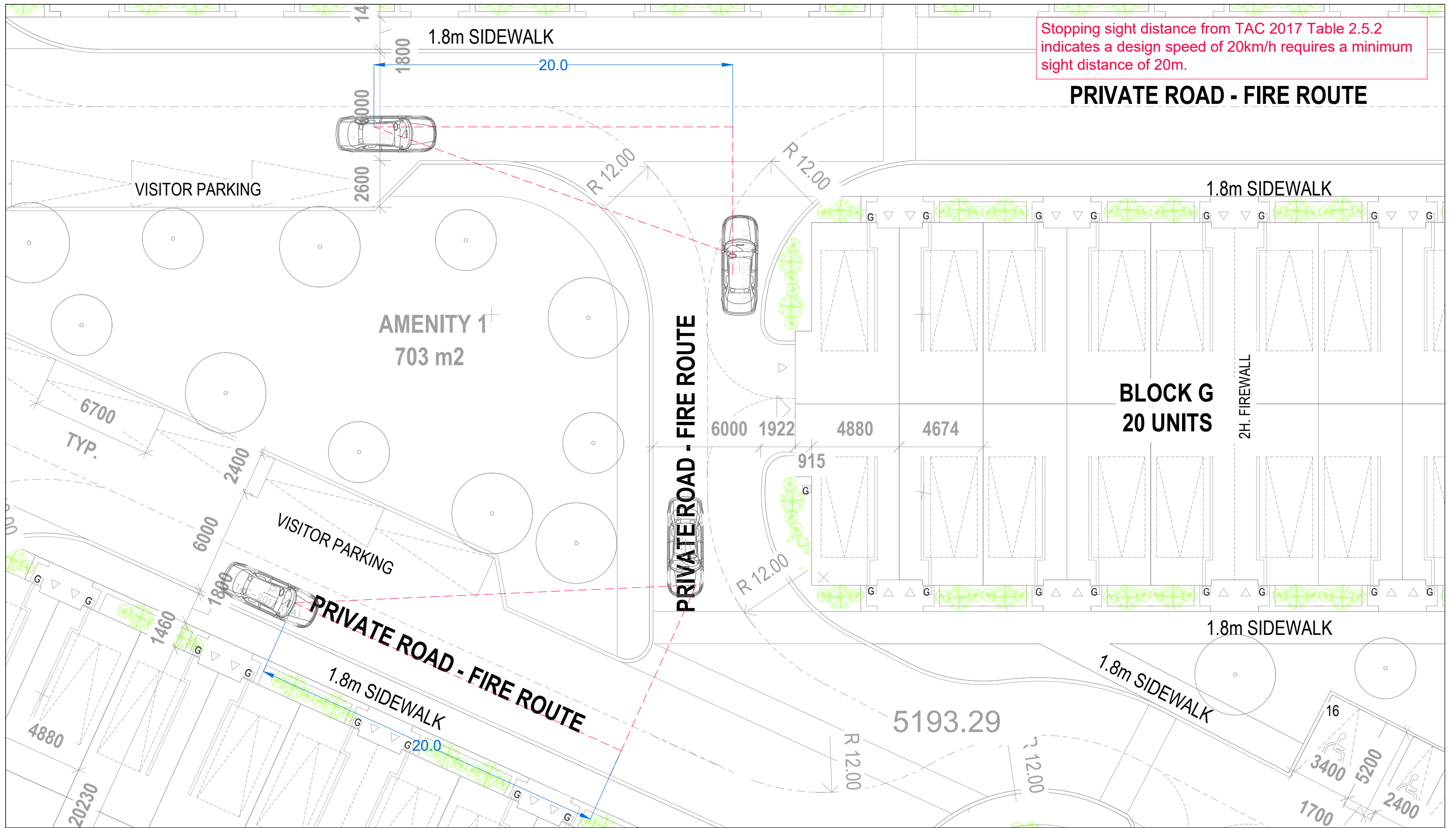
Scale: 1:600



Mississauga Fire Truck		units
Width		: 2.54
Track		: 2.54
Lock to Lock Time		: 6.0
Steering Angle		: 37.0

Figure 9
Fire Truck Access Test - Outbound
2620 Chalkwell Close, Mississauga, ON

Stopping sight distance from TAC 2017 Table 2.5.2 indicates a design speed of 20km/h requires a minimum sight distance of 20m.

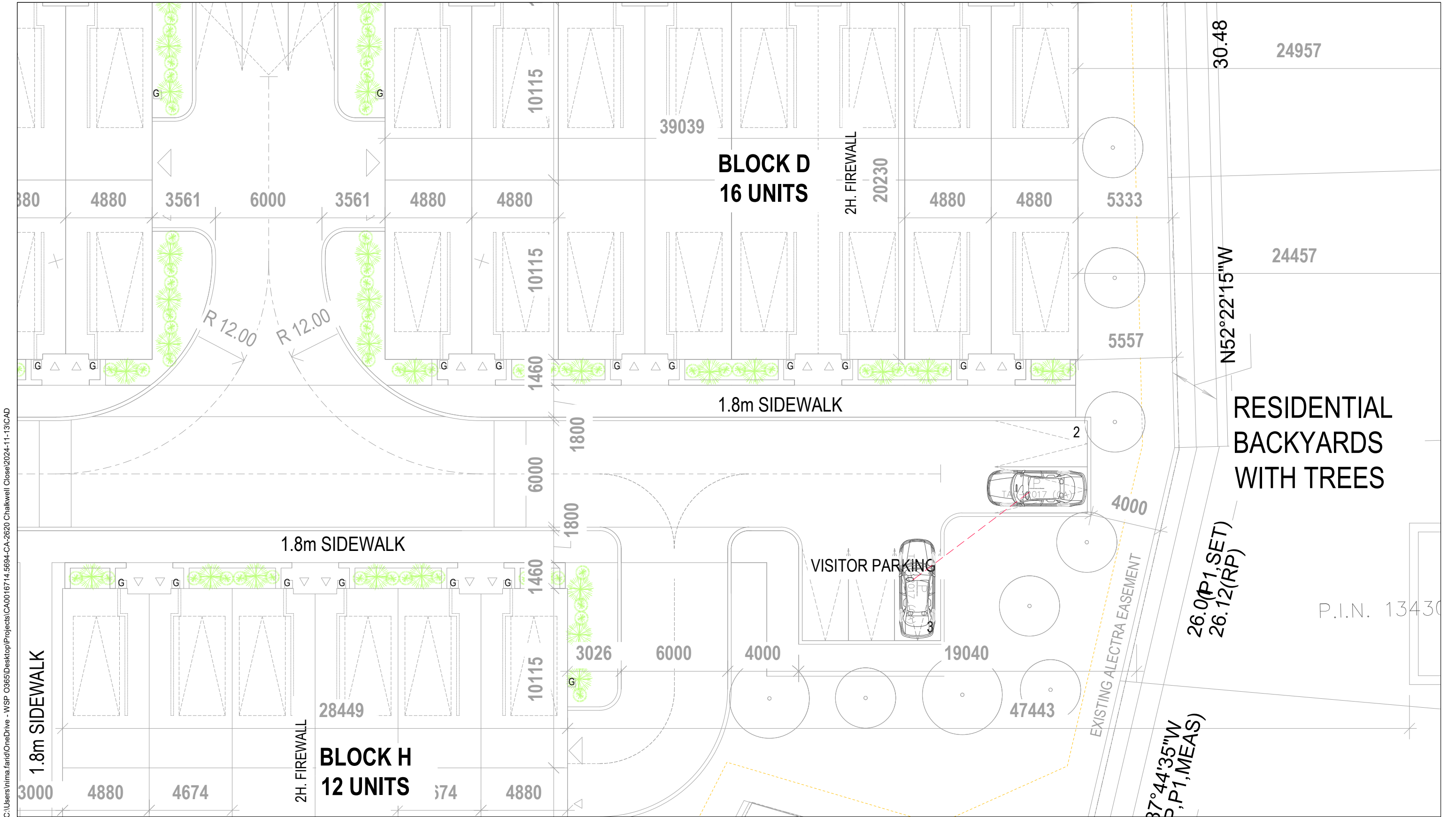


Date Site Plan Received: 2024-11-11

Scale: 1:200



Figure 10
Sightline Analysis Test - Critical Intersections
2620 Chalkwell Close, Mississauga, 10N



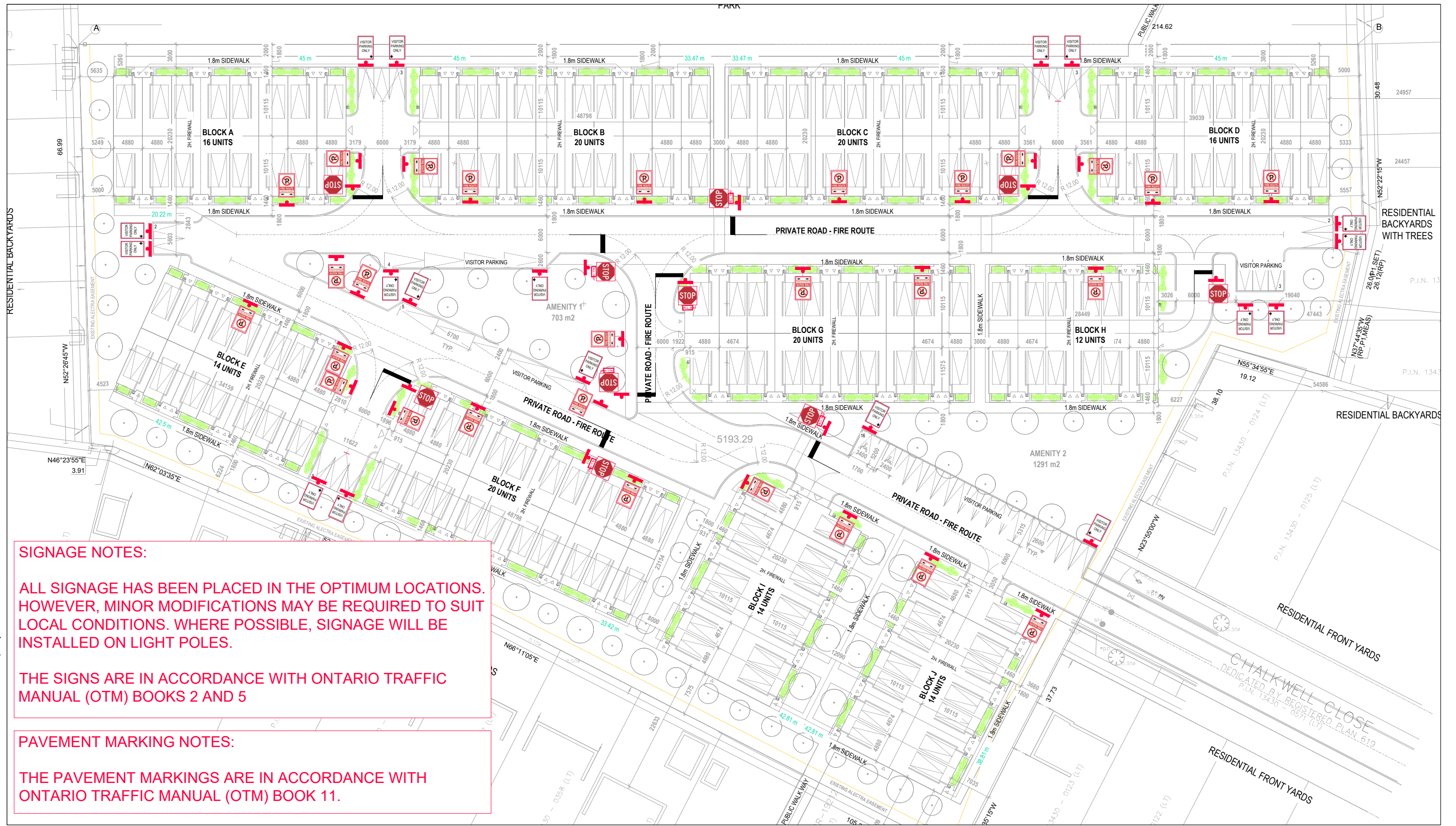
C:\Users\nima.farid\OneDrive - WSP\OneDrive\Projects\CA0016714_5694-CA-2620 Chalkwell Close\2024-11-13\CAD

Date Site Plan Received: 2024-11-11

Scale: 1:200



Figure 11
Sightline Analysis Test - Parked Vehicles
2620 Chalkwell Close, Mississauga, ON



SIGNAGE NOTES:

ALL SIGNAGE HAS BEEN PLACED IN THE OPTIMUM LOCATIONS. HOWEVER, MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT LOCAL CONDITIONS. WHERE POSSIBLE, SIGNAGE WILL BE INSTALLED ON LIGHT POLES.

THE SIGNS ARE IN ACCORDANCE WITH ONTARIO TRAFFIC MANUAL (OTM) BOOKS 2 AND 5

PAVEMENT MARKING NOTES:

THE PAVEMENT MARKINGS ARE IN ACCORDANCE WITH ONTARIO TRAFFIC MANUAL (OTM) BOOK 11.

Date Site Plan Received: 2024-11-11

Scale: 1:600



Figure 12
Pavement Marking and Signage Plan
2620 Chalkwell Close, Mississauga, ON