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September 30, 2020 **Reference Number: 19275/200**

Ida Assogna
Core Development Group Ltd.
287 Macpherson Avenue, Suite 20
Toronto, ON
M4V 1A4

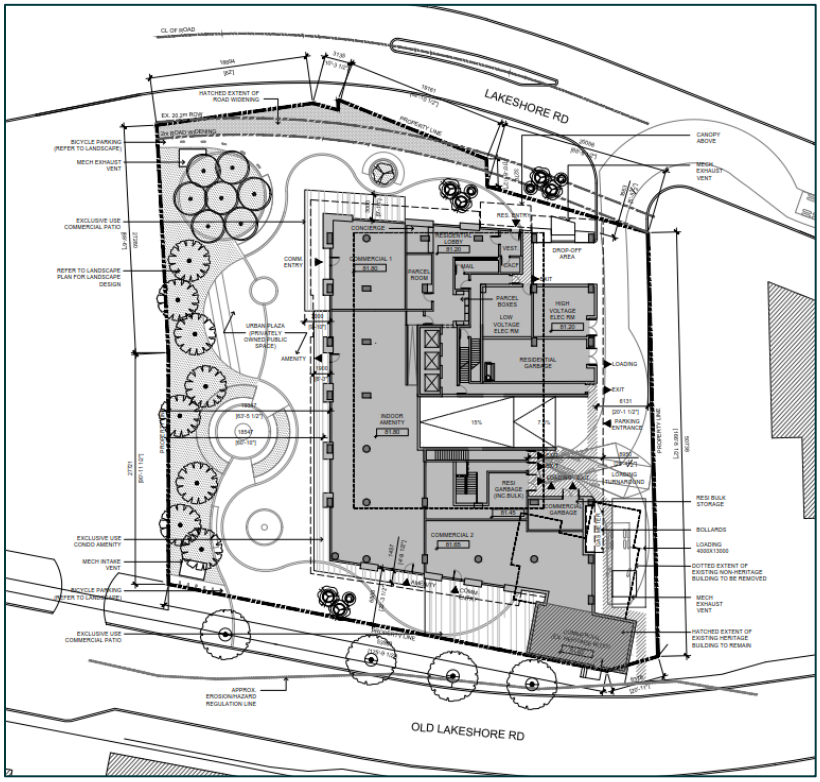
Dear Ms. Assogna,

RE: Transportation Impact Study (TIS) Update Letter for the proposed mixed-use development at 2100 Lakeshore Road, City of Burlington

LEA Consulting Ltd. (LEA) was retained by Core FSC Lakeshore LP and CORE FSC Lakeshore GP Inc. to prepare a Transportation Impact Study (TIS) for the proposed mixed-use development (herein referred to as "subject site") located at 2100 Lakeshore Road in the City of Burlington. LEA previously prepared a Transportation Impact Study for the proposed development, dated August 2019.

Since then, the proposed site plan has changed with revised site statistics. This update letter has been prepared to review the changes and refinements to the proposed site plan and statistics from a transportation perspective. A summary of the changes to the proposal since the August 2019 TIS are presented in **Table 1**, with the updated ground floor plan illustrated in **Figure 1**.

Figure 1: Conceptual Rendering of Proposed Development



Source: Studio JCI (September 24, 2020)

Table 1: Statistics Comparison

Type	August 2019 submission	Current Submissions	Net Change
Size	310 residential units; 707.1 m^2 of retail GFA	310 residential units; 426.4 m^2 of retail GFA	+0 units -280.7 m^2 of retail GFA
Vehicular Parking	333 total vehicle parking spaces Residential: 294 spaces Visitor: 30 spaces Car-Share: 4 spaces Small Car: 5 spaces (1.12 spaces/unit)	316 total vehicle parking spaces Residential: 275 spaces Visitor: 30 spaces Car-Share: 6 spaces Small Car: 5 spaces (1.08 spaces/unit)	-17 spaces
Loading Spaces	1	1	+0 spaces

The previous development proposal consisted of 310 residential units and approximately 707m^2 of at-grade retail GFA. According to the latest site plan, the retail GFA has decreased by 280.7 m^2; however, the number of dwelling units have remained the same. As such, it is expected that the circulation and traffic operations with the proposed development will be consistent with the findings in the previous study.

PARKING REVIEW

According to the City-Wide Parking Standards Review, conducted by the City of Burlington, recommended vehicle parking rates for intensification areas consist of 1.0 resident spaces per unit and 0.25 visitor spaces per unit. **Table 2** summarizes the vehicle parking standards for the proposed development.

Table 2: Vehicle Parking Summary

Type	# of Units	City-Wide Parking Standards		Proposed Parking Supply		Zoning Equivalent	
		Parking Spaces	Parking Rate	Parking Spaces	Parking Rate	Parking Spaces	Parking Rate
Residential	310 Units	310	1.0	275	0.89	275	0.89
Car-Share (1 = 4 Effective Resident Spaces)				6	0.02	24	0.08
Small Car Resident Spaces				5	0.01	5	0.01
Resident Spaces Total		**310**	**1.0**	**286**	**0.92**	**304**	**0.98**
Residential Visitor		78	0.25	30	0.10	30	0.10
Total		**388**	**1.25**	**316**	**1.02**	**334**	**1.08**

The subject site is required to provide a total of 388 parking spaces. The development is proposing 316 spaces consisting of 280 residential (including 5 small car spaces) and 30 visitor parking spaces, as well as 6 car-share spaces. Incorporating the equivalent effective parking spaces of car-share (4 spaces for each car-share space), the overall effective parking supply rate is 1.08 spaces/unit. Due to the minimal difference in parking supply rates from the original TIS, justification and conclusions from the August 2019 TIS remain valid. As such, no updates to the parking justification is required.

LOADING AND FUNCTIONAL DESIGN

As with the original submission, the subject site is required to provide at least one off-street loading space as per Subsection 2.25.3 of the City's By-Law 2020. One (1) loading space is provided on the subject site, which meets the minimum requirement. Vehicle swept paths for the updated loading and parking layouts are enclosed in **Appendix A**.

CONCLUSIONS

- The proposed development will introduce 310 residential units, 426.4 m^2 of at-grade retail GFA and 316 parking spaces, resulting in a decrease of 280.7m^2 of retail GFA and 17 parking spaces from the previous August 2019 TIS.
- As the updated site plan maintains the number of residential units proposed in the August 2019 site plan, no additional intersection capacity analysis is required. Therefore, the conclusions and findings of the previous assessment remain valid.
- The proposed development will provide 316 physical vehicle parking spaces on site consisting of 286 (280 spaces + 6 car-share) and 30 spaces allocated for residents and visitors respectively. This results in an overall effective parking supply rate of 1.08 spaces/unit. With a negligible difference in parking supply rates from the previous assessment, justification and conclusions from the August 2019 TIS remain valid.
- The provision of one (1) loading spaces meet the minimum requirement outlined in the City of Burlington Zoning By-Law 2000.

Should you have any question or concerns regarding this Transportation Impact Study Update, please do not hesitate to contact Christopher Sidlar (416-572-1791, csidlar@lea.ca) or Kelsey Waugh (416-572-1793, kwaugh@lea.ca).

Yours truly,

LEA CONSULTING LTD.



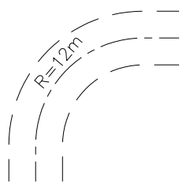
Kelsey Waugh, P.Eng., RSP1
Transportation Engineer

:cs

Encl: Appendix A – Swept Path Diagrams

NOTE:

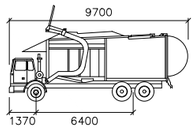
1. ONTARIO BUILDING CODE 3.2.5.5 LOCATION OF ACCESS ROUTES
   (1) ACCESS ROUTES...SHALL BE LOCATED SO THAT THE PRINCIPAL ENTRANCE AND EVERY ACCESS OPENING...ARE LOCATED NOT LESS THAN 3m AND NOT MORE THAN 15m FROM THE CLOSEST PORTION OF THE ACCESS ROUTE
2. ONTARIO BUILDING CODE 3.2.5.6 ACCESS ROUTE DESIGN
   (1) A PORTION OF A ROADWAY PROVIDED AS A REQUIRED ACCESS ROUTE FOR FIRE DEPARTMENT USE SHALL:
   (a) HAVE A CLEAR WIDTH NOT LESS THAN 6m,
   (b) HAVE A CENTRELINE RADIUS NOT LESS THAN 12m,
   (c) HAVE AN OH CLEARANCE OF NOT LESS THAN 5m
   (d) HAVE TURNAROUND FACILITIES FOR ANY DEAD-END PORTION OF THE ACCESS ROUTE MORE THAN 90m LONG
   (e) BE CONNECTED WITH A PUBLIC THOROUGHFARE



DRAWN BY: A.T. PLOT DATE: September 30, 2020

LEA Consulting Ltd. Consulting Engineers and Planners **www.LEA.ca**	N	Project No. 19275-220 Date SEPT. 30, 2020	2093-2101 OLD LAKESHORE RD BURLINGTON ONTARIO 3 0 3 6 9m 1:300	SITE PLAN FIRE ROUTE REVIEW	Drawing No. 001

DRAWING NAME: F:\19275\Drafting\19275WF13.dwg



GARBAGE HALTON

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Width	: 2700
Track	: 2700
Lock to Lock Time	: 6.0
Steering Angle	: 33.8

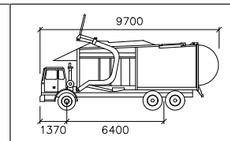
FORWARD IN

NOTES:
1. HALTON REGION DEVELOPMENT DESIGN GUIDELINES FOR SOURCE SEPARATION OF SOLID WASTE
   1.10 PRIVATE ROAD REQUIRMENTS
   1.10.1.4 ALL TURNS SHALL HAVE A MINIMUM TURNING RADIUS FROM THE CENTRE LINE OF 13 METRES TO THE SATISFACTION OF THE REGION
   1.10.1.5 OVERHEAD CLEARANCE THROUGHOUT THE PRIVATE ROAD MUST BE A MINIMUM OF 7.5 METRES AND BE FREE FROM OBSTRUCTIONS
   2.3 MULTI–RESIDENTIAL APARTMENT BUILDINGS
   2.3.1.4 A MIN. OF 18m STRAIGHT HEAD–ON APPROACH TO COLLECTION POINT IS REQUIRED.
   APPENDIX 1 COLLECTION VEHICLE DIMENSIONS AND MINIMUM TURNING RADII REQUIRED FOR SPA
   FRONT END – TURNING RADIUS = 11.50m

1. FLASHING WARNING LIGHT TO BE ACTIVATED WHEN TRUCKS ENTER AND EXIT THE SITE. THE SYSTEM TO REMAIN ACTIVATED DURING THE EXIT MANEUVER AND UNTIL THE TRUCK EXITS THE SITE.
2. WARNING SIGN TO BE MOUNTED BELOW THE FLASH LIGHT.

WATCH FOR TURNING TRUCKS WHEN FLASHING

(600x300)
BLACK LEGEND & BORDER,
WHITE REFL. BACKGROUND.



GARBAGE HALTON

	mm
Width	: 2700
Track	: 2700
Lock to Lock Time	: 6.0
Steering Angle	: 33.8

REVERSE OUT

NOTES:
1. HALTON REGION DEVELOPMENT DESIGN GUIDELINES FOR SOURCE SEPARATION OF SOLID WASTE
   1.10 PRIVATE ROAD REQUIRMENTS
   1.10.1.4 ALL TURNS SHALL HAVE A MINIMUM TURNING RADIUS FROM THE CENTRE LINE OF 13 METRES TO THE SATISFACTION OF THE REGION
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   FRONT END – TURNING RADIUS = 11.50m

1. FLASHING WARNING LIGHT TO BE ACTIVATED WHEN TRUCKS ENTER AND EXIT THE SITE. THE SYSTEM TO REMAIN ACTIVATED DURING THE EXIT MANEUVER AND UNTIL THE TRUCK EXITS THE SITE.
2. WARNING SIGN TO BE MOUNTED BELOW THE FLASH LIGHT.

WATCH FOR TURNING TRUCKS WHEN FLASHING

(600x300)
BLACK LEGEND & BORDER,
WHITE REFL. BACKGROUND.

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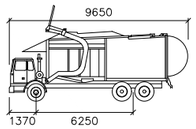
2093–2101 OLD LAKESHORE RD
BURLINGTON ONTARIO

4 0 4 8 12m
1:400

SITE PLAN – LOADING REVIEW REGIONAL GARBAGE TRUCK ENTRY & EXIT PATHS

Drawing No.
002

DRAWING NAME: F:\19275\Drafting\19275WF13.dwg



RECYCLING HALTON

	mm
Width	: 2440
Track	: 2440
Lock to Lock Time	: 6.0
Steering Angle	: 28.7

FORWARD IN

NOTES:
REGION OF HALTON DEVELOPMENT DESIGN GUIDELINES
FOR SOURCE SEPARATION OF SOLID WASTE

1.10 PRIVATE ROAD REQUIREMENTS

1.10.1.4 ALL TURNS SHALL HAVE A MINIMUM TURNING RADIUS FROM THE CENTRE LINE OF 13 METRES TO THE SATISFACTION OF THE REGION

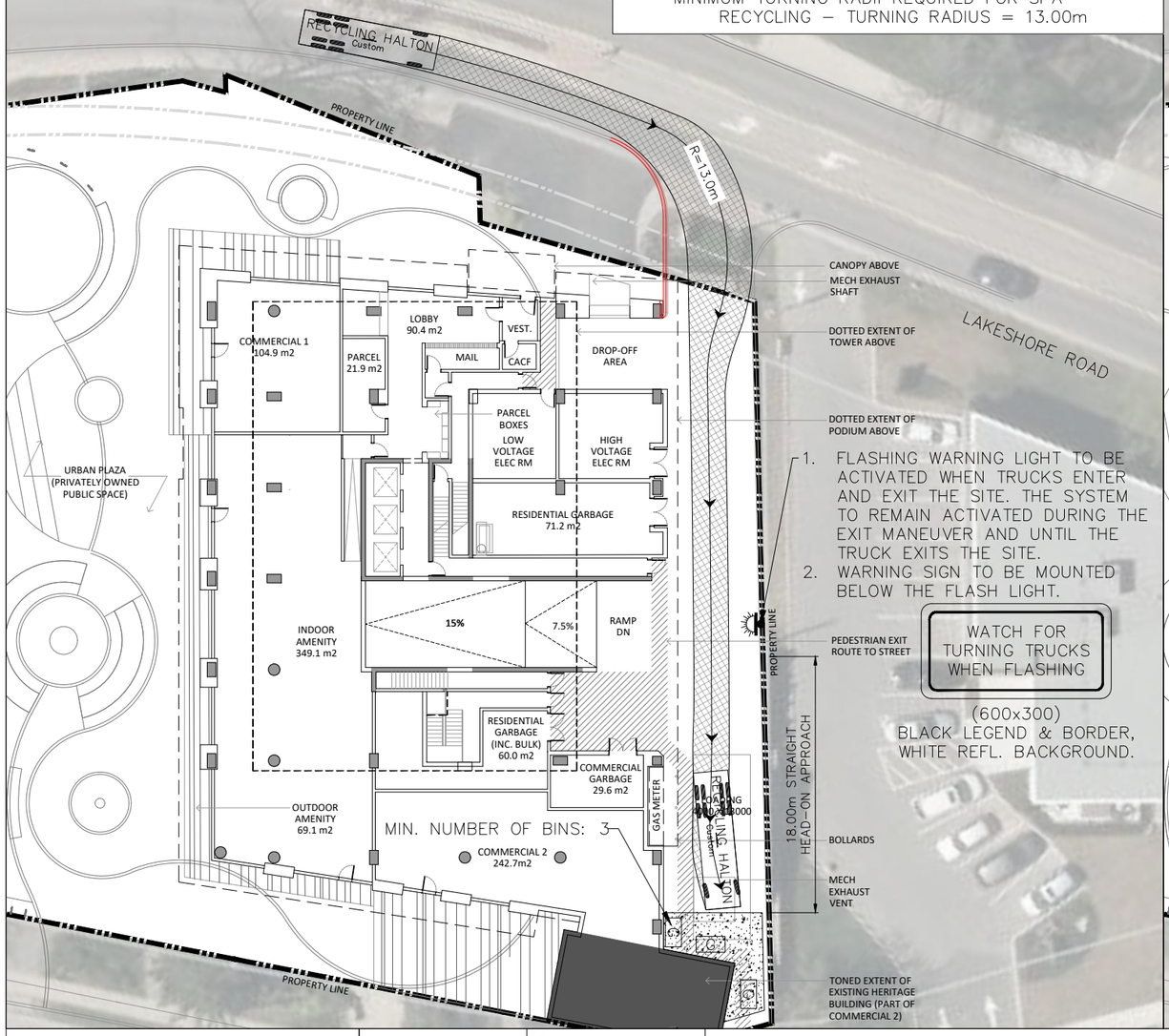
1.10.1.5 OVERHEAD CLEARANCE THROUGHOUT THE PRIVATE ROAD MUST BE A MINIMUM OF 7.5 METRES AND BE FREE FROM OBSTRUCTIONS

2.3 MULTI–RESIDENTIAL APARTMENT BUILDINGS

2.3.1.4 A MIN. OF 18m STRAIGHT HEAD–ON APPROACH TO COLLECTION POINT IS REQUIRED.

APPENDIX 1 COLLECTION VEHICLE DIMENSIONS AND MINIMUM TURNING RADII REQUIRED FOR SPA

RECYCLING – TURNING RADIUS = 13.00m



RECYCLING HALTON

	mm
Width	: 2440
Track	: 2440
Lock to Lock Time	: 6.0
Steering Angle	: 28.7

REVERSE OUT

NOTES:
REGION OF HALTON DEVELOPMENT DESIGN GUIDELINES
FOR SOURCE SEPARATION OF SOLID WASTE

1.10 PRIVATE ROAD REQUIREMENTS

1.10.1.4 ALL TURNS SHALL HAVE A MINIMUM TURNING RADIUS FROM THE CENTRE LINE OF 13 METRES TO THE SATISFACTION OF THE REGION

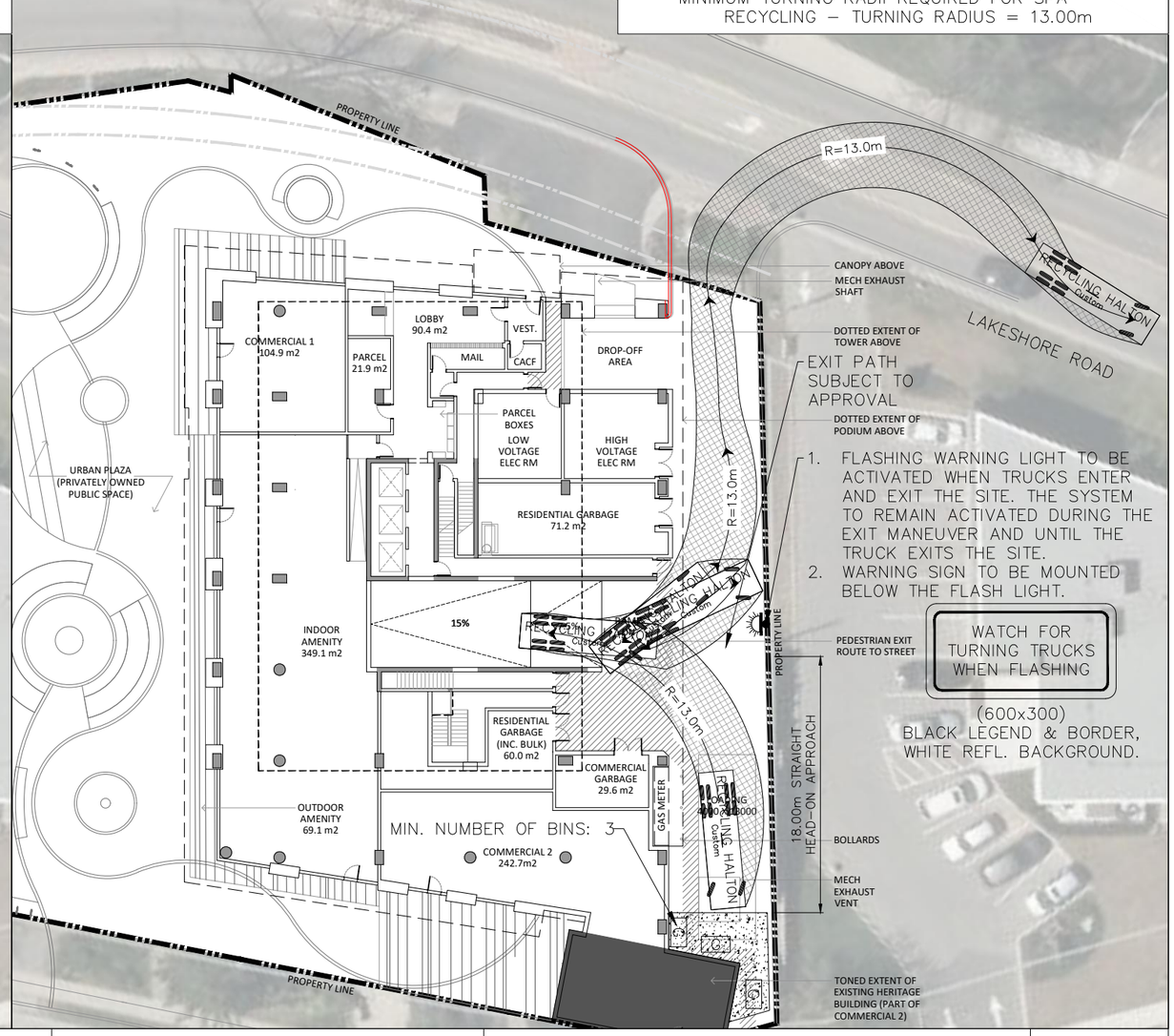
1.10.1.5 OVERHEAD CLEARANCE THROUGHOUT THE PRIVATE ROAD MUST BE A MINIMUM OF 7.5 METRES AND BE FREE FROM OBSTRUCTIONS

2.3 MULTI–RESIDENTIAL APARTMENT BUILDINGS

2.3.1.4 A MIN. OF 18m STRAIGHT HEAD–ON APPROACH TO COLLECTION POINT IS REQUIRED.

APPENDIX 1 COLLECTION VEHICLE DIMENSIONS AND MINIMUM TURNING RADII REQUIRED FOR SPA

RECYCLING – TURNING RADIUS = 13.00m



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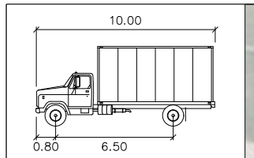
2093–2101 OLD LAKESHORE RD
BURLINGTON ONTARIO

4 0 4 8 12m
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SITE PLAN – LOADING REVIEW
REGIONAL RECYCLING TRUCK
ENTRY & EXIT PATHS

Drawing No.
003

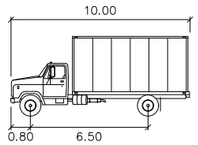
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MSU meters

Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 40.1

FORWARD IN



MSU meters

Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 40.1

REVERSE OUT

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4 0 4 8 12m
1:400

SITE PLAN – LOADING REVIEW MOVING/DELIVERY TRUCK (MSU) ENTRY & EXIT PATHS

Drawing No.
004

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NOTES:
1. CITY OF BURLINGTON SITE PLAN APPLICATION GUIDELINES 5.3 GUIDELINES – DRIVEWAY AND ACCESS DESIGN MAIN DRIVEWAYS FOR RESIDENTIAL PROJECTS SHOULD BE MINIMUM OF 6.0m WIDE

EX. 20.2m ROW
ROAD WIDENING
PROPERTY LINE
MECH EXHAUST VENT
COMMERCIAL 1 104.9 m2
PARCEL 21.9 m2
LOBBY 90.4 m2
VEST.
MAIL
CACF
PARCEL BOXES
LOW VOLTAGE ELEC RM
HIGH VOLTAGE ELEC RM
RESIDENTIAL GARBAGE 71.2 m2
URBAN PLAZA (PRIVATELY OWNED PUBLIC SPACE)
INDOOR AMENITY 349.1 m2
15%
7.5%
RAMP DN
6.00m
CANOPY ABOVE
MECH EXHAUST SHAFT
DOTTED EXTENT OF TOWER ABOVE
DOTTED EXTENT OF PODIUM ABOVE
LAKESHORE ROAD
PEDESTRIAN EXIT ROUTE TO STREET
RESIDENTIAL GARBAGE (INC. BULK) 60.0 m2
COMMERCIAL GARBAGE 29.6 m2
GAS METER
LOADING 4000 X 13000
OUTDOOR AMENITY 69.1 m2
COMMERCIAL 2 242.7m2
BOLLARDS
MECH INTAKE VENT
MECH EXHAUST VENT
TONED EXTENT OF EXISTING HERITAGE BUILDING (PART OF COMMERCIAL 2)

5.60
1.10 3.20
P

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

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3 0 3 6 9m
1:300

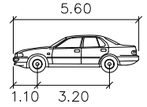
GROUND FLOOR – PARKING REVIEW PASSENGER VEHICLE (P–TAC) ENTRY & EXIT PATHS

Drawing No.
005

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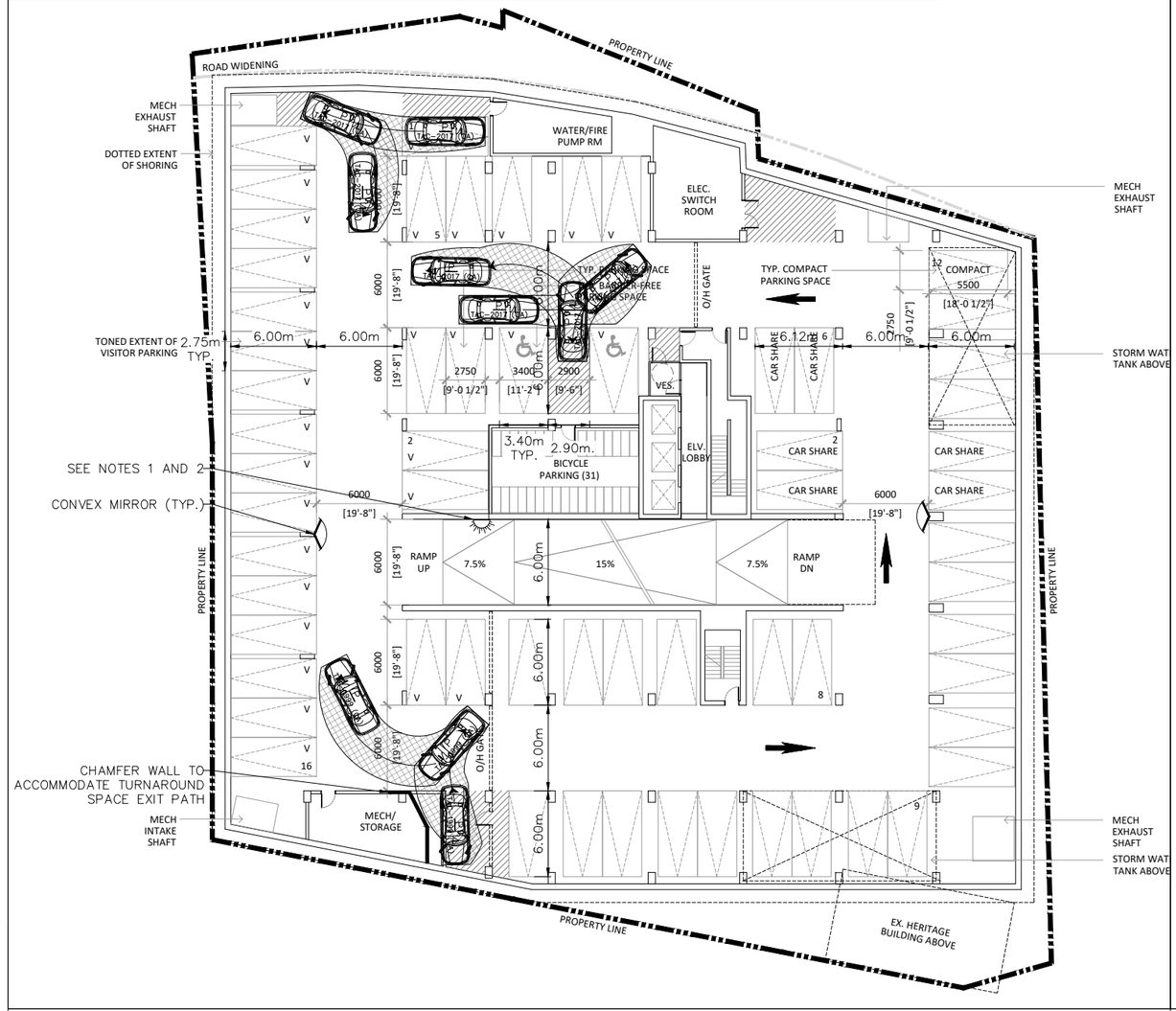
NOTES:

1. FLASHING WARNING LIGHT TO BE ACTIVATED WHEN COLLECTION VEHICLE/MOVING TRUCKS MANEUVER THROUGH THE RAMP ON THE GROUND FLOOR.
2. WARNING SIGN TO BE MOUNTED BELOW THE FLASHING BEACON, WARNING DRIVERS THAT A TRUCK IS AT THE RAMP OPENING ON THE GROUND FLOOR.
3. CITY OF BURLINGTON ZONING BY-LAW 2020 SECTION 2.26 GENERAL PARKING PROVISIONS
   1. PARKING SPACE SIZE & ACCESSIBILITY
      a) EACH PARKING SPACE SHALL HAVE A MIN. WIDTH OF 2.75m AND A MIN. AREA OF 16.5 m^2...
   9. DESIGNATED ACCESSIBLE PARKING SPACES
      b) EACH DESIGNATED ACCESSIBLE PARKING SPACE SHALL MEET THE MINIMUM WIDTH AND AREA REQUIREMENTS OF SUBSECTION (1)(a) ABOVE AND SHALL BE LOCATED ADJACENT TO A DELINEATED ACCESSIBLE PARKING WALKWAY WITH A MIN. WIDTH OF 2.00m.



P

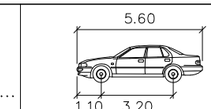
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Width	: 2.00
Track	: 2.00
Lock to Lock Time	: 6.0
Steering Angle	: 35.9



LEVEL P1

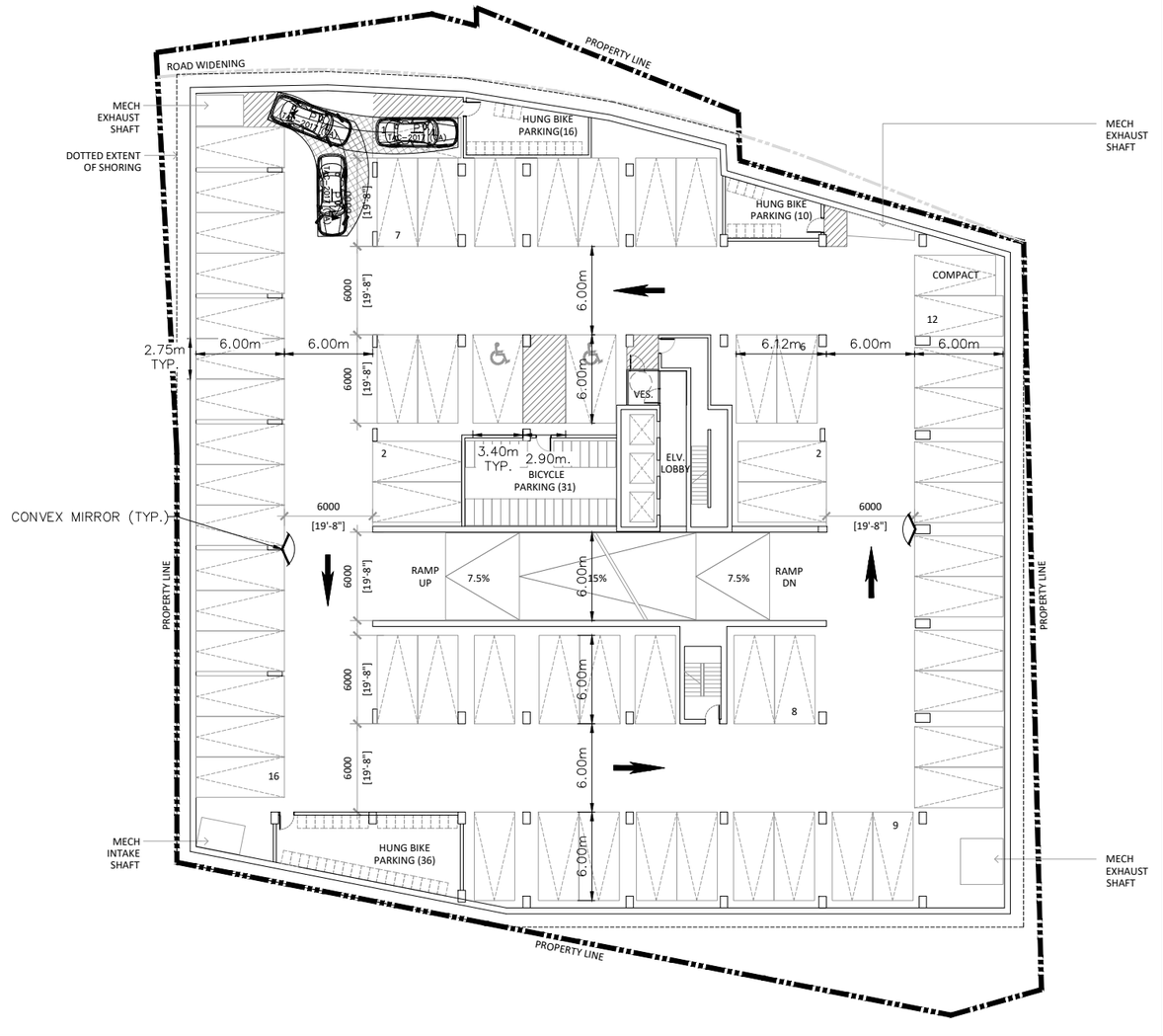
NOTES:

1. CITY OF BURLINGTON ZONING BY-LAW 2020 SECTION 2.26 GENERAL PARKING PROVISIONS
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P

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



LEVEL P2

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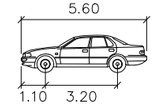
4 0 4 8 12m
1: 400

LEVEL P1 & P2 – PARKING REVIEW
PASSENGER VEHICLE (P-TAC)
ENTRY & EXIT PATHS

Drawing No.
006

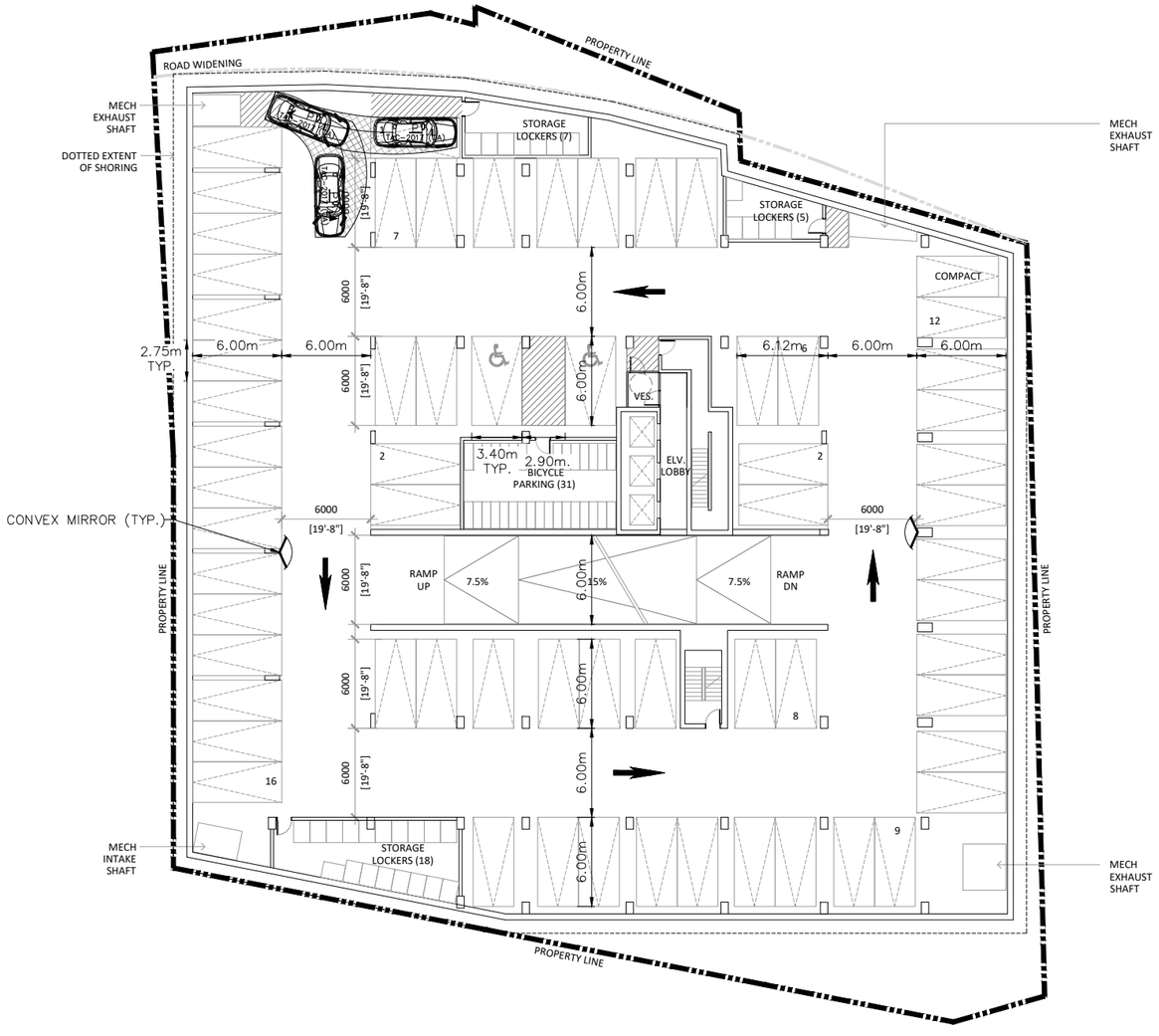
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NOTES:
1. CITY OF BURLINGTON ZONING BY-LAW 2020 SECTION 2.26 GENERAL PARKING PROVISIONS
   1. PARKING SPACE SIZE & ACCESSIBILITY
   a) EACH PARKING SPACE SHALL HAVE A MIN. WIDTH OF 2.75m AND A MIN. AREA OF 16.5 m²...
   9. DESIGNATED ACCESSIBLE PARKING SPACES
   b) EACH DESIGNATED ACCESSIBLE PARKING SPACE SHALL MEET THE MINIMUM WIDTH AND AREA REQUIREMENTS OF SUBSECTION (1)(a) ABOVE AND SHALL BE LOCATED ADJACENT TO A DELINEATED ACCESSIBLE PARKING WALKWAY WITH A MIN. WIDTH OF 2.00m.



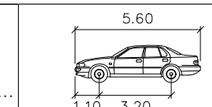
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	meters
Width	: 2.00
Track	: 2.00
Lock to Lock Time	: 6.0
Steering Angle	: 35.9



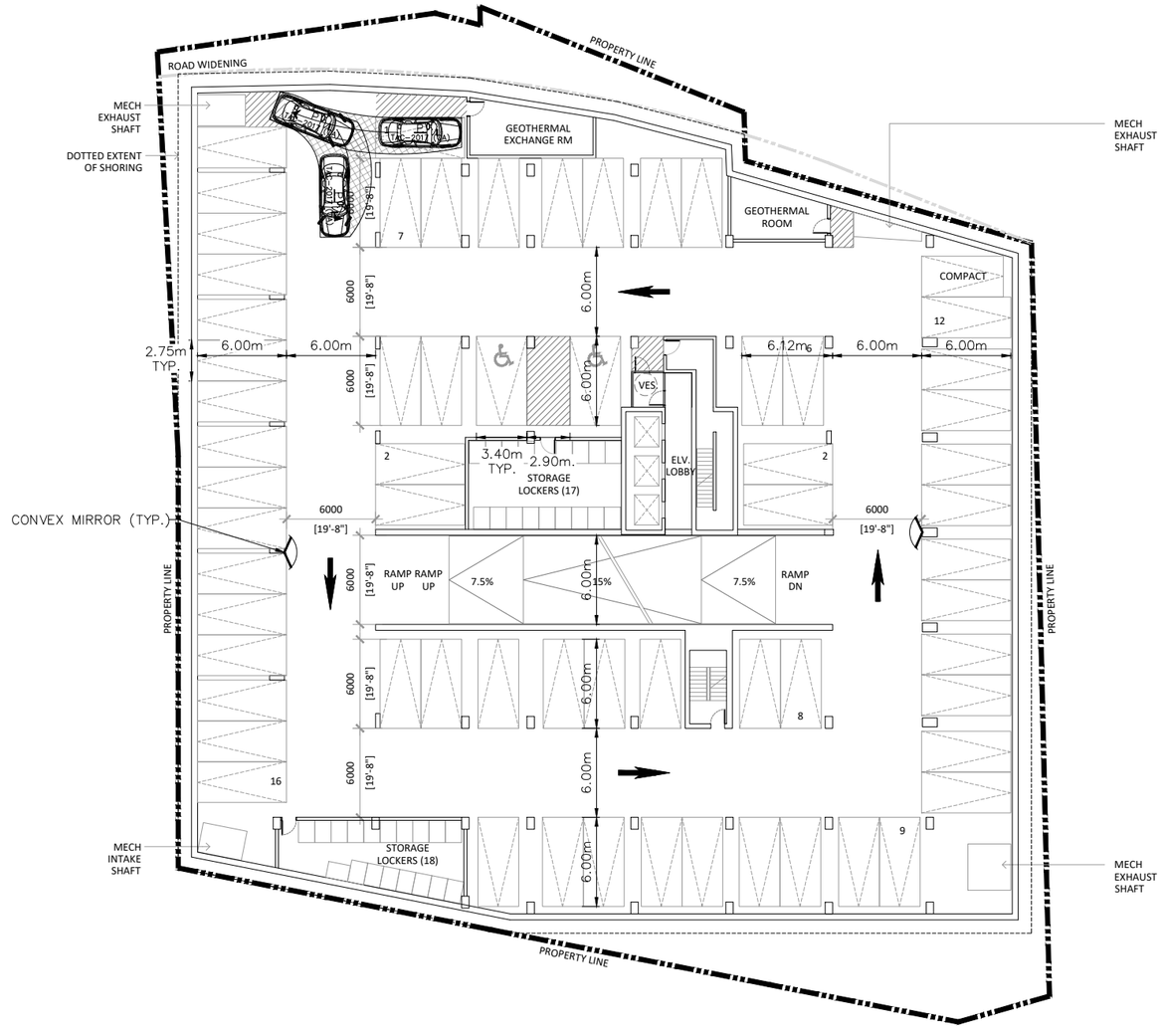
LEVEL P3

NOTES:
1. CITY OF BURLINGTON ZONING BY-LAW 2020 SECTION 2.26 GENERAL PARKING PROVISIONS
   1. PARKING SPACE SIZE & ACCESSIBILITY
   a) EACH PARKING SPACE SHALL HAVE A MIN. WIDTH OF 2.75m AND A MIN. AREA OF 16.5 m²...
   9. DESIGNATED ACCESSIBLE PARKING SPACES
   b) EACH DESIGNATED ACCESSIBLE PARKING SPACE SHALL MEET THE MINIMUM WIDTH AND AREA REQUIREMENTS OF SUBSECTION (1)(a) ABOVE AND SHALL BE LOCATED ADJACENT TO A DELINEATED ACCESSIBLE PARKING WALKWAY WITH A MIN. WIDTH OF 2.00m.



P

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



LEVEL P4

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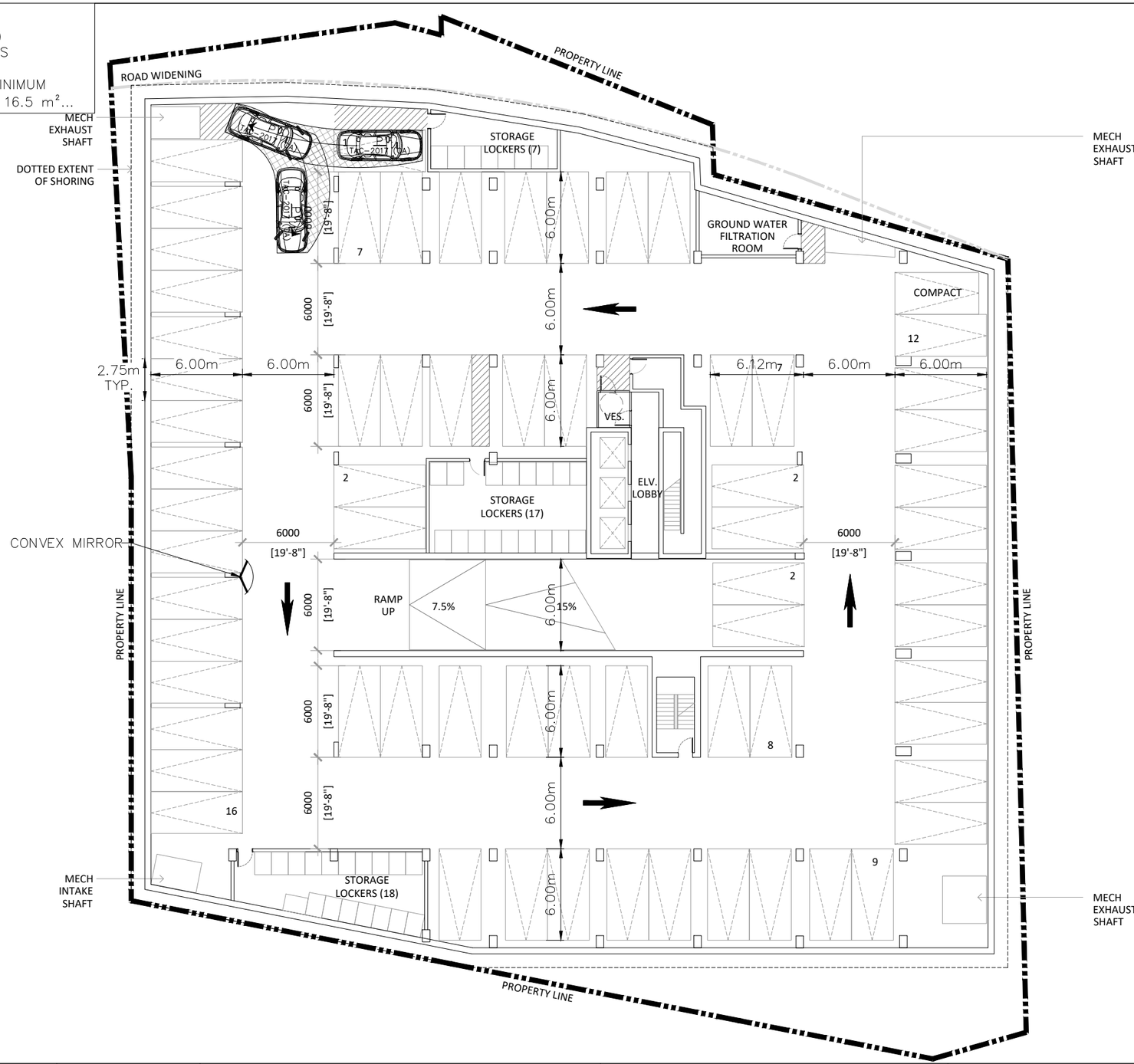
4 0 4 8 12m
1: 400

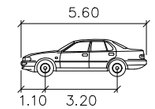
LEVEL P3 & P4 – PARKING REVIEW
PASSENGER VEHICLE (P-TAC)
ENTRY & EXIT PATHS

Drawing No.
007

DRAWING NAME: F:\19275\Drafting\19275WF13.dwg

NOTES:
1. CITY OF BURLINGTON ZONING BY-LAW 2020
SECTION 2.26 GENERAL PARKING PROVISIONS
1. PARKING SPACE SIZE & ACCESSIBILITY
a) EACH PARKING SPACE SHALL HAVE A MINIMUM WIDTH OF 2.75m AND A MINIMUM AREA OF 16.5 m^2...





P

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

DRAWN BY: A.T. PLOT DATE: September 30, 2020

LEA Consulting Ltd.
Consulting Engineers and Planners
www.LEA.ca

N

Project No.
19275-220

Date
SEPT. 30, 2020

2093-2101 OLD LAKESHORE RD
BURLINGTON ONTARIO

3 0 3 6 9m
1:300

LEVEL P5 – PARKING REVIEW PASSENGER VEHICLE (P-TAC) ENTRY & EXIT PATHS

Drawing No.
008

DRAWING NAME: F:\19275\Drafting\19275WF13.dwg