



April 3<sup>rd</sup>, 2023

JDE Project 1519

**Sean Mason Homes (Essa Road) Inc.**  
405 Essa Road  
Barrie, ON L4N 9C8

**RE: Traffic Impact Study - Addendum**  
**405 Essa Road Development, City of Barrie**

This letter was prepared by **JD Northcote Engineering Inc.** [JD Engineering] for the account of **Sean Mason Homes (Essa Road) Inc.** [Developer].

## **1.0 BACKGROUND**

JD Engineering prepared a Traffic Impact Study for the proposed residential development located on a site municipally known as 405 Essa Road, in the City of Barrie [City], dated October 4<sup>th</sup>, 2021 [TIS]. The TIS assessed the impact of following development statistics:

- 6 townhouse units;
- 89 apartment units; and
- 447 sq.m. (4,812 sq.ft.) of commercial space.

The proposed development has been revised through the development approval process to address comments from the City Staff, Councillors and the public. The updated Site Plan now includes the following:

- 5 townhouse units;
- 92 apartment units; and
- 171 sq.m. (1,841 sq.ft.) of commercial space.

The revised Site Plan is provided in the **Appendix "A"**.

This letter is intended as an update to the TIS, to assess impact of the changes to the Site Plan.

## **2.0 IMPACT OF THE REVISED SITE PLAN - TRAFFIC GENERATION**

Data provided in the Institute of Transportation Engineers [ITE] *Trip Generation* (11<sup>th</sup> Edition) was used in the TIS to calculate the traffic generated from the proposed development. The revised estimated trip generation for the proposed development is provided below in **Table 1**. The previous traffic generation has also been included, for comparative purposes.



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**Table 1 – Estimated Traffic Generation of Proposed Development**

Land Use	Size	AM Peak Hour			PM Peak Hour		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Previous Development Plan							
Single Family Attached ITE Land Use: 215	6 units	1	2	3	2	1	3
Multifamily Housing (Mid-Rise) ITE Land Use: 221	89 units	6	22	28	21	14	35
Strip Retail Plaza (<40k) ITE Land Use: 822	4,812 sq.ft. GFA	6	5	11	16	16	32
Total		13	29	42	39	31	70
Revised Development Plan							
Single Family Attached ITE Land Use: 215	5 units	1	1	2	2	1	3
Multifamily Housing (Mid-Rise) ITE Land Use: 221	92 units	7	22	29	22	14	36
Strip Retail Plaza (<40k) ITE Land Use: 822	1,841 sq.ft. GFA	3	1	4	6	6	12
Total		11	24	35	30	21	51
Net Trips		-2	-5	-7	-9	-10	-19

As indicated, the revised Site Plan will result in a net trip reduction of 7 AM and 19 PM peak hour trips.

There is no change to the recommendations and conclusions presented in the TIS, as a result of the change in traffic generation by the revised Site Plan.

As outlined in the TIS, there is no requirement for traffic signals at the Site Access / Essa Road intersection.

### 3.0 IMPACT OF THE REVISED SITE PLAN – DRIVEWAY LOCATION

The Site Access in the revised Site Plan has been relocated slightly further south to improve the alignment with the existing commercial driveway on the east side of Essa Road. The revised location of the Site Access still meets the minimum spacing requirements and sight distance requirements, as outlined in the TIS. As a result, there is no change to the recommendations and conclusions presented in the TIS.

### 4.0 IMPACT OF THE REVISED SITE PLAN – DRIVEWAY WIDTH

The width of the throat for the Site Access in the revised Site Plan has been increased from 6.0 metres to 7.2 metres. For the reasons outlined in the TIS, no operational or traffic safety issues are anticipated at the Site Access as a result of the proposed driveway throat width.

The internal driveway aisles have been increased from 6.0 metres to 6.4 metres where the driveway aisle is adjacent to parking stalls. The proposed internal driveways can accommodate the required vehicle turning movements and will not result in any operational issues.

Internal driveways that are not adjacent to parking stalls have been maintained at 6.0 metres wide. A 6.0-metre-wide internal driveway is consistent with the minimum Zoning By-Law requirement for a number similar municipalities, including:

- City of Orillia
- Town of Collingwood
- Town of Wasaga Beach
- Town of Innisfil
- Town of Bradford West Gwillimbury

## **5.0 IMPACT OF THE REVISED SITE PLAN – SERVICE ACCESS**

The revised Site Plan includes a service access via an easement within the existing residential development to the north. This access will be controlled by an overhead service door and will not be accessible for private vehicle access. This service access will allow waste collection vehicles to enter and exit the site in a forward motion.

## **6.0 PARKING REVIEW**

The revised Site Plan provides 108 parking spaces (1.11 spaces per unit), which exceeds the minimum parking requirement according to the City of Barrie By-Law 2015-097 (amendment to the City's Comprehensive Zoning By-law 2009-141 [Zoning By-law]).

The revised Site Plan provides five barrier-free parking spaces, which meets the minimum parking requirement according to the Zoning By-law.

## **CONCLUSION**

This section summarizes the conclusions and recommendations from the additional analysis.

- 1) There is no change to the recommendations and conclusions presented in the TIS, as a result of the change in traffic generation by the revised Site Plan.
- 2) There is no requirement for traffic signals at the Site Access / Essa Road intersection.
- 3) The revised location of the Site Access still meets the minimum spacing requirements and sight distance requirements, as outlined in the TIS.
- 4) The proposed width for the Site Access and internal driveways is acceptable for the intended use.
- 5) The Service Access will allow waste collection vehicles to enter and exit the site in a forward motion and will prohibit access by passenger vehicles.
- 6) The proposed parking meets the City's Zoning By-law minimum parking requirements.

We trust you will find this submission acceptable. Should you have any questions or concerns or require any additional information in this regard, please contact our office.

Yours truly,  
**JD Northcote Engineering Inc.**



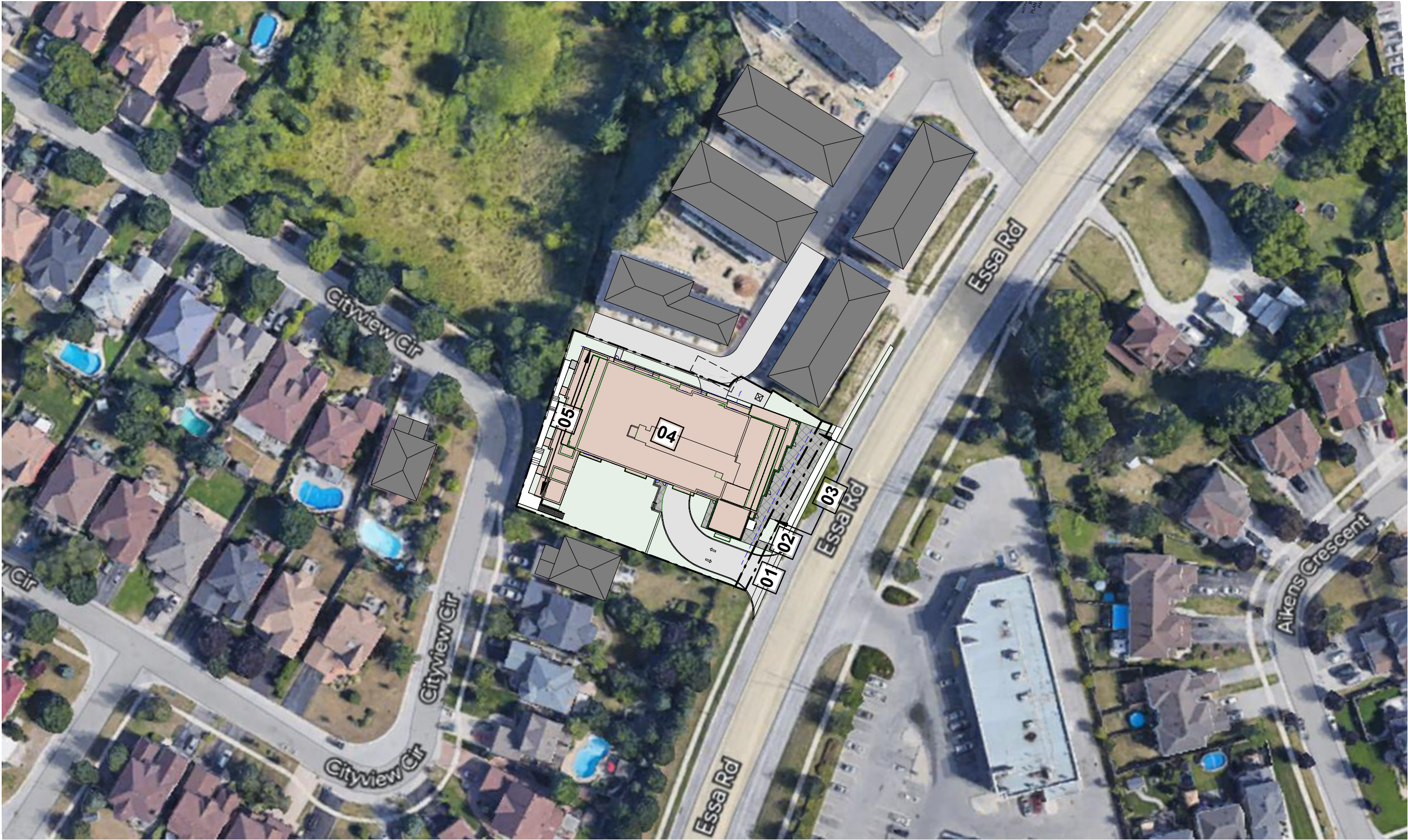
John Northcote, P.Eng.  
President



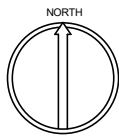
Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. JD Engineering accept no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this project.

## **Appendix "A"**



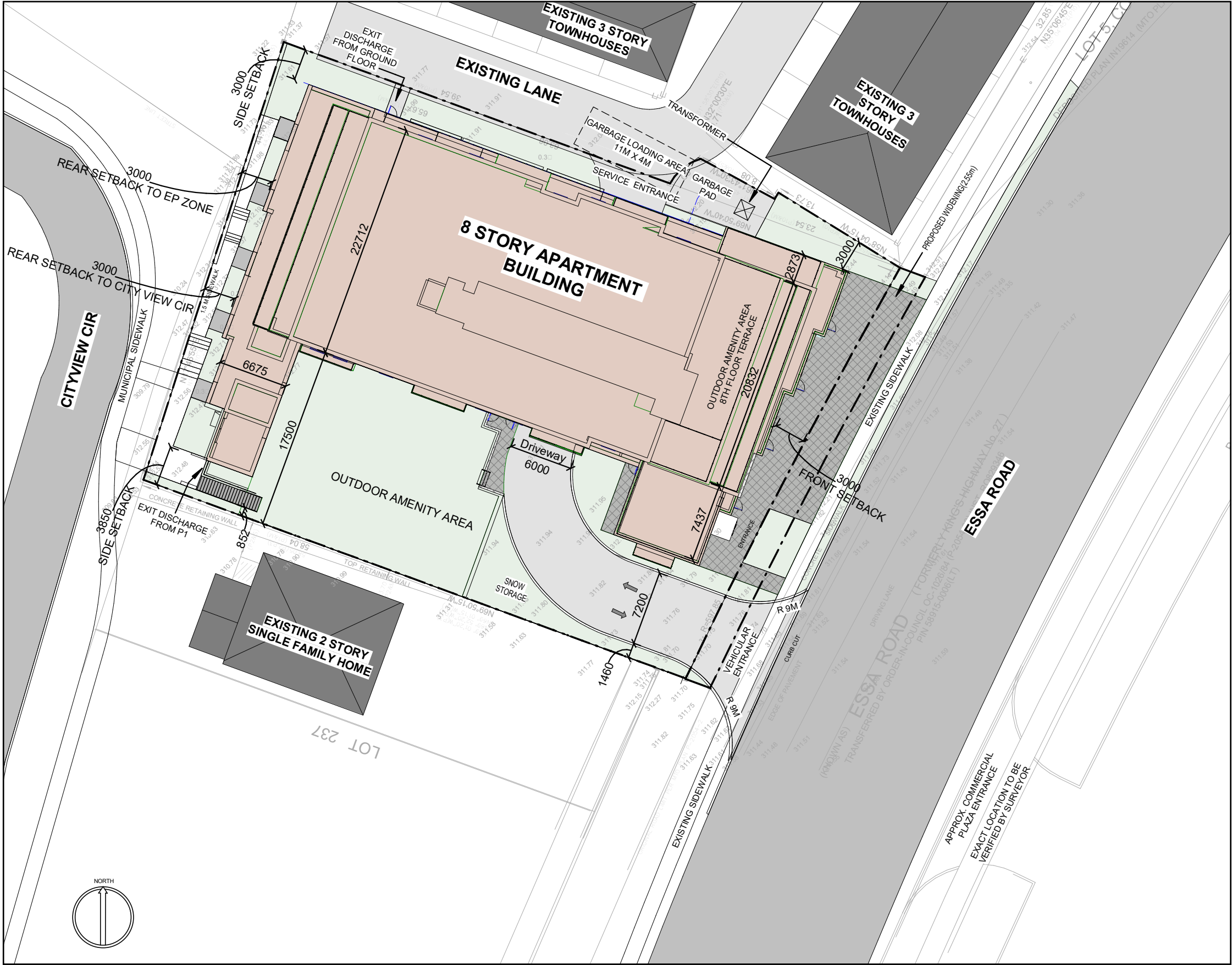


1 CONTEXT PLAN  
A001 1 : 1000



- 01 VEHICULAR ENTRANCE
- 02 PEDESTRIAN ENTRANCE
- 03 TWO STORY TOWNHOUSES ALONG ESSA RD
- 04 EIGHT STORY APARTMENT BUILDING
- 05 THREE STORY TOWNHOUSES ALONG CITYVIEW CIR

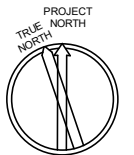




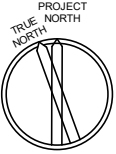
MIXED-USE CORRIDOR (MU2) ZONE		
PROVISIONS	REQUIRED	PROVIDED
Lot Area (min)	----	2,649.74m2 (Developable Area)
Lot Frontage (min.)	----	45.44m - Essa Rd. (measured 7.0m back)
Number of Units	----	Residential = 97 Commercial = 4 Total = 101
Dwelling Unit Floor Area (5.4.2.2.a)	35.0m2/ + 10.0m2/ / bedroom	> 35.00m2/ + 10.00m2/ / bedroom
Front Yard Setback (5.4.3.2.a)	1.0m Front yard setback areas shall be fully paved and seamlessly connected with abutting sidewalk	Conforms
Front Yard Setback (5.4.3.2.b)	3.0m If ground floor usage abutting lot frontage is residential, a min. 3.0m front yard setback will apply	3.0 m
Balconies (5.4.3.6.e)	Balconies on apartment dwellings, where located at a greater height than the bottom of the first floor ceiling joists, may project a distance of not more than 1.5m into a required yard, but in no case shall the side yard, except where none is required, be reduced to less than 1.8m to any side lot line.	Conforms
Side Yard Setback (min.)	0.0m	0.8m
Rear Yard Setback (min.) (5.4.3.3.a / 5.4.3.3.b)	1.5m (Abutting Cityview Circle)	Conforms
	7.0m (Abutting Residential, OS or EP Zone)	3.0m (1.5m encroachment permitted for porches and balconies to EP zone)
Front Facade Step-Back (min.)	45° angular plane at height above 80% equivalent right-of-way using 3.0m min. stepbacks - Essa Rd: 34.0m width - Step back required after 27.2m in height	Conforms
Rear Facade Step-Back (min.)	45° angular plane above 7.5m using min. 3.0m step-backs	45 degree angular plane above 10.5 metres using 7.5 metre setback from opposite Streetline. Minimum 3 metre step-back applies.
Lot Coverage (max. % of lot area)	----	55% - 1,460m2/ (bldg. & balconies)
Gross Floor Area (max. % of lot area)	----	292% (7,750.00m2/ - 4 Architecture Inc.)
Ground Level Floor Height (min.)	4.5m	4.6m
Building Height	25.5 metres	25.8m
Parking	Residential 97 spaces required (97 units) (1 space / dwelling units)	108 Spaces
	Commercial 8 spaces required (1 space / 24 sq.m.) 171 sq.m / 24 = 7.125 ~ 8.0 spaces	
Barrier Free Parking (4.6.4)	2 Type 'A' (3.4m wide + 1.5m aisle) 3 Type 'B' (3.1m wide + 1.5m aisle)	2 Type 'A' 3 Type 'B'
Size of Parking Spaces and Aisle Width (min.) (4.6.2.5)	Parking space: 2.7m x 5.5m Drive aisle: 6.4m (90° angle parking)	Parking space: 2.7m x 5.5m Drive aisle: 6.4m (90° angle parking)
Structural Columns Encroachment (4.6.2.5.1)	Structural column may encroach into a parking space provided that the min. width of the space is not less than 2.5m	Conforms
Enclosed Parking Areas / Parking Structure (4.6.5.1 / 4.6.5.2)	Above ground structure containing a parking area shall conform to zone provisions	Conforms
	Underground structure shall have a min. setback of 1.8m, except where the min. yard setback is less than 1.8m, in which case the min. setback shall apply	Conforms
Max. Lot Coverage for Parking (5.4.4.1)	35%	24.29% (644.48m2/ - incl. covered portion)
Outdoor Amenity Area (5.4.2.2.b)	97 Residential units x 12.0 m² = 1164 m² (12.0m² per unit in a consolidated or unconsolidated form)	2,470.00m2 - 1,450.00m2/ (public amenity area) - 1,020.00m2/ (private amenity area) (4 Architecture Inc.)
Landscaped Buffer (5.4.4.0)	When abutting a residential zone, 3.0m landscaped buffer with 2.0m high tight board fence is required along abutting lot line	Conforms Excluding roads, stairwells, transformers, garbage pads, etc
Rooftop Mechanical / Electrical Structures	Max. height are not include of rooftop mechanical / electrical structures, but are subject to any 45° degree angular plane requirements	Conforms





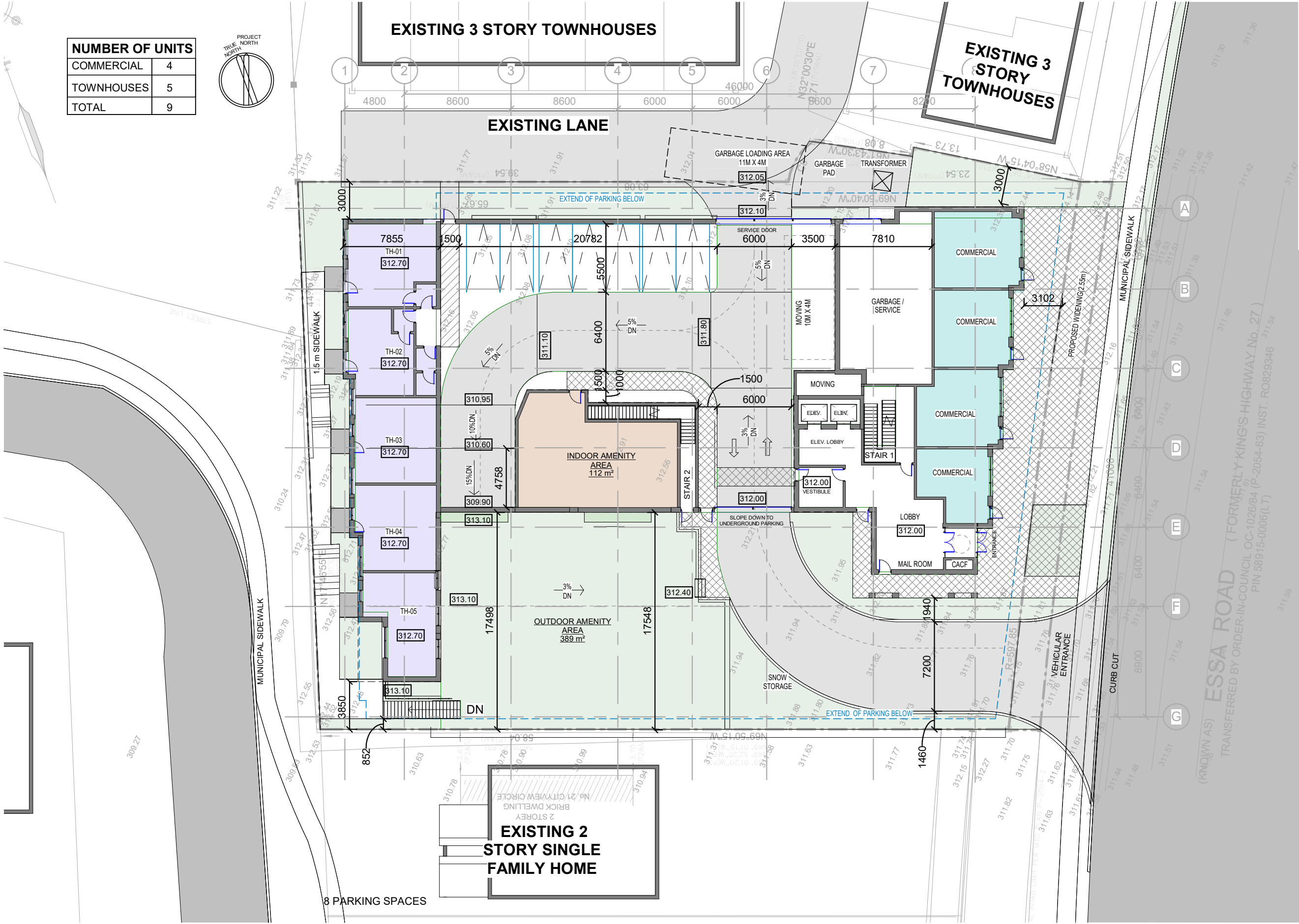


NUMBER OF UNITS	
COMMERCIAL	4
TOWNHOUSES	5
TOTAL	9



AREA / SUITE TYPE

- 2 STORY TOWNHOUSE
- COMMERCIAL
- INDOOR AMENITY AREA
- OUTDOOR AMENITY AREA



APPROX. COMMERCIAL  
PLAZA ENTRANCE  
EXACT LOCATION TO BE  
VERIFIED BY SURVEYOR