



November 23<sup>rd</sup>, 2023

JDE Project 1302

**Pratt Construction Inc.**  
111 Bradford Street, Suite 300  
Barrie, ON L4N 3A9

Attn: Hugh Johnston

**RE: Traffic Letter**  
**Hewitt's Gate Central, City of Barrie**

**JD Northcote Engineering Inc.** [JD Engineering] is pleased to submit the following Traffic Letter to **Pratt Construction Inc.** [the Developer] in support of the proposed residential development in the City of Barrie [City].

## **1.0 Project Background**

The subject site (Hewitt's Gate Central) is located within the Hewitt Secondary Plan Area [HSPA] north of Lockhart Road, east of Yonge Street. The proposed development will include a total of 336 residential units comprised of 117 single-detached units, 217 townhouse units and 2 future development units.

**Figure 1** illustrates the location of the subject site in relation to the surrounding area.

Access to Hewitt's Gate Central will be provided via the extension of Prince William Way and Terry Fox Drive, which will link Maplevue Drive East and Lockhart Road.

The Site Plan for the proposed development is provided in the **Appendix**.

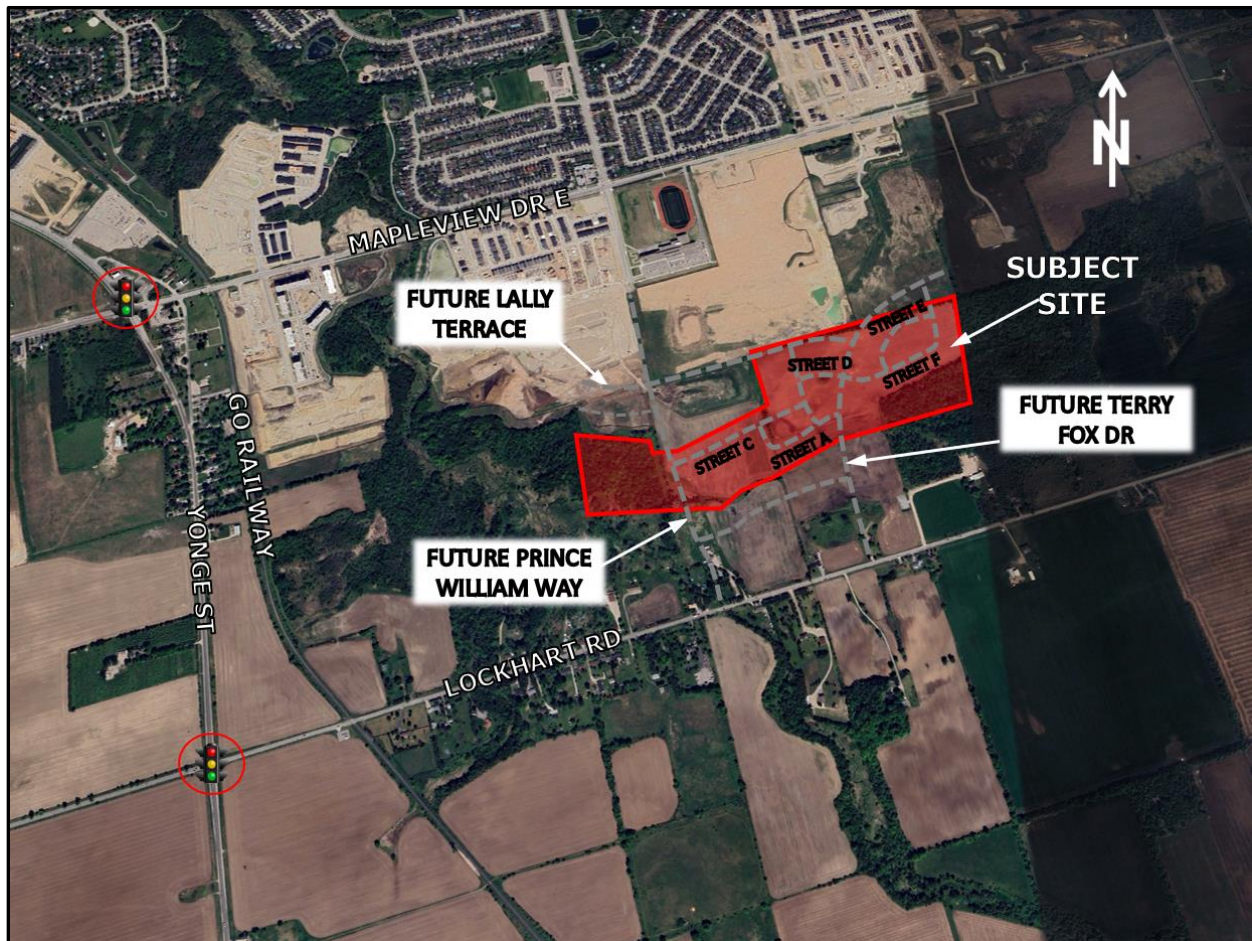
The Developer has retained JD Engineering to prepare this Traffic Letter in support of the proposed development application.

The scope of this Traffic Letter, which was confirmed through correspondence with the City, includes a review of the proposed unit count, compared to the anticipated unit count applied in the transportation planning studies completed for the HSPA. The analysis also includes a review of the traffic generated by the proposed development.



**JD Engineering**  
Phone: 705.725.4035  
Email: Info@JDEngineering.ca

Figure 1 – Site Location and Study Area



## 2.0 LEA Updated Master Transportation Study (MTS)

LEA Consulting Ltd. prepared an updated Master Transportation Study for the anticipated development located within the Hewitt Secondary Plan Area in the City of Barrie, dated February 2019 (LEA MTS). The subject site (Hewitt's Gate Central) is located within the Hewitt Secondary Plan Area [HSPA]. Based on a review of the LEA MTS, the Hewitt's Gate Lands were anticipated to include a major residential community, with low, medium and high-density residential units, and neighbourhood commercial uses. The LEA MTS evaluates the roadway network for an interim horizon (2020-2021) prior to the opening of the Harvie Road / Big Bay Point Road overpass and the ultimate horizon (2031) corresponding with the full build-out of the Subject Lands. The anticipated development for the two horizon years was 2,100 units for the interim horizon year 2020-2021 and 13,512 units for the ultimate horizon year 2031. The unit count projections were based on the August 2018 Development Plan, which was included in the LEA MTS (attached in the Appendix for reference).

The trip generation rate for the proposed units within the HSPA was based on proxy site surveys, conducted during a typical weekday AM and PM peak periods on August 25, 2016, for the residential subdivision located east and west of Prince William way and north of Mapleview Drive East. The TMC data collected for this subdivision was evaluated and the calculated trip generation rates were utilized to estimate traffic generated by the HSPA during the peak AM and PM peak hours for the interim and ultimate horizons, summarized in **Table 1**.

**Table 1 –LEA MTS – Trip Generation Rates Summary**

Land Use / Generator	Size	AM Peak Hour			PM Peak Hour		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Proxy trip Rates		0.14	0.34	0.48	0.41	0.25	0.67

### 3.0 Proposed developments unit count

**Table 2** provides a comparison of the traffic generation for the subject site area, based on the planned units in the August 2018 Development Plan from the LEA MTS and the proposed unit count according to the current development application. For the purpose of this comparison, the proxy trip rates proposed in the LEA MTS have been applied.

**Table 2 –Trip Generation and Unit Count Comparison**

Land Use	Size	AM Peak Hour			PM Peak Hour		
		IN	OUT	TOTAL	IN	OUT	TOTAL
LEA MTS							
Single Family Detached units	305 units	43	104	147	125	76	201
Proposed Development							
Single Family Detached, Townhouse units and Two Future development units	336 units	47	114	161	138	84	222
Net Trips		+4	+10	+14	+13	+8	+21

As indicated, the proposed development will result in a minor increase in the net trip generation of 14 AM and 21 PM peak hour trips, compared to the LEA MTS.

Consequently, the proposed development is consistent with the development density that was anticipated in the LEA MTS.

### 4.0 Traffic Impact Review

The proposed development is estimated to generate an additional 14 AM and 21 PM peak hour net trips compared to the LEA MTS. In consideration of the anticipated traffic generation for entire HSPA,

the above-noted variation will have a negligible impact on the traffic operations and will not trigger any changes to the recommendations or conclusions provided in the LEA MTS. The proposed development will not adversely affect the capacity or result in any traffic safety issues on the planned surrounding road network.

## 5.0 Conclusion

The minor increase in the unit count for the proposed development and the resulting minor increase in the traffic generation, compared to the development and traffic projections applied in the LEA MTS, will have a negligible impact on the surrounding road network.

The proposed development is anticipated to be implemented in phases; consequently, a subsequent traffic analysis can be completed as part of the detailed design for each phase, or as applicable, to demonstrate that external road improvements on Lockhart Road and Mapleview Drive East (as identified in the LEA MTS) can accommodate the traffic generation from the proposed occupancy of the development.

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.**

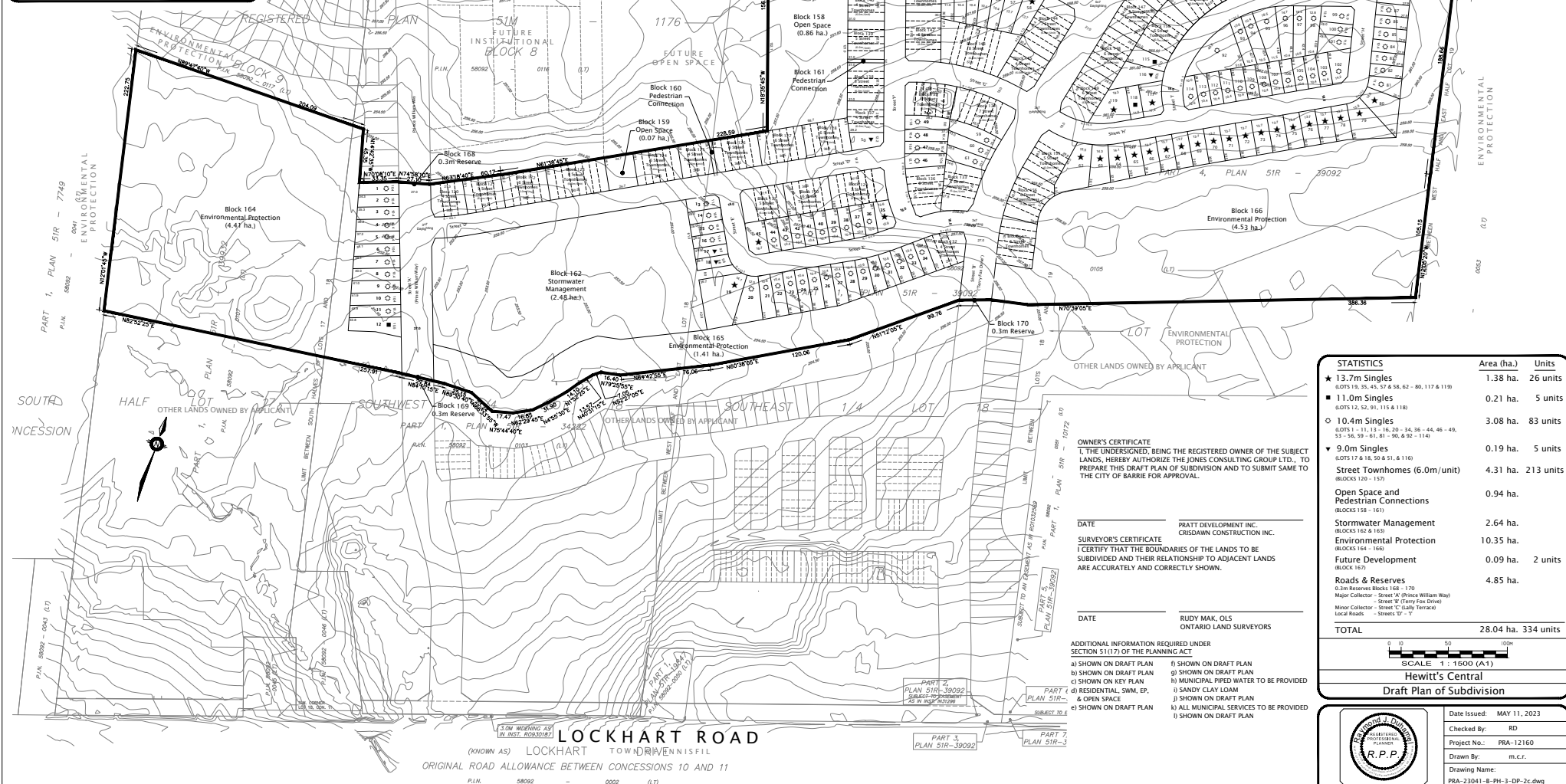


John Northcote, P.Eng.  
President



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



SCHEDULE OF REVISIONS		
DATE	DESCRIPTION	DRAWN
AUG. 21, 2023	CHANGES AS PER COMMENTS	m.c.
AUG. 25, 2023	CHANGES AS PER COMMENTS	m.c.
SEPT. 14, 2023	CHANGES AS PER COMMENTS	m.c.
SEPT. 19, 2023	CHANGES AS PER COMMENTS	m.c.



**JONES**  
**CONSULTING GROUP LTD.**  
**PLANNERS & ENGINEERS**  
229 Mapleview Drive East, Unit 1, Barrie, Ontario, L  
Phone: 705-736-5538  
www.jonesconsulting.com Fax: 705-7

Date Issued:	MAY 11, 2023
Checked By:	RD
Project No.:	PRA-12160
Drawn By:	m.c.r.
Drawing Name:	PRA-23041-B-PH-3-DP-2c.dwg



## 1.4 PROPOSED DEVELOPMENT

The proposal for the lands is to develop the area primarily as a major residential community, with low, medium and high density residential, and neighbourhood commercial uses. The development also includes schools, parks, recreational centres, open spaces and EPAs.

For the purpose of projecting traffic volumes generated by the proposed development, 13,512 residential units have been considered (based on Jones Consulting Group Ltd.'s 2031 Development Plan dated August 30, 2018).

Based on discussions with City staff and the landowners, it was determined that two horizon years will evaluate the interim as well as the long term (ultimate) traffic impacts associated with the proposed development. The interim horizon will correspond to the year 2020-2021 for analysis of the traffic impacts prior to the implementation of the Harvie Road / Big Bay Point overpass at Highway 400; the overpass is expected to be in operation at the end of 2020. The ultimate horizon will correspond to the year 2031 for analysis of the traffic impacts associated with the full build out of the Subject Lands. For the purpose of our analysis, the breakdown of the proposed development for the two horizon years is provided in Table 1-1. As mentioned earlier, in addition to the residential units, there are other uses which typically exist in residential subdivisions including local commercial uses, schools and parks. In addition, there are recreational centre and potential Sobeys supermarket that their respective trips are included in this update as discussed in the trip generation section.

Table 1-1: Site Statistics for the Interim and Ultimate Horizon Years

Land Use	Interim Horizon Year (2020-2021)	Ultimate Horizon Year (2031)
Residential Units	2,100	13,512

## 1.5 PROPOSED FUTURE ROADWAY IMPROVEMENTS

The major assumed roadway improvement projects completed for the Interim and Ultimate horizon year traffic analyses are provided in Table 1-2. These assumptions have been developed through discussions with City staff and review of Town of Innisfil and County of Simcoe's Transportation Master Plans (TMP), as well as a review of the Multi-Modal Active TMP (MMATMP). In addition, recommendations proposed by Hewitt Secondary Plan EA Study were included in this update. Furthermore, summary of road improvements and their timings were confirmed with the City of Barrie due to the ongoing MMATMP update. It should be mentioned that the proposed Divergent Diamond Interchange (DDI) layout at Highway 400 and Maplevue Drive was also presumed to be functional at the 2031 horizon following the City staff comments. Of note, the capital budget of the City of Barrie was also reviewed to assure the timing of the planned road improvements. Each road improvement identified in the Table 1-2 is also depicted in Figure 1-8.

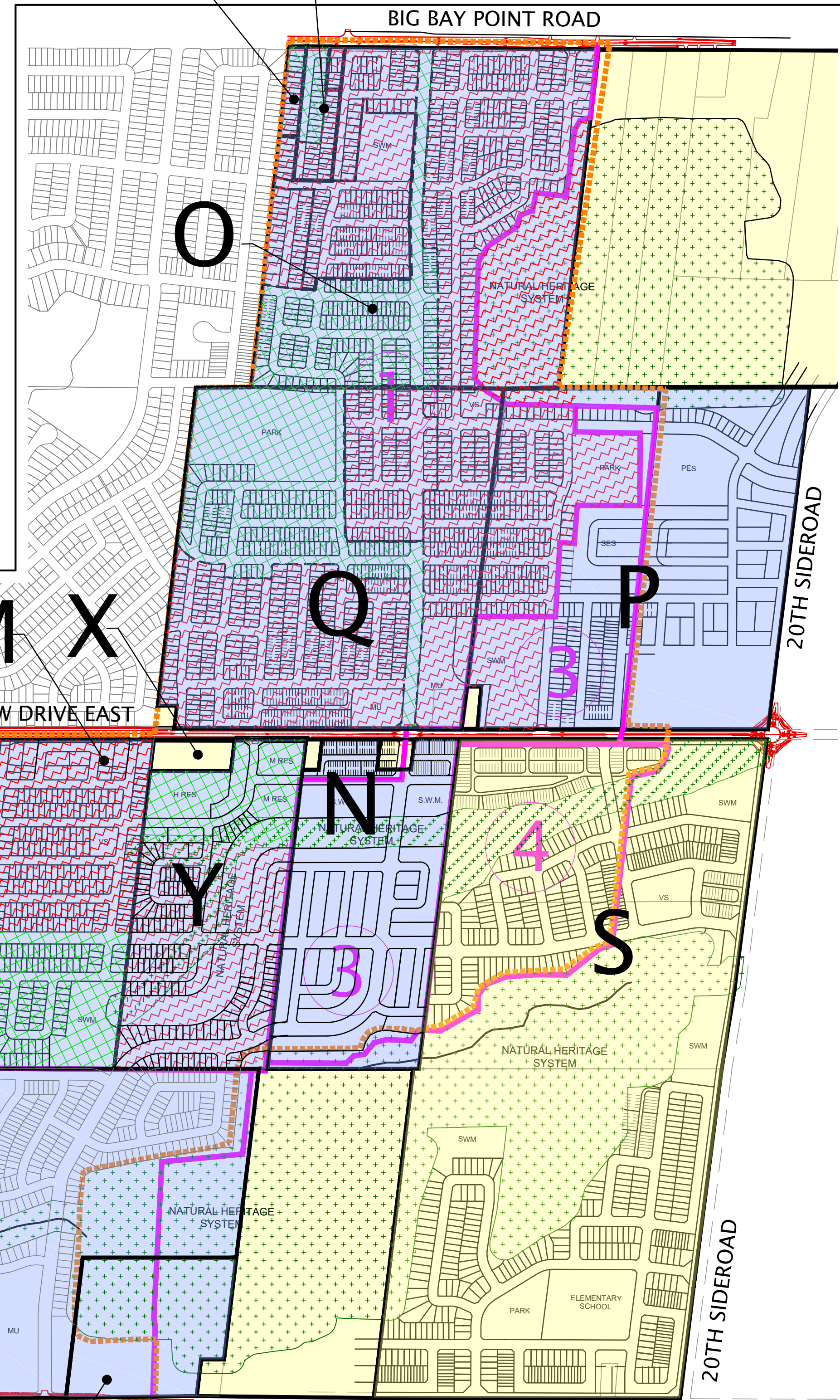


KEY PLAN

1:40,000

Non-Participating Landowner Unit Counts/Estimates											
Map ID	Land Owner	Total Area (ha.)	Developable Area within Phase 1 COB Sec Plan	Total Area within 2031 Boundary (ha.)	Total Developable (ha.)	Developable Area within 2031 Boundary (2031) ha.	Phase 1 Units	Phase 2 Units	Phase 3 Units	Phase 4 Units	Total Units
C	Van Der Hayden	3.17	0.00	3.17	3.17		0	52.5	0	0	52.5
G	Myrtle Bernice Irving	27.93	0.00	27.93	27.93		0	698.25	0	0	698.25
R	Sobey's	8.18	8.18	8.18	8.18		0	0	0	0	0
S	DIV/ Development	80.23	0	17.97	51.92		0	0	0	267.5	267.5
U	Ed Elisses and Others	3.84	3.84	3.84	3.84		192	0	0	0	192
X	H. Rosner	1.01	1.01	1.01	1.01		0	0	0	0	0
DD	SCDSB	9.56	9.56	9.56	9.56		0	0	0	0	0
EE	Barbara Johnston	0.95	0.95	tm	0.95		0	95	0	0	95
		14.41	14.41	1.00	14.41		192	845.75	0	267.5	1305.25

Non-Participating Landowner Unit Counts/Estimates											
Map ID	Land Owner	Total Area (ha.)	Developable Area within Phase 1 COB Sec Plan	Total Area within 2031 Boundary (ha.)	Total Developable (ha.)	Developable Area within 2031 Boundary (2031) ha.	Phase 1 Units	Phase 2 Units	Phase 3 Units	Phase 4 Units	Total Units
C	Van Der Hayden	3.17	0.00	3.17	3.17		0	52.5	0	0	52.5
G	Myrtle Bernice Irving	27.93	0.00	27.93	27.93		0	698.25	0	0	698.25
R	Sobey's	8.18	8.18	8.18	8.18		0	0	0	0	0
S	DIV/ Development	80.23	0	17.97	51.92		0	0	0	267.5	267.5
U	Ed Elisses and Others	3.84	3.84	3.84	3.84		192	0	0	0	192
X	H. Rosner	1.01	1.01	1.01	1.01		0	0	0	0	0
DD	SCDSB	9.56	9.56	9.56	9.56		0	0	0	0	0
EE	Barbara Johnston	0.95	0.95	tm	0.95		0	95	0	0	95
		14.41	14.41	1.00	14.41		192	845.75	0	267.5	1305.25



-