

520 Industrial Parkway South, Suite 201  
Aurora ON L4G 6W8

Phone: 905-503-2563  
www.nexttrans.ca

**nexttrans**  
CONSULTING ENGINEERS

NextEng Consulting Group Inc.

August 23, 2022

**Attention: Mehedi Khan, Development Coordinator**

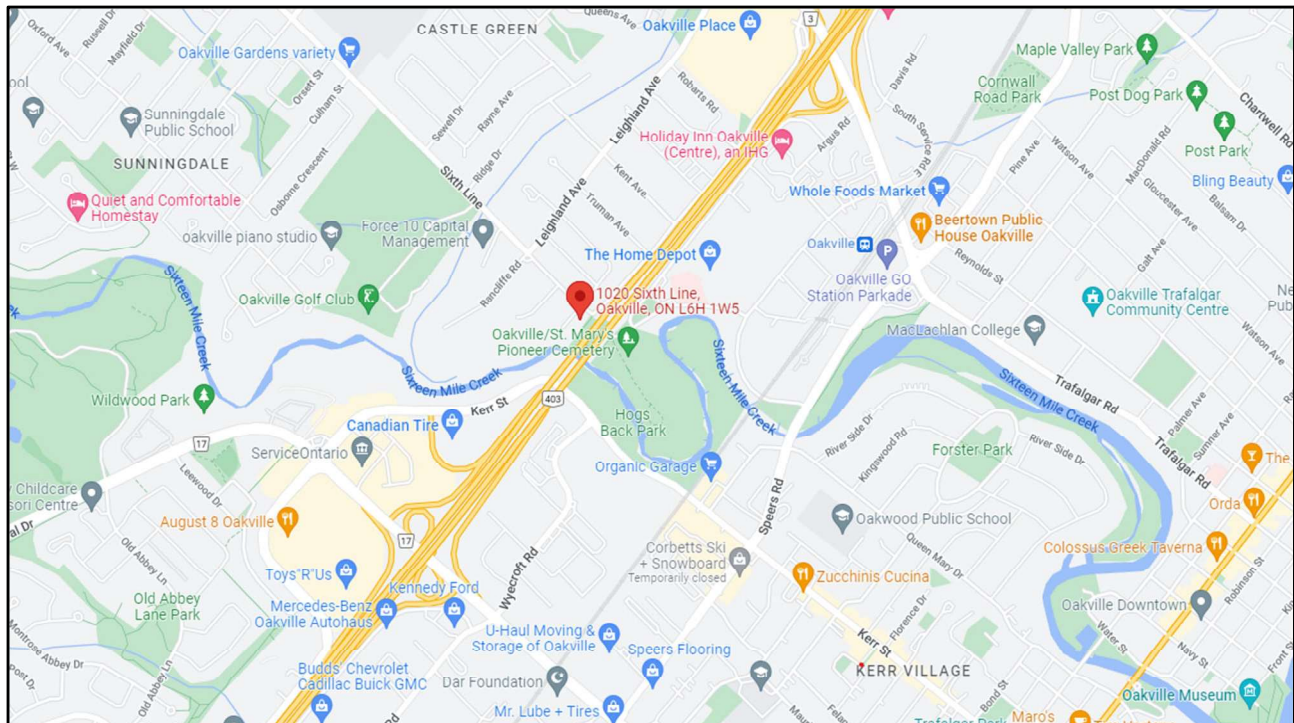
Dunpar  
105 Six Point Road  
Etobicoke, Ontario  
M8Z 2X3 Canada

**Re: Transportation Reliance Letter  
Proposed Residential Development  
1020, 1024, 1028, 1032, 1042 Sixth Line, Oakville  
Our Project No. NT-16-114**

Nexttrans Consulting Engineers (A Division of NextEng Consulting Group Inc.) is pleased to present the enclosed Transportation Reliance Letter for the above noted site in support of the proposed residential development. The purposes of this Letter are to provide a comparison between the previous and current development proposals, and an assessment of the latest site plan statistics to support the proposed development.

The subject development is located at the municipal addresses 1020, 1024, 1028, 1032 and 1042 Sixth Line, in the Town of Oakville. The subject development generally bounded to the east by Sixth Line, to the south by North Service Road and to the north by Sunny Crest Lane. **Figure 1** illustrates the proposed development location.

**Figure 1 – Proposed Development Location**



Source: Google Map

## 1.0 SUMMARY AND FINDINGS

Based on this study assessment, the following conclusions are made:

- The current development proposal consists of 57 units to be constructed in two phases, the first phase would include 52 units and the second phase will include 5 units. The existing single-family detached unit will be retained;
- The current development proposal is expected to generate -13 less two-way trips during both the morning and afternoon peak hours than the previous development proposal. The previous assessment indicates that under the existing, future background and future total traffic conditions, all intersections considered in the analysis are expected to operate at acceptable levels of service with no critical movements are identified and therefore no improvements are required;
- Given that the previous assessment was undertaken with a higher number of units (24 more units) than the current development proposal, it is anticipated that the current development proposal will have negligible impact on the existing transportation network and area intersections;
- The current development proposal provides one access onto Sixth Line and one access onto Sunnycrest Lane, at similar locations as previously proposed site plan. It should be noted that the previous proposal provides two accesses onto Sixth Line, however, under the current development proposal, only one access will be provided onto Sixth Line. It is Nextrans' opinion that the proposed access location is appropriate from both operational and safety perspective;
- The proposed private condominium road width is 6.0 m, which meets the Town of Oakville Zoning By-law No. 2014-014 requirements;
- The current development proposal provides a total of 15 visitor parking spaces and 114 resident parking spaces, for a total of 129 vehicle parking spaces, which meets the Town of Oakville Zoning By-law No. 2014-014 requirements;
- The vehicle turning movement analysis indicates that fire trucks and servicing trucks can be accommodated within the proposed private condominium roads; and
- Sidewalks will be provided along the internal private condominium roads and connect to Sixth Line;

Based on the assessment and conclusions noted above, the current development proposal met all of the Town of Oakville requirements from a transportation perspective and site design. Therefore, Nextrans recommends that the Town of Oakville approve the proposed development. The detailed assessment is outlined in the subsequent sections of this Reliance Letter.

## 2.0 INTRODUCTION

The subject site is currently vacant. The current development proposal consists of 57 residential dwelling units, with 52 condominium townhouse units to be built in Phase 1 and the additional 5 units will be built in Phase 2. The proposed development will retain the existing single-family detached unit located at 1042 Sixth Line. The previous development proposal consists of 81 residential condominium townhouse units and the retention of two single family homes at 1024 and 1028 Sixth Line.

The comparison between the previous and current development proposals are summarized in **Table 1**, with the proposed development concept is included in **Appendix A**. Based on the information outlined in the table below, the current development proposal has 24 less units compared to the previous development proposal. Therefore, it is anticipated that the potential impact will be minimum or negligible.

**Table 1 – Current Changes from Previous Site Plan**

Previous Development Proposal (2016)	Current Development Proposal (August, 2022)	Difference
81 residential dwelling units (Including 2 existing single-family detached to remain)	57 residential dwelling units (Including 2 semis and one existing single-family detached to be retained)	-24 units

### 3.0 TRIP GENERATION ASSESSMENT

For the purposes of this assessment, Nextrans has estimated the trip generation based on the current development proposal and compare it with the previous development proposal. **Table 2** summarizes the current development proposal trip generation. It should be noted that, for the purposes of this assessment, the latest Institute of Transportation Engineers (ITE) Trip Generation Manual *11<sup>th</sup> Edition* has been utilized. It should also be noted that given the small scale of the proposed development and it is located at the bottom of the data plot, the average rate is more appropriate than the equation.

**Table 2 – Current Development Proposal Trip Generation**

ITE Land Use	Magnitude (units)	Parameters	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise) Not Close to Rail LUC 220	57	Average Trip Rates	0.10	0.30	0.40	0.32	0.19	0.51
		<b>Total Trips</b>	6	17	23	18	11	29

As indicated in the table above, the current development proposal is only expected to generate a total of 23 two-way auto trips during the morning peak hour (6 inbound and 17 outbound) and a total of 29 two-way auto trips during the afternoon peak hour (18 inbound and 11 outbound).

**Table 3** summarizes the comparison between the current and previous development proposal site trip generation. It should be noted that the previous development proposal site trip generation was obtained from Nextrans' Transportation Impact Study dated October, 2016.

**Table 3 – Trip Generation Comparison Between Previous and Current Site Plans**

Scenario		Morning Peak			Afternoon Peak		
		In	Out	Total	In	Out	Total
Previous Development Proposal	81 units	6	30	36	28	14	42
Current Development Proposal	57 units	6	17	23	18	11	29
<b>Current – Previous</b>							
Difference	Auto Trips	<b>0</b>	<b>-13</b>	<b>-13</b>	<b>-10</b>	<b>-3</b>	<b>-13</b>

As indicated in the table above, the current development proposal is expected to generate -13 less two-way auto trips during the morning peak hour and also -13 less two-way auto trips during the afternoon peak hour.

It is Nextrans' opinion that a revised intersection transportation capacity analysis is not required as the current development proposal is expected to generate less trips than the number of trips compared to the previous development proposal, therefore, the potential impact is negligible.

### 4.0 TRANSPORTATION OPERATIONAL ASSESSMENT

#### 4.1. Study Area Intersection Operation Assessment

Based on the October, 2016 Transportation Impact Study assessment, the analysis indicates that under the existing, future background and future total traffic conditions, all intersections considered in the analysis are expected to operate at

acceptable levels of service with no critical movements are identified. The October, 2016 Study includes that no improvements are required to accommodate the proposed improvements.

As per the assessment indicated in Section 3 above, the current development proposal is expected to generate -13 less two-way auto trips during both the morning and afternoon peak hours compared to the previous development proposal, therefore, the potential impact is negligible.

**Table 4** summarizes the previous transportation operational assessment dated October, 16, 2016.

**Table 4 – Future Total Levels of Service Assessment**

Intersection	Key Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS (v/c)	Delay (s)	LOS (v/c)	Delay (s)
Sixth Line/Rancliffe Road/Leighland Avenue (Unsignalized intersection)	EB LTR	A (0.02)	9	A (0.03)	9
	WB LTR	A (0.21)	10	B (0.50)	12
	NB LTR	A (0.10)	9	B (0.24)	10
	SB LTR	D (0.84)	27	B (0.50)	14
Sixth Line/Sunny Crest Lane (Unsignalized intersection)	EB LR	A (0.00)	10	A (0.00)	0
	NB LT	A (0.00)	0	A (0.00)	0
	SB TR	A (0.10)	0	A (0.05)	0
Sixth Line/Germorda Drive (Unsignalized intersection)	WB LTR	A (0.00)	9	A (0.00)	9
	NB LTR	A (0.03)	0	A (0.10)	0
	SB LTR	A (0.00)	0	A (0.00)	0
Sixth Line/Site Access (Unsignalized intersection)	EB LR	A (0.01)	9	A (0.00)	10
	NB LT	A (0.00)	0	A (0.00)	0
	SB TR	A (0.08)	0	A (0.05)	0

## 4.2. Site Access Assessment

As indicated, the current development proposal provides similar access arrangement as the previous proposal with one access onto Sixth Line and one access onto Sunnycrest Lane, at approximately similar location as previously proposed site plan. It should be noted that the previous proposal provides two accesses onto Sixth Line, however, under the current development proposal, only one access will be provided onto Sixth Line. It is Nextrans' opinion that the proposed access location is appropriate from both operational and safety perspective.

Under the previous assessment, the analysis indicates that the proposed development access onto Sixth Line is appropriate and expected to operate at acceptable levels of service with negligible delay or queue, as indicated in **Table 4** above. Given that the proposed main access location onto Sixth Line and secondary access onto Sunnycrest Lane are similar to the previous development proposal, it is expected that the proposed access is appropriate and expected to operate at acceptable levels of service with negligible delay or queue as the current development proposal is expected to generate much less trips than the previous development proposal.

## 4.3. Active Transportation Assessment

### 4.3.1. Walking Mode

Under the existing conditions, there are sidewalks located on both sides of Sixth Line vicinity of the proposed development. However, along North Service Road, only the north side currently has sidewalk. It is NexTrans understanding that the proposed development provides direct sidewalk connections from the proposed development to connect with the existing sidewalks via the proposed main entrance onto Sixth Line.

The existing sidewalks along the west side of Sixth Line will be relocated away from the curb along the frontage of the proposed development to provide more buffer between pedestrians, bicycles and automobiles. This is an improvement given that the existing sidewalk on the west side of Sixth Line is located adjacent to the pavement. It is Nextrans'

understanding that sidewalks will be provided internally as part of the private road network within the proposed development to facilitate active transportation modes.

#### 4.3.2. Cycling Mode

Under the existing conditions, Sixth Line has dedicated bicycle lanes on both sides in the vicinity of the proposed development. The bicycle lanes end at North Service Road. Ideally, the bicycle lanes should continue on North Service Road and connect to Trafalgar Road. This provision will provide the residents with option to ride their bicycles to go shopping or run errands. However, this provision is beyond the scope of this development. It is recommended that the Town of Oakville should consider this provision in the future to promote sustainable modes of transportation in the Town.

The proposed development is located approximately 1.3 km from the Oakville Place and Trafalgar Road. Based on an assumed walking speed of 1.2 m/s, it would take approximately 18 minutes from the proposed development to these locations on foot, and about 6 minutes by bicycle (assumed bicycle speed of 3 m/s).

#### 4.3.3. Transit Mode

The proposed development is located approximately 250 m (about 5-minute walk) from Route 13 Westoak Trails bus stops at the Sixth Line/Rancliffe Road/Leighland Avenue intersection. Route 13 Westoak Trails is currently operating between Oakville GO Train and Bronte GO Train stations. The frequency is 15 minutes during the morning and afternoon peak periods and 30 minutes frequency during the off-peak periods.

As part of the GO Expansion Project, Metrolinx is expanding GO Transit to enable 15-minute service along the Lakeshore West Corridor from Strachan Avenue to Burlington with electrified trains that provide faster and more frequent service. This service will allow the existing and future residents to take up more transit trips to go to work or for discretionary trips to other parts of GTHA. It is anticipated that the non-auto modal split will grow from the existing 15% to 20% or more in the future.

#### 4.3.4. Overall Assessment

Therefore, it is Nextrans' opinion that the existing and proposed active transportation facilities are appropriate for the context of the area and the small scale of the proposed development. It is also concluded that there are options in the area for the residents to walk, cycle or taking transit if they wish to do so.

### 5.0 SITE PLAN ASSESSMENT

#### 5.1. Vehicle Parking Assessment

The Town of Oakville's By-law 2014-014 Consolidated to April 4, 2016 parking requirement and supply for the proposed development is summarized in **Table 5**.

**Table 5 – Town of Oakville By-law Vehicle Parking Requirements**

Land Use	Type	No. of Unit/GFA	Parking Rates	Parking Requirement	Total
Townhouse dwelling	Visitor	57 units	0.25 spaces/unit	15	129
	Resident	57 units	2.0 spaces/unit	114	

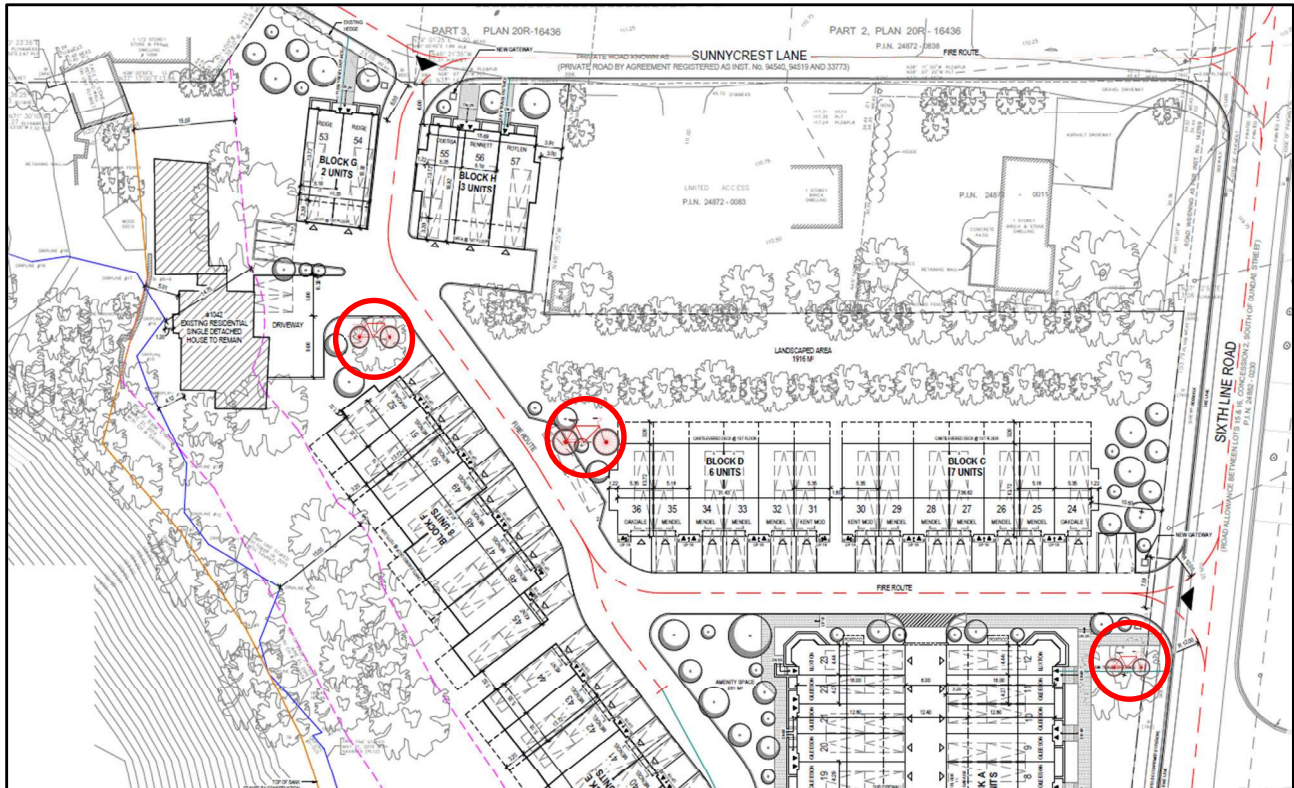
Based on the Town of Oakville's By-law 2014-014 Consolidated to April 4, 2016, a total of 129 parking spaces (including 15 visitor and 114 resident spaces) are required for the proposed development. The proposed development provides a total of 129 vehicle parking spaces, including 15 visitor parking spaces, which meets the Town of Oakville's Zoning By-law requirement.

## 5.2. Bicycle Parking Assessment

Under the Town of Oakville current Zoning By-law, bicycle parking spaces are not required for low-rise residential development as the bicycles can be stored inside the unit garage.

However, Nextrans suggests that the proposed development provides one bicycle rack in front of each amenity area or near visitor vehicle parking spaces to encourage visitors to ride their bicycles to the proposed development instead of driving private vehicle. **Figure 2** illustrates the potential bicycle rack locations.

**Figure 2 – Potential Bicycle Rack Locations**



## 5.3. Solid Waste Management

It is Nextrans' understanding that the proposed development will provide curb side solid waste pick-up within the private condominium roads. Servicing vehicles will enter and exit the site via the proposed development access onto Sixth Line or Sunnycrest Lane. This solid waste pick-up arrangement will be similar to the existing residential developments along Sixth Line, Sunnycrest Lane, Rancliffe Road and Germorda Drive. It is Nextrans' opinion that this arrangement is appropriate and consistent with the existing neighbourhood.

## 5.4. Vehicle Turning Movement Assessment

AutoTURN software was used to generate vehicular turning templates to confirm and demonstrate the accessibility for servicing vehicles and emergency vehicles in and out of the proposed development. The turning templates are provided in **Figures 3, 4 and 5**.

## 6.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) is a co-ordinated series of actions aimed at maximizing the people moving capability of the transportation system. Intended to reduce single-occupant auto use, potential TDM measures include:

TDM supportive land use, bicycle and pedestrian programs and facilities, public transit improvements, preferential treatments for buses and ridesharing, where appropriate.

The following TDM measures and incentives are recommended for the proposed residential development:

- Provide direct shared pedestrian and cycling connections from the proposed development to Sixth Line;
- Provide information package for new residents. The information package includes GO Train schedules, Oakville Transit bus route schedules, community and cycling maps, where appropriate. The Information Package can be distributed at the sale office; and
- The proposed development provides one bicycle rack in front of each amenity area or near visitor vehicle parking spaces to encourage visitors to ride their bicycles to the proposed development instead of driving private vehicle.

## 7.0 CONCLUSION

Based on the assessment and findings of this Letter, the following conclusions and recommendations are provided:

- The currently development proposal is expected to generate much less auto trips (-13 trips during both the morning and afternoon peak hours) than the previous development proposal, therefore, the potential impacts are also less;
- The previous analysis indicates that all intersections considered in the analysis are expected to operate at acceptable levels of service and continue to do so with the current development proposal;
- The proposed development meets the Town of Oakville Zoning By-law requirements for vehicle parking, private road width, solid waste management and emergency vehicle turning movements;
- The proposed development also represents good transportation planning by utilizing the existing infrastructures without impacting it;
- The proposed development is consistent with the neighbourhood character from transportation planning perspective

For the reasons noted above, Nextrans recommends that the Town of Oakville approve the proposed development as it has no negative impacts on the existing transportation network but contributing to the housing need and affordability in the Town of Oakville.

We trust the enclosed sufficiently addresses your needs. Should you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

**Nextrans Consulting Engineers**

A Division of NextEng Consulting Group Inc.

Prepared by:

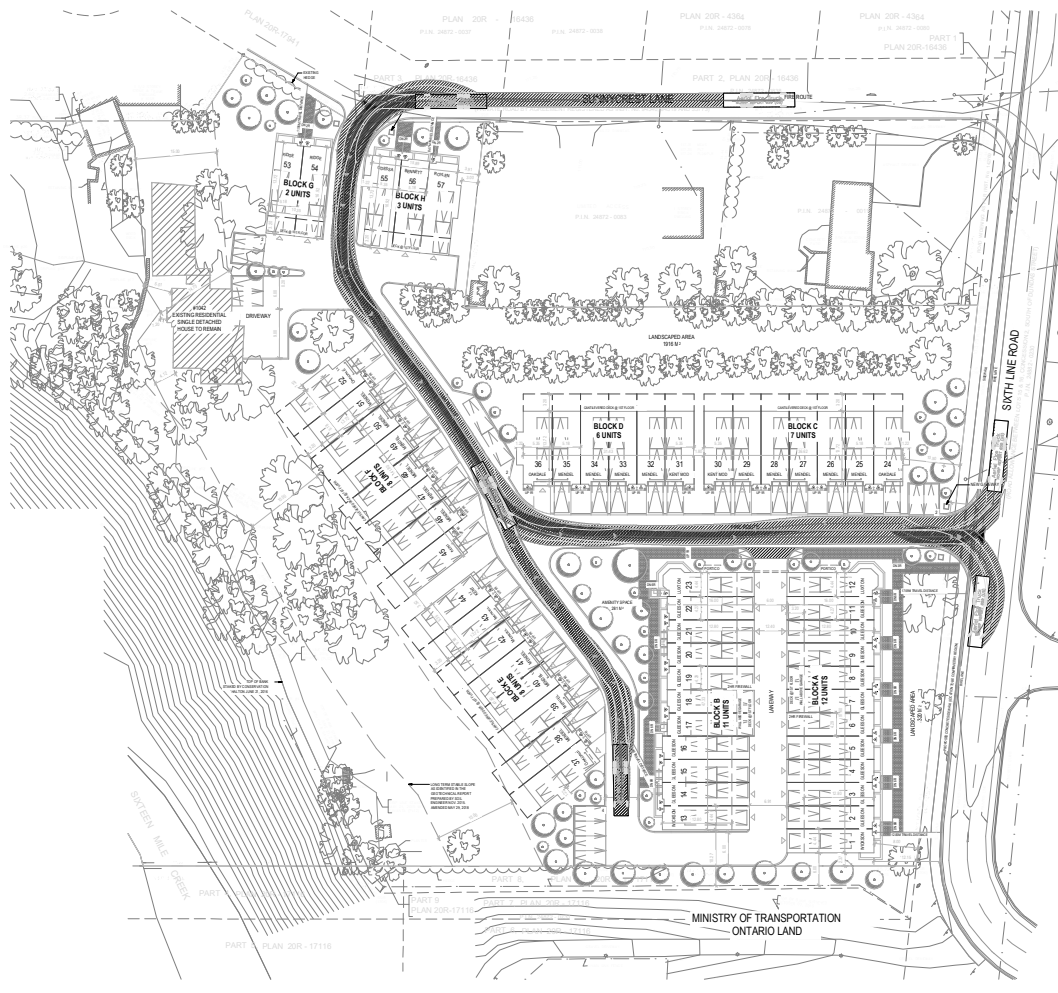


Sam Nguyen, Dipl.  
Transportation Analyst

Reviewed and Approved by:



Richard Pernicky, MITE  
Principal



KEY PLAN

BENCHMARK

REVISIONS

NO.	REVISION	DATE	BY

STAMP

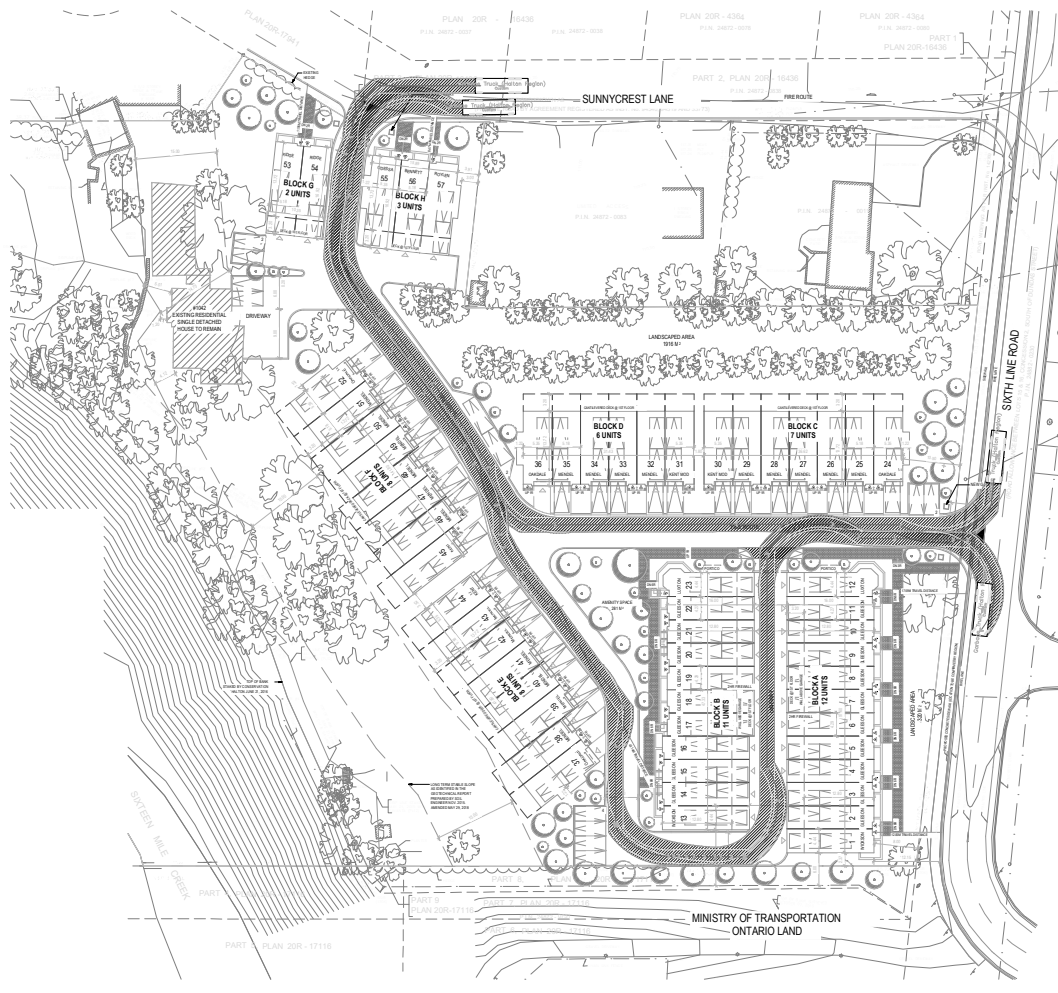


PROJECT NAME:  
**RESIDENTIAL DEVELOPMENT  
 80 Sixtieth Line  
 (Town of Halton Hills)**

DRAWING TITLE:  
**AutoTURN Analysis  
 (Aerial Fire Truck  
 NCHRP Report 659)**

DESIGNED BY: K.A.	DRAWN BY: K.A.
CHECKED BY: R.P.	PROJECT NO: NT-22-159
APPROVED BY: K.A.	DRAWING NO:
SCALE: NTS	FIGURE NO: Figure 3





KEY PLAN

BENCHMARK

REVISIONS

NO.	REVISION	DATE	BY

STAMP

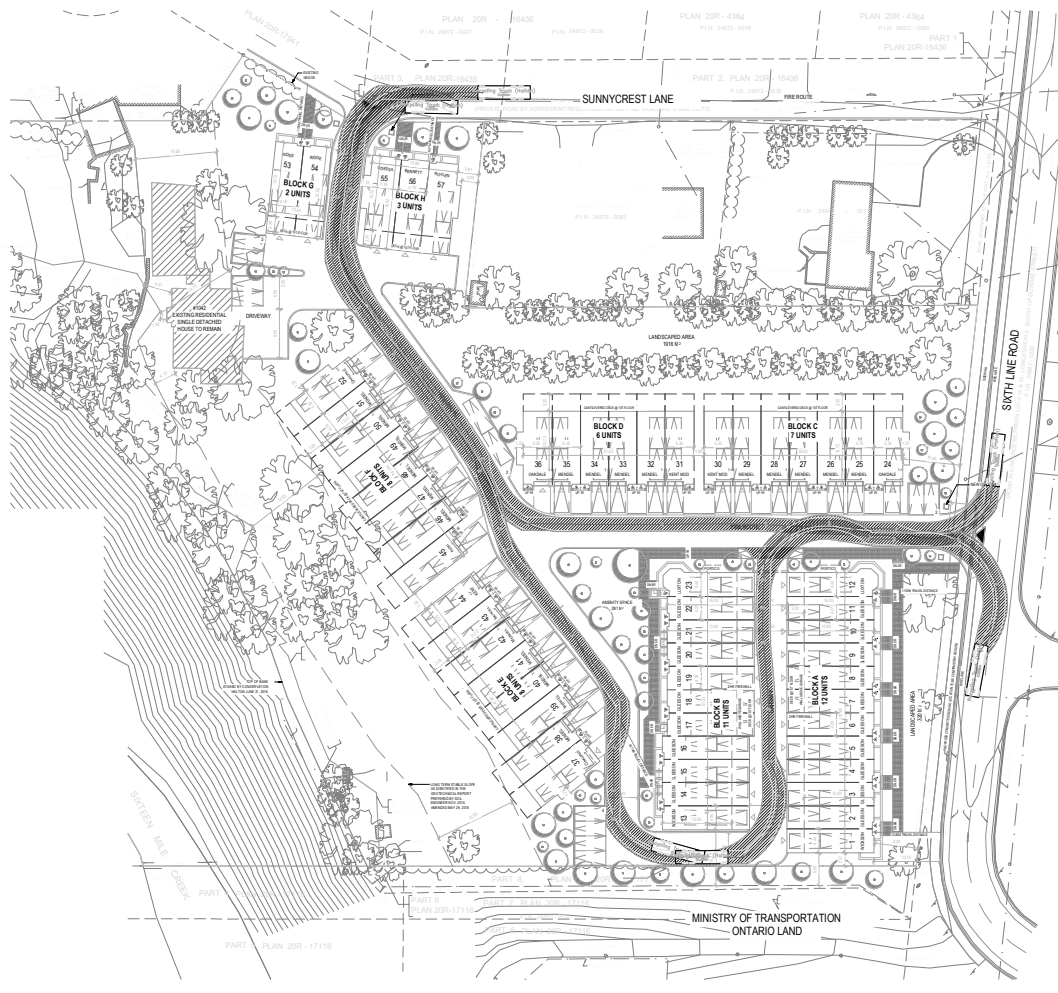


PROJECT NAME:  
**RESIDENTIAL DEVELOPMENT  
 80 Sixtieth Line  
 (Town of Halton Hills)**

DRAWING TITLE:  
**AutoTURN Analysis  
 (Halton Garbage)**

DESIGNED BY: K.A.	DRAWN BY: K.A.
CHECKED BY: R.P.	PROJECT NO: NT-22-159
APPROVED BY: K.A.	DRAWING NO:
SCALE: NTS	FIGURE NO: Figure 4





KEY PLAN

BENCHMARK

NO.	REVISION	DATE	BY

STAMP



PROJECT NAME:  
**RESIDENTIAL DEVELOPMENT  
 80 Sixtieth Line  
 (Town of Halton Hills)**

DRAWING TITLE:  
**AutoTURN Analysis  
 (Halton Recycling)**

DESIGNED BY: K.A.	DRAWN BY: J.S.
CHECKED BY: R.P.	PROJECT NO.: NT-22-159
APPROVED BY: K.A.	DRAWING NO.:
SCALE: NTS	FIGURE NO.: Figure 5

# **Appendix A**

## **Proposed Development Drawings and Stats**

