

# **PUBLIC MEETING**

Monday, November 21st, 2011 at 7:00 p.m.

# **Municipal Office Council Chambers, Kenilworth**

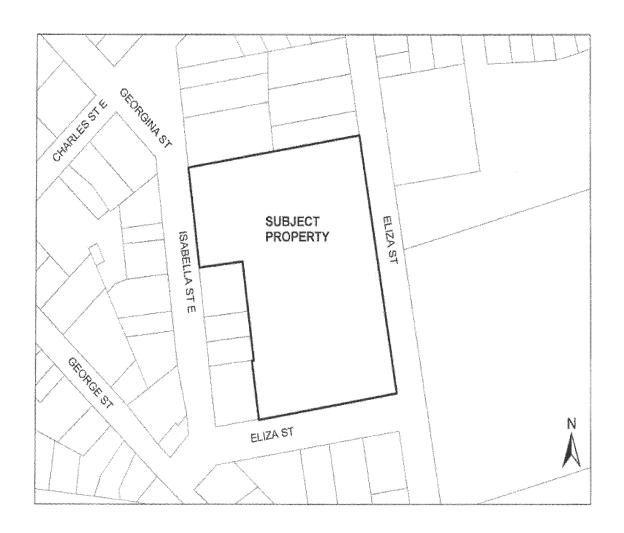
# AGENDA

	Page 1 of 2
AGENDA ITEM	PAGE NO.
The Mayor will call the meeting to order.	
Declaration of Pecuniary Interest.	
Owners/Applicant: 1530953 Ontario Ltd.	
THE LOCATION OF THE SUBJECT PROPERTY is described as 161 Eliza Street, Arthur. The property contains the former Arthur Public School, and its location is shown on the map attached.	01
THE PURPOSE AND EFFECT of the amendment is to rezone the property to an appropriate residential and commercial category. The owner is proposing to redevelop the site with residential uses and some commercial uses. The existing building is proposed to be converted into residential apartments and a limited amount of commercial. Townhouses are proposed on the remaining land. This is the second public meeting being held for this site.	
Please note – Section 34 (12) of the Planning Act.	
(12) Information. – At a meeting under subsection (12), the council shall ensure that information is made available to the public regarding the power of the Municipal Board under subsection (14.1) to dismiss an appeal if an appellant has not provided the council with oral submissions at a public meeting or written submissions before a By-law is passed.	
1. Notice for this public meeting was sent to property owners within 120 m and required agencies and posted on the property on October 27th, 2011.	
<ul><li>2. Application for Zoning By-law Amendment</li><li>- including Traffic Impact Study</li></ul>	02 08

# Public Meeting Agenda November 21st 2011 7:00 p

8. Adjournment

November 21st, 2011 - 7:00 p.m. Page 2 of 2 PAGE NO. **AGENDA ITEM** 3. Presentations by: - Linda Redmond, Planner - See attached comments 52 - Public Meeting Minutes, November 9, 2009 58 4. Review of Correspondence received by the Township: - Ray Kirtz, Township Engineer, Triton Engineering Services - General & Transportation Impact Study Comments 64 - Rezoning Submission Comments 67 5. The by-law will be considered at a future regular council meeting. Persons wishing notice of the passing of the By-law must submit a written request. 6. Mayor opens floor for any questions/comments. 7. Comments/questions from Council.



# Corporation of the Township of Wellington North

Application for Zoning By-law Amendment

Application No.:
A. THE AMENDMENT
1. TYPE OF AMENDMENT? Site Specific [ Y Other
WHAT IS THE PURPOSE OF AND REASONS FOR THE PROPOSED AMENDMENT(S)?  TO FACILITATE THE REPEDENCIAL APPROPRIED TO RESIDENTIAL  AND CAMMERCIAL WEST INTENSIFICATION;  FE-DEPLYMENT OF EXIST. STEUCTURE;
B. GENERAL INFORMATION
3. APPLICANT INFORMATION
Address: So For Home (SI) 232 1474 Work (18 422 1921 Fax ( )  b) Applicant (Agent) Name(s): Address:
b) Applicant (Agent) Name(s):  Address:  Phone: Home (3) 24/ 5/34 Work (3) 74/7 19 // Fax (3) 74/7 16 // 2
c) Name, Address, Phone of all persons having any mortgage charge or encumbrance on the property:
d) Send Correspondence To? Owner [ ] Agent [ ] Other [ ]
e) When did the current owner acquire the subject land?
4. WHAT AREA DOES THE AMENDMENT COVER? [X] the "entire" property [ ] a "portion" of the pro

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	Municipal Addres	ss: 161	ENZA-	STEFFI, AF	JUHTS
					an No.:
	Area: 1.86	_hectares De _acres	epth: <u>175. Z</u> me <u>574.9</u> fee	ters Frontage (Widt t	h): <u>97. 1</u> meters 318.4 feet
6.	PROVIDE A DES	SCRIPTION OF	THE AREA TO E	SERIPTION SE AMENDED IF ON	I Y A "PORTION"
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	Area:	_nectares De _acres	ptn:met feet	ers Frontage (Width	1):feet
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8.					PLAN DESIGNATION
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10.	WHAT IS THE "	EXISTING" US	SE(S) OF THE SU	BJECT LAND?	
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11.	HOW LONG HAS	THE "EXISTI	NG" USE(S) CON	TINUED ON THE SU	JBJECT LAND?
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	PROVIDE THE F SUBJECT LAND		PETAILS FOR AL	L BUILDINGS OR S	STRUCTURES ON THE

	Existing	Proposed
a) Type of Building (s) - or Structure (s)	YAKAMT	TOWNHOUSES, AFARTMENT CONVERSION OF EXIST
b) Date of Construction	11947	STEWTURE THEW!
c) Building Height	6.1 (m.) ZD (ft.)	1D. 5 (m.) 34.5 (ft.)
d) Number of Floors	DHE (1)	THREE (3)
e) Total Floor Area	2577 (sq.m.) 27,730 sq.ft.)	3644 (sq.m.) 60,729 (sq.ft.)
f) Ground Floor Area (exclude basement)	2577 (sq.m.) 2778 (sq.ft.)	2608 (sq.m.) 28, 163 (sq.ft.)
g) Distance from building the:	g/structure to	3047 m2 34,306 % THOUSE
Front lot line south	4.97 (m.) 16.3/(ft.)	(m.) (ft:)
Side lot line west	4.19 (m.) 13,75 (ft.)	(m.) (ft.)
Side lot line east	18.01 (m.) 59.09 (ft.)	(m.) (ft.)
Rear lot line north	98.86 (m.) 324.34(ft.)	(m.) (ft.)
h) % Lot Coverage	13.90/	- THE ATTACHED
i) # of Parking Spaces	WHKNOWH	ENE HUNDRED FIGHTY TWO (182)
j) # of Loading Spaces	MUSHAHEN	DHE (1)

# D. <u>EXISTING AND PROPOSED SERVICES</u>

# 14. WHAT IS THE ACCESS TO THE SUBJECT PROPERTY?

Provincial Highway [ ] Continually maintained municipal road [ ]

Right-of-way [ ]

County Road ( )

Seasonally maintained municipal road [ ]

Water access [ ]

# 15. WHAT IS THE NAME OF THE ROAD OR STREET THAT PROVIDES ACCESS TO THE SUBJECT PROPERTY?

ELIZA STEFFT (ALSE TENDON AS JOHN)

# 16. IF ACCESS IS BY WATER ONLY, PLEASE DESCRIBE THE PARKING AND DOCKING FACILITIES USED OR TO BE USED AND THE APPROXIMATE DISTANCE OF THESE FACILITIES FROM

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SUBJECT LAND TO THE NEAREST PUBLIC ROAD. (This information should be illustrated on the

## F. OTHER SUPPORTING INFORMATION

21. PLEASE LIST THE TITLES OF ANY SUPPORTING DOCUMENTS: (e.g. Environmental Impacts Study, Hydrogeological Report, Traffic Study, Market Area Study, Aggregate License Report, Stormwater Management Report, etc.)

# G. APPLICATION DRAWING

- 22. PLEASE PROVIDE AN ACCURATE DRAWING OF THE PROPOSAL, PREFERABLY PREPARED BY A QUALIFIED PROFESSIONAL. IN SOME CASES IT MAY BE MORE APPROPRIATE TO SUBMIT ADDITIONAL DRAWINGS AT VARYING SCALES TO BETTER ILLUSTRATE THE PROPOSAL. THE DRAWING MUST INCLUDE THE FOLLOWING INFORMATION:
  - owner's/applicant's name;
  - legal description of property;
  - · boundaries and dimensions of the subject property and its current land use;
  - · dimensions of area of amendment (if not, the entire property);
  - · the size and use of all abutting land;
  - · all existing and proposed parking and loading areas, driveways and lanes;
  - the nature of any easements or restrictive covenants on the property;
  - · the location of any municipal drains or award drains;
  - woodlots, forested areas, ANSI's, ESA's, wetlands, floodplain, and all natural watercourses (rivers, stream banks, etc.);
  - the dimensions of all existing and proposed buildings and structures on the subject land and their distance to all lot lines;
  - the name, location and width of each abutting public or private road, unopened road allowance or right of way:
  - if access to the subject land is by water only, provide the location of the parking and docking facilities to be used; and
  - other features both on site or nearby that in the opinion of the applicant will have an effect on the
    application (auch as bridges, railways, airports, wells, septic systems, springs, alopos, gravel pits).

THE DRAWING SHOULD ALSO INCLUDE THE SCALE, NORTH ARROW AND DATE WHEN THE DRAWING WAS PREPARED.

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County/Region of	do hereby au	uthorize	
act as my agent in this applica	ation.		

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statements contained in this application are true, and I,(we), ma	
conscientiously believing it to be true, and knowing that it is of t	
if made under oath and by virtue of the CANADA EVIDENCE A	
	•
DECLARED before me at the	Jorth in the
	of <u>September</u> , 2009
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Signature of Owner or Authorized Solicitor or Authorized Agent	Date /
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On a fine of the contract of t	Sept. 30 09.
Signature of Commissioner Smouth, CLERK	Date
OF THE CORPORATION OF THE TOWNSHIP OF WELLINGTON NORTH	
COMMISSIONER FOR TAKING AFFIDAVITS.	
APPLICATION AND FEE OF \$ 1500 RE	CEIVED BY THE MUNICIPALITY:
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- Rangones	Dept 30/01
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Signature of Municipal Employee	Date



# PROJECT SUMMARY

PROJECT NAME: FORMER ARTHUR SCHOOL
TRANSPORTATION IMPACT STUDY
CLIENT: 1530953 ONTARIO LTD
TOURS ON TARIO LTD  5552 8™ LINE  ERIN ON NOB 1TO
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CLIENT PROJECT MANAGER: SCOTT MAY
PRINCIPAL
THE MAY DESIGN GROUP 535 HAVENDALE PLACE WATERLOO ON N2T 2T3
VVAILEOU DIVINET ETQ
CONSULTANT: PARADIGM TRANSPORTATION SOLUTIONS LIMITED
43 FOREST ROAD
CAMBRIDGE ON N1S 3B4
PH: 519-896-3163 FAX: 1-866-722-5117
FAX. 1-000-722-3117
CONSULTANT PROJECT MANAGER
REPORT DATE: APRIL 2010
PROJECT NUMBER: 100070
100070

8



### **EXECUTIVE SUMMARY**

#### CONTENT

Paradigm Transportation Solutions Limited has prepared this Traffic Impact Study on behalf of 1530953 Ontario Limited and The May Design Group. This study has reviewed the traffic impacts associated with the proposed residential development located on the northwest corner of Isabella Street and John Street in Arthur. Ontario.

The proposed residential development includes 23 street-front townhouses, 16 townhouses with access from Eliza Street, and 67 apartments in the existing structure.

The report documents the net additional traffic that will occur as a result of the proposed development and estimates the impact of the traffic on the surrounding roadway network. The findings, conclusions and recommendations of this study are summarized below and outlined in more detail in the body of the report.

#### CONCLUSIONS

The conclusions of this study are summarized as follows:

- the intersections included in the study area used to assess the impact of the proposed development include Isabella Street and George Street, Isabella Street and John Street, Isabella Street and Georgina Street, Isabella Street and Charles Street, Leonard Street and Eliza Street, and Eastview Drive and Eliza Street;
- overall the intersections in the study area currently operate with acceptable levels of service during the AM Peak Hour and PM peak hours with no problem movements currently noted;
- the development of the subject site is expected to be completed and fully occupied within five years and is estimated to generate roughly 51 vehicle trips during the AM peak hour, and roughly 63 vehicle trips during the PM peak hour;
- by 2015 with background traffic alone, overall the intersections in the study will continue to operate with acceptable levels of service during the AM Peak Hour and PM peak hours with no problem movements noted;
- by 2015 with full development and occupancy of the site, overall the intersections in the study will continues to operate with acceptable levels of service during the AM Peak Hour and PM peak hours with no problem movements;
- by 2020 with background traffic alone, overall the intersections in the study will continue to operate with acceptable levels of service during the AM Peak Hour and PM peak hours with no problem movements noted;
- by 2020 with full development and occupancy of the site, overall the intersections in the study will continues to operate with acceptable levels of service during the AM Peak Hour and PM peak hours with no problem movements;
- by 2015 with full development and occupancy of the site left-turn lanes and right-turn lanes are not warranted at any of the study area intersections;



- by 2015 with full development and occupancy of the site left-turn lanes and right-turn lanes are not warranted at any of the study area intersections; and
- any minor changes to the development concept are not expected have any change on the recommendations of the report findings.

#### RECOMMENDATIONS

Based on the findings of this study, it is recommended that:

- the draft plan application be approved with no requirements for off-site transportation-related improvements;
- the redesign of the intersection of John Street and Eliza Street not be undertaken given the significant impacts and that the Township investigate alternative detour routes including Wells-Eliza, 2nd Line-Sideroad 3-Wellington 109 and the potential use of Isabella Street rather than Eliza;
- the proposed drop-off on John Street be redesigned to address the issues identified;
- the proposed walkway shown on the south side of the Isabella Street townhouses be constructed to
  a sufficient width and pavement design such that it can be used as an access point for emergency
  vehicles; and
- to avoid misuse by regular traffic, the end of the pathway should be designed with either a lockable gate system or breakaway bollards subject to the engineering and emergency services standards of the Township.





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FIGURE U. I. JUNIN JIMENI AND ELIZA WIREET LARGE FIELD TURNING MADIC	10 , . , , , , , , , , , , , , , , , , ,	ا ت ،





# 1.0 INTRODUCTION

# 1.1 Background

A draft plan of submission has been submitted for a residential development at Isabella Street and John Street in Arthur, Ontario (**Figure 1.1**). The proposed development will include 14 townhouses with driveways along Eliza Street, 9 townhouses with driveways along Isabella Street, 16 townhouses within the site with a single driveway from Eliza Street and 67 apartments in the existing structure which will also use the driveway off Eliza Street. The access to the 16 townhouses and 67 apartments will be approximately 30 metres north of the intersection of Eliza Street and John Street.

### 1.2 Purpose and Scope

Paradigm Transportation Solutions Limited was retained by The May Design Group to conduct a Transportation Impact Study for the proposed development as per the requirements of the county. The surpose of the study is to determine the impact of the development on the surrounding roadway network. The scope of the study includes determination of the current traffic and site conditions in the vicinity of the development, additional traffic that will be generated by the development, analyses of the impact of the traffic and development of recommendations on the measures required in order to accommodate this traffic in a satisfactory manner.

The following assumptions guided the development of this report.

- the study area would include the intersections of:
  - o Isabella Street and George Street,
  - o Georgina Street and Isabella Street
  - o Georgina Street and Charles Street;
  - Isabella Street and Leonard Street;
  - Eliza Street and Leonard Street; and
  - Eliza Street and Eastview Drive.
- the analysis period would extend for a five and ten-year planning horizon (i.e. 2015 and 2020) as per the requirements of the Township; and
- AM and PM peak hours were required for analysis in this report.

In addition, the Township identified the intersection of Eliza Street and John Street as requiring a review of its geometry.





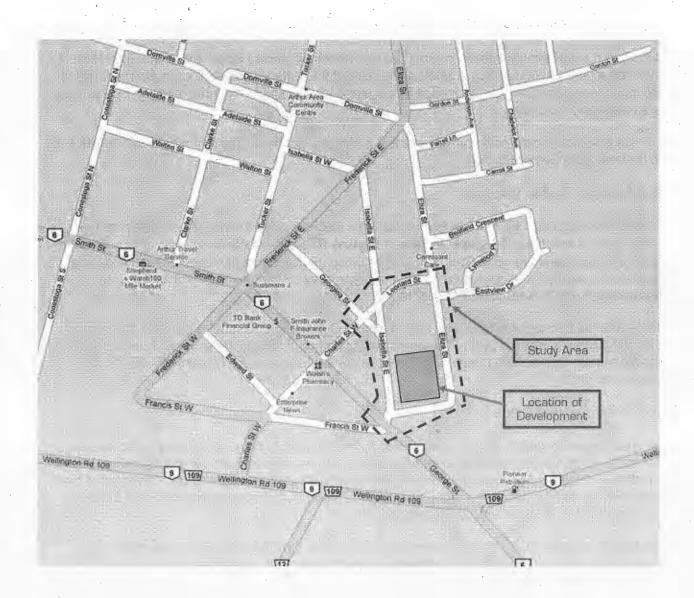


Figure 1.1



**Location of Development** 



## 2.0 Existing Conditions

This section documents current traffic conditions, operational deficiencies, and constraints experienced by the public travelling at the intersections within the study area. The operational deficiencies and constraints dentified at this stage will provide input to the problem statement and will be fundamental to the process of defining the required remedial measures.

# 2.1 Existing Roads within Study Area

The location of the proposed development is to the northwest of Isabella Street and John Street. None of the intersections within the study area are signalized and the posted speed is 50 km/h. George Street is the main street in the town of Arthur. Eliza Street provides access to the majority of the residential areas n the west part of Arthur.

The site is surrounded by residential development to the east and north. The commercial part of Arthur is to the west along George Street.

# 2.2 Existing Traffic Volumes

Paradigm collected data for all intersections within the study area. The existing AM and PM peak hour traffic volumes are shown in **Figure 2.1a** and **Figure 2.1b**. Bi-directional volumes on Eliza Street range from approximately 48 vehicles in the AM peak hour to approximately 93 vehicles in the PM peak hour and on Isabella Street volumes range from approximately 66 vehicles in the AM peak hour to approximately 125 vehicles in the PM peak hour

These volumes translate into daily volumes in the order of 480 to 1,250 vehicles per day. According to data and guidelines provided by the Transportation Association of Canada, these values fall well below the desirable upper limit for local streets (3000 vehicles per day) and collector roadways (8000-12,000 vehicles per day).

#### 2.3 Existing Traffic Operations

Intersection level of service (LOS) is a recognized method of quantifying the efficiency of traffic flow at intersections. It is based on the delay experienced by individual vehicles executing the various movements. The delay is related to the number of vehicles desiring to make a particular movement, compared to the estimated capacity for that movement. The capacity is based on a number of criteria related to the opposing traffic flows and intersection geometry.

The highest possible rating is LOS A, under which the average total delay is equal or less than 10.0 seconds per vehicle. When the average delay exceeds 80 seconds for signalized intersections or 50 seconds for unsignalized intersections, the movement is classed as LOS F and remedial measures are usually implemented, if they are feasible. LOS E is usually used as a guideline for the determination of road improvement needs on through lanes, while LOS F may be acceptable for left-turn movements at peak times, depending on delays.





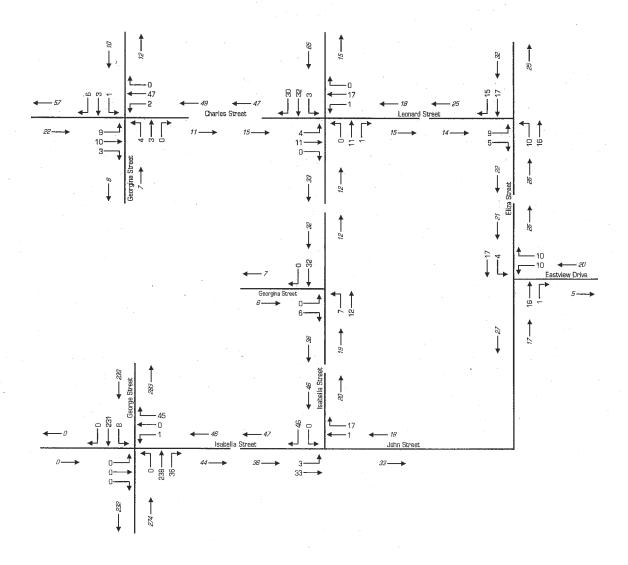


Figure 2.1a



2010 AM Peak Hour Existing Traffic Volumes





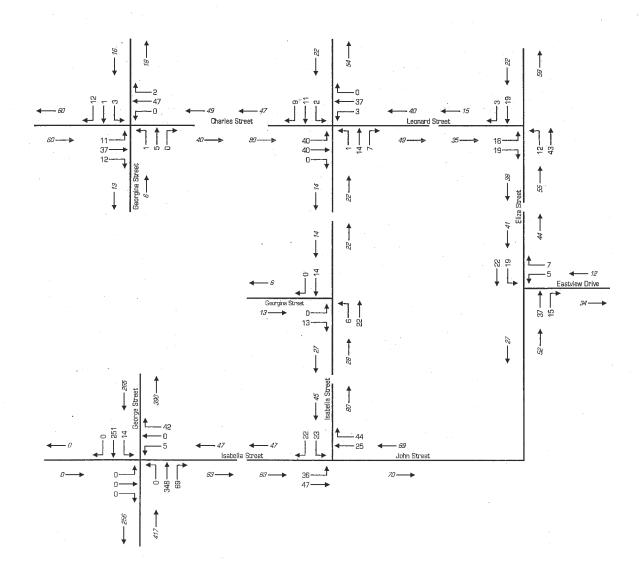


Figure 2.1b



2010 PM Peak Hour Existing Traffic Volumes



The operations of intersections in the study area were evaluated using the existing turning movement volumes illustrated in **Figure 2.1a** and **Figure 2.1b** and existing signal timings, which was provided by the County of Oxford.

The intersection analysis considered two separate measures of performance:

- The volume to capacity ratio for each intersection; and
- The level of service (LOS) for each turning movement which is based on the average control delay per vehicle.

The existing intersection operations are summarized in **Table 2.1** indicating the existing levels of service and volume to capacity ratios experienced within the study area, for the AM and PM peak hours.

Based on the above criteria and the entries in **Table 2.1**, all intersections within the study area operate at an acceptable level of service during the AM and PM peak hours.

Detailed Synchro v7 are provided in Appendix A.

# 2.4 Existing Pedestrian and Cyclist Facilities

Sidewalks are provided on the east side of Eliza Street and the East side of Isabella Street through the study area.

No designated cycling lanes exist within the study area





TABLE 2.1: BASE YEAR PEAK HOUR TRAFFIC OPERATIONS

	T							D	irectio	n / M	oveme	nt / A	pproad	ch					77	
. <u>i</u>		<u>a</u>			Easth	ound		Γ		bound				bound			South	bound		
Analysis Period	Intersection	Control Type	MOE	LEFT	тнвоисн	RIGHT	АРРИСТАСН	LEFT	ТНВОИСН	RIGHT	АРРВОДСН	LEFT	тнвоисн	RIGHT	APPROACH	LEFT	тнвоисн	RIGHT	АРРЯОДСН	OVERALL
	1 - George Street & Isabella Street	TWSC	LOS Delay V/C	A 0 0.00	A 0 0.00	A 0 0.00	1	A 10 0.07	A . 0 0.07	A 10 0.07		A 0.00	A 0.00	A Ó 0.00		A 0 0.01	A 0 0.01	A 0 0.00		1
'n	2 - Isabella Street & John Street	TWSC	LOS Delay V/C	0 0 0.03	A 0 0.03			1	9 0.02	A 9 40:02			-			A 0.00		0.00	6 88	2
Existing Total AM Peak Hour	3 - Isabella Street & Georgina Street	TWSC	LOS Delay V/C	0 0.01		A 9 0.01	1					A .0 .0.00	A 3 0.00				A 0 0.02	0 0.02	100	22
otal AM	4 - Georgina Street & Charles Street	TWSC	LOS Delay V/C	0 0.01	3 0.01	A 3 0.01	5	A 0.00	A 0 0.00	A 0 0.00		A 10 0.01	A 10 0.01	10 0.01		9 0.01	9 0.01	9 0.01		3
isting T	5 - Charles Street & Isabella Street	TWSC	LOS Delay V/C	A 0 0.00	2 0.00	0.00		A 0.00	A O.	A 0.00		A 10 0.02	A 10 0.02	A 10 0.02		A 10 0.08	A 10 0.08	A 10 0.08		7
ū	6 - Leonard Street & Eliza Street	TWSC	LOS Delay V/C	9 0.02		9 0.02						A 0 0.01	A 3 0.01				A 0 0.02	A 0 0.02		3
	7 - Eastview Drive & Eliza Street	TWSC	LOS Delay V/C				18	A 9 0.02		9 0.02			A 0 0.01	A 0 0.01	-	0 0.80	0.00 2 A			4
	1 - George Street & Isabella Street	TWSC	LOS Delay V/C	A 0 0.00	A 0 0.00	A 0 0.00	(Self)	B 12 0.09	A 0 0.09	B 12 0.09		Α 0 0.00	A 0 0.00	A 0 0.00	100	A 0 0.01	0 0.01	A 0 0.01		1
á	2 - Isabella Street & John Street	TWSC	LOS Delay V/C	A 0 0.05	A 0 0.05		442	100	A 10 0.06	A 10 0.06	1	100401	i i			0 0.03		A 3 0.03		4
Peak Ho	3 - Isabella Street & Georgina Street	TWSC	LOS Delay V/C	A 8 0.01		A 8 0.01	S) (				5	A .0 0.00	A 2 0.00				A 0 0.01	A 0 0.01		3:
tal PM	4 - Georgina Street & Charles Street	TWSC	LOS Delay V/C	A 0 0.01	A 2 0.01	A 2 0.01	3	A 0	A 0 0.00	A 0 0.00		A 10 0.01	A 10 0,01	A 10 0.01		A 9 0.02	A 9 0.02	A 9 0.02		2
Existing Total PM Peak Hour	5 - Charles Street & Isabella Street	TWSC	LDS Delay V/C	A 0 E0.0	A 4 0.03	4 U:03		A 0 0.00	A 1 0.00	1 0.00		A 10 0.03	A 10 0.03	A 10 0.03		A 10 0.03	A 10 0.03	A 10 0.03		5
Ж	6 - Leoherd Street & Eliza Street	TWSC	LOS Delay V/C	A 9 0.04		A 9 0.04		1000				A 0 0.01	A 2 0.01	545			A 0 0.01	A 0 0.01		4
	7 - Eastview Drive & Elize Street	TWSC	LOS Delay V/C	36.5				A 9 0.01		A 9 0.01			A 0 0.03	A 0 0.03		A 0 0.01	A 4 0.01			2



## 3.0 DEVELOPMENT CONCEPT

The proposed development includes 39 townhouses and 67 apartments. Street-front access will be provided on Eliza Street to 14 townhouses and on Isabella Street to 9 townhouses. The remaining 16 townhouses will be at the center of the site and a single driveway off of Eliza Street will provide access to these homes. The 67 apartments will be located in the existing structure (the former Arthur School building). Access to this building will also be obtained via the driveway on Eliza Street, approximately 60 metres north of John Street. A passenger pick-up drop off driveway is proposed for John Street at the front of the building. Parking for the street-front townhouses will be provided in each driveway. Parking for the 16 internal townhouses and the apartment building will be provided within the site, approximately 142 spaces will be provided. A walkway (6 m wide) to the central 16 townhouses and the apartment building is provided off of Isabella Street, south of the 14 street-front townhouses. The proposed development master plan concept is shown in **Figure 3.1**.





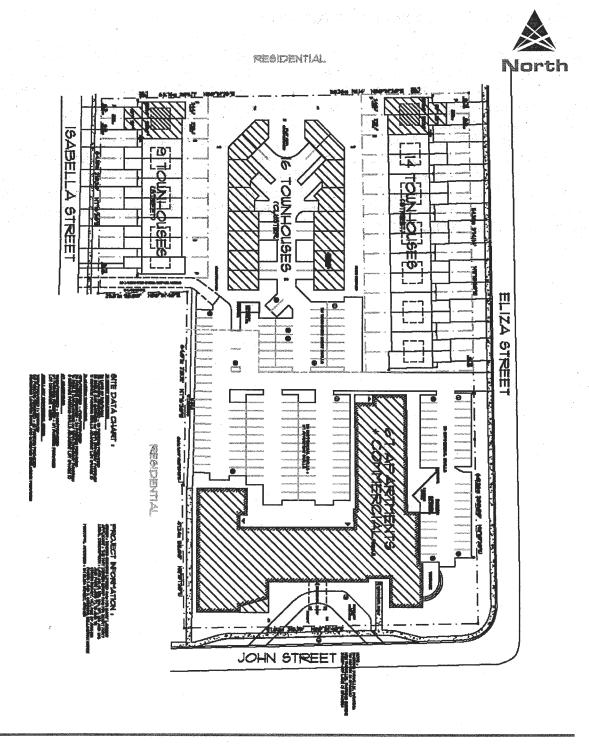


Figure 3.1



**Development Concept** 



### 4.0 EVALUATION OF FUTURE TRAFFIC CONDITIONS

The assessment of future traffic conditions contained in this section includes estimates of future background and total traffic and analysis in order to adequately identify the impacts of the development. The likely future traffic volumes in the vicinity of the development will consist of increased non-site traffic volumes (background traffic) and the traffic generated by the proposed development (site traffic). In accordance with requirements of the township, future traffic conditions were assessed at a five and tenyear planning horizon.

# 4.1 Background Traffic Growth (2015 & 2020)

The non-site traffic increase is generalized traffic growth forecast to occur as a result of growth in the Town of Arthur over the next decade. Conservatively, this is anticipated to follow the average increase in population within the area and is conservatively estimated to be 2% per annum. It should be noted that according to Statistics Canada the population of the Township of Wellington North decreased by 1.1% over the 2001-2006 census period. Therefore the 2% per annum increase in traffic is considered to represent an ambitious growth pattern compared to the last census period.

The increases in background traffic are shown in **Figure 4.1a** and **Figure 4.1b** for a five-year horizon (2015) and in **Figure 4.2a** and **Figure 4.2b** for a ten-year horizon (2020).

## 4.2 Background Traffic Operations (2015 & 2020)

Based on the estimated volumes shown in **Figure 4.1a**, **Figure 4.1b**, **Figure 4.2a**, and **Figure 4.2b** operational analyses have been conducted using Synchro v7 for the future background traffic conditions.

**Table 4.1** summarizes the future background traffic operations for the five-year horizon and **Table 4.2** summarizes the future background operations for the ten-year horizon. The signal timings were reoptimized using Synchro. Based on the entries in **Table 4.1**, all intersections were found to operate at an acceptable level of service in 2015 under background conditions.

Based on the entries in **Table 4.2**, all intersections were found to operate at an acceptable level of service in 2020 under background conditions.

Detailed Synchro v7 are provided in Appendix B.





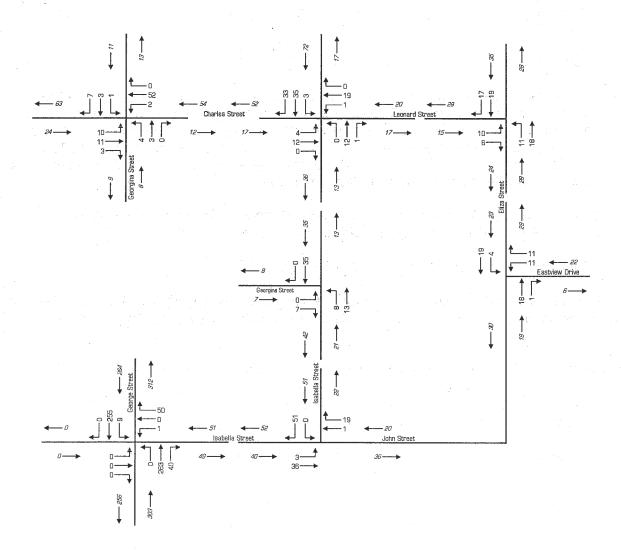


Figure 4.1a



2015 AM Peak Hour Background Traffic Volumes





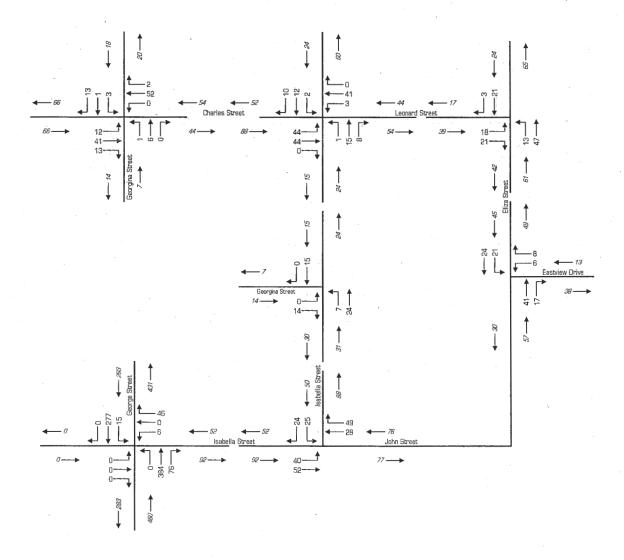


Figure 4.1b



2015 PM Peak Hour Background Traffic Volumes





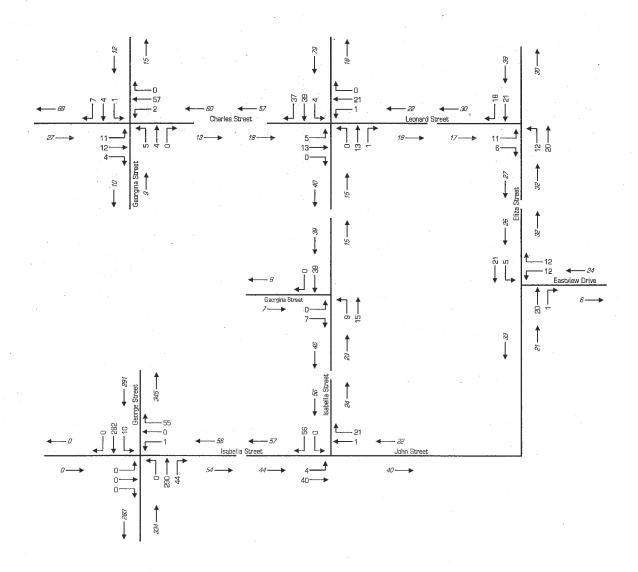


Figure 4.2a



2020 AM Peak Hour Background Traffic Volumes





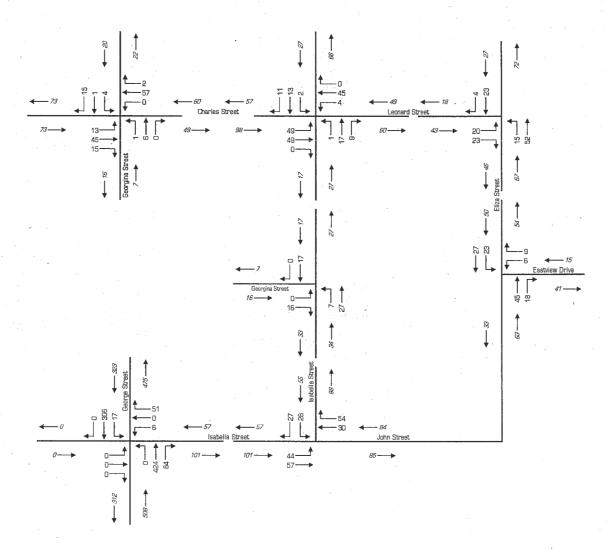


Figure 4.2b



2020 PM Peak Hour Background Traffic Volumes



TABLE 4.1: 2015 BACKGROUND TRAFFIC OPERATIONS

			Direction / Movement / Approach																	
В					F						n / M	oveme			ch		-			
e E		Ž				ound	-		West	bound	_			bound			South	bound		
Analysis Period	Intersection	Control Type	MOE	LEFT	тнкоисн	RIGHT	APPROACH	ыэ	тнвоисн	RIGHT	дрряпасн	LEFT	неповнт	RIGHT	АРРЯОАСН	HEI	тнвоисн	RIGHT	АРРВОАСН	OVERALL
	1 - George Street &		LOS	А	Α	Α		Α	Α	Α		Α	Α	Α		Α ".	Α	Α		
	Isabella Street	TWSC	Delay	0	0	0		10	0	10		0	0	0		0	0	0		1
			V/C	0.00	0.00	0.00		0.07	0.07	0.07		°0.18	0.18	0.18		0.01	0.01	0.00		
_	2 - Isabella Street & John	TWSC	LOS Delav	A 0	A 0	-	-		9 9	A 9						A 0		. A 0		2
Background AM Peak Hour	Street	10000	V/C	0.03	0.03				0.02	0.02						0.00		0.00		-
<u> </u>			LOS	Α	0.00	Α			0.02	0.02		A⁄	Α			0.00	A	Δ.00		
ea	3 - Isabella Street &	TWSC	Delay	0		. 9					100	-0	3				0	0		2
2	Georgina Street		V/C	0.01		0.01						0.00	0.00				0.02	0.02		
Ā			LOS	Α	Α	A		Α	· A	·A		Α	A	A <sup>2</sup>		Α	А	Α		
핕	4 - Georgina Street & Charles Street	TWSC	Delay	0	3	. 3		0 :	0	0		10	10	10		9	. 9	9		3
₫	Charles outest	188	V/C	0.01	0.01	0.01		0.00	0.00	0.00		0.01	0.01	0.01		0.01	0.01	0.01		
왔	5 - Charles Street &		LOS	Α	Α	Α	100	Α	Α	ΔA.		A	Α	Α		·A	Α	Α		
Ba	Isabella Street	TWSC	Delay	0	. 5	5	2	0	Q.	0	- 4	10	10	1.0		10	10	10		7
ល			·V/C	0.00	0.00	0.00	- 3	0.00	0.00	0.00		0.02	0.02	0.02		0.08	0.08	0.08		
2015	6 - Leonard Street & Eliza	T 4 (00	LOS	A 9		· A						A	A				A	A		
	Street	TWSC	Delay V/C	0.02		9 0.02						0.01	3 0.01				0.02	0.02		3
			LOS	0.02		0.02		А		Α		0.01	Α.υ.υ	A		A	0.02 A	0.02		
	7 - Eastview Drive & Eliza	TWSC	Delay					9		g .			0	0		n	5			4
	Street	:	V/C					0.02		0.02			0.01	0.01		0.00	0.00			
			LOS	Α	Α	Α		В	Α	В		Α.	Α	Α		Α	A	Α		
	1 - George Street & Isabella Street	TWSC	Delay	0	0	0		13	0	13		0	0	0		0	0	0		1
	ISOBEIIG OW CEC.		V/C	0.00	0.00	0.00		0.11	0.11	0.11		0:30	0.30	0.30		0.02	0.02	0.02		
	2 - Isabella Street & John		LOS	· A	Α				Α	Α						Α		Α		
ā	Street	TWSC	Delay	0	0				10	10						0		3		4
- 프			V/C LOS®	0.06	0.06				0.06	0.06						0.03		0.03		
ea ea	3 - Isabella Street &	TWSC	Delay	A B		A 8					4	A >>.0	A 2				Α 0	A 0		3
4	Georgina Street	10000	V/C	0.01		0.01						0.00	. 0.00				0.01	0.01		- 0
6			105	Α.	Α	A		À	Α	Δ		Α	A.00	А		Α	Α	Α		
핕	4 - Georgina Street &	TWSC	Delay	0	2	2		0	0	0		10	10	10		9	9	9		2
ž	Charles Street		V/C	0.01	0.01	0.01		0.00	0.00	0.00		0.01	0.01	0.01		0.02	0.02	0.02		
\$	E OI - I - OI N		LOS	Α	Α	А		Α	Α	Α		Α	Α	Α		Α	Α	Α		
Background PM Peak Hour	5 - Charles Street & Isabelia Street	TWSC	Delay	0	4	4		0	1	1 -		10	10	10		10.	10	10		5
2	iddolla da acc		_V/C	0.03	0.03	0.03		0.00	0.00	0.00		0.04	0.04	0.04		0,03	0.03	0.03		
2015	6 - Leonard Street & Eliza		LOS	Α		Α						A	Α				. A	Α		
CU	Street	TWSC	Delay	9		9						0	2				-0	0		4
			V/G	0.04		0.04		Λ				0.01	0.01			<b></b>	0.02	0.02		
	7 - Eastview Orive & Eliza	TWSC	LOS* Delay					A 9		9 B			Α	Α 0		A 0	A 4	- 15		2
	Street	14490	V/C					».0.02		0.02			0.04	0.04		0.02	0.02			
			*/ 0					OUT.		0.05			0.04	0.04		10.02	10.05			



TABLE 4.2: 2020 BACKGROUND TRAFFIC OPERATIONS

	Intersection	Control Type	Ι							irectio	n / M	oveme	nt / A	pproad	ch ·					
Analysis Period			MOE	Eastbound				Westbound			Northbound				Southbound					
				LEEL	тнвоисн	RIGHT	АРРВОАСН	ыэт	тнвоовн	THOIR	АРРВОДСН	LEFT	тнвоисн	RIGHT	АРРНОАСН	HEFT	тнвоивн	RIGHT	АРРВОАСН	OVERALL
2020 Background PM Peak Hour	1 - George Street & Isabella Street	TWSC	LOS Delay V/C	A 0.	A 0	A 0		A 10	A 0	A 10		A 0	A 0	A 0		A .	A 0	A 0		1
	2 - Isabella Street & John Street	TWSC	LOS Delay	0.00 A 0 0.03	0.00 A 0 0.03	0.00		0.09	0.09 A 9 0.02	0.09 A 9 0.02		0.22	0.22	0.22		0.01 A 0 0.00	0.01	0.00 A 0 0.00		2
	3 - Isabella Street & Georgina Street	TWSC	LOS Delay	A 0 0.01	0.03	A 9 0.01			0.02	0.02		A 0 0.00	A 3 0.00	i i	4	0.00	A 0 0.02	0.00 0 0.02		2
	4 - Georgina Street & Charles Street	TWSC	LOS Delay	A 0 0.01	A 3 0.01	A 3 0.01	1.5	A 0	A 0	A 0		A 10 0.01	A 10 0.01	A 10 0.01	1 10	A 9 0.01	A 9 0.01	A 9 0.01		3
	5 - Charles Street & Isabella Street	TWSC	LOS Delay V/C	A 0	A 2 0.00	A 2 0.00		A 0.00	A 0	A 0		A 10 0.02	A 10 0.02	A 10 0.02		A 10 0.10	A 10	A 10 0.10	130.00	7
	6 - Leonard Street & Eliza Street	TWSC	LOS Delay	A 9 0.02	0.00	A 9 0.02		0.00	0.00	5.00		A 0 0.01	A 3 0.01		*	.0,10	0.02	A 0 0.02		3
	7 - Eastview Drive & Eliza Street	TWSC	LOS Delay V/C					A 9 0.02		A 9 0.02		0.0	A 0.01	A 0 0.01		A 0	A 2 0.00			4
	1 - George Street & Isabella Street	TWSC	LOS Delay V/C	A 0 0.00	A 0.00	A 0 0.00		B 13 0.11	A 0 0.11	B 13 0.11		A 0 0.30	A 0 0.30	A 0 0.30	1	. A . 0 0.02	A 0.02	A 0 0.02	100	1
	2 - Isabella Street & John Street	TWSC	LOS Delay V/C	A 0 0.06	A 0 0.06				A 10 0.06	A 10 0.06						A 0		A 3 0.03	ra.	4 9
	3 - Isabella Street & Georgina Street	TWSC	LOS Delay V/C	A 8 0,01		A 8 0.01	100			Args.		A 0	A 2 0.00				A 0 0.01	A 0 0.01		3
	4 - Georgina Street & Charles Street	TWSC	LOS Delay V/C	A 0 0.01	A 2 0.01	A 2 0.01		A 0	A 0 0.00	A 0 0.00		. A 10 0.01	A 10 0.01	A 10 0.01		A 9 0.02	A 9 0.02	A 9 0.02		2
	5 - Charles Street & Isabella Street	TWSC	LOS Delay V/C	A 0 E0.0	A 4 0.03	A 4 0.03		A 0	A 1 0.00	A 1 0.00		A 10 0.04	A 10 0.04	A 10 0.04		A 10 0.03	A 10 0.03	A 10 0.03		5
	6 - Leonard Street & Eliza Street	TWSC	LOS Delay V/C	A 9 0.04		A 9 0.04			0.00			A 0 0.01	A 2 0.01	3.3		0.00	A 0 0.02	A 0 0.02		4
	7 - Eastview Drive & Eliza Street	TWSC	LOS Delay V/C		100			A 9 0.02		A 9 0.02		5.5	A 0. 0.04	A 0 0.04		A 0 0.02	A 4 0.02	3.02		5



# 4.3 Development Traffic Generation, Distribution and Assignment

The amount of traffic generated by the development was determined through trip generation rates published by the Institute of Transportation Engineers<sup>1</sup>. The rate for Land Use Code 230 *Residential Condominium/Townhouse* was used for the 39 townhouses and Land Use Code 220 *Apartment* was used for the 67 apartments.

The total amount of traffic forecast to be generated by the site is contained in **Table 4.3**. The table indicates that during the weekday AM peak hour, the forecast total amount of trip generation is in the order of 51 trips (10 into the site and 41 leaving the site) while in the weekday PM peak hour it is estimated to be 63 trips (41 in and 22 out).

AM Peak Hour PM Peak Hour ITE Code Land Use Units Trip Rate ln Out Total Trip Rate Total Residential 230 0.52 39 0.44 3 14 17 14 21 Condominium/Townhouse 67 0.51 Apartment 220 27 0.62 42 Total 106 10 51

**TABLE 4.3: TRIP GENERATION** 

The distribution of trips was determined based on existing traffic distribution on Eliza Street and Isabella Street and the surrounding amenities (grocery, downtown, etc).

Based on the above and the access arrangements, site traffic was assigned to the adjacent road network, via the site driveways. The traffic generated by the development is shown in **Figure 4.3a** and **Figure 3.2b.** 

The total trips expected in the horizon year, which is the addition of the development traffic to the background traffic is shown in **Figure 4.4a** and **Figure 4.4b** for the five-year horizon (2015) and **Figure 4.5a** and **Figure 4.5b** for the ten-year horizon (2020).

<sup>&</sup>lt;sup>1</sup> Trip Generation & Edition, Institute of Transportation Engineers, Washington D.C, 2009.





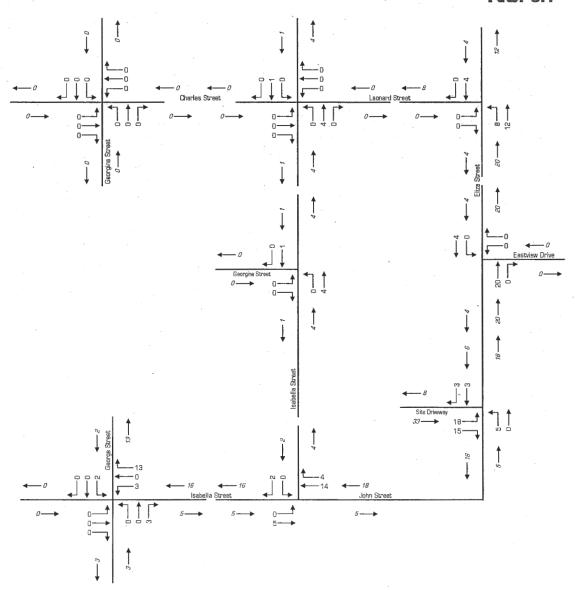


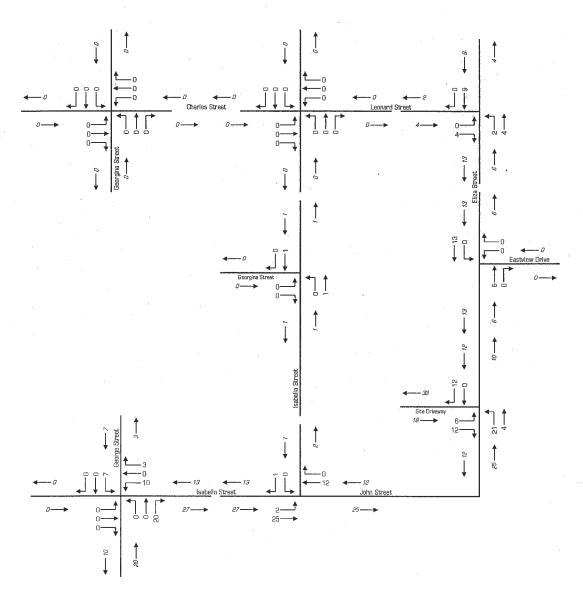


Figure 4.3a

2015 AM Peak Hour Site-generated Traffic Volumes







# Figure 4.3b



2015 PM Peak Hour Site-generated Traffic Volumes





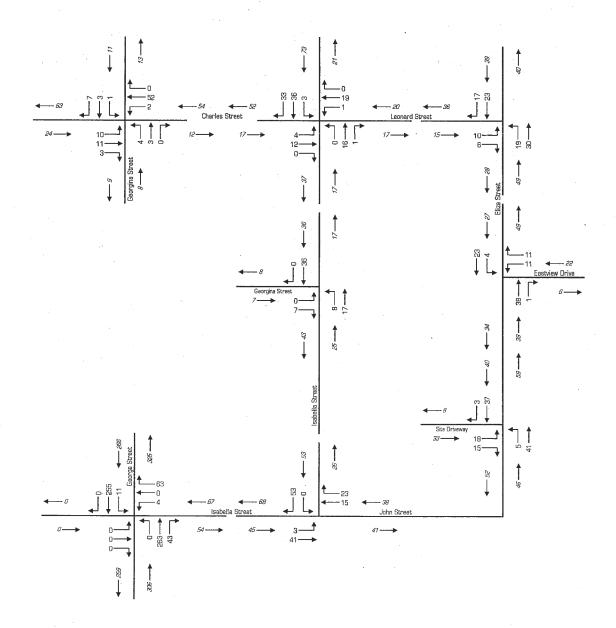


Figure 4.4a



2015 AM Peak Hour Total Traffic Volumes



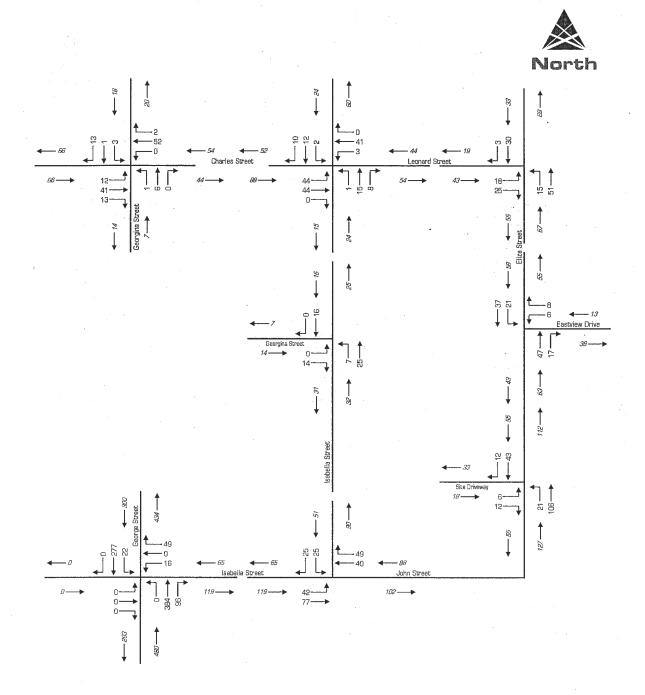


Figure 4.4b



2015 PM Peak Hour Total Traffic Volumes





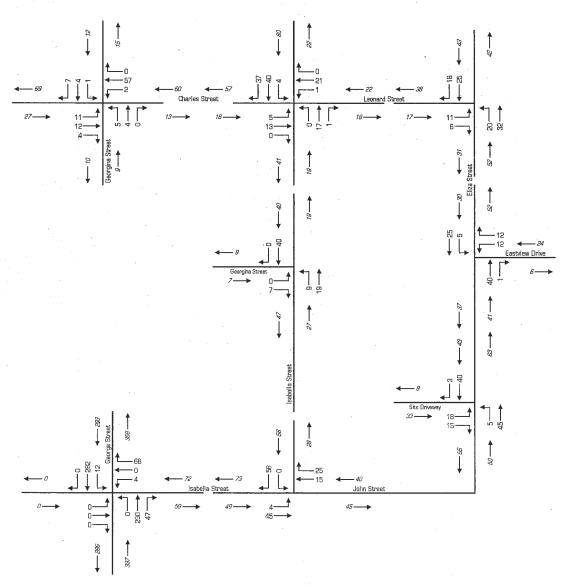
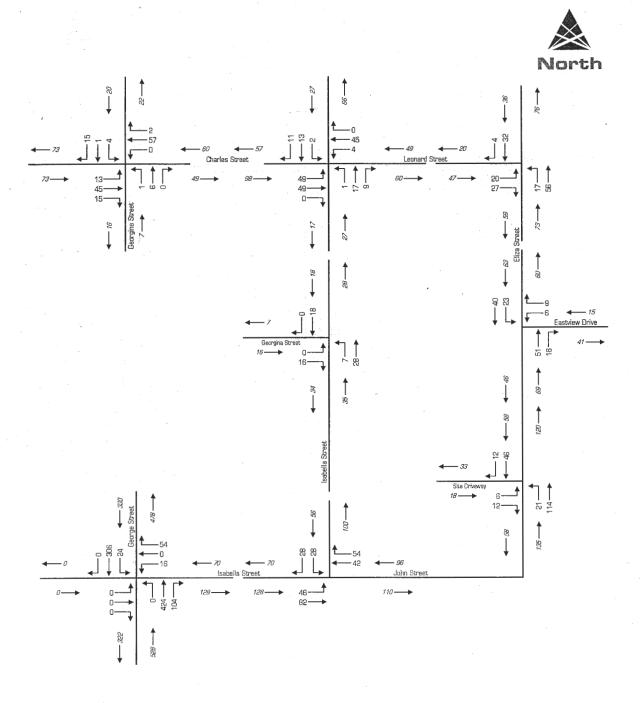


Figure 4.5a



2020 AM Peak Hour Total Traffic Volumes





Former Arthur School TIS

Figure 4.5b



2020 PM Peak Hour Total Traffic Volumes

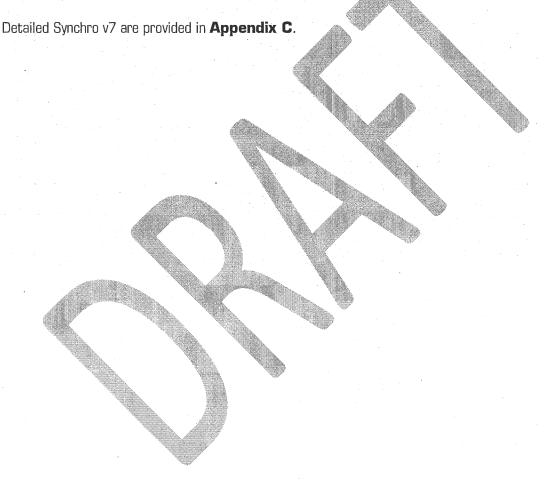


## 4.4 Total Traffic Operations (2015 & 2020)

Based on the estimated volumes shown in **Figure 4.3a**, **Figure 4.3b**, **Figure 4.4a**, and **Figure 4.4b**, LOS analyses have been conducted using Synchro 7 for the AM and PM peak hour conditions for the intersections in the study area, assuming no improvements to the road network.

**Table 4.4 and Table 4.5** summarize the future traffic operations for the five-year and ten-year horizons, respectively. The signal timings were re-optimized using Synchro. Based on the entries in **Table 4.4**, all intersections were found to operate at an acceptable level of service under 2015 total traffic conditions.

Based on the entries in **Table 4.5**, all intersections were found to operate at an acceptable level of service under 2020 total traffic conditions.





## TABLE 4.4: 2015 TOTAL TRAFFIC OPERATIONS

Direction / Movement / App						pproa	oach :													
Period	* :	ype			East	ound				bound		_ ,0,,10		bound		Southbound				
Analysis Pe	Intersection	Control Type	MOE	TEFT	тнвоисн	RIGHT	APPROACH	LEFT	нэпоынт	THĐIH	АРРВОАСН	LEFT	тнвойсн	RIGHT	APPROACH	LEFT	THROUGH	RIGHT	АРРВОАСН	DVERALL
	1 - George Street & Isabella Street	TWSC	LOS Delay V/C	0.00	A 0.00	0.00		11 0.11	A 0 0.11	B 11 0.11		A 0 0.20	A 0 0.20	0 0.20		0 0.01	A 0.01	A 0 0.00		1
	2 - Isabella Street & John Street	TWSC	LOS Delay V/C	A 0 0.03	A 0				A 9 0.04	A 9 0.04		0.20	0.120	0.20		A 0		A 0		2
Hour	3 - Isabella Street & Georgina Street	TWSC	LOS Delay	A 0 0.01	0.00	A 9 0.01			0.04	0.04		A . 0 0.00	A E 00.00			0.00	A . 0	A 0		2
AM Peak Hour	4 - Georgina Street & Charles Street	TWSC	LOS Delay	A 0 0.01	A 3 0.01	A 3 0.01		A 0	A 0.00	A 0 0.00		A 10 0.01	A 10	A 10 0.01		A 9 0.01	A 9 0.01	A 9 0.01		3
5 Total Al	5 - Charles Street & Isabella Street	TWSC	LOS Delay	A 0.00	0.00 A	A 2 0.00		A 0	A 0.00	A 0.00	100	A 10 0.02	A 10 0.02	A 10 0.02		A 10 0.10	A 10 0.10	A 10 0.10		7
2015	6 - Leonard Street & Eliza Street	TWSC	LOS Delay V/C	A 9 0.02		A 9 0.02				5.00		A 0 0.01	A 3 0.01	9,005		0.10	A 0 0.02	A 0 0.02		3
	7 - Eastview Drive & Eliza Street	TWSC	LOS Delay V/C				an areal	A 9		A 9 0.02		1	A D.01	A 0 0.01		A 0 0.00	A 2 0.00	0.012		4
	8 - Site Driveway & Eliza Street	TWSC	LOS Delay V/C	A 7 0.04		7 0.04	100					A 0 0:00	A 1 0.00	1,300			A 0 0.03	A 0 0.03		3
	1 - George Street & Isabella Street	TWSC	LOS Delay V/C	A 0	A 0	A 0	in a	14 0.16	A 0 0.16	B 14 0.16		A 0 0.31	A 0 0 31	A 0 0.31		0.02 0	A 0 0.02	A 0 0.02		1
	2 - Isabella Street & John Street	TWSC	LOS Delay V/C	A 0 0.08	A 0 0.08		9		A 10 0.11	A 10 0.11				40	68	A 0		A 3 0.03		4
Peak Hour	. 3 - Isabella Street & Georgina Street	TWSC	LOS Delay V/C	A B 0.01		A 8 0,01						A 0 0.00	A 2 0.00				A 0 0.01	A 0 0.01		3
PM Peak	4 - Georgina Street & Charles Street	TWSC	LOS Delay V/C	A Q 0.01	A 2 0.01	A 2 0.01	45	A 0 0.00	A 0 0.00	A 0 0.00		A 10 0.01	A 10 0.01	A 10 0.01		A 9 0.02	A 9 0.02	A 9 0.02		5
5 Total	5 - Charles Street & Isabella Street	TWSC	LDS Delay V/C	A 0 0.03	A 4 0.03	A 4 0.03		A 0 0.00	A 1 0:00	A 1 0.00		A 10 0.04	A 10 0.04	A 10 0.04		A 10 0.03	A 10 0.03	A 10 0.03		5
201	6 - Leonard Street & Eliza Street	TWSC	LOS Delay V/C	9 0.05		A 9 0.05		200				A 0 0.01	A 2 0.01			Tale Control	A 0 0.02	A 0 0.02		4
	7 - Eastview Drive & Eliza Street	TWSC	LOS Delay V/C					9 0.02		A 9 0.02			A 0 0.04	A 0 0.04		A 0 0.02	A 4 0.02			2
	8 - Site Driveway & Eliza Street	TWSE	LOS Delay V/C	A 9 0.02		9 0.02	200		e e			A 0 0.02	A 1 0.02				A 0 0.04	A 0 0.04		2



TABLE 4.5: 2020 TOTAL TRAFFIC OPERATIONS

	Direction / Movement / Approach																						
Period	Intersection	Control Type	ntrol Type		Eastbound Westbound Northbound Southbound																		
Analysis Pe				ntrol T	ntrol Ty	ntrol Ty	MOE	LEFI	тнвоисн	RIGHT	APPROACH	EFI	гнвоисн	RIGHT	АРРВОДСН	LEF1	тнвоисн	RIGHT	APPROACH	EFI	тнвоисн	RIGHT	аррядасн
Ana			1.00								202200000000000000000000000000000000000				APPE				APPF	ΛO			
1	1 - George Street &	TWSC	LOS Delav	A 0	A n	A 0		В 11	A 0	B 11	1	A	Α 0	A O		A 0	·A 0	A 0		1			
	Isabella Street		V/C	0.00	0.00	0.00		0.11	0.11	0.11		0.20	0.20	0.20	0.00	0.01	0.01	0.00					
			LOS	Α	A	0.00		10.11	A	Α		0.20	D.EU	U.EU-		Α.	0.01	Α.δ.					
	2 - Isabella Street & John Street	TWSC	Delay	0	0		7.7		9	.9						0		0		-2			
	Julean.		V/C	0.03	: 0.03		1111		0.04	0.04						0.00		0.00					
	3 - Isabella Street &		LOS	Α		Α						Ą	Α				Α	Α					
夏	Georgina Street	TWSC	Delay	0		9						0	3				0	0		5			
구	-	ļ	V/C	0.01		0.01						0.00	0.00				0.02	0.02					
l sa	4 - Georgina Street &	TWSC	LOS Delav	A 0	A 3	A 3		A 0	Α .	A 0	37	A	A 10	A. 10		A 9	A 9	A 9		3			
2	Charles Street	IVVSC	V/C	0.01	0.01	0.01		0.00	0.00	0.00		10 0.01	0.01	0.01	3.4	0.01	0.01	0.01		3			
<u>₹</u>	4 7		LOS	A.	A	Α		- A-	Α	- Δ.Ου - Α		Α	Α.	. A		A	Α	Α					
5 Total AM Peak Hour	5 - Charles Street &	TWSC	Delay	0	2	5		0	0	0		10	10	10		10	10	10		7			
10	Isabella Street		V/C	0.00	0.00	0.00		0.00	0.00	0.00		0.02	0.02	0.02		0.10	0.10	0.10					
201	6 - Leonard Street & Eliza		LOS	Α		Α						Α	Α				.A	Α					
ដ	Street	TWSC	Delay	9		9	500					0	3				0	Ö		- 3			
	3,000		V/C	0.02		0.02						0.01	0.01				0.02	0.02					
	7 - Eastview Drive & Eliza Street		LOS				<u> </u>	A		A			Α	Α		Α	Α	44					
İ		TWSC	Delay V/C	- 20				9		9			0	0		0	2			4			
	8 - Site Driveway & Eliza Street	TWSC	LOS	Α		- Α		0.02		0.02		Á	0.01 A	0.01		0.00	0.00 A	Α					
			Delay	7		7						0	1 1	-3			0	0		3			
			V/C	0.04		0.04		100				0.00	0.00				0.03	0.03					
	1 - George Street & Isabella Street	TWSC	LOS	Α	Α	А		B	Α	В		А	Α.	Α		Α	Α	Α					
			Delay	0	0	0		14	0	14		0	0	0	100	0	0	0		1			
			V/C	0.00	0.00	0.00		0.16	0.16	0.16		0.31	0.31	0.31		0.02	0.02	0.02					
	2 - Isabella Street & John Street	ohn TWSC	LOS	A	A			ļ	Α	Α						Α		Α					
			Delay V/C	0.08	0.08				10 . 0.11	10						0.03		0.03		4			
			LOS	0.08 A	0,06	A			U. I I	0.11		A	Α			0.03	A	U.U3					
5	3 - Isebella Street &	TWSC	Delay	В		8						0	2				0	0		3			
운	Georgina Street		V/C	0.01		0.01						0.00	0.00				0.01	0.01					
Peak Hour	A. Canasina Chanat P		LOS	Α	Α	Д		А	А	. A		Α	Α	А		А	Α	Α					
ď	4 - Georgina Street & Charles Street	TWSC	Delay	0	2	- 5		, O.	0	0		10	10	10		9	9	9.		2			
Σ	5.1di 100 04.000		.V/C	0.01	0.01	0.01		0.00	0.00	0.00		0.01	0.01	0.01		0.02	0.02	0.02					
īg	5 - Charles Street &		LOS	A	Α	Α		Α	A	Α		Α	Α	Α		Α	A	A					
5 Total	Isabella Street	TWSC	Delay V/C	0 0.03	4	0.03		0	0.00	1		10	10	10		- 10	10	10 .		5			
15		_	LOS	U UB	0.03	U.UJ A		0.00	0.00	0.00		0.04 A	0.04 A	0.04		0.03	0.03 A	E0.0					
201	6 - Leonard Street & Eliza	TWSC	Delay	9		9						0	2				0	0		-4			
	Street		V/C	0.05		0.05						0.01	0.01				0.02	0.02		<u> </u>			
	7 Fachiou Data C.F.		LOS					А		Α			A	А		Α	A	5.52					
	7 - Eastview Drive & Eliza Street	TWSC	Delay					9		9			0	Q		0	4			2			
			V/C					0.02		0.02			0.04	0.04		0.02	0.02						
	8 - Site Driveway & Eliza		LOS	A		Α						Α	Α				А	A					
	Street	TWSC	Delay	9		9						0	1				0	0		2			
			V/C	0.02		0.02						0.02	0.02				0.04	0.04					



#### 5.0 REMEDIAL MEASURES

The following sections review what, if any, measures should be implemented to mitigate the increases in Jelay resulting from the development of the site.

## 5.1 Traffic Control Signal Warrant

Jsing the OTM Book 12 warrant system and the future total traffic conditions it was calculated that traffic control signals would not be warranted at any of the intersections within the study area for both the five and ten-year horizons based on the need to meet 120% of the warrant requirements for future forecasts.

#### Appendix D

## 5.2 Auxiliary Turn Lanes

The need for auxiliary turn lanes was then reviewed based on the 2015 and 2020 future total traffic orecasts.

#### 5.2.1 Left-turn Lanes

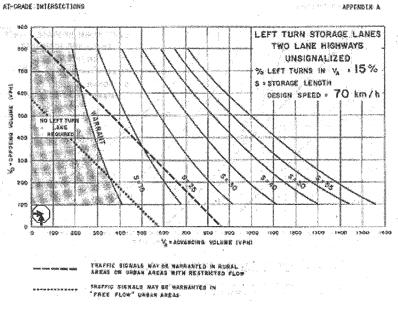
The warrant for a left-turn lane, as described in the Ministry of Transportation's Geometric Design Standards, was assessed for the 2015 and 2020 AM Peak hour and PM peak hour forecast conditions. The speed limit on Eliza Street is 50 km/h, therefore the left-turn lane warrant was examined under a design speed of 70 km/h, as required by the township guidelines.

The left-turn lane warrant nomograph for the intersection of the site driveway and Eliza Street is shown in **Figure 5.1** for the five-year horizon (2015) and **Figure 5.2** for the ten-year horizon (2020). According to the left-turn lane warrant procedure, no left-turn lane is warranted at this intersection in either of the norizon years.

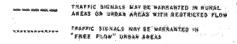
#### 5.2.2 Right-turn Lanes

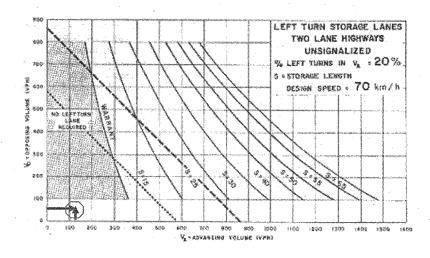
Within the study area, right-turn volumes are low at all intersections. Based on these low turning volumes and the low through volumes throughout the study area, no right-turn lanes are recommended.





## AM Peak Hour





## PM Peak Hour

Former Arthur School TIS

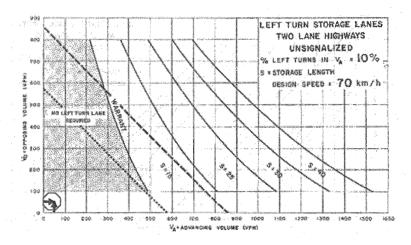
Figure 5.1



2015 Left-turn Nomograph Eliza Street & Site Driveway

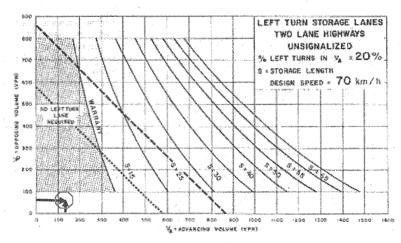


TEAFFIC BIGHALS MAY BE WARRANTED IN RURAL AREAS OR WHOMA AREAS WITH RESTRICTED FLOW TRAFFIC STORAGE MAY DE WARRANTED IN PORCE FLOW USBORN AREAS



## AM Peak Hour

TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OF UNDAY AREAS WITH RESTRICTED FLOW TRAFFIC SISRALS MAY BE WARRANTED IN "PREE FLOW" UNBAY AREAS



PM Peak Hour

Former Arthur School TIS

Figure 5.2



2020 Left-turn Nomograph Eliza Street & Site Driveway



### 6.0 Special Issues

In discussions with Township staff as well as a review of the proposed site additional issues were identified that required review. This chapter reviews these issues and provides a suggested course of action where required.

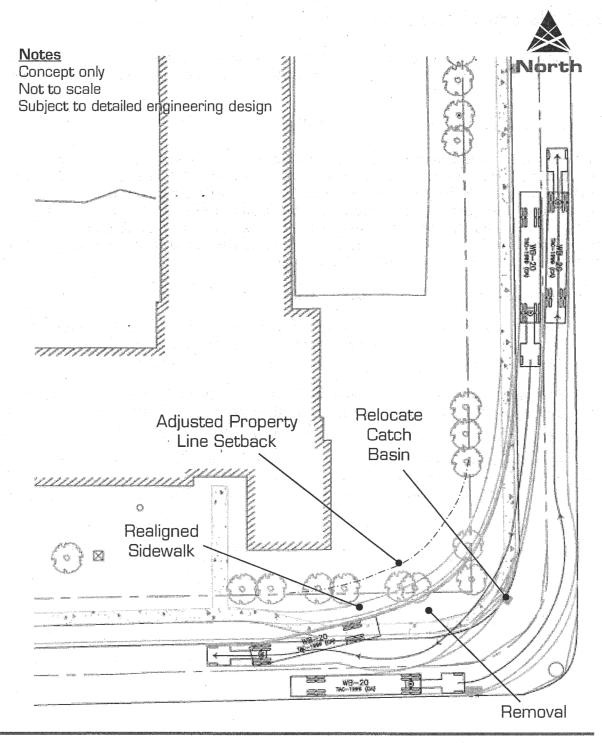
#### 6.1 John Street & Eliza Street Corner Radius

At the pre-study conference meeting, Township of Wellington North staff identified the radius of the intersection of John Street with Eliza Street as potentially problematic. Staff indicated that in their opinion, the intersection has visibility concerns and due to this being a 90° intersection and further that traffic tends to "cheat" when going around the corner rather than staying in their respective lanes. Staff also noted that when George St is closed for special events, (parades, civic events) the detour route goes from George St onto John St onto Eliza to Domville Street and as such this detour route is expected to be able to accommodate large transport trucks (WB-20 TAC design vehicle).

This matter has been reviewed and the following is noted:

- Realigning the intersection of Eliza and John Street to eliminate the 90-degree intersection by providing a large-radius curve and the elimination of the tighter-radius curve has the potential to increase speeding along Eliza Street and John Street which is undesirable.
- Realigning the intersection of Eliza and John Street to eliminate the 90-degree intersection by providing a large-radius curve does not consider the impacts on the existing residential driveways that form part of this intersection and has the potential to affect these property owners.
- Realigning the intersection of Eliza and John Street to eliminate the 90-degree intersection by providing a large-radius curve does not consider the impacts on the potential for long-term redevelopment of the lands east of Eliza Street and how they may gain access to this intersection.
- It is very undesirable to route large transport trucks through residential areas. The detour route identified by staff has a significant number of existing residential properties, a community centre, a pool and curling rink on it. It is expected that trucks would encounter parked cars, cyclists and pedestrians, including children, along this route. Encouraging the use of this route has the potential to negatively impact the existing community and the proposed residential development.
- Realigning the intersection of Eliza and John Street to eliminate the 90-degree intersection by providing a large-radius curve will have significant impacts on the site, possibly resulting in the loss of several very large caliper mature maple trees and requiring the construction of a retaining wall on the site. **Figure 6.1** shows the required turning radius to accommodate large trucks and the estimated impact on the site.
- The on-street drainage will be affected resulting in the requirement to relocate the catch basin located near the apex of the inner curb.
- The need for the ability to accommodate large trucks through this area is very infrequent and will result in significant day-to-day impacts that will affect area residents.





Former Arthur School TIS

## Figure 6.1



John Street & Eliza Street Large Truck Turning Radius



## 6.2 Drop-off Driveway

The drop-off lane at the front of the apartment building along John Street is shown as one-way and is quite narrow and has acute approaches to John Street. In addition, there are additional geometric issues associated with the proposed driveway including:

- ▶ The tangent section of the drop-off lane is too short;
- The radius of the curve at the apex is too tight making negotiating the turn very difficult, especially if a car is parked in the drop-off area;
- The angle of the approaches to John Street make negotiating a left-turn into the site from John Street very difficult:
- Hard cover walking surfaces should surround the driveway, and
- The covered canopy appears to be too small to provide adequate shelter;

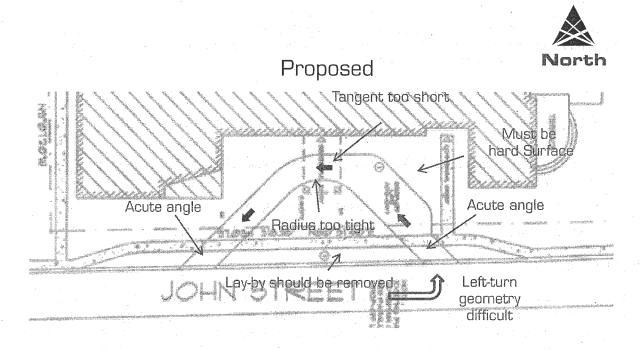
#### **Figure 6.2** illustrates the above issues.

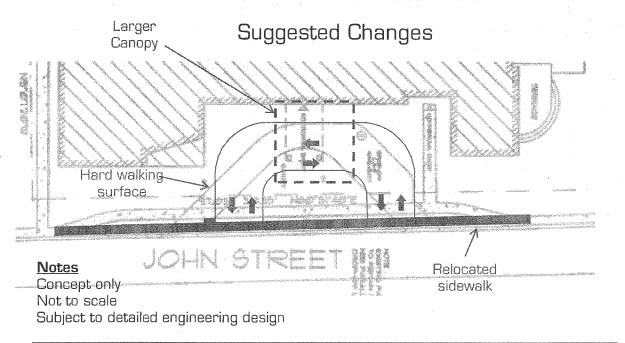
The lower part of the figure contains some suggested changes to the design to ensure that the above issues are addressed. Most notable of these is the re-orientation of the driveways to meet John Street at 90-degrees and widening the driveway to 7.5 m to permit two-way flow. It is important to note that as the apartment building is expected to be largely occupied by seniors, grades should be designed such that wheelchairs and walkers can be accommodated comfortably and safely.

#### 6.3 Emergency Vehicle Access

The site layout shows a single access from Eliza Street to the internal townhouses and the apartment building. This access will be sufficient for the development as the total number of entering and exiting trips in the AM and PM peak hours is 41 and 51, respectively, which is quite low. To provide two means of access as required in the event of an emergency, the walkway shown on the south side of the Isabella Street townhouses should be constructed to a sufficient width and pavement design such that it can be used as an access point for emergency vehicles. To avoid misuse by regular traffic, the end of the pathway should be designed with either a lockable gate system or breakaway bollards subject to the engineering and emergency services standards of the Township.







Former Arthur School TIS

Figure 6.2



John Street Drop-off

Paradigm Transportation Solutions Limited



## 7.0 CONCLUSIONS AND RECOMMENDATIONS

#### 7.1 Conclusions

The conclusions of this study are summarized as follows:

- the intersections included in the study area used to assess the impact of the proposed development include Isabella Street and George Street, Isabella Street and John Street, Isabella Street and Georgina Street, Isabella Street and Charles Street, Leonard Street and Eliza Street, and Eastview Drive and Eliza Street;
- overall the intersections in the study area currently operate with acceptable levels of service during the AM Peak Hour and PM peak hours with no problem movements currently noted;
- the development of the subject site is expected to be completed and fully occupied within five years and is estimated to generate roughly 51 vehicle trips during the AM peak hour, and roughly 63 vehicle trips during the PM peak hour;
- by 2015 with background traffic alone, overall the intersections in the study will continue to operate
  with acceptable levels of service during the AM Peak Hour and PM peak hours with no problem
  movements noted;
- by 2020 with background traffic alone, overall the intersections in the study will continue to operate
  with acceptable levels of service during the AM Peak Hour and PM peak hours with no problem
  movements noted;
- by 2015 with full development and occupancy of the site, overall the intersections in the study will continues to operate with acceptable levels of service during the AM Peak Hour and PM peak hours with no problem movements;
- by 2020 with full development and occupancy of the site, overall the intersections in the study will continues to operate with acceptable levels of service during the AM Peak Hour and PM peak hours with no problem movements;
- by 2015 with full development and occupancy of the site left-turn lanes and right-turn lanes are not warranted;
- by 2015 with full development and occupancy of the site left-turn lanes and right-turn lanes are not warranted;
- any minor changes to the development concept are not expected have any change on the recommendations of the report findings.



## 7.2 Recommendations

Based on the findings of this study, it is recommended that:

- the draft plan application be approved with no requirements for off-site transportation-related improvements;
- ▶ the redesign of the intersection of John Street and Eliza Street not be undertaken given the significant impacts and that the Township investigate alternative detour routes including Wells-Eliza, 2<sup>nd</sup> Line- Sideroad 3-Wellington 109 and the potential use of Isabella Street rather than Eliza;
- the proposed drop-off on John Street be redesigned to address the issues identified;
- the proposed walkway shown on the south side of the Isabella Street townhouses be constructed to a sufficient width and pavement design such that it can be used as an access point for emergency vehicles; and
- to avoid misuse by regular traffic, the end of the pathway should be designed with either a lockable gate system or breakaway bollards subject to the engineering and emergency services standards of the Township.



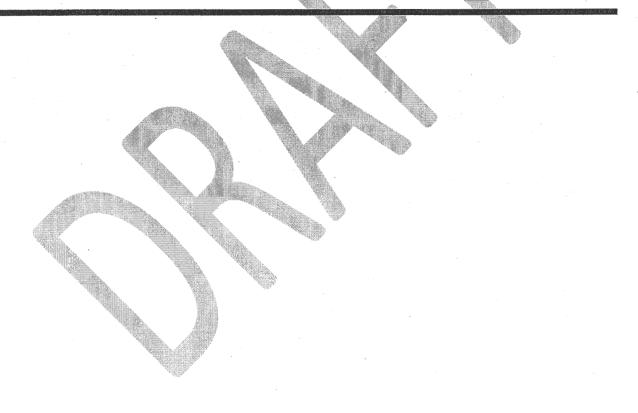


## Appendix A Existing Traffic Operations





## Appendix B Background Traffic Operations





# Appendix C Future Total Traffic Operations





## Appendix D Traffic Control Signal Warrant





#### **COUNTY OF WELLINGTON**

PLANNING AND DEVELOPMENT DEPARTMENT GARY A. COUSINS, M.C.I.P., DIRECTOR TEL: (519) 837-2600 FAX: (519) 823-1694 1-800-663-0750 ADMINISTRATION CENTRE
74 WOOLWICH STREET
GUELPH, ONTARIO
N1H 3T9

November 15, 2011

Lori Heinbuch, Clerk/CAO Township of Wellington North P.O. Box 125, 7490 Sideroad 7 W Kenilworth, ON NOG 2E0

Dear Ms. Heinbuch:

RE: Former Arthur Public School- Zoning By-law Amendment

161 Eliza Street, Arthur

#### PLANNING OPINION

The proposal is for the redevelopment of the former Arthur Public School site. The owner is proposing to convert the existing vacant school into 67 senior apartments and add approximately 300 sq.m (3229 sq.ft.) of commercial area. The north portion of the property (former playing field) is proposed for 16 townhouse units. There will be 23 street townhouse units, 14 are proposed to front on Eliza Street and 9 are proposed to front on Isabella Street.

Staff are pleased to see this development moving forward. Overall this development appears to be a efficient reuse of an existing vacant school property and a great example of intensification and infill. There are a few overall design issues related to density and access. There are also some minor zoning variances that area required in order to accommodate this proposal. Staff still require some clarification with respect to the apartment and commercial component of the development before proceeding with a by-law.

#### SUBJECT PROPERTY AND LOCATION

The subject lands are located at 161 Eliza Street, Arthur. The property has an area of approximately 1.86 ha. (4.59 ac.) and has frontage on Eliza, John and Isabella Streets. The lands are currently occupied by the former Arthur public school building which is currently vacant. The property is primarily surrounded by residential properties.

#### **PROPOSAL**

The proposal is to rezone the property to an appropriate residential and commercial category. The owner is proposing to redevelop the site with residential uses and some commercial uses. The existing school building is proposed to be converted into 67 residential apartments and a limited amount of commercial. The remainder of the property will be developed with 23 street townhouses and 16 cluster townhouse units.

#### WELLINGTON COUNTY OFFICIAL PLAN

The property is designated RESIDENTIAL in the Official Plan. According to Policy 8.3.3 of the County Official Plan the predominant use of land in those areas designated Residential shall be residential and provides for a variety of housing types from low rise and low density to medium density. Section 8.3.5 outlines criteria for medium density developments which includes: density targets, development on full services, compatibility with surrounding land uses, adequate on-site parking, amenity area's and storm water management. Some non residential uses are also recognized uses within the Residential designation.

November 2011

Former Arthur PS

1

Section 8.3.5 a) establishes density targets for medium density residential uses as follows: 14 units/acre for townhouses or row houses and 30 units/acre for apartments. This development is a combination of all three dwelling types. The property appears to exceed the density criteria by 12 units and is shown on the following table:

	Dwelling Type	Area	Density permitted	Density provided
Parcel A	(to be severed) – Row Houses	0.5 ac (2119 m2)	7 units	9 units
Parcel B	(to be severed) – Row Houses	0.8 ac (3264 m2)	11 units	14 units
Parcel C	Apartment & Commercial	2 ac. (8440 m2)	60 units	67 units
	Townhouses	1.16ac. (4705 m2)	16 units	16 units

Section 4.6.1 outlines a number of studies that may be required in order to assess the merit of planning applications. These studies may propose ways of reducing or eliminating any negative impacts that may result from the development. The developer has completed a traffic impact study.

#### **DRAFT ZONING BY-LAW**

The subject property is zoned Institutional (IN). The property should be placed in a site specific Residential/commercial zone. At this time a draft by-law has not been prepared. Although formal Site Plan approval has not been completed, staff have completed a zoning review of the most recent Site Plan, last revised on Sept.12/11. A copy of the zoning review is attached. In summary the following deficiencies will need to be addressed through the zoning by-law:

- Parking 1 space per unit (1.5/unit required) for Street townhouse units (23 units)
- Lot area reduction for apartment (former school) 9686 sq.m required 8440 sq.m. provided.
- Interior side yard setback (former school expansion) 4.3m required 4.2m provided.
- Rear yard setback (former school) 7.6m required 7.45m provided.

Other zoning requirements that need to be considered or clarified include:

- Buffer area buffer is required along the northerly and westerly yards which abut residential uses (section 6.3).
- Common Amenity Area is required for the apartment and 16 unit townhouse. The apartment requires an area of approximately 3821 sq.ft. and the townhouse requires an area of 1297 sq.ft. (section 6.6).
- · Type and floor area of apartment units.
- Type of commercial use proposed.

At the Public meeting in 2009 the Developer's Planner stated that the apartment units are proposed to be approximately 350 sq.ft. This does not meet the minimum floor area for a bachelor unit which is 398 sq.ft. Also a one bedroom apartment is to be a minimum of 538 sq.ft. It would be preferable to see a variety of unit types within the proposed apartment building.

#### SITE PLAN

According to the Site Plan Control By-law, this proposal will be subject to Site Plan approval. I would suggest that Site Plan approval be obtained in principle prior to adoption of the by-law.

#### PLANNING CONSIDERATIONS

This application was before Council on November 9, 2009. At that time a number of residents were in attendance and had the following concerns/comments:

- Type of commercial use proposed.
- Size and scale of street townhouse units (height).
- Density too high.
- Traffic issues.
- Property values.
- Storm Water Management lots of flooding currently on property.

November 2011 Former Arthur PS

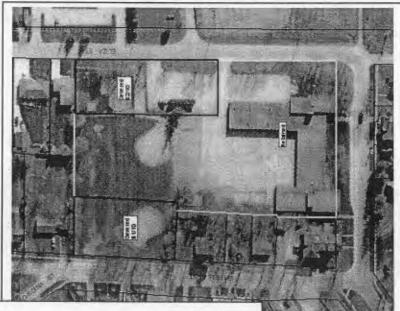
- Some residential properties drain onto school property how will this be dealt with.
- Concerns with crime on the site.
- Would like access onto Isabella too much coming onto Eliza with current plan.
- Concerned with subsidized housing.
- Assurance that project will be completed in a timely manner.
- Buffering.

Council requested the applicant complete a traffic impact study and storm water management plan. A draft traffic impact study was submitted and was reviewed by Triton Engineering on behalf of the Township.

#### Severance application

There are currently applications for severance on the subject lands (Figure 1). These applications were deferred until such time that Council has dealt with the Zone Amendment and Site Plan approval of the overall parcel. The parcels to be severed are proposed for street townhouses as shown on the site plan (Figure 2). It should be noted that the two proposed townhouse blocks will not conform to maximum allowable density as per the Official Plan

Figure 1 - Severances B1 & 2/10, Townhouse Blocks



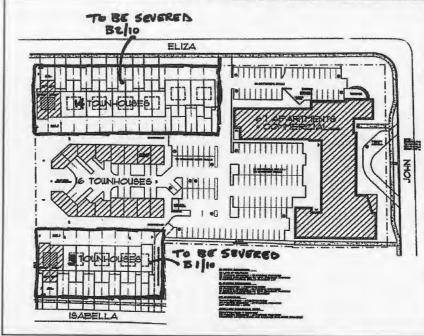


Figure 2 - Site Plan (May Design Group - July 2009)

#### **Parking**

As stated earlier it is our understanding that the street townhouses are to be severed. The parking requirement of 1.5 spaces per unit is difficult to achieve with this type of dwelling. The units are proposed to have garages which will essentially provide two off street parking spaces. The developer is proposing to provide 20 extra parking spaces within the development for the street townhouse units. This option would be difficult to implement once the lots have been severed from the overall property. Our preference would be to amend the by-law to allow 1 parking space per townhouse unit which is the same requirement for a single family dwelling. The 20 extra parking spaces will still be available for use as well as on street parking.

Further, the apartment has been reviewed as a senior building at 1 parking space unit, while other apartment dwellings require 1.5 spaces per unit. This makes sense from a use perspective as seniors tend to have less vehicles per household, however the Township has no control over the type of residents who will ultimately reside in the building. As such it would be preferable that the extra 20 parking spaces referred to earlier be available for apartment overflow parking, visitors and the street townhouse units.

Parking located in exterior side yard is permitted for commercial uses, however it should be noted that parking would not be permitted in this yard if the building becomes all residential.

There are three issues with overall design which staff have discussed with the Developer's Planner. First issue is the number of Street Townhouse units. Although the By-law does not limit the number of units permitted in a row, staff have advised that we would prefer to have no more than 6 units attached with breaks. Second issue is an access onto Isabella Street. The site plan shows this access for emergency use only, with a gate. Staff would prefer that this be a fully utilized access. Finally the overall density appears to be higher than the Official Plan recommends.

#### Sewage Capacity

Consideration needs to be given to the capacity of Municipal services and whether there is sufficient capacity and allocation for this proposal. My understanding is that there is allocation of 42 units for this site. The amending by-law should place any portion of lands that would not have allocation, in a holding zone until such time that capacity is available. Further given the sewage constraints, Council should consider what phasing is preferable.

#### Commercial Use

The type of commercial use is unknown at this time. It is our understanding through discussions with the Planner that the intention is to have uses that would service the senior residents of the apartments such as a restaurant, variety store or salon etc. We would want to ensure that any commercial use that locates here does not compete with the downtown core area of Arthur. The by-law for this property should include controls for this use.

I trust that these comments will be of assistance to Council in their consideration of this matter.

Yours truly.

Linda Redmond, B.A.

Planner

Attachments:

Zoning Review September 12, 2011 (Completed By Darren Jones, CBO)

Council Public Meeting Minutes - November 9, 2009

cc. Scott May

November 2011

Former Arthur PS

4

#### REVISED - SEPTEMBER 12, 2011

R3 Residential Zone (Eliza and Isabella Street Townhouses (23)): FREEHOLD

- Minimum lot area of 232 sq.m. OK
- Minimum lot frontage of 6.5m OK
- Minimum front yard of 7.6m OK
- Minimum interior side yard (end unit) of 1.2m OK (one storey as per definition in 5.215)
- Minimum exterior side yard N/A
- Minimum rear yard of 7.6m OK
- Maximum building height of 10.5m OK
- Minimum floor area (end units are one storey by definition and require a minimum floor area of 70 sq.m. ...proposed have 80.0 sq.m. on main with another 23.0 sq.m. in the loft for a total of 103.0 sq.m.
- PARKING REQUIRES RELIEF TO 1 PARKING SPACE PER UNIT FROM 1.5 PARKING SPACES PER UNIT (NOTE: SITE PLAN PROPOSES 12 ADDITIONAL PARKING SPACES ON ADJACENT SITE SUBJECT TO AGREEMENT)

R3 Residential Zone (Interior Cluster Townhouses (16)): CONDOMINIUM

- Minimum lot area of 4,571 sq.m. OK
- Minimum lot frontage of 20.1m OK
- Minimum front yard of 7.6m OK
- Minimum rear yard (north line) of 7.6m OK
- Minimum interior side yard (adjacent to street townhouses) of 6.0m OK
- Minimum exterior side yard of 7.6m OK
- Maximum building height of 10.5m OK
- Minimum floor area (bachelor/1,2 or 3 bedroom) OK
- Distance between clusters OK
- PARKING PROVIDED AT 1.5 PARKING SPACES PER UNIT; OK

#### R3 Residential Zone (Apartments (67)): CONDOMINIUM

- Minimum lot area of 9,686 sq.m. REQUIRES RELIEF TO 8,440 sq.m. (13% REDUCTION) = INTENSIFICATION
- Minimum lot frontage of 18.0m OK
- Minimum front yard of 7.6m LEGAL NON-COMPLYING OF 5.0m...REQUIRES RELIEF TO 4.8m FOR SOUTH TWO STOREY ADDITION (SQUARING SOUTH BUILDING FACE)
- Minimum exterior side yard of 7.6m OK
- Minimum interior side yard of 4.3m (half the new building height) REQUIRES RELIEF TO 4.2m
   FOR VERTICAL EXPANSION ALONG EXISTING BUILDING PERIMETER
- Minimum rear yard of 7.6m REQUIRES RELIEF TO 7.45m (SOUTH LINE OF ELIZA STREET FREEHOLD TOWNHOUSE UNIT #1)

- Maximum building height of 12.0m OK
- Maximum lot coverage of 45% **OK**
- Minimum floor area (per apartment) OK AS PER 'PLANS BY BEN'
- SENIOR CITIZEN APARTMENTS PARKING PROVIDED AT 1 PARKING SPACE PER UNIT; OK
- 2 BARRIER-FREE PARKING SPACES REQUIRED, 2 PROVIDED; OK

### C3 Neighbourhood Commercial Zone (300 sq.m.): WITHIN CONDOMINIUM SITE

- Minimum lot area of 557.4 sq.m. OK; CONTAINED WITHIN 8,440 sq.m. SITE
- Minimum lot frontage of 18.0m OK
- Minimum front yard of 7.6m LEGAL NON-COMPLYING (6.22.1); OK
- Minimum interior side yard of 3.0m OK; TO COMMERCIALLY ZONED FLOOR AREA
- Minimum exterior side yard of 7.6m OK
- Minimum rear yard of 7.6m OK; TO COMMERCIALLY ZONED FLOOR AREA
- Maximum lot coverage of 40% OK
- Minimum ground floor area of 80.0 sq.m. OK
- Maximum building height of 12.0m OK
- PARKING PROVIDED AT 1 SPACE PER 28 sq.m. OF GROUND FLOOR AREA; 11 REQUIRED, 22
   PROVIDED; OK
- 1 LOADING SPACE REQUIRED, 1 PROVIDED; OK

#### IN Institutional Zone:

- Currently a legal non-complying use
- Would need minor relief for front yard and rear yard setbacks as noted above if expansions undertaken as proposed (second storey addition on north, two storey addition on south)
- Medical Clinic, Home for the Aged, Rest Home, Nursing Home among the permitted uses

#### PUBLIC MEETING - MINUTES

#### Monday, November 9, 2009

#### Page Five

Mayor Broomhead returned to the public meeting.

Owners/Applicant: 1530953 Ontario Limited

No declaration of Pecuniary Interest

THE LOCATION OF THE SUBJECT PROPERTY is described as 161 Eliza Street, Arthur. The property contains the former Arthur Public School.

THE PURPOSE AND EFFECT of the amendment is to rezone the property to an appropriate residential and commercial category. The owner is proposing to redevelop the site with residential uses and some commercial uses. The existing building is proposed to be converted into residential apartments and a limited amount of commercial. Townhouses are proposed on the remaining land.

Please note - Section 34 (12) of the Planning Act.

- (12) Information. At a meeting under subsection (12), the council shall ensure that information is made available to the public regarding the power of the Municipal Board under subsection (14.1) to dismiss an appeal if an appellant has not provided the council with oral submissions at a public meeting or written submissions before a By-law is passed.
- Notice for this public meeting was published in the Wellington Advertiser on October 16<sup>th</sup>, 2009 and sent to the Applicant and required agencies.
- Presentations
  - Linda Redmond, Township Planner reviewed her correspondence

Ms. Redmond reviewed her correspondence dated November 5, 2009. The owner is proposing to convert the existing vacant school into 67 senior apartments and add approximately 900 sq.m (2952 sq.ft.) of commercial area. The north portion of the property (former playing field) is proposed for 16 townhouse units. There will be 23 street townhouse units, 14 are proposed to front on Eliza Street and 9 are proposed to front on Isabella Street.

#### **PUBLIC MEETING - MINUTES**

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#### Page Six

At this time the proposal is being presented to provide Council and the public an opportunity to comment. A formal report with a recommendation and amending by-law will be provided for Council's consideration once all comments and appropriate studies are received. The subject property is zoned Institutional and should be placed in a site specific Residential/Commercial Zone. Site Plan approval would be required and a more formal review of the site plan regarding parking is suggested.

Scott May, engineer for Mr. Langen's development, informed Council that an informal meeting to receive input from neighbours had been held the previous week. Phase one would be completed on the east side of the property. Size of units will be determined through the Building Code. The developer is looking for feedback regarding the type of commercial use; ie. medical such as chiropractor. The current gym locations would be three levels with two levels in between. The townhouses would be single storey with a loft.

- 9. Review of Correspondence received by the Township.
  - Dan and Willaby Cotton
    - Concerns
  - Grand River Conservation Authority
    - No Objection
- 10. The by-law will not be considered at the Regular Council Meeting following the public meeting. Mayor Broomhead asked those wishing to receive further notices regarding this application to make their request in writing.
- Mayor Broomhead opened the floor for any questions/comments.

David Emery, 160 Eliza St, presented a petition against the re-development of the former Arthur Public School. The property was purchased by a private land owner in 2007 and since that time there has been no improvement to the facility and it has become a nuisance and potential safety hazard. The petitioners do not feel the proposed development is appropriate.

#### **PUBLIC MEETING - MINUTES**

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They are concerned with the overall site density, re-zoning for commercial, servicing capacity (sewer and water), traffic congestion and capacity, property values, environmental impact of oil contaminated soil and site drainage.

Mayor Broomhead informed those in attendance that the vandalism concerns have been addressed. Concerns must be specific and include the reasoning behind the concern. There are strict regulations for development. The developer is already aware of servicing issues. Traffic studies may be needed before proceeding. The province has regulations regarding environmental issues, which the developer will have to follow, and the results of various testing will be available to the public. A storm water management plan required. The developer has been very accommodating to date and is willing to work with the planners and the Township to develop this land.

Paul Johnson, 281 Isabella St., raised concerns regarding timelines for start and completion of the project, the storm water capacity and an increase in crime rates. Ms. Redmond stated that the project cannot start until the proper zoning is in place and a site plan has been approved. Mayor Broomhead commented that engineering will help control water management as capacity will be the biggest issue. Site plan approval will be necessary. Ms. Redmond suggested that the police could review the site plan and offer suggestions about reducing crime, such as fences vs. hedges.

Dan Sorenson, 291 Isabella St., inquired about the square footage of the senior's apartments and the area for commercial use. Could it be altered to allow for either more apartments or commercial area? Mayor Broomhead informed Mr. Sorenson that any changes would have to go through the zoning process again. Parking would be one space per apartment as per the Zoning By-law. Ms. Redmond stated that the site plan process would deal with lighting onto adjoining properties and requirements for buffering.

Cameron Hill, 261 Isabella St., expressed concerns regarding lighting, noise and privacy issues as the parking lot will back onto his backyard. He would prefer fences rather than hedges. He is also concerned that the units will be subsidized housing. The developer stated that he is planning affordable housing, not subsidized. Ms. Redmond informed Mr. Hill that subsidized housing is provided through the County, not individual developers.

#### **PUBLIC MEETING - MINUTES**

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Rob Schmidt, 308 Eliza St., raised concerns regarding only having one entrance to the development and in that regard, the issue of fire protection. Ms. Redmond informed Mr. Schmidt that fire routes are addressed in the Ontario Building Code and that there is an alternative emergency access with interlocking brick and grass. Mayor Broomhead suggested that the fire department will have an opportunity to review the development plan.

Gord Bannister, 306 Eliza St., was also concerned about entrances and would like to see an entrance on Isabella St. as well as Eliza St. Ms. Redmond suggested that a traffic impact study be completed.

Dan Cotton, 304 Eliza St., reviewed his concerns outlined in an email previously submitted. Concerns raised included amount of development density; storm water management; height of phase 1 and 2 structures and the natural lighting for his property; Council's obligation to completion dates; Council's development bond insurance to ensure completion of developed lands; low cost housing or government assisted housing not being acceptable; traffic and safety; no elevators to upper levels of commercial development; phase 1 being completed before phase 2 begins; and the cost of infrastructure to existing residences and tax increases.

Dan Sorenson inquired if the street in the development would become Township streets. Mayor Broomhead stated that the interior roads would remain privately owned.

Dave Hewitson, 240 Isabella St., questioned the need for 67 senior's apartments and how they would be filled. Mr. Langen commented that phase 1 would be completed first and if those units could not be filled he would not continue with phase 2. The portion of the project started will be completed.

Judy Bannister expressed her concern for the safety of the seniors currently living across the road from the development. Many use walkers and move slowly.

Dan Cotton asked for confirmation from the Township that this development will not include low cost housing or government assisted housing. Mayor Broomhead stated that the County is regulated by the Province to supply a certain amount of subsidized housing. Ms. Redmond commented that there is a difference between subsidized housing and affordable housing. Subsidized housing is usually built by the County or Province.

## **PUBLIC MEETING - MINUTES**

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Barbara Shantora, 211 Eliza St., questioned if the developer needed to have a percentage of units sold prior to construction beginning, would the by-law state that the units would only be for seniors and asked what would be done to make the corner safer as it is a blind corner. Ms. Redmond and Mayor Broomhead stated that the developer would not be required to presell units. The by-law would not state for seniors only as that would be considered discrimination. The corner is being looked at.

Donna Kunkle, 211 Eliza St. expressed concerns with snow removal on Eliza St. They do not live on the property and snow is dumped on their driveway and covers up the fire hydrant. Councillor Yake will address this concern through the works committee.

Willaby Cotton, 304 Eliza St., asked what the timeline would be for the traffic study to be completed. Scott May estimated that a traffic study would take 60 to 70 days.

Ms. Redmond explained that the next step is for the developer to take the information regarding issues and concerns presented and compile an updated plan. Those who have requested notification will be notified when the plan comes back to Council.

## 12. Comments/questions from Council

Mayor Broomhead stated that the developer has to meet the requested requirements before entering into a Site Plan Agreement. Concerns raised at this meeting can now be addressed before the development proceeds.

Councillor Yake suggested that most people would agree that something needs to be done with this site. This is an ambitious project and many valid concerns have to be addressed before the project can move ahead. A Site Plan should cover curbing and street upgrade concerns.

Councillor Matusinec also felt that something needs to be done with the site and understands residents concerns that whatever is started needs to be completed. Storm water management and traffic concerns are two important issues to be looked at.

## **PUBLIC MEETING - MINUTES**

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Councillor Mason commented that this is the first step in the process and that there will be many changes to the development plan.

Councillor Mason agreed that this is an ambitious project and the concerns raised will have to be considered.

13. Adjournment

CAO/CIEDE

MAXOR



## Memorandum

	DATE:	October 7, 2011						
	TO:	Darren Jones						
	FROM:	Ray Kirtz /Chris Clark						
	RE:	Former Arthur Public School Site Re-development Arthur, Wellington North Preliminary Sub #1						
	FILE:	A5510(11) -R24						

#### Current Submission including the following:

- Transportation Impact Study, dated April, 2010, prepared by Paradigm Transportation Solutions Limited
- Drawing No. SP-1, entitled 'Site Plan' Revision No. 5 dated September 12, 2011, prepared by The May Design Group.
- Conceptual Architectural Drawings, prepared by UNKNOWN
- Two (2) Drawings No. C102, untitled, dated April 1, 2010, prepared by UNKNOWN

#### Comments From Pre-Submission No. 1 September 15, 2011:

Note: This submission is not considered complete since engineering drawings submitted are not legible and do not provide sufficient detail, and there is not adequate supporting documentation. Therefore a detailed engineering review was not completed. However, the following are general comments provided regarding information presented.

#### Site Plan & General Comments

- 1.1 There are two C102 drawings. It is unclear which is to be used since the do not match. Also, the company/person that these were prepared by should be indicated on the drawing.
- 1.2 Provide existing and proposed grade elevations including t/b curbs, finished floors, top foundations, etc.
- 1.3 Design to correspond with the Municipal Servicing Standards.
- 1.4 Existing and proposed storm/sanitary/watermain servicing is unclear. Servicing to be in accordance with Municipal Standards.
- 1.5 Pavement design details to be provided including supporting geotechnical information.
- 1.6 Show dimensions for entrances, typical parking space, lanes and curb radii at roadway and island entrances.
- 1.7 Provide details for utilities, hydro, lighting, etc.
- 1.8 Entrance widths and lanes to be adequate for intended use. Provide traffic movement details.

- 1.9 A legend is required to follow line types on drawings.
- 1.10 Fire/Planning Department to approve fire access route and hydrant placement.
- 1.11 An email sent Oct 28, 2009 outlined SWM criteria for the site. A summary of this email required post to pre for quantity and an "Enhanced" level of treatment for quality control. The current plans do not appear to address SWM controls.
- 1.12 Currently there are only 42 units of Sewage Treatment Reserve Capacity allocated for this development and the current plan indicates 106 units. Based on the 2011 Sewage Reserve Capacity Calculation there is -89 units of Uncommitted Reserve Capacity.
- 1.13 Storm design to include confirmation that receiving sewer and overland outlet are adequate.
- 1.14 Estimates of domestic water usage and fire flow requirements to be provided.
- 1.15 A Pre-Servicing Report to be provided to outline servicing strategy for the site including stormwater management, sanitary, water, hydro and utilities.
- 1.16 Landscape plan to be provided.
- 1.17 Sediment and erosion control plan to be provided.
- 1.18 Lighting details including a photometrics plan to be provided.

#### **Transportation Impact Study Comments**

- T.01 Traffic volumes noted on Figure 2.1a 2010 AM Peak Hour Existing Traffic Volumes:
  - a) 25 vph heading west on Leonard St. from Eliza St. significantly more than 18 vph on east approach at Leonard St. and Isabella St.
  - b) 27 vph heading south on Eliza St., south of Eastview Dr. significantly more than 18 vph on east approach of John St. and Isabella St.
  - c) 33 vph heading east on John Street from Isabella Street significantly more than 17 vph on south approach at Eliza St. and Eastview Dr. nursing/retirement home noted
- T.02 Traffic volumes noted on Figure 2.1b 2010 PM Peak Hour Existing Traffic Volumes:
  - a) 15 vph heading west on Leonard St. from Eliza St. significantly less than 40 vph on east approach at Leonard St. and Isabella St.
  - b) 49 vph heading east on Leonard St. from Isabella St. significantly more than 35 vph on west approach at Leonard St. and Eliza St.
  - c) 27 vph heading south on Eliza St., south of Eastview Dr. significantly less than 69 vph on east approach of John St. and Isabella St. nursing/retirement home noted
  - d) 70 vph heading east on John St. from Isabella St. significantly more than 52 vph on south approach at Eliza Street and Eastview Drive nursing/retirement home noted.
- T.03 The Development Concept (Figure 3.1) notes Commercial uses in addition to the apartments in the existing school building. This has not been considered in the analysis.
- T.04 Distribution of trips to site access points are consistent with the number and location of dwelling units approximately 80% of trips generated will use the Site Driveway and 20% will be to/from direct driveway access on Isabella St. or Eliza St.

- T.05 It is noted that "the distribution of trips was determined based on existing traffic distribution" as stated in Section 4.3, however this is inconsistent with expected origin/destination with respect to the location of the Town of Arthur relative to the nearest urban centres such as Fergus and Guelph to the south (via Highway 6) and Orangeville to the west (via Highway 9). As such, the 3 vph turning left from Isabella St. onto George St. during the AM Peak Hour as illustrated in Figure 4.3a is low. The volume of northbound traffic turning right from George St. onto Isabella St. (20 vph) is consistent with the majority of trips originating from the south.
- T.06 References to signal timing should be removed from report as all intersections are unsignalized.
- T.07 Decrease in northbound v/c ratio from 0.22 (2020 Background Traffic Table 4.2) to 0.20 (2020 Total Traffic Table 4.5) at George St. & Isabella St. was noted.
- T.08 No appendices were received with the report.
- T.09 6.1 John Street & Eliza Street Corner Radius. The report provides a number of comments regarding the issue raised by the Township on this corner. The comments are acknowledged; however, under current conditions the Township has noted deficiencies with this corner. It is our opinion that improvements to the corner would not be triggered by the development, but the Township should review this situation and take steps to acquire sufficient property here to make minor improvements to this corner when they deem it necessary.
- T.010 6.2 Drop-off Driveway We agree in concept with the recommended changes, although space is very tight here. A sketch has been provided, but it does not include radii where the driveway meets John Street. These and other details should be reviewed as part of the site plan approval.
- T.011 6.3 Emergency Vehicle Access- The suitability of the suggested emergency access (walkway with lockable gate system or breakaway bollards) should be reviewed by the Township and their Emergency Services.

If you have any questions regarding these comments please call to discuss.



## Memorandum

DATE:	November 17, 2011							
TO:	Darren Jones							
FROM:	Ray Kirtz							
RE:	Former Arthur Public School Site Re-development Arthur, Wellington North: Re-zoning Review Sub #2							
FILE:	A5510(11)R24							

Current Submission including the following:

- "Site Servicing and Grading Concept Report, Proposed Redevelopment of the Old Schoolhouse with Parking and Addition of Townhouses", prepared by Borealis Engineering Inc. dated November 11, 2011.
- Transportation Impact Study, dated April, 2010, prepared by Paradigm Transportation Solutions Limited.
   Not Re-submitted.
- Drawing No. SP-1, entitled 'Site Plan' Revision No. 5 dated September 12, 2011, prepared by The May Design Group. Not Re-submitted.
- Conceptual Architectural Drawings, prepared by UNKNOWN Not Re-submitted.
- Two (2) Drawings No. C102, untitled, dated April 1, 2010, prepared by UNKNOWN Not Re-submitted.

Note: It is our understanding that the purpose of this submission is strictly in support of a rezoning application for the property. Given this, our review was general in nature aimed at identifying significant grading and servicing constraints that may affect the feasibility of the overall development. It is assumed that site plan details will be provided and reviewed as part of the Site Plan Approval process. As such, many of our previous comments are not applicable to the rezoning currently being considered, but should be considered at the Site Plan Approval (SPA) stage.

#### **Rezoning Submission Comments:**

- R 1. Water servicing for the site will be provided by existing watermains located on streets adjacent to the site. There is sufficient water supply in the municipal system to accommodate this development and hydraulic capacity to the site should be adequate for domestic and fire flow requirements. However, it is recommended that as part of the SPA, the developer complete hydrant testing near the site to confirm that available fire flow is adequate.
- R 2. Currently, there are only 42 units of Sewage Treatment Reserve Capacity allocated for this development and the current plan proposes 106 units. Based on the 2011 Sewage Treatment Reserve Capacity Calculation (RCC), there is 89 units of Uncommitted Reserve Capacity. This calculation is based on a committed allocation of 177 units, therefore, actual available treatment capacity is 88 units (i.e. 177 89). The Concept Report indicates that the development will be phased to limit the number of units to a maximum of 42 until such time as additional Reserve Capacity is available. We do not have an issue with this approach, however, there is no information regarding the phasing approach proposed so we cannot comment on it's feasibility.

- R 3. The schoolhouse will be serviced by existing services to the sanitary sewer Eliza Street (formerly John). Proposed townhouses fronting onto Isabella Street will be serviced by the existing sanitary sewer. A 100 m long extension of the Eliza Street sewer from the north is proposed to service proposed townhouses fronting onto Eliza Street and the interior units of the development. However, based on the preliminary grading information, an extension from the north may not be deep enough and therefore, a sewer extension from the south (i.e. from corner at John Street) may be required. This issue will be confirmed as part of the SPA. Based on our knowledge on these sewers, the overall sanitary servicing strategy is acceptable.
- R 4. The stormwater management (SWM) strategy for the site intends to direct the majority of the surface runoff toward the on-site SWM facilities. These facilities will provide both Quantity Control (i.e. Post to Pre) and Quality Treatment (i.e. Enhanced) of stormwater prior to discharging to the existing storm sewer of Eliza Street. The frontages of the proposed townhouses along Eliza and Isabella Streets will drain onto their respective streets. Generally, we consider the proposed SWM strategy acceptable, however, as part of SPA, the Developer will have to demonstrate that the proposed discharges from site can be accommodated by the existing municipal storm system.
- R 5. The Traffic Impact Study completed in support of the rezoning did not identify any significant concerns with the proposed redevelopment. Our review of this report concurs with this assessment.
- R 6. In response to concerns raised previously by the Township, the Traffic Impact Study report provides a number of comments regarding the John Street and Eliza Street corner radius. The comments are acknowledged; however, under current conditions the Township has noted deficiencies with this corner. It is our opinion that improvements to the corner would not be triggered by the development, but the Township should review this situation and take steps to acquire sufficient property to make minor improvements to this corner when they deem it necessary.
- R 7. General configuration of the site with respect to entrance locations / details and parking configuration will be dealt with as part of the SPA. We do not foresee any significant issues that could not be addressed through the SPA process.

If you have any questions please call.