APPENDIX B
THE STUDY:
The Town of Whitby has initiated a Class Environmental Assessment (Class EA) Study for Garden Street between Dryden Boulevard and Taunton Road. This project will study existing and future transportation needs on Garden Street to accommodate the anticipated growth in this area.

THE PROCESS:
The Study is being carried out in accordance with the planning and design process for ‘Schedule B’ projects as outlined in the Municipal Engineers Association “Municipal Class Environmental Assessment,” (October 2000, as amended in 2007), which is approved under the Ontario Environmental Assessment Act. However, for this project, a higher level of consultation will be conducted, which is sufficient to meet the requirements of a ‘Schedule C’ project.

PUBLIC CONSULTATION:
Public consultation is a key component of this study. The project team will meet with the public to obtain public input, present the project details, review study findings, and address public comments and concerns.

The first Public Information Centre (PIC) scheduled is:

Date: June 29, 2011 (Wednesday)
Time: 7:00 p.m. to 9:00 p.m.
Location: Town of Whitby Municipal Building
575 Rossland Road East, Whitby

This PIC is intended to introduce the study and to obtain public input. All interested citizens are invited to attend this PIC to share their ideas and concerns on this project. If you cannot attend this PIC but wish to provide comments, please send your comments to either one of the following project team members:

Horace Look, P.Eng.
Project Engineer
Town of Whitby
575 Rossland Road East
Whitby, ON L1N 2M8
Tel: 905-430-4307, Ext. 2336
Fax: 905-686-7005
E-mail: lookh@whitby.ca

Ray Bacquie, P.Eng.
Consultant Project Manager
Cole Engineering Group Ltd.
70 Valleywood Drive
Markham, ON L3R 4T5
Tel: 905-940-6161, Ext. 308,
Fax: 905-940-2064
E-mail: GardenStEA@coleengineering.ca

Personal information is collected under the authority of Section 11 of the Municipal Act, SO 2001 and will be used for information purposes only for this project. Questions regarding the collection and use of personal information should be directed to the Town of Whitby Freedom of Information and Protection of Privacy Office, Telephone (905) 430-4300.
Welcome
to the
Garden Street
Dryden Boulevard to Taunton Road
Class Environmental Assessment Study
Public Information Centre #1

Wednesday June 29, 2011
7 PM to 9 PM
Background

• In July 2010, Council adopted the Whitby Transportation Master Plan (TMP) to guide the Town’s transportation policies, programs and infrastructure improvements to meet transportation needs to the year 2031.

• One of the roadway initiatives identified in the TMP is the widening of Garden Street between Dryden Boulevard and Taunton Road.

• This study will confirm the need and justification for the improvements. It will also identify the problems and opportunities, alternative planning solutions and the preferred alternative solution and design concept.
Garden Street Corridor

- The study corridor is Garden Street from Dryden Boulevard to Taunton Road and is approximately 1.3 km in length. The study corridor is a 2-lane roadway with intersections spaced at more than 300 m apart, and with left turn lanes at each intersection.
- South of Dryden Boulevard, Garden Street has a 4-lane cross section to Rossland Road, with a centre two-way left-turn lane for the section between Kenneth Hobbs Avenue and Rossland Road.
- North of Taunton Road, the segment adjacent to commercial development has been widened to 4 lanes with a raised median and left-turn lanes for each driveway access.
Class EA Process

This study is being carried out as a ‘Schedule B’ Municipal Class Environmental Assessment as outlined in the *Municipal Class Environmental Assessment* document (2000, amended 2007).

However, for this project a higher level of consultation will be conducted, which is sufficient to meet the requirements of a ‘Schedule C’ project.
Purpose of
Public Information Centre #1

- Present the study process and background information
- Present justification of needs
- Present problem and opportunity statements
- Present potential alternative solutions
- Present proposed evaluation criteria
- Gather public input
Planning Policies –
Whitby Official Plan (Review On-going)

The transportation-related goals in the Town’s OP are:

8.1.1.1 To provide a safe, convenient and efficient transportation system for the benefit of all resident groups and businesses in the Municipality.

8.1.1.2 To promote a system which is responsive to environmental and aesthetic principles.

8.1.1.3 To provide a high level of road network capacity and transit that operates efficiently without substantial delay.

Garden Street is currently defined as a Type C Arterial:

8.1.3.3 (iii) Type C arterial roads are designed to move lower volumes of traffic at slower speeds over relatively short distances. When considering local road intersection and private access, the needs of abutting land uses will be given paramount consideration subject to site specific conditions and accepted traffic engineering principles. Accesses and intersections should not impact efficient transit operation.

- The Transportation Master Plan (TMP) defines an integrated mobility plan and guiding principles for the accommodation of future anticipated growth in a cost-effective, efficient, balanced and environmentally sensitive manner.

- Whitby’s transportation vision:

  To move people and goods within and across the municipality: safely, conveniently, and reliably by providing an integrated, accessible, and financially sustainable transportation system. This system will have a balanced range of mobility options and choice for all users which crosses and links into Regional and Provincial transportation infrastructure, connects all borders of Whitby including integration with the waterfront, and safeguards the natural environment, protects residents and the social community fabric, and enables economic prosperity.

- The TMP recommended widening Garden Street from 2 lanes to 4 lanes between Taunton Road and Dryden Boulevard in the 2017 to 2021 timeframe. Furthermore, the TMP recommended changing the classification of the Garden Street corridor from Type C arterial to Type B arterial.

8.1.3.3 (ii) **Type B arterial roads** are designed to move moderate volumes of traffic at moderate speeds from one part of the Region to another. Such roads provide an average level of service relative to other types of arterial roads and occasionally extend beyond the Municipal boundaries. These roads generally intersect with other arterial and collector roads.

• The Cycling and Leisure Trails Plan recommended a number of policies to support the vision for cycling and trail use in Whitby, such as:
  
  Commit to the on-going implementation of the recommended cycling network and leisure trail network

  Consider the needs of cyclists in all transportation projects, including:
  
  • Design of new major collector and arterial roadways, and bridge construction projects to include bike lanes and/or paved shoulders

• The Plan’s recommended network includes a boulevard multi-use path on Garden Street through the study corridor.
Socio-economic Summary

- Mainly residential development on both sides of Garden Street
- One retail development on northwest corner of Garden Street / Meadowglen Drive
- One retail development on southeast corner of Garden Street / Taunton Road

Natural Environment Summary

- Boulevard trees on both sides of Garden Street
- No watercourse within the project limits
- No designated hazard / environmentally sensitive areas within the project limits
- Not under Central Lake Ontario Conservation Authority’s jurisdiction
Existing Transportation Conditions

- Traffic volumes on Garden Street are approximately 450-650 vehicles in the peak direction in the peak hour
- Daily two-way traffic volume is approximately 12,700 vehicles
- Travel speeds at or above 50 km/h posted speed

- High delays at Garden / Taunton intersection
- Other intersections with acceptable levels of service (LOS C or better)
- Two transit routes serve the Garden Street corridor
  - Route 303 (weekday)
  - Route 318 (evening and weekend)
- Most transit stops do not have a shelter nor paved surface
Existing Safety Conditions

• The two lane configuration results in passing of slower vehicles or stopped buses.

• 3-year collision summary indicates low rate of collisions in study corridor

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<th>Collisions by Year</th>
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<tr>
<td></td>
<td>2008</td>
<td>2009</td>
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<tr>
<td><strong>Intersections</strong></td>
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<tr>
<td>Garden Street / Cork Drive</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Garden Street / Meadowglen Drive</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Garden Street / Willowbrook Drive</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Garden Street / Dryden Boulevard</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Garden Street Segments</strong></td>
<td></td>
<td></td>
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<tr>
<td>Taunton Road to Cork Drive</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Cork Drive to Meadowglen Drive</td>
<td>1</td>
<td>0</td>
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<tr>
<td>Meadowglen Drive to Willowbrook Drive</td>
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<tr>
<td>Willowbrook Drive to Dryden Boulevard</td>
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Existing Pedestrian and Cycling Conditions

• Existing sidewalks on both sides of the road. Sidewalks are set back approximately 5 to 7.5 metres from the roadway.
• Controlled pedestrian crossings are limited to the Dryden Boulevard and Taunton Road signalized intersections.
• Pedestrian connections from the neighbourhoods to the Garden Street sidewalk are located at:
  – Bellfield Court
  – Opposite Willowbrook Drive
  – Millstone Crescent / Parnell Crescent
  – Greenbush Place / Patrick Drive
  – Meadowglen Drive
  – Yorkshire Crescent
  – Cork Drive
  – Clune Place
• No existing cycling facilities within the study area.
Future Traffic Conditions

- **Town population growth**
  - From 115,600 in 2006 to 192,860 in 2031 (2.1% per year)

- **Town employment growth**
  - From 35,820 in 2006 to 71,310 in 2031 (2.8% per year)

- **Traffic growth**
  - Forecasts from the Whitby Transportation Master Plan indicates peak hour traffic growth of 3.2% per year for Garden Street corridor
  - With anticipated growth, the average peak hour link volume on corridor will reach the practical capacity of an arterial road in the 2019 horizon.

- **Other improvements to major transportation corridors**
  - Future Highway 407 East extension to Hwy 115/35
  - Future West Durham Link connecting Highway 407 and Highway 401 in west Whitby
  - Future Highway 401 widening to 10 lanes through Whitby
  - Future Highway 7 widening to 4 lanes from Brock Road to Brock Street (on-going)
Needs Assessment

• Pedestrian Accommodation
  – Sidewalks are provided on both sides of the corridor, however controlled pedestrian crossing opportunities of Garden Street are limited to the signalized intersections of Taunton Road and Dryden Boulevard which are 1.3 km apart.
  – Pedestrian volumes should be monitored for future consideration of mid-block pedestrian crossing(s) to improve pedestrian accessibility, convenience and safety.

• Cycling Accommodation
  – Currently, there are no designated cycling facilities within the corridor. Garden Street is designated for a boulevard multi-use path which would ultimately connect to the existing multi-use path south of Dundas Street.

• Vehicular Accommodation
  – The signalized intersection of Garden Street / Taunton Road is approaching capacity.
  – The average peak hour link volume will reach the practical capacity of the 2-lane cross section of Garden Street in 2019.
  – A 4-lane Garden Street with appropriate turn-lanes at the intersections will be sufficient to accommodate forecasted volumes for the 2031 horizon.
Problem and Opportunity Statement

Problem:
• The current 2-lane road is inadequate to accommodate future traffic demand generated by the anticipated growth and planned transportation network.

Opportunity to improve Garden Street to:
• Support long-term development / growth
• Address future traffic demand
• Enhance safety (pedestrian crossing, transit)
• Promote cycling
• Improve transit services

Multi-use path on Garden Street at Burns Street
Potential Alternative Solutions

• Do Nothing
  – Continue existing conditions; no changes or improvements to the Garden Street corridor

• Travel demand management
  – Shift demand to transit, carpooling, alternative modes

• Improve pedestrian / cycling facilities
  – Add multi-use path to one side of Garden Street
  – Improve pedestrian crossing opportunities

• Widen Garden Street
  – Widen Garden Street to 4 lanes

• Combination of alternatives
  – Widen Garden Street to 4 lanes
  – Add multi-use path to one side of Garden Street
  – Improve pedestrian crossing opportunities
Proposed Evaluation Criteria

• Transportation Service
  – Corridor efficiency and level of service
  – Traffic safety
  – Transit operations
  – Accommodation of pedestrians and cyclists
  – Emergency services response times

• Socio-economic Impacts
  – Residents impacts
  – Business impacts
  – Visual / aesthetics, streetscape
  – Air quality, noise

• Natural Environment Impacts
  – Surface water, ground water impacts
  – Terrestrial impacts

• Engineering
  – Utility relocation
  – Capital costs
  – Operating costs
  – Property Acquisition
  – Accommodation of future municipal services
Next Steps

The next steps for the study are:

• Review all comments and suggestions received from the public and agencies following Public Information Centre #1

• Based on public and agency input, we will evaluate alternative solutions to identify the preferred solution

• Public Information Centre #2 (Fall 2011)
  – Present the preferred solution
  – Present alternative design concepts
  – Present technically preferred design concept
  – Collect input on the technically preferred concept

• Review all comments and suggestions received from the public and agencies

• Document the study in an Project File Report

• File the Project File Report, which will be available for public review and comments for the required minimum 30-day review period
Your Input is Important!

We invite you to fill out a comment sheet with your comments and suggestions.

If you wish to be put on our mailing list, require further information, or wish to provide any input to the study, please contact the project team:

Project Engineer (Capital Projects)     Consultant Project Manager
Town of Whitby                          Cole Engineering Group Ltd.
905.430.4300 ext. 2336                  905.940.6161 ext. 308
lookh@whitby.ca                         GardenStEA@coleengineering.ca

Please visit the project website at www.whitby.ca
Town of Whitby > Town Hall > Environmental Assessment
(under Public Works / Engineering Services)

Thank you!
COMMENT FORM

Public Information Centre – Class Environmental Assessment of Garden Street from Dryden Boulevard to Taunton Road
Wednesday, June 29, 2011 – Town of Whitby Municipal Building
575 Rossland Road East, Whitby

We are interested in hearing any comments you may have associated with this Class Environmental Assessment Study. Thank-you for clearly writing your comments in the space provided below. If you require additional space, please continue your comments on the back of this sheet.

Our family has lived in Whitby for 22 years. It is a wonderful town!

Our concern is the plan to widen Garden St. to 4 lanes. This is unacceptable for several reasons:
1. It will be through a residential neighborhood!!
2. Cause too much noise from traffic – trees and fences are nice but not enough to adequately deflect the annoying traffic noise.
3. Speed of traffic is also a concern – we’re referring mainly to safety of pedestrians & cyclists.
4. More traffic = more air pollution (right near homes)

If your ultimate goal is to build a thoroughfare from the

Horace Look, P.Eng.
Project Engineer
Town of Whitby
575 Rossland Road East
Whitby, ON L1N 2M6
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Fax: 905-686-7005
E-mail: lookh@whitby.ca

Ray Bacque, P.Eng.
Consultant Project Manager
Cole Engineering Group Ltd.
70 Valleywood Drive
Markham, ON L3R 4T5
Tel: 905-940-6151, Ext. 308,
Fax: 905-940-2064
E-mail: GardenStEA@coleengineering.ca

Please submit your written comments before leaving the PIC. If you require more time to comment, please mail/fax in the comment sheet by Friday, July 8, 2011.

Thank you very much for considering my ideas. Let’s keep our lovely town beautiful!

PLEASE CLEARLY PRINT YOUR NAME AND CONTACT INFORMATION BELOW:

Name: 

Phone Number: 

Email Address: 

COLE ENGINEERING

TOWN OF WHITBY
PUBLIC WORKS DEPARTMENT
**COMMENT FORM**

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575 Rossland Road East, Whitby

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| MY CONCERN IS THE SPEEDERS, VOLUME THE @ CONSTANT U TURNS AT THE TOP OF GARDEN & CORK DR. ALSO THE HUGE AMOUNT OF CARS USING MY DRIVEWAY TO TURN AROUND. I FEEL THERE IS A ELEMENT OF DANGER CREATED AT THE TOP OF CORK DR. THIS NEEDS TO BE ADDRESSED |

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<td>Consultant Project Manager</td>
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<tr>
<td>Town of Whitby</td>
<td>Cole Engineering Group Ltd.</td>
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<td>70 Valleywood Drive</td>
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<tr>
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<td>Markham, ON L3R 4T5</td>
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<td>Fax: 905-940-2064</td>
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<td>E-mail: <a href="mailto:GardenStEA@coleengineering.ca">GardenStEA@coleengineering.ca</a></td>
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[COLE ENGINEERING]

[THE CORPORATION OF THE TOWN OF WHITBY PUBLIC WORKS DEPARTMENT]
COMMENT FORM

Public Information Centre – Class Environmental Assessment of Garden Street from Dryden Boulevard to Taunton Road

Wednesday, June 29, 2011 – Town of Whitby Municipal Building
575 Rossland Road East, Whitby

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We love Whitby. Most of the planning is excellent.

Concerns - 4 lane Garden will attract further traffic.

- Once 407 is in, Garden could very well become an alternate way to get from 407 to 401 (basically a N-S road straight from one to the other.

- More noise - acoustic fence? Who will pay? Town of Whitby is considering having homeowner pay 1/2 - my 100' would cost me $7000!!

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575 Rossland Road East, Whitby

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Please e-mail the Board.

Please provide links to information substantiating the growth plan.

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PLEASE CLEARLY PRINT YOUR NAME AND CONTACT INFORMATION BELOW:

Name: [Redacted]

Phone Number: [Redacted]

Email Address: [Redacted]
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575 Rossland Road East, Whitby

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1. Speed bump on Meadnglen near garden
2. Higher Fences (paid by the Town)
3. More hawthorn trees
4. No trades on garden
5. Narrow traffic lanes (less trades, lower speed)

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- Whitby is big enough, limit growth!

COMMENT FORM

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575 Rossland Road East, Whitby

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We live about 200 feet from the street and the volume of traffic is too much noise and pollution. It seems to us to be exceptional poor judgment to route more traffic through a residential area!

- The area is dangerous with the volume of traffic for kids today
- The air pollution from transit and cars affects our quality of life
- We need stop signs today to reduce speed & volume
- Poor planning on your part should not affect our ability to enjoy our property or reduce the value of our house
- Using Garden as a feeder to the 407/401 is just wrong and must be rejected by Whitby council.
- It seems like city planners do not care about residents anymore

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COMMENT FORM

PUBLIC INFORMATION CENTRE – CLASS ENVIRONMENTAL ASSESSMENT OF GARDEN STREET FROM DRYDEN BOULEVARD TO TAUNTON ROAD

WEDNESDAY, JUNE 29, 2011 – TOWN OF WHITBY MUNICIPAL BUILDING
575 Rossland Road East, Whitby

We are interested in hearing any comments you may have associated with this Class Environmental Assessment Study. Thank you for clearly writing your comments in the space provided below. If you require additional space, please continue your comments on the back of this sheet.

- I Teresa van Schagen live at 5 Cork Dr and I have a few concerns that needs addressed prior to the new change of development from North of Gardin to the corner of Dryden & Garden.

  Concern #1 – High volume of traffic doing U-turns need to be addressed in the driveways on Cork Dr from Gardin just to be able to turn right into the Plaza at the corner of Garden & Taunton (NE) Mary Brownon. A study needs to be conducted on how many vehicles that do the U-turns. This has caused a lot of near misses from the traffic flow coming up Cork Dr from the bottom. There is no other way for traffic turning south from Taunton to Garden to turn in to the plaza because there is a no left turn sign. The median needs to be opened from Taunton going west to that.

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COMMENT FORM

Public Information Centre - Class Environmental Assessment of Garden Street from Dryden Boulevard to Taunton Road

Wednesday, June 29, 2011 – Town of Whitby Municipal Building
575 Rossland Road East, Whitby

We are interested in hearing any comments you may have associated with this Class Environmental Assessment Study. Thank you for clearly writing your comments in the space provided below. If you require additional space, please continue your comments on the back of this sheet.

Concern #2 - The speed of traffic along Garden Street has increased. It is being used as a speedway. Either lower the speed limit or team up with Durham Police on Taunton Rd to conduct more radar traps. They used to sit at the top of Cost Dr but haven't seen them for a long while.

Concern #3 (additional to speed of vehicles)
I have not been able to back up into my driveway in a safe way due to the speed of vehicles that don't stop and wait but try to squeeze their way around and I have many near misses that they have almost hit me.

Comments and information regarding this project are being collected to assist the Town of Whitby. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the Freedom of Information and Privacy Act. With the exception of personal information, all comments will become part of the public record.

Please submit your written comments before leaving the PIC. If you require more time to comment, please mail/fax in the comment sheet by Friday, July 8, 2011 to:

Horace Look, P.Eng.
Project Engineer
Town of Whitby
575 Rossland Road East
Whitby, ON L1N 2M8
Tel: 905-430-4307, Ext. 2336
Fax: 905-686-7005
E-mail: lookhl@whitby.ca

Ray Bacque, P.Eng.
Consultant Project Manager
Cole Engineering Group Ltd.
70 Valleywood Drive
Markham, ON L3R 4T5
Tel: 905-940-6161, Ext. 308,
Fax: 905-940-2064
E-mail: GardenStEA@coleengineering.ca

PLEASE CLEARLY PRINT YOUR NAME AND CONTACT INFORMATION BELOW:

Name: ____________________________

Phone Number: ______________________

Email Address: ______________________
COMMENT FORM

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hit my vehicle because they were either speeding around the corner or just in a hurry. Something needs to be done about the speed of traffic turning onto the top of Count Dr. I've asked for speed bumps, the neighbors have also left our vehicle on the road just to slow the traffic down. This needs to be addressed. Study needs to be conducted on Garden St throughout the year to see how fast the traffic is going. And another study that is needed on Count Dr. is how much traffic is travelling on Count Dr because of the closure of Fallhy brook North and the no left turn on to the plaza. Another study at the top of Count Dr is to conduct how many people do U-turns in the driveways.

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To get to the Plaza at the corner of Garden & Taunton one must walk to the Mary Brown's Plaza.

During this transition I would like a sign near the road of where I live. This has caused a lot of stress & frustration in this area. I have lived at this address for 17 years and I have never thought about the stress & frustration in this area. I would like to be able to get in & out of my driveway & not get stuck in the traffic on Garden St. It is a beautiful area, but it has gotten stressful to live.

Comments and information regarding this project are being collected to assist the Town of Whitby. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the Freedom of Information and Privacy Act. With the exception of personal information, all comments will become part of the public record.

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Tel: 905-430-4307, Ext. 2336
Fax: 905-886-7005
E-mail: lookh@whitby.ca

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These studies need to be done throughout a year. The speed box needs to be put up on both sides of the street not just one in the past. And a walking path between taunton & dryden.

Comments and information regarding this project are being collected to assist the Town of Whitby. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the Freedom of Information and Privacy Act. With the exception of personal information, all comments will become part of the public record.

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Fax: 905-940-2064
E-mail: GardenStEA@coleengineering.ca

PLEASE CLEARLY PRINT YOUR NAME AND CONTACT INFORMATION BELOW:

Name: 

Phone Number: 

Email Address: 

COLE ENGINEERING

TOWN OF WHITBY
Dawn Perry-Smith

From: Gnane Gnarendran on behalf of Administrator
Sent: Thursday, July 07, 2011 8:35 AM
To: Garden Street EA
Cc: Suzette Shiu
Subject: FW: Garden Street Widening
Attachments: ATT00001.txt

Gnane B. Gnarendran
IT Operations Specialist

From: [Redacted]
Sent: Wednesday, July 06, 2011 7:14 PM
To: gardensea@coleengineering.ca
Subject: Garden Street Widening

--Forwarded Message Attachment--
From: [Redacted]
To: lookh@whitby.ca; gardenstea@coleengineering.ca; rbacquie@coleengineering.ca; mayor@whitby.ca
Subject: Garden street widening
Date: Wed, 6 Jul 2011 18:55:41 -0400

Sir/Madam

No widening on Garden should be done until all present and future issues on the residential streets connected to Garden Street are addressed.

Living on Cork Dr. there are a lot if issues with traffic on our street. The subdivision we live is between Taunton to the north, Dryden to the south, Anderson to the east and Garden to the west. It has 4 exits one on each boundary streets.

Since the reconstruction of Taunton Rd there is no left turning at Fallingbrook and Taunton this increased the traffic on Cork Dr. All traffic leaving the subdivision going north or west use Cork to exit as well a lot of south bound traffic. This has more than half the subdivision traffic going on Cork Dr. This only a small part of the traffic problem. Since Dryden turns south west of Fallingbrook a lot of the traffic leaving the subdivision south of Dryden of Fallingbrook travel north on Fallingbrook and exit on Cork to go north or west.

The neighbourhood is maturing and the Fallingbrook school which is in our subdivision will be having increased kids being bussed to to it from other areas, this brings with it increased traffic from parents picking up or dropping off kids by car. There is also 2 schools on Dryden between Anderson and Fallingbrook, since Dryden turns south west of Fallingbrook vehicle traffic from these 2 school also exiting the north and west directions by going north up Fallingbrook and west on Cork.

The Taunton Rd reconstruction has cause other traffic issues on Cork, the plaza on the south east corner of Taunton and Garden has had its access reduce to west bound on Taunton or north bound on Garden only. Traffic from the north and east travel south on Garden to Cork and U-turn on Cork, mostly in drive ways of residents, also traffic leaving the plaza exit on Taunton travel east to Fallingbrook south to Cork, west on Cork onto Garden.

It is not uncommon to see 4 to 5 cars lined up trying to exit Cork onto Garden. Cork Dr is just over 500 ft long and is sloped down in the easterly direction. Speed over 50 km/hr is common. It is difficult to back in your own driveway with our car trying to drive around our behind you.

Future issues that are going to effect Cork include the extension of Dryden to Thickson Rd. bringing traffic from Dryden north on Fallingbrook up Cork to Garden , Traffic will not travel south on Dryden to Garden unless there is

6/11/2013
a deterrent not to travel on Fallingbrook or Cork. Widening of Garden Street will make it more difficult to exit south bound on Garden from Cork.

Garden has a lot of trees that are just maturing and widening Garden will make it look baron. Speed on Garden is an issue widening it will not slow traffic down but just speed it up as there are no stop lights from Dryden to Taunton. No stop lights also make it difficult for pedestrians to cross Garden. Garden is a bus route and people do have to cross at points other than Taunton or Dryden four lanes and speed is a accident waiting to happen. Whitby currently has no four lane roads going north-south between Rossland and Taunton, east-west roads are a lot busier money going to be used on Garden should be used else were not wasted on Garden street. Widering will lower the values of the home off of Garden street in this section of town reducing the taxes the town will get.
Dawn Perry-Smith

From: [Redacted]
Sent: Friday, July 08, 2011 2:46 PM
To: Ray Bacquie
Subject: Garden St Expansion

Good Day Mr. Bacquie, I am sending you this e-mail as a concerned resident of Whitby. I currently own a home at 7 Cork Drive in Whitby, Ontario. I am sending you this e-mail in response to the proposed change to Garden Ave in which it would become 4 lanes from my understanding.

Currently Cork Drive is out of control with excessive traffic on our street and with the proposed expansion of Garden Street to four lanes; it will be unbearable to live here. Currently Cork Drive is the only street that runs off of Garden and allows access to residents that live on all the feeder street that run off Fallingbrook and Kilbridge.

Currently we are faced with the following challenges living on Cork Drvie:

1. Children can’t play in front of our homes because of excessive traffic that averages about 60kph
2. Because of the no left turn sign (for southbound traffic) into the plaza on the south east corner of Garden and Taughton Rd, our driveways are used by motorists as a turning point for those vehicles in which they can head back northbound to get into the plaza. This is totally unacceptable.
3. Cork Drive is as busy as Garden Street at rush hour
4. Noise pollution is at an all time high

With this current challenge we face, I would ask that you strongly reconsider widening Garden Street to 4 lanes. In the event the Town decides to move forward, additional arteries into the feeder streets must be made available. We would hope that you would consider opening perhaps one of the following streets (Klune, Patrick, and Parnell) as an additional option for entrance into the streets that run off Fallingbrook and Kilbridge which would in turn lighten the traffic load off Cork Drive.

Thanks for taking the time to read this e-mail; I am sure if you lived on Cork Drive you would have the same concerns and frustrations as we do.

Regards

6/11/2013
From: Look, Horace [lookh@whitby.ca]
Sent: Thursday, June 23, 2011 3:39 PM
To: Suzette Shiu
Subject: FW: Class Environmental Assessment
Hi Suzette, for your record.

Thanks

Horace

From: [Redacted]
Sent: Thursday, June 23, 2011 11:56 AM
To: Look, Horace
Cc: [Redacted]
Subject: Class Environmental Assessment

Horace:

My name is Rick McRobert. My wife Dianne; and I live at 28 Millstone Crescent in Whitby; our home faces east and looks onto Garden street between Meadowglen Drive and Willowbrook Drive. This is the section of Garden Street that is still one lane each direction. I would like to provide our input as we will be unable to attend the meeting this coming Wednesday. Additionally we would like to be added to any list that would include us in any further communications in regards to this study and or intended changes to Garden Street.

I would assume any changes would be addressing increased traffic flow; which sub sequentially probably includes further widening of Garden street. If this is the case our concerns are three fold all with regards to public safety. Firstly excess speed is already an ever growing issue. Some vehicles, and I stress that it is by far the minority, travel at excessively high rates of speed on this road. This is especially true, from about 11:00pm to 6:00am but does occur at all times of the day. Sometimes a car will pass a string of vehicles all in one stretch. This is currently easy to do as there are no stop signs or lights from Dryden up to Taunton and only three side streets all of which are three way intersections with the right of way going to traffic on Garden Street.

Our second concern is truck traffic. At one point in time; trucks were restricted on Garden Street and there were posted signs to this effect. I do not know if this is still the case; but believe it is so. This corridor is continually used by 53 foot trailers; most of which are travelling to deliver goods to the various box stores located on Garden Street to the north side of Taunton. Their company logos on the side of the trucks make their destination obvious. This truck traffic is ever increasing. Dump trucks also use Garden Street but not to the extent of the semis.

Garden Street is a major pedestrian route used by young adults going to and from school as well as the various fast food outlets located both on Taunton and at the Meadowglen plaza. These young people are distracted with Electronic equipment be it music; text messages; or phones. They cross Garden Street wherever the mood strikes them; and may casually look both directions or not. If this road is widened further it will require more attention to task as there will be multi lanes each direction.

It is our fear that if Garden Street is widened and the speed of traffic is not kept in check we are inviting the potential for some serious accidents. We urge you to consider addressing these issues as you move forward with any discussions and assessments of Garden Street.
Confidentiality Warning: This e-mail contains information that is confidential and is intended only for the use of the named recipient(s). If you are not the intended recipient, you are hereby notified that any review, copying or distribution of this transmission is strictly prohibited. Please contact the Abilities Centre immediately if you have received this transmission in error and delete this message.
Dawn Perry-Smith

From: Suzette Shiu
Sent: Tuesday, June 28, 2011 3:02 PM
To: Ray Bacquie; Drew Stirling
Cc: GardenStEA@colesengineering.ca
Subject: FW: PIC widening of Garden

another one

From: Look, Horace [mailto:lookh@whitby.ca]
Sent: Tuesday, June 28, 2011 10:12 AM
To: Suzette Shiu
Subject: FW: PIC widening of Garden
Importance: High

Hello

I will say that I currently don’t have any real issues regarding the widening of Garden except for the duration of how long. As well, my backyard faces Garden and I’m on the east side between Dryden and Parnell Crescent. The backyard fences have been replaced all around us but the stretch of fences are not the same height as the others. Our fence is not quite 6’ high but the newer fences that have been replaced by the Town of Whitby are considerably higher which will prevent people from leaping over the fence and trespassing. I for one and I would think my neighbours on the same side of the street as myself will agree we need that fence replaced. That would be the only request I would like to submit considering the amount of our tax dollars being used to widen the road for which I do agree.

Can you please respond back to my email and keep me informed as well as updated to my request as well as the progress on widening Garden.

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Dawn Perry-Smith

From: Suzette Shiu
Sent: Tuesday, June 28, 2011 3:01 PM
To: Ray Bacquie; Drew Stirling
Cc: GardenSTEA@coleengineering.ca
Subject: FW: (Dryden Boulevard to Taunton Road) = Environmental Assessment COMMENT

Suzette Shiu, P.Eng.
Cole Engineering Group Ltd.
T: 905-940-6161 x 436
C: 416-727-6532
E: SSHiu@ColeEngineering.ca

CONFIDENTIALITY NOTE
This email may contain confidential information and any rights to privilege have not been waived. If you have received this transmission in error, please notify us by telephone or e-mail. Thank you.

From: Look, Horace [mailto:lookh@whitby.ca]
Sent: Tuesday, June 28, 2011 10:12 AM
To: Suzette Shiu
Subject: FW: (Dryden Boulevard to Taunton Road) = Environmental Assessment COMMENT

Hi Suzette, for your record.

Thanks

Horace

From: [redacted]
Sent: Tuesday, June 28, 2011 8:33 AM
To: Look, Horace
Subject: (Dryden Boulevard to Taunton Road) = Environmental Assessment COMMENT

Due to previous plans (Son's engagement dinner.) we will not be able to attend Wed. Environmental assessment meeting.

Our Comments
We are the original owners & have lived here since 1989.
I don't know if this is the proper forum to vent my concerns about the Garden Street fences that are located behind the homes on Lipton Crescent.
But the large amount of traffic on Garden Street has Greatly impacted our backyard Environment for MANY YEARS, you see we only have a ONE METER HIGH fence behind our home which is the original fencing installed over 20 years ago. This fence has no acoustic value at all & no privacy or security value.
Our backyard gatherings & activities are usually overshadowed by loud traffic noise, dust & exhaust fumes. We usually keep our back windows & doors closed during heavy traffic times.

We have called the township several times to complain about road noise & heavy dump truck traffic on Garden Street.

6/11/2013
BUT we were reminded that Garden Street was considered a by-pass road for the town of Whitby & that the fencing behind our homes would be upgraded **IN THE NEAR FUTURE to minimise our noise problem?** That was 7 Years ago & nothing yet.

Over the years we have witnessed many new homes that were built with higher & more acoustic fencing than ours along Garden Street, **BUT now what angers me is that most of these better fences behind these NEWER HOMES have already been replaced by the township with even better upgraded acoustic fences. (up to 8 feet tall)**

When do we get our fences upgraded?? What about our environment??
Our ONE METER HIGH fence does nothing to improve our backyard environment. The only upgrade done to our fences by the township is replacing broken boards that have been vandalized.

Hopefully this Environmental study deals with the existing backyard environmental issues before studying future issues.

My opinion is that the fencing behind the homes on Lipton Cres. should of been upgraded 10 years ago & that future expansion of Garden Street up to Baldwin should not move forward until present environmental issues are solved.

To: Horace Look
Thank-You for your time
Sorry to bother you with my fencing issue, but we enjoy using our backyard daily & any help in improving the quality of it's environment would be greatly appreciated.
Gentlemen,
Thank you for the opportunity to express concerns/comments.
Due to work I am unable to attend the meeting tonight.

My main concern regarding the possible expansion of Garden Street to 4 lanes from Dryden to Taunton would be the trees along the boulevard.
We have eyeballed the street and hope the existing trees will be saved.
They are a nice size now and provide some privacy.

Sincerely,
Dawn Perry-Smith

From: [Redacted]
Sent: Friday, July 01, 2011 8:48 AM
To: lookh@whitby.ca, Garden Street EA
Subject: Missed Public Meeting: Please hurry up and build 4 lane Garden improvement

Dear Horace & Ray:
I live 100 metres from the top of Garden south of Taunton on west side. I have no objection to expanding Garden to 4 lanes to Dryden.
The noise is minimal and Whitby needs to have another way to get to Brooklin by taking Garden all the way to Winchester as shown in some of your Master Plans.

Please hurry up with the fence improvements along Garden and lets get this done. Finally, this will take some load off of Baldwin St., which can have a 1km traffic backup 5pm on weekdays near Platinum Fitness.

Thanks
### Class Environmental Assessment of Garden Street from Dryden Boulevard to Taunton Road

**Date:** Wednesday, June 19, 2011. **Location:** Town of Whitby Municipal Building, 575 Rossland Road East, Whitby

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<td>Resident</td>
<td>[received at PIC#1] Our family has lived in Whitby for 22 years. It is a wonderful town! Our concern is the plan to widen Garden St. to 4 lanes. This is unacceptable for several reasons: 1. It will be through a residential neighbourhood!! 2. Cause too much noise from traffic – trees and fences are nice but not enough to adequately deflect the annoying traffic noise! 3. Speed of traffic is also a concern – we’re referring mainly to safety of pedestrians and cyclists. 4. More traffic = more air pollution (right near homes) If your ultimate goal is to build a thoroughfare from the 407 to 401, I am totally opposed to it. Thank you for your considering my ideas. Let’s keep our lovely town beautiful.</td>
<td>- Currently, Garden Street is a Type C arterial road and is a 2-lane roadway. The Town of Whitby completed a Transportation Master Plan (TMP) in 2010 to provide guiding principles to accommodate future growth. The Transportation Master Plan recommends the widening of Garden Street to four lanes in the 2017 to 2021 timeframe. The plan also recommends the designation of Garden Street as a Type B arterial road which is intended to “provide an average level of service relative to other types of arterial roads”. - The traffic analysis undertaken in this study has indicated that forecasted traffic will reach the practical capacity of a two lane arterial road by 2019 and will require additional capacity between Dryden Boulevard and Taunton Road. - As part of this environmental assessment, a noise impact study will be completed. Based on the findings of the noise impact study noise mitigation (e.g. provision or upgrading of noise walls) may be identified in certain locations based on the technical merits. - The concern regarding the potential for higher speeds and related pedestrian and cycling safety has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds, accommodate cyclists and opportunities for pedestrian crossings. - Improvements within the corridor are intended to accommodate future development designated in the Town Official Plan and the related growth in travel. The analysis of alternative solutions and designs will consider the effects on air pollution. - Garden Street will not be connected to the Highway 407 corridor; it is proposed to extend to a future mid-block east-west arterial road to the north. Garden Street currently is not connected to Highway 401. However, the Ministry of Transportation is reviewing the merits of a potential new Highway 401 interchange with access to Garden Street.</td>
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| Resident     | [received at PIC#1] My concern is the speeders, volume, the constant u-turns at the top of Garden St. and Cork Dr. Also the huge amount of cars using my driveway to turn around. I feel there is an element of danger created at the top of Cork Dr. This needs to be addressed. | - Improvements within the corridor are intended to accommodate future development designated in the Town Official Plan and the related growth in travel. Growth in traffic is anticipated regardless of the planned improvement. The concern regarding the potential for higher speeds has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds and volume. - The existing issues related to operations on Cork Drive have been noted and the Town will investigate these concerns and consider alternative measures within the constraints of the existing road pattern. |

| Resident     | [received at PIC#1] We love Whitby. Most of the planning is excellent. Concerns: - 4-lane Garden will attract further traffic. - Once 407 is in Garden could very well become an alternative way to get from 407 to 401 (basically a north-south road straight from one to the other). - More noise – acoustic fence? Who will pay? Town of Whitby is considering having homeowner pay ½ - my 100’ [fence] would cost me $7000!!! | - Improvements within the corridor are intended to accommodate future development designated in the Town Official Plan and the related growth in travel. Growth in traffic is anticipated regardless of the planned improvement. The concern regarding the potential for higher speeds has been noted. It is also noted that Garden Street is currently a four-lane roadway to the north and south of the study area. - Garden Street will not be connected to the Highway 407 corridor; it is proposed to extend to a future mid-block east-west arterial road to the north. Garden Street currently is not connected to Highway 401. However, the Ministry of Transportation is reviewing the merits of a potential new Highway 401 interchange with access to Garden Street. - As part of this environmental assessment, a noise impact study will be completed. Based on the findings of the noise impact study, noise mitigation (e.g. provision or upgrading of noise walls) may be identified in certain locations based on the technical merits. If additional noise mitigation is required as a result of road improvements, then the noise mitigation will be fully funded as part of the transportation improvements. |
| Resident, | [received at PIC#1] |
| Comment Received | Whitby is big enough, limit growth! |
| Comment from | We live about 20 feet from Garden Street and experience too much noise and pollution. Today due to volume of traffic. It seems to be exceptional poor judgment to route more traffic through a residential area!! |

- The area is dangerous with the volume of traffic for kids today
- The air pollution form transports and cars affects our quality of life
- We need stop signs today to reduce speed and volumes
- Poor planning on your part should not affect our ability to enjoy property or reduce the value of our house
- Using Garden as a feeder to the 407/401 is just wrong and must be rejected by Whitby council
- It seems that city planners do not care about residents and their health

- Growth in the Town of Whitby is designated through the Town Official Plan. The Official Plan process includes a separate public consultation process and is approved by Town Council and has been defines future growth within the Town. This study is being undertaken based on the current council approved Official Plan.
- Improvements within the corridor are intended to accommodate future development designated in the Town Official Plan and the related growth in travel. Growth in traffic is anticipated regardless of the planned improvement. It is also noted that Garden Street is currently a four-lane roadway to the north and south of the study area. The concer regarding the safety of children has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds and volume.
- Improvements within the corridor are intended to accommodate future development designated in the Town Official Plan and the related growth in travel. The analysis of alternative solutions and designs will consider the effects on air pollution.
- Garden Street will not be connected to the Highway 407 corridor; it is proposed to extend to a future mid-block east-west arterial road to the north. Garden Street currently is not connected to Highway 401. However, the Ministry of Transportation is reviewing the merits of a potential new Highway 401 interchange with access to Garden Street.
- This study is a review of the environmental implications of proposed infrastructure. It is explicitly intended to address socio-economic impacts. As noted, impacts that have the potential to affect health will be considered, such as noise or congestion related emissions and mitigation measures identified.

| Resident, | [received at PIC#1] |
| Comment Received | I live at ----- and I have a few concerns that needs addressed prior to the new/change of development from north of Garden to the corner of Dryden and Garden. |
| Comment from | Concern #1: High volume of traffic doing U-turns in the driveways on Cork Dr. from Garden just to be able to turn right into right into the plaza at the corner of Garden and Taunton (N6) (Mary Browns). A study needs to be conducted on how many vehicles that do the U-turns. This has caused a lot of near misses from the traffic coming up Cork Dr. from the bottom. There is no other way for traffic turning south from Taunton to Garden to turn into the plaza because there is a no left turn sign. The median needs to be open from Taunton going west to that plaza for people to turn into the plaza. |

- We recognize that some undesirable traffic routing occurs given the no-left-turn restriction for southbound traffic on Garden Street to the Marigold Plaza driveway north of the Garden Street and Taunton Road intersection, and no entry points to the plaza for westbound traffic on Taunton Road. The existing issues related to operations on Cork Drive (i.e. high volume and speed) have been noted and the Town will investigate these concerns and consider alternative measures within the constraints of the existing road pattern. The study will also notify the Region of Durham of this issue. Further, the Town will consider options (i.e. supplementary signage or Road Watch initiatives) to discourage these undesirable movements.
- The concern regarding the potential for higher speeds has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds.

| Resident, | [received at PIC#1] |
| Comment Received | Please e-mail the display boards. Please provide links to information substantiating the Growth Plan i.e. traffic. |
| Comment from | The current Transportation Master Plan describes future traffic growth forecasts and can be accessed at http://www.whitby.ca/index.php?page=270, specific details on population and employment growth are found under Section 5.2. |

- The suggestion of speed bumps on Meadowglen near Garden Street has been noted. This suggestion will be considered within the Town of Whitby Traffic Calming protocol, currently being finalized by the Town.
- As part of this environmental assessment, a noise impact study will be completed. Based on the findings of the noise impact study, noise mitigation (e.g. provision or upgrading of noise walls) may be identified in certain locations based on the technical merits. If additional noise mitigation is required as a result of road improvements, then the noise mitigation will be fully funded as part of the transportation improvements.
- The design of proposed improvements on Garden Street will include the provision of boulevard trees.
- The Town of Whitby completed a Transportation Master Plan (TMP) in 2010 to provide guiding principles to accommodate future growth. The Whitby TMP recommends that Garden Street be classified as a Type B arterial road designed to move moderate volumes of traffic at moderate speeds. The restriction of commercial trucks on Garden Street is not consistent with this road function.
- The narrowing of traffic lanes may be considered as part of future improvements or reconstruction of Garden Street.

| Resident, | [received at PIC#1] |
| Comment Received | 1. Speed bump on Meadowglen (near Garden) 2. Higher fences (paid by Town) 3. More boulevard trees 4. No commercial trucks on Garden i.e. less trucks, lower speed 5. Narrow traffic lanes |
| Comment from | Comment noted. PIC materials are available on the Town’s website for public viewing. |

- The design of proposed improvements on Garden Street will include the provision of boulevard trees.
- The Town of Whitby completed a Transportation Master Plan (TMP) in 2010 to provide guiding principles to accommodate future growth. The Whitby TMP recommends that Garden Street be classified as a Type B arterial road designed to move moderate volumes of traffic at moderate speeds. The restriction of commercial trucks on Garden Street is not consistent with this road function.
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<tr>
<th>Comment from</th>
<th>Comment Received</th>
<th>Response</th>
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<tbody>
<tr>
<td></td>
<td>Garden has a lot of trees that are just maturing and widening Garden will make it look baron. Speed on Garden is an issue and widening it will not slow traffic down but just speed it up as there are no stop lights from Dryden to Taunton. No stop lights also make it difficult for pedestrians to cross Garden. Garden is a bus route and people do have to cross at points other than Taunton or Dryden four lanes and speed is an accident waiting to happen. Whitby currently has no four lane roads going north-south between Rossland and Taunton, east-west roads are a lot busier money going to be used on Garden should be used else were not wasted on Garden street. Widening will lower the values of the home off of Garden street in this section of town reducing the taxes the town will get.</td>
<td>Comments noted.</td>
</tr>
<tr>
<td>Resident,</td>
<td>[received via email] I live 100 metres from the top of Garden south of Taunton on west side. I have no objection to expanding Garden to 4 lanes to Dryden. The noise is minimal and Whitby needs to have another way to get to Brooklin by taking Garden all the way to Winchester as shown in some of your Master Plans. Please hurry up with the fence improvements along Garden and let's get this done. Finally, this will take some load off of Baldwin St., which can have a 1km traffic backup 5pm on weekdays near Platinum Fitness.</td>
<td>As part of this environmental assessment, a noise impact study will be completed. Based on the findings of the noise impact study, noise mitigation (e.g. provision or upgrading of noise walls) may be identified in certain locations based on the technical merits. If additional noise mitigation is required as a result of road improvements, then the noise mitigation will be fully funded as part of the transportation improvements.</td>
</tr>
<tr>
<td>Resident,</td>
<td>[received via email] Thank you for the opportunity to express concerns/comments. Due to work I am unable to attend the meeting tonight. My main concern regarding the possible expansion of Garden Street to 4 lanes from Dryden to Taunton would be the trees along the boulevard. We have eyeballed the street and hope the existing trees will be saved? They are a nice size now and provide some privacy.</td>
<td>The design of proposed improvements on Garden Street will include the provision of boulevard trees. Existing trees will be preserved as much as possible through planning and mitigation measures.</td>
</tr>
<tr>
<td>Resident,</td>
<td>[received via email] I will say that I currently don’t have any real issues regarding the widening of Garden except for the duration of how long. As well, my backyard faces Garden and I’m on the east side between Dryden and Parnell Crescent. The backyard fences have been replaced all around us but the stretches of fences are not the same height as the others. Our fence is not quite 6’ high but the newer fences that have been replaced by the Town of Whitby are considerably higher which will prevent people from leaping over the fence and trespassing. I for one and I would think my neighbours on the same side of the street as myself will agree we need that fence replaced. That would be the only request I would like to submit considering the amount of our tax dollars being used to widen the road for which I do agree. Can you please respond back to my email and keep me informed as well as updated to my request as well as the progress on widening Garden.</td>
<td>As part of this environmental assessment, a noise impact study will be completed. Based on the findings of the noise impact study, noise mitigation (e.g. provision or upgrading of noise walls) may be identified in certain locations based on the technical merits. If additional noise mitigation is required as a result of road improvements, then the noise mitigation will be fully funded as part of the transportation improvements.</td>
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<td>Resident,</td>
<td>[received via email] We are the original owners &amp; have lived here since 1989. I don't know if this is the proper forum to vent my concerns about the Garden Street fences that are located behind the homes on Lipton Crescent. But the large amount of traffic on Garden Street has greatly impacted our backyard environment for MANY YEARS, you see we only have a ONE METER HIGH fence behind our home which is the original fencing installed over 20 years ago. This fence has no acoustic value at all &amp; no privacy or security value. Our backyard gatherings &amp; activities are usually overshadowed by loud traffic noise, dust &amp; exhaust fumes. We usually keep our back windows &amp; doors closed during heavy traffic times. We have called the township several times to complain about road noise &amp; heavy dump truck traffic on Garden Street. BUT We were reminded that Garden Street was considered a by-pass road for the town of Whitby &amp; that the fencing behind our homes would be upgraded IN THE NEAR FUTURE to minimize our noise problem? That was 7 Years ago &amp; nothing yet. Over the years we have witnessed many new homes that were built with higher &amp; more acoustic fencing then ours along Garden Street. BUT now what angers me is that most of these better fences behind these NEWER HOMES have already been replaced by the township with even better upgraded acoustic fences, (up to 8 feet tall) When do we get our fences upgraded?? What about our environment??? Our ONE METER HIGH fence does nothing to improve our backyard environment. The only upgrade done to our fences by the township is replacing broken boards that have been vandalized. Hopefully this Environmental study deals with the existing backyard environmental issues before studying future issues. My opinion is that the fencing behind the homes on Lipton Cres. should of been upgraded 10 years ago &amp; that future expansion of Garden Street up to Baldwin should not move forward until present environmental issues are solved.</td>
<td>• As part of this environmental assessment, a noise impact study will be completed. Based on the findings of the noise impact study, noise mitigation (e.g. provision or upgrading of noise walls) may be identified in certain locations based on the technical merits. If additional noise mitigation is required as a result of road improvements, then the noise mitigation will be fully funded as part of the transportation improvements.</td>
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<tr>
<td>Resident,</td>
<td>My name is -------, My wife, -------, and I live at ----------- in Whitby; our home faces east and looks onto Garden street between Meadowglen Drive and Willowbrook Drive. This is the section of Garden Street that is still one lane each direction. I would like to provide our input as we will be unable to attend the meeting this coming Wednesday. Additionally we would like to be added to any list that would include us in any further communications in regards to this study and or intended changes to Garden Street. I would assume any changes would be addressing increased traffic flow; which sub sequentially probably includes further widening of Garden street. If this is the case our concerns are three fold all with regards to public safety. Firstly excess speed is already an ever growing issue. Some vehicles, and I stress that it is by far the minority, travel at excessively high rates of speed on this road. This is especially true, from about 11:00pm to 6:00am but does occur at all times of the day. Sometimes a car will pass a string of vehicles all in one stretch. This is currently easy to do as there are no stop signs or lights from Dryden up to Taunton and only three side streets all of which are three way intersections with the right of way going to traffic on Garden Street. Our second concern is truck traffic. At one point in time; trucks were restricted on Garden Street and there were posted signs to this effect. I do not know if this is still the case; but believe it is so. This corridor is continually used by 53 foot trailers; most of which are travelling to deliver goods to the various box stores located on Garden Street to the north side of Taunton. Their company logos on the side of the trucks make their destination obvious. This truck traffic is ever increasing. Dump trucks also use Garden Street but not to the extent of the semis. Garden Street is a major pedestrian route used by young adults going to and from school as well as the various fast food outlets located both on Taunton and at the Meadowglen plaza. These young people are distracted with Electronic equipment be it music; text messages; or phones. They cross Garden Street wherever the mood strikes them; and may casually look both directions or not. If this road is widened further it will require more attention to task as there will be multi lanes each direction. It is our fear that if Garden Street is widened and the speed of traffic is not kept in check we are inviting the potential for some serious accidents. We urge you to consider addressing these issues as you move forward with any discussions and assessments of Garden Street.</td>
<td></td>
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<td>• The concerns regarding pedestrian safety, potential for higher speeds and illegal passing has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds and safety improvements. • The Town of Whitby completed a Transportation Master Plan (TMP) in 2010 to provide guiding principles to accommodate future growth. The Whitby TMP recommends that Garden Street be classified as a Type B arterial road designed to move moderate volumes of traffic at moderate speeds. The restriction of commercial trucks on Garden Street is not consistent with this road function.</td>
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| Resident,    | I am sending you this e-mail as a concerned resident of Whitby. I currently own a home at ----------- in Whitby, Ontario. I am sending you this e-mail in response to the proposed change to Garden Ave in which it would become 4 lanes from my understanding. Currently Cork Drive is out of control with excessive traffic on our street and with the proposed expansion of Garden Street to four lanes; it will be unbearable to live here. Currently Cork Drive is the only street that runs off of Garden and allows access to residents that live on all the feeder street that run off Fallingbrook and Kibride. Currently we are faced with the following challenges living on Cork Drive: 1. Children can’t play in front of our homes because of excessive traffic that averages about 60kph 2. Because of the no left turn sign (for southbound traffic) into the plaza on the south east corner of Garden and Taunton Rd, our driveways are used by motorists as a turning point for those vehicles in which they can head back northbound to get into the plaza. This is totally unacceptable. 3. Cork Drive is as busy as Garden Street at rush hour 4. Noise pollution is at an all time high With this current challenge we face, I would ask that you strongly reconsider widening Garden Street to 4 lanes. In the event the Town decides to move forward, additional arteries into the feeder streets must be made available. We would hope that you would consider opening perhaps one of the following streets (Klune, Patrick, and Parnell) as an additional option for entrance into the streets that run off Fallingbrook and Kibride which would in turn lighten the traffic load off Cork Drive. |

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<td>• The concern regarding the potential for higher speeds and safety of children has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds and volume. • Existing and potential traffic impacts to streets connecting Garden Street are being noted. We recognize issues associated with the developments at Garden Street and Taunton Road and Fallingbrook Drive where turning restrictions exist. An operational review of Cork Drive is to be conducted by the Town to address these concerns and look at measures to alleviate these negative impacts. • As part of this environmental assessment, a noise impact study will be completed. Based on the findings of the noise impact study noise mitigation (e.g. provision or upgrading of noise walls) may be identified in certain locations based on the technical merits. • Within the Town of Whitby, given the development growth taking place particularly in the north, there is a need for additional capacity to north-south routes. The Transportation Master Plan has identified Garden Street and Anderson Street for expansion from 2 to 4 lanes. Garden Street currently is a four-lane roadway north of and south of the study area.</td>
</tr>
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</table>
THE STUDY:
The Town of Whitby has initiated a Class Environmental Assessment (Class EA) Study for Garden Street between Dryden Boulevard and Taunton Road. This project will study the existing and future transportation needs on Garden Street to accommodate the anticipated growth in this area.

THE PROCESS:
The Study is being carried out in accordance with the planning and design process for ‘Schedule B’ projects as outlined in the Municipal Engineers Association "Municipal Class Environmental Assessment," (2000, as amended in 2010), which is approved under the Ontario Environmental Assessment Act.

PUBLIC CONSULTATION:
Public consultation is a key component in this study to obtain public input, and to address comments and concerns from the public. The upcoming Public Information Centre (PIC) No. 2 is scheduled as follows:

Date: January 29, 2013 (Tuesday)
Time: 6:00 p.m. to 8:00 p.m.
Location: Town of Whitby Municipal Building, 575 Rossland Road East, Whitby

PIC No. 2 is intended to present the recommended preliminary design for the widening of Garden Street between Dryden Boulevard and Taunton Road to 4 lanes plus applicable turning lanes, and pedestrian and cycling accommodations. All interested citizens are invited to attend this PIC No. 2 to share their comments on this project. If you cannot attend this PIC but wish to provide comments, please send your comments to the following project team member:

Horace Look, P.Eng.
Project Engineer
Town of Whitby
575 Rossland Road East
Whitby, ON L1N 2M8
Tel: 905-430-4307, Ext. 2336
Fax: 905-686-7005
E-mail: lookh@whitby.ca

Personal information is collected under the authority of Section 11 of the Municipal Act, SO 2001 and will be used for information purposes only for this project. Questions regarding the collection and use of personal information should be directed to the Town of Whitby Freedom of Information and Protection of Privacy Office, Telephone (905) 430-4300.
Welcome
to the
Garden Street
Dryden Boulevard to Taunton Road
Class Environmental Assessment Study
Public Information Centre #2
January 29, 2013
6 PM to 8 PM
Purpose of Public Information Centre #2

• The purpose of this second public information centre is to present the preliminary preferred design for the widening of Garden Street from Dryden Boulevard to Taunton Road.

Problem:
• The current 2-lane road is inadequate to accommodate future traffic demand generated by the anticipated growth and planned transportation network.

Opportunity to improve Garden Street to:
• Support long-term development / growth
• Address future traffic demand
• Enhance safety (pedestrian crossing, transit)
• Promote cycling
• Improve transit services
Study Background

- In July 2010, Council adopted the Whitby Transportation Master Plan (TMP) to guide the Town’s transportation policies, programs and infrastructure improvements to meet transportation needs to the year 2031.
- One of the roadway initiatives identified in the TMP is the widening of Garden Street between Dryden Boulevard and Taunton Road from 2 lanes to 4 lanes.
- The study corridor is comprised of Garden Street between Dryden Boulevard to Taunton Road, the corridor includes 3 existing intersections and is approximately 1.3 km in length.
- Each intersection currently provides an exclusive left turn lane on Garden Street with the intersections spaced a minimum of 300m apart.
- Garden Street, both south of Dryden Boulevard and north of Taunton Road includes a 4-lane cross-section as well as additional turning lanes where applicable.

Traffic Operations

- Existing and projected traffic volumes on Garden Street were reviewed and assessed. It is currently anticipated the need to widen Garden Street to 4 lanes will occur in 2019.
- Existing Travel speeds on the corridor were reviewed and operating speeds are typical of an arterial roadway of this classification (Arterial Type B).
Municipal Class EA Process

This study is being carried out as a ‘Schedule B’ Municipal Class Environmental Assessment as outlined in the *Municipal Class Environmental Assessment* document (2000, amended 2011). However, for this project a higher level of consultation will be conducted, which is sufficient to meet the requirements of a ‘Schedule C’ project.
Summary of Public Information Centre #1

Comments from PIC #1 provided valuable insight into the issues within the study area. Here is a brief summary of some of main concerns and opportunities.

- Garden Street should not be a thoroughfare for commuters from Highway 401 to Highway 407.
- Traffic impacts need to be addressed to improve safety and liveability in our neighbourhood.
- Are there mitigation measures for the street trees along Garden Street?
- Our fences need to be higher to reduce noise impacts and increase privacy and security.
- Students need safer options to cross Garden Street. As well as more opportunities to walk and cycle.
- U-turns in my driveway and along my street are causing a hazard.
- Truck traffic seems to be increasing. Why are trucks not restricted along Garden Street?
- Can’t we limit urban growth?
- Excessive speeding by automobiles is a concern in my neighbourhood.
- Something needs to be done about traffic noise.

Garden Street Dryden Boulevard-Taunton Road Class Environmental Assessment Study
Evaluation Criteria

The following criteria were used to evaluate the alternative solutions:

<table>
<thead>
<tr>
<th>Transportation/Engineering:</th>
<th>Socio-Economic and Cultural:</th>
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</thead>
<tbody>
<tr>
<td>• Transportation Master Plan Objectives and Goals</td>
<td>• Archaeological/Cultural Heritage Resources</td>
</tr>
<tr>
<td>• Corridor Efficiency and Level of Service</td>
<td>• Natural Heritage Resources</td>
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<tr>
<td>• Traffic Safety</td>
<td>• Business Impacts</td>
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<tr>
<td>• Transit Operations</td>
<td>• Residential Impacts</td>
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<tr>
<td>• Accommodation of Pedestrians and Cyclists</td>
<td>• Official and Secondary Plan Policies</td>
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<td>• Emergency Response Times</td>
<td>• Visual/Aesthetics and Streetscape</td>
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<tr>
<td>Natural Environment:</td>
<td>Financial:</td>
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<tr>
<td>• Surface Water, Ground Water Impacts</td>
<td>• Utilities Relocation</td>
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<tr>
<td>• Terrestrial Impacts</td>
<td>• Capital Costs</td>
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<td>• Vegetation Impacts</td>
<td>• Operation and Maintenance Costs</td>
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<td>• Property Acquisition Costs</td>
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</table>
Alternative Solutions

The study identified and evaluated 6 alternative solutions for Garden Street.

- **Alternative #1 – Do Nothing**
  - Continue existing conditions; no changes or improvements to Garden Street corridor

- **Alternative #2 – Travel Demand Management**
  - Shift demand to transit, carpools, alternative modes

- **Alternative #3 – Improve Pedestrian/Cycling Facilities**
  - Addition of a multi-use path on one side of Garden Street
  - Improve pedestrian crossing opportunities

- **Alternative #4 – Traffic Operations/System Management Improvements**
  - Make operational changes to Garden Street without major physical changes, e.g. restriping lanes, adding traffic signals

- **Alternative #5 – Widen Garden Street**
  - Widen Garden Street to 4 lanes

- **Alternative #6 – Combination of Alternatives**
  - Widen Garden Street to 4 lanes
  - Addition of a multi-use path on one side of Garden Street
  - Improve pedestrian crossing opportunities.
## Evaluation of Alternative Solutions

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Measures</th>
<th>Alternative 1: Do Nothing (to Garden Street, other improvements planned by Region and Town are in place)</th>
<th>Alternative 2: Travel Demand Management</th>
<th>Alternative 3: Improve Pedestrian/Cycling Facilities</th>
<th>Alternative 4: Traffic Operations/Systems Management Improvements</th>
<th>Alternative 5: Widen Garden Street</th>
<th>Alternative 6: Combination of Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>A principle or standard by which something may be judged or decided.</td>
<td>Dimensions, quantity, or capacity as ascertained by comparison with a standard.</td>
<td>• Continue existing conditions. • No change to study corridor, but includes Transportation Master Plan proposed changes i.e. Brock Street, Thickson Road, Anderson Street widening</td>
<td>• Shift demand to transit, carpooling, alternative modes</td>
<td>• Add multi-use path to one side of Garden Street • Improve pedestrian crossing opportunities</td>
<td>• Minor geometric/physical improvements • May include adding lanes at intersections, signal timing changes, improved signage and pavement markings</td>
<td>• Widen Garden Street to 4 travel lanes</td>
<td>• Widen Garden Street to 4 travel lanes</td>
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<tr>
<td>Socio-Economic</td>
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<tr>
<td>Archaeological/ Cultural Heritage Resources</td>
<td>Minimizes number of heritage features affected and provides opportunities to enhance built heritage and cultural features</td>
<td>• No impacts</td>
<td>• No impacts since no identified features and existing disturbance to study area</td>
<td>• No impacts since no identified features and existing disturbance to study area</td>
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<td>Natural Heritage Resources</td>
<td>Minimizes number of natural heritage features affected and provides opportunities for their protection or enhancement</td>
<td>• No impacts</td>
<td>• No impacts since no identified features and existing disturbance to study area</td>
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<tr>
<td>Business Impacts</td>
<td>Minimizes adverse physical effects on local businesses</td>
<td>• Potential for increased traffic issues that will adversely affect local businesses</td>
<td>• Potential for increased traffic issues still exist as additional capacity is not provided</td>
<td>• Potential for increased traffic issues still exist as additional capacity is not provided</td>
<td>• Potential for increased traffic issues still exist as additional capacity is not provided</td>
<td>• Potential for increased traffic issues still exist as additional capacity is not provided</td>
<td>• Opportunity to address all traffic issues adversely affecting local businesses</td>
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<td>Residential Impacts</td>
<td>Minimizes adverse physical effects on local residences</td>
<td>• Potential for increased traffic issues that will adversely affect local residents</td>
<td>• Potential for increased traffic issues still exist as additional capacity is not provided</td>
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<td>• Opportunity to address all traffic issues adversely affecting local residents</td>
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<tr>
<td>Visual/Aesthetics and Streetscape</td>
<td>Minimizes physical impacts on visual/aesthetic and streetscape</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• Potential improvement with urban design on boulevard landscape design to accommodate Multi-use Path</td>
<td>• Potential impact on existing boulevard trees for turn lanes.</td>
<td>• Potential impact on existing boulevard trees for road widening.</td>
<td>• Opportunity to address all traffic issues adversely affecting local residents and improved cyclist/pedestrian access for local residents</td>
</tr>
<tr>
<td>Noise Impacts</td>
<td>Minimizes adverse effects of noise as a result of roadway functions</td>
<td>• Noise impacts of less than Sdb (insignificant to noticeable)</td>
<td>• Noise impacts of less than Sdb (insignificant to noticeable)</td>
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<tr>
<td>Air Quality</td>
<td>Minimizes adverse effects on air quality and potential vehicle exhaust emissions</td>
<td>• Increased congestion and related emissions</td>
<td>• Increased congestion and related emissions</td>
<td>• Increased congestion and related emissions</td>
<td>• Increased congestion and related emissions</td>
<td>• Reduced congestion related emissions</td>
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Notes:
- **Widen Garden Street**
  - To 4 travel lanes
  - Add multi-use path to one side of Garden Street
  - Improve pedestrian crossing opportunities
  - Traffic system improvements
  - Traffic Demand Management
# Evaluation of Alternative Solutions

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<td>Transportation</td>
<td>• Minimizes travel delay while maximizes the efficiency of movement for people and goods within the corridor</td>
<td>• Potential traffic congestion due to traffic growth insufficient capacity to meet future demand</td>
<td>• Potential traffic congestion due to traffic growth, and insufficient capacity to meet future demand (even with modal shifts)</td>
<td>• Potential traffic congestion due to traffic growth, and insufficient capacity to meet future demand (even with active transportation improvements)</td>
<td>• Potential traffic congestion due to traffic growth, and no change in vehicle capacity to meet future demand (even with active transportation improvements)</td>
<td>• Additional 2 travel lanes provide sufficient capacity to meet future demand</td>
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</tr>
<tr>
<td>Traffic Safety</td>
<td>• Maximizes opportunities for safety measures to reduce collisions and potential conflicts between vehicles, pedestrians and cyclists</td>
<td>• Potential for increased safety issues associated with traffic growth</td>
<td>• Potential for increased safety issues associated with traffic growth</td>
<td>• Potential for increased safety issues associated with traffic growth. Improvement on safety for cyclists</td>
<td>• Potential for increased safety issues associated with traffic growth.</td>
<td>• Opportunities to address safety issues via road design and operation improvements</td>
<td>• Safety of all road users will be considered and incorporated into design and operations. Opportunities to address safety issues via road design and operation improvements</td>
</tr>
<tr>
<td>Transit Operations</td>
<td>• Maximizes ability to accommodate transit accessibility and operations</td>
<td>• Potential for increased traffic issues may adversely affect transit operations</td>
<td>• Potential impacts to transit operations due to traffic issues</td>
<td>• Potential for increased safety issues associated with traffic growth</td>
<td>• Potential for increased safety issues associated with traffic growth due to transit operations due to traffic growth.</td>
<td>• Potential for improved pedestrian access to transit</td>
<td>• Potential for improved pedestrian access to transit</td>
</tr>
<tr>
<td>Accommodation of Pedestrians &amp; Cyclists</td>
<td>• Sustains or improves the safety, accessibility, mobility, and efficiency of active transportation modes</td>
<td>• Potential for increased safety issues associated with traffic growth</td>
<td>• Promotes active transportation</td>
<td>• Potential for improved cyclist/peDESTrian safety and accommodation</td>
<td>• No cyclist accommodation provided</td>
<td>• Potential for increased cyclist/peDESTrian safety and accommodation</td>
<td>• Potential for improved cyclist/peDESTrian safety and accommodation</td>
</tr>
<tr>
<td>Emergency Services Response Times</td>
<td>• Maximizes ability to use the roadway in response to emergency situations</td>
<td>• Potential traffic congestion may extend response times</td>
<td>• Potential traffic congestion may extend response times</td>
<td>• Potential traffic congestion may extend response times</td>
<td>• Potential traffic congestion may extend response times</td>
<td>• Potential for improved response times</td>
<td>• Potential for improved response times</td>
</tr>
<tr>
<td>Natural Environment</td>
<td>Surface Water, Ground Water Impacts</td>
<td>• Minimizes adverse effects on local water</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• No impacts</td>
</tr>
<tr>
<td>Terrestrial Impacts</td>
<td>• Minimizes adverse effects on local terrestrial areas</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• No impacts</td>
</tr>
<tr>
<td>Vegetation Impacts</td>
<td>• Minimizes adverse effects on local vegetation</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• Minor impacts to existing street trees.</td>
<td>• Potential for increased safety issues associated with traffic growth.</td>
<td>• No impacts</td>
<td>• No impacts</td>
</tr>
<tr>
<td>Engineering</td>
<td>Utility Relocation</td>
<td>• Minimizes need for utility relocation</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• Potential for minor utility relocation</td>
<td>• Potential for minor utility relocation</td>
<td>• Potential for moderate utility relocation</td>
</tr>
<tr>
<td>Property Acquisition</td>
<td>• Minimizes need for property acquisition</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• No impacts</td>
</tr>
<tr>
<td>Accommodation of Future Municipal Services</td>
<td>• Maximizes opportunities for municipal services</td>
<td>• No impacts.</td>
<td>• No impacts.</td>
<td>• No impacts.</td>
<td>• No impacts.</td>
<td>• No impacts.</td>
<td>• Opportunity to incorporate new municipal services</td>
</tr>
<tr>
<td>Capital Costs</td>
<td>• Minimizes capital costs</td>
<td>• Construction costs: • 1.3 km (approx.) of new multi-use path • Addition of signage and/or pavement markings</td>
<td>• Construction costs: • Additional turn lanes at intersections • Addition of signage and/or pavement markings</td>
<td>• Construction costs: • 1.3 km (approx.) of additional 2 lanes of roadway</td>
<td>• Construction costs: • 1.3 km (approx.) of additional 2 lanes of roadway and multi-use path • Signage and/or pavement markings</td>
<td>• Construction costs: • 1.3 km (approx.) of additional 2 lanes of roadway and multi-use path</td>
<td>• Construction costs: • 1.3 km (approx.) of additional 2 lanes of roadway and multi-use path</td>
</tr>
<tr>
<td>Operation and Maintenance Costs</td>
<td>• Minimizes operation and maintenance costs</td>
<td>• No impacts</td>
<td>• No impacts</td>
<td>• Increase in maintenance costs is insignificant.</td>
<td>• Increase in maintenance costs is insignificant.</td>
<td>• Increase in maintenance costs for additional 2 lanes of roadway</td>
<td>• Increase in maintenance costs for additional 2 lanes of roadway</td>
</tr>
</tbody>
</table>
Evaluation of Alternative Solutions

- Based on the evaluation Alternative #6 – Combination of Alternatives is the preferred solution.
- This alternative provides the preferred socio-economic and transportation conditions as well as satisfactory engineering and cost factors.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>ALTERNATIVE #1: DO NOTHING (to Garden Street, other improvements planned by Region and Town are in place)</th>
<th>ALTERNATIVE #2: TRAVEL DEMAND MANAGEMENT</th>
<th>ALTERNATIVE #3: IMPROVE PEDESTRIAN/ CYCLING FACILITIES</th>
<th>ALTERNATIVE 4: TRAFFIC OPERATIONS/ SYSTEMS MANAGEMENT IMPROVEMENTS</th>
<th>ALTERNATIVE 5: WIDEN GARDEN STREET</th>
<th>ALTERNATIVE 6: COMBINATION OF ALTERNATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>• Continue existing conditions • No change to study corridor, but includes Transportation Master Plan proposed changes i.e. Brock Street, Thickson Road, Anderson Street widening</td>
<td>• Shift demand to transit, carpooling, alternative modes</td>
<td>• Add multi-use path to one side of Garden Street • Improve pedestrian crossing opportunities</td>
<td>• Minor geometric/physical improvements • May include adding lanes at intersections, signal timing changes, improved signage and pavement markings</td>
<td>• Widen Garden Street to 4 travel lanes</td>
<td>• Widen Garden Street to 4 travel lanes • Add multi-use path to one side of street • Pedestrian crossing opportunities • Traffic system improvements • Traffic Demand Management</td>
</tr>
<tr>
<td>Socio-Economic</td>
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<tr>
<td>Archaeological/Cultural Heritage Resources</td>
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<tr>
<td>Natural Heritage Resources</td>
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<tr>
<td>Business Impacts</td>
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<tr>
<td>Residential Impacts</td>
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<tr>
<td>Visual/Aesthetics and Streetscape</td>
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<tr>
<td>Noise Impacts</td>
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<td>Air Quality</td>
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<tr>
<td>Transportation</td>
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<tr>
<td>Corridor Efficiency and Level of Service</td>
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<tr>
<td>Traffic Safety</td>
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<tr>
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<td>Cost</td>
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<tr>
<td>Operation and Maintenance Costs</td>
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<tr>
<td>Recommendation</td>
<td>Not recommended</td>
<td>Not recommended</td>
<td>Not recommended</td>
<td>Not recommended</td>
<td>Not recommended</td>
<td>Recommended</td>
</tr>
</tbody>
</table>
Alternative Design Concepts

The study identified and evaluated 4 alternative design concepts for the preferred solution for Garden Street.

- **Alternative #1**
  - Widen about the centreline

- **Alternative #2** – Widen to the East
  - Hold existing west curb line

- **Alternative #3** – Widen to the West
  - Hold existing east curb line

- **Alternative #4** – Reduced Tree Impacts
  - Widen about the centreline
  - Locate left-turn lanes east or west of centreline as required to reduce tree impacts
Alternative Design Concepts

Design Concept #1 – Widen About Centreline

- Equal distribution of new roadway limits on both sides.
Alternative Design Concepts

Design Concept #2 – Widen to the East Side

- Distribution of new roadway limits towards east side.
Alternative Design Concepts

Design Concept #3 – Widen to the West Side

- Distribution of new roadway limits towards west side.
Alternative Design Concepts

Design Concept #4 – Reduced Tree Impacts (Recommended Design Concept)

- Generally equal distribution of new roadway limits on both sides, auxiliary lanes developed left of centre, right of centre and about centre to limit tree impacts.
Alternative Design Concepts

Design Concept #4 – Reduced Tree Impacts (Recommended Design Concept)

- Generally equal distribution of new roadway limits on both sides, auxiliary lanes developed left of centre, right of centre and about centre to limit tree impacts.
# Evaluation of Alternative Design Concepts

## Factor

<table>
<thead>
<tr>
<th>Factor</th>
<th>Design Concept #1</th>
<th>Design Concept #2</th>
<th>Design Concept #3</th>
<th>Design Concept #4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widen About the Centreline</td>
<td>No difference between alternatives in terms of capacity.</td>
<td>No difference between alternatives in terms of capacity.</td>
<td>No difference between alternatives in terms of capacity.</td>
<td>No difference between alternatives in terms of capacity.</td>
</tr>
<tr>
<td>Widen to the East (Hold Existing West Curveline)</td>
<td>No difference between alternatives in terms of capacity.</td>
<td>Left turn lanes are developed exclusively by deflection of northbound traffic (to the west of centre) resulting in a more adverse deflection for northbound traffic throughout the corridor and no shift for northbound traffic.</td>
<td>Left turn lanes are developed exclusively by deflection of northbound traffic (to the west of centre) resulting in a more adverse deflection for northbound traffic throughout the corridor and no shift for northbound traffic.</td>
<td>Left turn lanes are developed exclusively by deflection of northbound traffic (to the west of centre) resulting in a more adverse deflection for northbound traffic throughout the corridor and no shift for northbound traffic.</td>
</tr>
<tr>
<td>Widen to the West (Hold Existing East Curveline)</td>
<td>No difference between alternatives in terms of capacity.</td>
<td>Left turn lanes are developed exclusively by deflection of northbound traffic (to the west of centre) resulting in a more adverse deflection for northbound traffic throughout the corridor and no shift for northbound traffic.</td>
<td>Left turn lanes are developed exclusively by deflection of northbound traffic (to the west of centre) resulting in a more adverse deflection for northbound traffic throughout the corridor and no shift for northbound traffic.</td>
<td>Left turn lanes are developed exclusively by deflection of northbound traffic (to the west of centre) resulting in a more adverse deflection for northbound traffic throughout the corridor and no shift for northbound traffic.</td>
</tr>
<tr>
<td>Reduced Tree Impacts (Widen About Centreline)</td>
<td>No difference between alternatives in terms of capacity.</td>
<td>Left turn lanes are developed exclusively by deflection of northbound traffic (to the west of centre) resulting in a more adverse deflection for northbound traffic throughout the corridor and no shift for northbound traffic.</td>
<td>Left turn lanes are developed exclusively by deflection of northbound traffic (to the west of centre) resulting in a more adverse deflection for northbound traffic throughout the corridor and no shift for northbound traffic.</td>
<td>Left turn lanes are developed exclusively by deflection of northbound traffic (to the west of centre) resulting in a more adverse deflection for northbound traffic throughout the corridor and no shift for northbound traffic.</td>
</tr>
</tbody>
</table>

### Transportation Service / Engineering

- **Accommodation of Future Travel Demand**
  - Design Concept #1: No difference between alternatives in terms of capacity.
  - Design Concept #2: No difference between alternatives in terms of capacity.
  - Design Concept #3: No difference between alternatives in terms of capacity.
  - Design Concept #4: No difference between alternatives in terms of capacity.

- **Traffic Operations**
  - Design Concept #1: Left turn lanes are evenly distributed about centreline resulting in smaller deflections of through traffic for both northbound and southbound directions.
  - Design Concept #2: Left turn lanes are evenly distributed about centreline resulting in smaller deflections of through traffic for both northbound and southbound directions.
  - Design Concept #3: Left turn lanes are evenly distributed about centreline resulting in smaller deflections of through traffic for both northbound and southbound directions.
  - Design Concept #4: Left turn lanes are evenly distributed about centreline resulting in smaller deflections of through traffic for both northbound and southbound directions.

- **Ability to Meet Design Guidelines**
  - Design Concept #1: Boulevard slopes may exceed Town maximum gradient of 8%.
  - Design Concept #2: Boulevard slopes become steeper in east boulevard and may exceed Town maximum gradient of 8%.
  - Design Concept #3: Boulevard slopes become steeper in west boulevard and may exceed Town maximum gradient of 8%.
  - Design Concept #4: Boulevard slopes become steeper in west boulevard and may exceed Town maximum gradient of 8%.

- **Access to/from Garden Street (Driveways, Side Streets, Window Streets)**
  - Design Concept #1: Balanced distribution of boulevard within the corridor.
  - Design Concept #2: Unbalanced distribution of boulevard within the corridor.
  - Design Concept #3: Unbalanced distribution of boulevard within the corridor.
  - Design Concept #4: Balanced distribution of boulevard within the corridor.

- **Social, Economic and Cultural Impacts**
  - Design Concept #1: Balanced impacts to residences adjacent to the east and west side of Garden Street.
  - Design Concept #2: Unbalanced impacts to residents adjacent to Garden Street.
  - Design Concept #3: Unbalanced impacts to residents adjacent to Garden Street.
  - Design Concept #4: Balanced impacts to residences adjacent to the east and west side of Garden Street.

- **Residential Impacts**
  - Design Concept #1: Equal distribution of new roadway limits relative to adjacent residences.
  - Design Concept #2: Unbalanced distribution of new roadway limits.
  - Design Concept #3: Unbalanced distribution of new roadway limits.
  - Design Concept #4: Equal distribution of new roadway limits relative to adjacent residences.

- **Noise Impacts**
  - Design Concept #1: Balanced impacts to residences adjacent to the east and west side of Garden Street.
  - Design Concept #2: Unbalanced impacts to residents adjacent to Garden Street.
  - Design Concept #3: Unbalanced impacts to residents adjacent to Garden Street.
  - Design Concept #4: Balanced impacts to residences adjacent to the east and west side of Garden Street.

- **Visual Aesthetics (Streetscape)**
  - Design Concept #1: Roadway boulevard widths and streetscape opportunities (vegetation, trees, etc.) will be balanced within the ROW.
  - Design Concept #2: Roadway boulevard widths and streetscape opportunities (vegetation, trees, etc.) will be balanced within the ROW.
  - Design Concept #3: Roadway boulevard widths and streetscape opportunities (vegetation, trees, etc.) will be balanced within the ROW.
  - Design Concept #4: Roadway boulevard widths and streetscape opportunities (vegetation, trees, etc.) will be balanced within the ROW.

- **Tree Impacts**
  - Design Concept #1: Tree impacts will be minimized.
  - Design Concept #2: Tree impacts will be minimized.
  - Design Concept #3: Tree impacts will be minimized.
  - Design Concept #4: Tree impacts will be minimized.
# Evaluation of Alternative Design Concepts

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>DESIGN CONCEPT #1</th>
<th>DESIGN CONCEPT #2</th>
<th>DESIGN CONCEPT #3</th>
<th>DESIGN CONCEPT #4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Natural Environment</strong></td>
<td>WIDEN ABOUT THE CENTRELINE</td>
<td>WIDEN TO THE EAST (HOLD EXISTING WEST CURB LINE)</td>
<td>WIDEN TO THE WEST (HOLD EXISTING EAST CURB LINE)</td>
<td>REDUCED TREE IMPACTS (WIDEN ABOUT CENTRELINE)</td>
</tr>
<tr>
<td>Vegetation</td>
<td>Balanced impacts to street trees and recent plantings (saplings) on the east and west side of Garden Street due to widening and grading.</td>
<td>Unbalanced impacts to street trees and recent plantings (saplings) on the east side of Garden Street.</td>
<td>Unbalanced impacts to street trees and recent plantings (saplings) on the west side of Garden Street.</td>
<td>Balanced impacts to street trees and recent plantings (saplings) on the east and west side of Garden Street due to widening and grading.</td>
</tr>
<tr>
<td></td>
<td>Impacts approximately 130 street trees and 9 small trees or saplings.</td>
<td>Reduced impacts to trees on west side of Garden Street, where auxiliary lanes are not required.</td>
<td>Reduced impacts to trees on east side of Garden Street, where auxiliary lanes are not required.</td>
<td>Impacts are anticipated to be similar or greater than alternatives #1 and #2.</td>
</tr>
<tr>
<td></td>
<td>Tree impacts have been qualitatively assessed based on the information available during the study and will require confirmation during detail design as a result of grading review.</td>
<td>Impacts approximately 129 street trees and 16 small trees or saplings.</td>
<td>Tree impacts have been qualitatively assessed based on the information available during the study and will require confirmation during detail design as a result of grading review.</td>
<td>Tree impacts have been qualitatively assessed based on the information available during the study and will require confirmation during detail design as a result of grading review.</td>
</tr>
<tr>
<td>Financial</td>
<td>Operating costs are anticipated to be similar for all alternatives.</td>
<td>Operating costs are anticipated to be similar for all alternatives.</td>
<td>Operating costs are anticipated to be similar for all alternatives.</td>
<td>Operating costs are anticipated to be similar for all alternatives.</td>
</tr>
<tr>
<td>Capital Costs</td>
<td>Capital costs will be slightly higher than Alternatives #2 and #3 and comparable to Alternative #4.</td>
<td>Capital costs will be slightly reduced.</td>
<td>Capital costs will be slightly reduced.</td>
<td>Capital costs will be slightly higher than Alternatives #2 and #3 and comparable to Alternative #1.</td>
</tr>
<tr>
<td></td>
<td>Alternative requires full reconstruction of all curbs and relocation of all catch basins along the corridor.</td>
<td>Curb replacement and catch basin relocations will not be required on the west side of Garden Street where there are no auxiliary lanes.</td>
<td>Curb replacement and catch basin relocations will not be required on the east side of Garden Street where there are no auxiliary lanes.</td>
<td>Alternative requires full reconstruction of all curbs and relocation of all catch basins along the corridor.</td>
</tr>
<tr>
<td>Property Acquisition</td>
<td>No property acquisition is anticipated.</td>
<td>No property acquisition is anticipated.</td>
<td>No property acquisition is anticipated.</td>
<td>No property acquisition is anticipated.</td>
</tr>
<tr>
<td>Utility Relocation</td>
<td>Impacts to existing catch basins and storm leads on the east and west sides of Garden Street.</td>
<td>Impacts to existing catch basins and storm leads generally on the east side of Garden Street.</td>
<td>Impacts to existing catch basins and storm leads generally on the west side of Garden Street.</td>
<td>Impacts to existing catch basins and storm leads on the east and west sides of Garden Street.</td>
</tr>
<tr>
<td></td>
<td>Potential minor impacts to hydro poles on the east side of Garden Street due to grading in the areas of left turn lanes and window streets.</td>
<td>Reduced impact to existing catch basins and storm leads on the west side of Garden Street, only where left turn lanes are present.</td>
<td>Reduced impact to existing catch basins and storm leads on the east side of Garden Street, only where left turn lanes are present.</td>
<td>Potential minor impacts to hydro poles on the east side of Garden Street due to grading in the areas of left turn lanes and window streets.</td>
</tr>
<tr>
<td></td>
<td>Impacts to two (2) Hydro Guy anchors.</td>
<td>Potential impacts to hydro poles on the east side of Garden Street due to more significant grading throughout the corridor and in the areas of left turn lanes and window streets.</td>
<td>Potential minor impacts to hydro poles on the east side of Garden Street due to reduced grading throughout the corridor and in the areas of left turn lanes and window streets.</td>
<td>Impacts to two (2) Hydro Guy anchors.</td>
</tr>
<tr>
<td></td>
<td>Impacts to one (1) Rogers Terminal and two (2) Bell Terminals due to the addition of the multi-use trail.</td>
<td>Impacts to two (2) Hydro Guy anchors.</td>
<td>Impacts to one (1) Rogers Terminal and two (2) Bell Terminals due to the addition of the multi-use trail.</td>
<td>Impacts to one (1) Rogers Terminal and two (2) Bell Terminals due to the addition of the multi-use trail.</td>
</tr>
</tbody>
</table>

### Financial

- Operating costs are anticipated to be similar for all alternatives.
- Capital costs will be slightly higher than Alternatives #2 and #3 and comparable to Alternative #4.
- Alternative requires full reconstruction of all curbs and relocation of all catch basins along the corridor.
- No property acquisition is anticipated.

### Capital Costs

- Capital costs will be slightly reduced.
- Curb replacement and catch basin relocations will not be required on the west side of Garden Street where there are no auxiliary lanes.
- A majority of curbing and catch basins will require replacement and no significant cost savings are anticipated.
- Capital costs will be slightly reduced.
- Curb replacement and catch basin relocations will not be required on the east side of Garden Street where there are no auxiliary lanes.
- A majority of curbing and catch basins will require replacement and no significant cost savings are anticipated.

### Property Acquisition

- No property acquisition is anticipated.

### Utility Relocation

- Impacts to existing catch basins and storm leads on the east and west sides of Garden Street.
- Potential minor impacts to hydro poles on the east side of Garden Street due to grading in the areas of left turn lanes and window streets.
- Impacts to two (2) Hydro Guy anchors.
- Impacts to one (1) Rogers Terminal and two (2) Bell Terminals due to the addition of the multi-use trail.
### Evaluation of Alternative Design Concepts

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</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>• Balanced impacts to both the east and west sides of Garden Street. • Maintains the existing road alignment. • Balanced deflection to through traffic where auxiliary lanes are present. • Improved visual esthetics. • Improved pedestrian access and safety via proposed centre median on Garden Street.</td>
<td>• Unbalanced impacts along Garden Street • More significant impacts to the east side of Garden Street. • Increased vegetation opportunities on the west side of Garden Street. • Requires a shift to the existing road alignment. • Unbalanced deflection to southbound through traffic where auxiliary lanes are present. • Potential for more significant utility impacts. • Reduced visual esthetics. • Improved pedestrian access and safety via proposed centre median on Garden Street.</td>
<td>• Unbalanced impacts along Garden Street • More significant impacts to the west side of Garden Street. • Increased vegetation opportunities on the east side of Garden Street. • Requires a shift to the existing road alignment. • Unbalanced deflection to northbound through traffic where auxiliary lanes are present. • Reduced visual esthetics. • Improved pedestrian access and safety via proposed centre median on Garden Street.</td>
<td>• Balanced impacts to both the east and west sides of Garden Street. Where auxiliary lanes are not present. • Maintains the existing road alignment. • Deflections to through traffic are distributed throughout the corridor. • Improved visual esthetics. • Minimized tree impacts.</td>
</tr>
</tbody>
</table>

The following criteria were also considered, however no significant differences were found between the alternatives.

**Social, Economic and Cultural Impacts**
- Commercial / Industrial Impacts
- Institutional Impacts
- Air Quality Impacts
- Archaeological & Heritage Resources
- Adjacent Local Roads (Potential for Traffic Infiltration)
- Support of Existing Land Use, Policies and Development Plans

**Natural Environment**
- Aquatic Habitat
- Stormwater
- Ground Water
- Erosion and Land Forms
- Sustainability
- Wildlife, Wildlife Habitat

**Transportation Service**
- Transit Operations and Accessibility
- Accommodation of Pedestrians and Cyclists (on-road)
- Access for Emergency Vehicles
- Ability to Accommodate Municipal Services
Technically Preferred Design Concept

- Design Concept #4 is the preferred design alternative as a result of the evaluation process.
- There are balanced impacts to both the east and west sides of Garden Street.
- The existing road alignment is maintained.
- The boulevards will be relatively balanced in size and width.
- Improved visual aesthetics through an evenly distributed corridor.

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>DESIGN CONCEPT #1: WIDEN ABOUT THE CENTRELINE</th>
<th>DESIGN CONCEPT #2: WIDEN TO THE EAST (HOLD EXISTING WEST CURB LINE)</th>
<th>DESIGN CONCEPT #3: WIDEN TO THE WEST (HOLD EXISTING EAST CURB LINE)</th>
<th>DESIGN CONCEPT #4: REDUCED TREE IMPACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>• Balanced impacts to both the east and west sides of Garden Street.</td>
<td>• More significant impacts to the east side of Garden Street.</td>
<td>• More significant impacts to the west side of Garden Street.</td>
<td>• Balanced impacts to both the east and west sides of Garden Street where there are no auxiliary lanes.</td>
</tr>
<tr>
<td></td>
<td>• Maintains the existing road alignment.</td>
<td>• Increased vegetation opportunities on the east side of Garden Street.</td>
<td>• Requires a shift to the existing road alignment.</td>
<td>• Maintains the existing road alignment.</td>
</tr>
<tr>
<td></td>
<td>• Improved visual aesthetics.</td>
<td>• Lane shift to northbound through traffic where auxiliary lanes are present.</td>
<td>• Lane shift to southbound through traffic where auxiliary lanes are present.</td>
<td>• Left turn lanes are shifted right of centre, left of centre and about centre to reduce tree impacts along the corridor.</td>
</tr>
</tbody>
</table>

Transportation Service / Engineering
- Accommodation of Future Travel Demand
- Traffic Operations
- Ability to Meet Design Guidelines
- Access to/from Garden Street

Socio, Economic and Cultural Impacts
- Residential Impacts
- Noise Impacts
- Visual Aesthetics

Natural Environment
- Vegetation

Financial
- Operating Cost
- Constructability and Staging
- Capital Costs
- Property Acquisition
- Utility Relocation

Recommendation
- Not recommended
- Not recommended
- Not recommended
- Recommended

Legend:
- Least Preferred
- Most Preferred
Addressing Traffic Issues on Cork Drive

Existing concerns related to traffic operations and traffic calming on Cork Drive have been identified and investigated as part of this study and in response to comments provided at PIC #1.

The following three alternative solutions were developed and assessed to determine the appropriate mitigation method:

- The reduction of lane widths on Cork Drive through the addition of bike lanes. (*Not preferred due to no effect on speeds and on-street parking impacts*).
- The conversion to a right-in/right-out intersection at Garden Street. (*Not preferred due to operational concerns for drivers*).
- Installation of median and lane width reduction at Garden Street. (*Preferred as a visual cue to drivers to reduce speed and discourage u-turns*).

In addition to the above the study will recommend the monitoring of Cork Drive under Town traffic calming policies following the implementation of physical changes to determine any further mitigation.
Intersection Pedestrian Signal

• Intersection Pedestrian Signals (IPS) are traffic signals designed to assist pedestrians crossing a roadway. IPS controls traffic on the main roadway to allow pedestrians to cross.

Example: IPS formerly at Baldwin Street and Campbell Street

• An IPS is recommended on Garden Street at Meadowglen Drive to enhance pedestrian safety and improve pedestrian connections for area schools, businesses and residents.
Tree Impacts and Measures

A certified arborist undertook an inventory and review of the potential tree impacts associated with the Technically Preferred Design. Several measures have been considered for preservation of the existing trees where possible.

To reduce impacts to existing trees, design alternations and measures considered include:
- Shifting of left turn lanes to east/west
- A reduction of left turn lane width from 3.5m to 3.3m to preserve right-of-way
- A focus on reducing impacts to trees adjacent to window streets and reducing tree impacts through strategic widening
- An Advanced Tree Planting / Transplant program will be implemented to offset tree impacts to the corridor.

Based on the arborist’s review of the Technically Preferred Design Concept, the following table illustrates the estimated impact to the trees within the Garden Street corridor.

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>Total number of trees in the corridor</td>
<td>270 (approximate)</td>
</tr>
<tr>
<td>Total number of impacted trees</td>
<td>87</td>
</tr>
<tr>
<td>Trees suitable for transplant</td>
<td>-8</td>
</tr>
<tr>
<td>Trees currently in fair / poor condition</td>
<td>-25</td>
</tr>
<tr>
<td>Total Tree Impacts</td>
<td>54</td>
</tr>
</tbody>
</table>

Further direction for the preservation of trees and overall corridor impacts will be considered in the detailed design phase of this project.
Noise Impacts and Measures

- A Noise Impact Assessment was undertaken as part of the Garden Street Environmental Assessment to identify existing and future noise levels in the area.
- The Provincial directive for sound levels in urban areas is at (or below) Leq 55 dBA and increases of greater than 5 dBA warrant mitigation.
- The noise impact assessment found that future sound levels with the widening of Garden Street compared to existing sound levels are predicted increase by less than 5 dBA at all analyzed locations (considered acoustically insignificant to noticeable).
- Gradual changes in traffic and noise levels are anticipated with the future undertaking and are expected to be within the 5 dBA increase.
- Fencing deficiencies and replacement within the corridor are to be addressed through the Town’s fence replacement program which is ongoing.
- The table below provides the range of sound levels for existing and future conditions (based on different locations and the future corridor configuration):

<table>
<thead>
<tr>
<th>Existing/Future Horizon Years</th>
<th>Sound Levels</th>
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<tbody>
<tr>
<td>2011</td>
<td>50 dBA – 60 dBA</td>
</tr>
<tr>
<td>2021</td>
<td>52 dBA – 62 dBA</td>
</tr>
<tr>
<td>2031</td>
<td>53 dBA – 63 dBA</td>
</tr>
</tbody>
</table>
Summary of Potential Impacts and Mitigation Measures

<table>
<thead>
<tr>
<th>Factor</th>
<th>Anticipated Impact</th>
<th>Proposed Mitigation</th>
</tr>
</thead>
</table>
| Natural Environment        |                                                                                    | **Vegetation and Vegetation Communities**  
• Garden Street: requires removal of existing ornamental landscape trees and/or relocation of small trees and saplings  
• Minimize the extent of grading limits that will result in the need to remove existing vegetation or conditions  
• Advance tree planting and tree transplant program will be instituted. Trees to be transplanted or retained will be clearly identified in the field. Care will be used when transplanting. Where feasible, a tree/shrub protection barrier will be used around trees to be maintained.  
• The movement and storage of heavy equipment, and storage of materials will be confined to a predetermined area. Materials and equipment will not be stored/placed over root systems of any existing trees to remain.  
• Ornamental tree plantings will be established to improve the urban landscape and will be included in the detail design phase.  
• During detail design, the exact number of street trees to be removed and/or relocated on Garden Street will be determined and a suitable compensation will be implemented.  
• In an effort to compensate for vegetation removed, and to enhance the aesthetics of the works and reduce any potential visually intrusive effects, a landscaping and refurbishing plan is recommended for implementation at the post-construction stage.  
• Should any trees be damaged as a result of construction, a replacement tree will be provided.  |
| Fisheries and Aquatic Habitat |                                                                                   | **No critical or significant fisheries or aquatic habitat will be affected by this project.**  
None                                                                                                                                 |
| Wildlife and Wildlife Habitat |                                                                                   | **No critical or significant wildlife habitat will be affected by this project.**  
None                                                                                                                                 |
| Surface Water               |                                                                                    | **Increase in quantity of runoff and amount of pollutants draining to the receiving watercourses, as a result of increase in the existing pavement area.**  
**Possible reduction of surface water infiltration.**  
**Review opportunities to improve the water quality in the study area to improve Total Suspended Solids (TSS) treatment and other contaminant in detailed design in accordance with MOE’s Stormwater Management Planning and Design Manual (2003).**  |
| Ground Water                |                                                                                    | **Alteration to the groundwater regime as a result of the proposed works is expected to be negligible post-construction.**  
**Construction dewatering may be required for this project depending on the proposed construction methods and timing.**  
**If dewatering is required, a Permit to take Water investigation will be conducted during detail design to assess individual wells, anticipated quantity and quality impacts, and develop a mitigation plan which may include temporary municipal water service during construction. Resident cooperation will be an important aspect of this investigation.**  |
| Soil Removal and Contaminants |                                                                                    | **Potential for removal of contaminated soils**  
**All waste generated during construction must be disposed of in accordance with MOE requirements.**  
**Any soils that are removed during construction should be tested for contaminants that may have been used or dumped along the corridor limits.**  
**If soils are contaminated they will require disposal in accordance with Part XV.1 of the Environmental Protection Act (EPA) and Ontario Regulation 153/04, Records of Site Condition, detailing the new requirements related to site assessment and clean up. The Town is to notify the MOE and have a contingency plan for how and where the soils will be disposed.**  |
## Summary of Potential Impacts and Mitigation Measures (cont.)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Anticipated Impact</th>
<th>Proposed Mitigation</th>
</tr>
</thead>
</table>
| Social Environment: Land Use and Socio-Economic Impacts | • Temporary impacts to one existing private access point and three local public roads while construction is taking place. It should be noted that all access points have alternative access available. | • Access is to be maintained or appropriate detours will be implemented to ensure access to individual driveways and side streets during construction.  
• Timing of construction activities can be coordinated to mitigate many of these impacts. Construction activities should not have significant impacts on regular business, resident, and institution operations throughout the corridor. Work hours in the corridor can be restricted, as appropriate. |
| Property Requirements | • No requirement for additional property are anticipated. | • None                                                                                                                                          |
| Noise | • The proposed road works on Garden Street including widening: and potential change in profile will result in decreased separation distance to the roadway and increased traffic volumes for adjacent receptor locations. In specific locations noise levels exceeding the 55dBA threshold currently exist and are anticipated in the future. The improvements and traffic volumes are not anticipated to result in an increase of 5dBA change in noise levels along the corridor.  
• The proposed road works on Garden Street will result in temporary increase in noise levels in the area. | • Timing of construction activities can be coordinated to mitigate noise levels during the construction of the improvements. Construction activities should not have significant impacts on regular business, resident, and institution operations throughout the corridor. Work hours in the corridor can be restricted, as appropriate to minimize noise impacts to adjacent businesses, residents and institutions.  
• Noise and vibration related to construction activities will be in conformance with the Town’s Noise By-law. |
| Archaeology, Heritage and Cultural Resources | • No impacts are anticipated. | • In the event that deeply buried archaeological remains are encountered, the Heritage Operations Unit of the Ontario Ministry of Culture should be notified immediately.  
• In the event that human remains are encountered during construction, both the Ministry of Culture, and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Government Services, Consumer Protection Branch should be contacted immediately.  
• No heritage features are expected to be affected as a result of the proposed widening of Garden Street. |
| Air Quality | • Reduced air quality during construction | • To minimize reduced air quality due to dust, apply water and calcium chloride during construction. |
| Safety | • Safety for pedestrian, cyclists, and motorists | • A multi-use trail (i.e. pedestrians and cyclists) is proposed on the west side of Garden Street throughout the study corridor.  
• With the additional roadway width, pedestrians will have wider intersections to cross. Proposed Intersection Pedestrian Signals (IPS) at the Garden Street / Meadowglen Drive intersection may be considered to improve pedestrian safety. |
| Streetscaping / Urban Design | • Reduced aesthetics | • Existing streetscaping on Garden Street can be partially maintained. New streetscaping can be provided on the east and west sides of Garden Street to relocate or replace impacted streetscape elements.  
• Streetscaping details will be determined during detail design. |
| Utilities | • Relocation of existing utilities | • Existing utilities will need to be relocated. Formal definition of impacts on utilities, specifically Bell Canada, Enbridge Gas Distribution, Whitby Hydro, and Rogers Cable Systems will be determined during detail design. |
Next Steps

The next steps for the study are:

• Review all comments and suggestions received from the public and agencies following Public Information Centre #2.

• Finalize the Project File Report, including the recommended preferred design concept.

• The Project File Report will be filed for a minimum 30-day public review

Implementation Program

• Advanced Tree Planting / Transplanting Program will commence in 2013 / 2014.

• Construction of the road widening is currently anticipated for 2019, subject to budget and Council approval.
Thank You!

We invite you to fill out a comment sheet with your comments and suggestions.

If you wish to be put on our mailing list, require further information, or wish to provide any input to the study, please contact the project team:

Project Engineer (Capital Projects)  Consultant Project Manager
Town of Whitby  Cole Engineering Group Ltd.
905.430.4300 ext. 2336  905.940.6161 ext. 308
lookh@whitby.ca  GardenStEA@coleengineering.ca

Please visit the project website at www.whitby.ca

Town of Whitby > Town Hall > Environmental Assessment
(under Public Works / Engineering Services)
From: [redacted]
Sent: Sunday, January 20, 2013 10:23 AM
To: lookh@whitby.ca
Cc: Garden Street EA
Subject: EA Comments for Gaden St between Dryden & Taunton

Thank you for the notice. I will be unable to attend the public consultation, and my comment may be beyond the scope of the EA portion of the project, however I feel it is important to voice concerns over safety issues in whatever forum allows it. Specifically, I have a safety concern over the "back entrance" to the Mary Brown's plaza intended for northbound traffic on Garden St entering the Garden/Taunton plaza on the SE corner. Due to the angularity of the location, it is virtually a completely blind entrance & exit point. This creates significant risk for pedestrians and other sidewalk users--children on bicycles, etc.-- (including myself and my family). I'm not aware of any serious injuries to date, but I have personally witnessed or been involved in SEVERAL near-misses between sidewalk users and automobiles (especially at night). With such a high rate of near-misses, it is not a question of "if", but only 'when' a significant injury or fatality will occur at this intersection if left status quo.

I was very disappointed that a flashing light and suitably signage was not placed at this high risk location, but this project may allow for further safety enhancements (which is why I am voicing this concern). I have witnessed some motorists CAREFULLY entering and exiting this driveway, but it is equally common to see motorists NOT stop at the sidewalk (even though it is a blind exit due to the Mary Brown's building and opposite-side fencing. Rather, many motorists use this as a 'quick' back-entrance and hurriedly beat traffic in an out of the flow on Garden St. without properly assessing sidewalk users leaving them in harms way. Under the reconstruction project of the northern-most tip of Garden St, I'd like to think that this back entrance can perhaps be closed to normal traffic and only available for deliveries (if required), or at the very least, additional safety features may be installed.

Thank you for your consideration,
[redacted]
Dawn Perry-Smith

From: [redacted]
Sent: Tuesday, January 29, 2013 9:27 PM
To: Garden Street EA
Subject: Garden Street

Mr. Bacquie,
We were unable to attend the meeting today regarding the widening of Garden Street. We live on Chiltern Place and our house faces Garden. There are already four lanes there (we are just south of Taunton). Are there any plans to widen the road further outside our house? Any changes to the sidewalk or space separating Garden Street from Chiltern Place that we should be aware of? Will there be any construction at all outside our house? When is the construction scheduled to take place and how long will it go on?

Living so close to now what will be major street, we are concerned about the safety of our 2 and 4 year old children. Is there anyway the Town of Whitby could make it safer for the residents who face Garden? With the widening of the road, traffic will be heavier. I would like to see a fence put up between the ‘opening’ between Chiltern and Garden to provided added safety for the many young children who live on our street. Also, noise is an issue and will be a bigger issue once the road is widening. Are there any considerations for noise in your project?

Thank you in advance for considering and addressing our concerns.

Sincerely,
Dawn Perry-Smith

From: [redacted]
Sent: Friday, March 15, 2013 10:54 PM
To: lookh@whitby.ca
Cc: Garden Street EA

Subject: I am concerned about the widening of Garden Street

I have been looking at Garden St and being a homeowner at 23 Greenbush Place, I am very opposed to this idea. You will be ruining the feel of the neighbourhood by widening the road. Why not widen Brock Street instead? Doing the widening will encourage more traffic on a street that is busy enough as it is. Brock has fewer homes and seems way more suited for widening.

I believe it will bring down the value of our home. I walk Garden often and would no longer feel the same walking a four lane street.

Please reconsider and find another option. It has taken me awhile to respond and I hope I am not too late for my opinion to be considered.

I have learned that our background and circumstances may have influenced who we are, but we are responsible for who we become.
Dawn Perry-Smith

From: [Redacted]
Sent: Tuesday, January 29, 2013 3:00 PM
To: lookh@whitby.ca
Subject: Public Information Centre No.2

Dear Sir,

I received a notice outlining your intention to widen Garden St. between Dryden Bvld. and Taunton Rd. in the near future.

This letter is in response to that notice to express my concerns. I realize this is only an Environmental Assessment Study, but the impact it will have on the affected neighbourhood is such a negative one on so many levels, including the environment I feel it needs to be addressed.

I do realize there is going to be future development in this area but Garden Street runs through a quiet residential neighbourhood and widening it to 4 lanes will only encourage traffic, not alleviate it. As it stands, cars “fly” up that part of the road when they have the opportunity (when no one else is in front of them). If given the opportunity to pass motorists that actually obey the posted speed limits, it will become a constant roadway creating a lot of noise and dust pollution. It’s difficult for residents to sleep with their windows open or enjoy outdoor activities in their own yards already, but it’s still possible with a highway of traffic running through the area it’ll force residents to close their windows and in turn, use their air conditions on nights when it wouldn’t normally be necessary. More pollution, higher bills for residents and a bigger drain on our already stressed Hydro delivery system.

In addition, the increase in dust and air pollution will be horrible for residents. I do personally know more than one family that lives on a side street off of Thickson Rd. and they’ve just experienced the same expansion. The impact has been devastating to them. The noise, the speeding traffic, and the dust are intolerable. Many are not able to move at this point - not that they should have to, but it will be in their future. Living beside a highway de-values properties and makes it much more difficult to sell. This wasn’t in my future plans either but I feel, as do many others I spoken to, it may be the only option. I purposely bought a home in a quiet neighbourhood beside a 2 lane road with the expectation more subdivisions would be introduced but I never would have bought in the area with the knowledge a highway would be imposed!

I would also like to point out the high school on Dryden Blvd at Fallingbrook Rd. During the school year (as well as through the summer) dozens of kids travel up Patrick Dr. and Parnell St. to cross Garden Rd. to get to the variety and pizza stores in the plaza across the street. Manoeuvring 4 lanes of traffic to cross will put both the kids and motorists at risk. Of course, putting in a cross-walk or a set of lights will only add to the noise and air pollution with a constant acceleration of cars having stopped for pedestrians.

Many people I’ve spoken to regarding this issue say they aren’t going to show up at the meeting set up at the Municipal Building because they feel their concerns will fall on deaf ears and you will continue with your plans regardless of the disapproval of the majority. Please take my concerns seriously and consider the good of the residents affected by this change. There has to be some peace and quiet, not to mention safety preserved in our neighbourhoods!
Dawn Perry-Smith

From: Look, Horace [lookh@whitby.ca]
Sent: Thursday, January 31, 2013 4:15 PM
To: Drew Stirling
Subject: FW: Forgot to go to the meeting PIC Jan 29, full speed ahead

Hi Drew, for your record.

Thanks
Horace

From: Horace
Sent: Wednesday, January 30, 2013 11:40 AM
To: Look, Horace
Subject: Forgot to go to the meeting PIC Jan 29, full speed ahead

Horace:
Forgot to go the meeting, but wanted to make sure you have my support for the 4 lane widening of Garden as fast as possible
I live 150 metres from Garden and have no issue with this much needed widening.

Also Whitby needs the Garden extension to Brooklin to relieve Baldwin congestion. When will that happen?
Thanks and add this to your record.

Confidentiality Warning: This e-mail contains information that is confidential and is intended only for the use of the named recipient(s). If you are not the intended recipient, you are hereby notified that any review, copying or distribution of this transmission is strictly prohibited. Please contact the Town of Whitby immediately if you have received this transmission in error and delete this message.

6/12/2013
COMMENT FORM

Public Information Centre #2 – Class Environmental Assessment of Garden Street from Dryden Boulevard to Taunton Road

Tuesday, January 29, 2013 – Town of Whitby Municipal Building
575 Rossland Road East, Whitby

We are interested in hearing any comments you may have associated with this Class Environmental Assessment Study. Thank-you for clearly writing your comments in the space provided below. If you require additional space, please continue your comments on the back of this sheet.

Properties close to Garden St (Patrick Ave) will be losing value because of extra traffic / noise.
My street is no access to Garden St. season 0 brought my house. There will be more pedestrian accidents (student from 3 school in area) even the street at noon for pizza eat and money + often when they go home. The number are in the hundreds.
Pollution from cow ethouse is another reason.

Spend your money on Beach Road and Markham starting from Lakeidge there are your priorities.
There is no growth in this area except Ingleth.
COMMENT FORM

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Left turn lane on Willowbrook is developed only to the west – 2 property owners lose most of the boulevard leading traffic too close to property line.

There is a lot more room on the East side with backyards abutting to Garden Street. On the west side, homes are very close to the road.

Comments and information regarding this project are being collected to assist the Town of Whitby. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the Freedom of Information and Privacy Act. With the exception of personal information, all comments will become part of the public record.

Please submit your written comments before leaving the PIC. If you require more time to comment, please mail/fax in the comment sheet by Friday, February 8, 2013 to:

Horace Look, P.Eng.
Project Engineer
Town of Whitby
575 Rossland Road East
Whitby, ON L1N 2M8
Tel: 905-430-4307, Ext. 2336
Fax: 905-688-7005
E-mail: lookh@whitby.ca

Ray Bacque, P.Eng.
Consultant Project Manager
Cole Engineering Group Ltd.
70 Valleywood Drive
Markham, ON L3R 4T5
Tel: 905-940-6161, Ext. 308,
Fax: 905-940-2064
E-mail: GardenSTEA@coleengineering.ca

PLEASE CLEARLY PRINT YOUR NAME AND CONTACT INFORMATION BELOW:

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
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COMMENT FORM

Public Information Centre #2 – Class Environmental Assessment of Garden Street from Dryden Boulevard to Taunton Road
Tuesday, January 29, 2013 – Town of Whitby Municipal Building
575 Rossland Road East, Whitby

We are interested in hearing any comments you may have associated with this Class Environmental Assessment Study. Thank-you for clearly writing your comments in the space provided below. If you require additional space, please continue your comments on the back of this sheet.

I've changed my mind about the trees. I don't mind if we lose trees as trees will grow. I prefer to know that the west side doesn't get impacted because of trees.

Comments and information regarding this project are being collected to assist the Town of Whitby. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the Freedom of Information and Privacy Act. With the exception of personal information, all comments will become part of the public record.

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E-mail: lookh@whitby.ca

Ray Bacquie, P.Eng.
Consultant Project Manager
Cole Engineering Group Ltd.
70 Valleywood Drive
Markham, ON L3R 4T5
Tel: 905-940-0116, Ext. 308
Fax: 905-940-2064
E-mail: GardenStFA@coleengineering.ca

PLEASE CLEARLY PRINT YOUR NAME AND CONTACT INFORMATION BELOW:

<table>
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<th>Name:</th>
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COLE ENGINEERING

TOWN OF WHITBY
PUBLIC WORKS DEPARTMENT
COMMENT FORM

Public Information Centre #2 – Class Environmental Assessment of Garden Street from Dryden Boulevard to Taunton Road
Tuesday, January 29, 2013 – Town of Whitby Municipal Building
575 Rossland Road East, Whitby

We are interested in hearing any comments you may have associated with this Class Environmental Assessment Study. Thank-you for clearly writing your comments in the space provided below. If you require additional space, please continue your comments on the back of this sheet.

Prasen Design Alternative Concept 1 - Widen About Centerline

This would provide better symmetry and
provide equal boulevards to both sides of the street.
Would impact both sides of Garden equally. Sorry if
that loses a few more trees.
Please no traffic lights as planned already.

Comments and information regarding this project are being collected to assist the Town of Whitby. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the Freedom of Information and Privacy Act. With the exception of personal information, all comments will become part of the public record.

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E-mail: loohki@whitby.ca

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Markham, ON L3R 4T5
Tel: 905-940-6161, Ext. 308,
Fax: 905-940-2064
E-mail: GardenStEA@coleengineering.ca

PLEASE CLEARLY PRINT YOUR NAME AND CONTACT INFORMATION BELOW:

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As a concerned Whitby resident, I think this widening of Garden is a real disappointment. It is a residential area with many children walking your street to public high schools. This street is not busy currently and this will only make it bussier. I think they are safety issues with widening a residential children-walking street.

It has been a dream of mine to live in Whitby. One of the reasons being streets like Garden with large beautiful boulevards for walking/driving and with the beautification of the trees. One of my main concerns is the trees that have matured over the years. I do not want to live in a town that looks like a city.
COMMENT FORM

Public Information Centre #2 – Class Environmental Assessment of Garden Street from Dryden Boulevard to Taunton Road
Tuesday, January 29, 2013 – Town of Whitby Municipal Building
575 Rossland Road East, Whitby

We are interested in hearing any comments you may have associated with this Class Environmental Assessment Study. Thank-you for clearly writing your comments in the space provided below. If you require additional space, please continue your comments on the back of this sheet.

- As a resident on greenbush Place, I am requesting to keep garden street as two lanes between taunton and chamber.
- This is a residential neighborhood with children (1st to 3rd grade) for school reasons.
- It is very poor planning to build houses so close to a four lane road. A retrofit will mean a poor quality of life from noise, pollution, and stress from additional speeding vehicles.
- I suggest traffic lights or stop signs should be installed to improve public safety by slowing down the flow of traffic.

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Please submit your written comments before leaving the PIC. If you require more time to comment, please mail/fax in the comment sheet by Friday, February 8, 2013 to:

Horace Look, P.Eng.
Project Engineer
Town of Whitby
575 Rossland Road East
Whitby, ON L1N 2M8
Tel: 905-430-4307, Ext. 2336
Fax: 905-686-7005
E-mail: lookh@whitby.ca

Ray Bacquie, P.Eng.
Consultant Project Manager
Cole Engineering Group Ltd.
70 Valleywood Drive
Markham, ON L3R 4T5
Tel: 905-940-6161, Ext. 308,
Fax: 905-940-2064
E-mail: GardenSTEA@coleengineering.ca

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COLE ENGINEERING
TOWN OF WHITBY
COMMENT FORM

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I understand need to widen Garden Blvd.
Hope you remember to share the impact of the boulevard widening – not just west side.
Also pleased that we’ll have no traffic lights at Meadowbrook, no cars back up as it is on Meadowbrook.

Comments and information regarding this project are being collected to assist the Town of Whitby. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the Freedom of Information and Privacy Act. With the exception of personal information, all comments will become part of the public record.

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Preferred Alternative Concept #1 - Widens about centerline

This would provide better symmetry and provide equal boulevards to both sides of the street and would impact both sides of Garden equally.

If this means we loose more trees so be it!

Please no traffic lights as currently planned. Thank-you.

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1. I am very concerned about safety at Cork Drive & Garden Street.
2. I am concerned about the high volume of cars using Cork Drive as a turn around street.
3. When Garden Street is made to 4 lanes I am worried about speed.

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Fax: 905-940-2064
E-mail: GardenStEA@coleengineering.ca

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A right in right out intersection is a preserved intersection for Cork
Send letter to each house on Cork
to get feed back

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| Name: | [Redacted] |
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- At present the need for this project is not existent.
- I agree that widening of Garden St. would make sense in case the traffic would become very heavy, but not before that.
- Please don’t forget: this is a quiet, student friendly area with lots of pedestrian crossings. A 4/LANE STREET PROMOTES VEHICLE SPEEDING

Comments and information regarding this project are being collected to assist the Town of Whitby. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the Freedom of Information and Privacy Act. With the exception of personal information, all comments will become part of the public record.

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Dawn Perry-Smith

From: Zirger, Rosi (MTCS) [Rosi.Zirger@ontario.ca]
Sent: Monday, January 28, 2013 10:01 AM
To: Garden Street EA
Subject: Garden Street Btwn Dryden Blvd to Taunton Road – Municipal Class EA

Project: Garden Street – Dryden Blvd to Taunton Road – Municipal Class EA
Location: Town of Whitby
MTCS File: 18EA079

TO: Ray Bacquie, Consultant Project Manager. Cole Engineering Group Ltd.

Dear Mr. Bacquie

On January 21, 2013 the Ministry of Tourism, Culture and Sport (MTCS) received a Notice of Public Information Centre #2 for the project mentioned above. As part of the Class Environmental Assessment process, the MTCS has an interest in the conservation of cultural heritage resources including:

- archaeological resources,
- built heritage resources, and
- cultural heritage landscapes.

Could you advise whether cultural heritage resources have been considered as part of this EA? I attached our Ministry’s standard checklists to assist you in your consideration of heritage:

1. **Criteria for Evaluating Archaeological Potential**, which identifies characteristics of the property that indicate whether archaeological resources might be present and/or impacted. The criteria will assist you in determining whether an archaeological assessment by an archaeologist licensed under the Ontario Heritage Act will be necessary for this project.

2. **Screening for Impacts to Built Heritage and Cultural Heritage Landscapes**, which will assist you in identifying potential heritage resources within the study area.

Please advise if, after you have completed these checklists, the project has the potential to impact cultural heritage resources. Feel free to contact me should you have any questions or concerns.

Best regards,

_Rosi Zirger_

Heritage Planner
Ministry of Tourism, Culture & Sport
Culture Division | Programs and Services Branch | Culture Services Unit
401 Bay Street, 17th Floor
Toronto, Ontario M7A 0A7
Tel. 416.314.7159 | Fax 416.314.7175
rosi.zirger@ontario.ca

6/12/2013
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<td>Resident</td>
<td>Thank you for the notice. I will be unable to attend the public consultation, and my comment may be beyond the scope of the EA portion of the project, however I feel it is important to voice concerns over safety issues in whatever forum allows it. Specifically, I have a safety concern over the &quot;back entrance&quot; to the Mary Brown's plaza intended for northbound traffic on Garden St entering the Garden/Taunton plaza on the SE corner. Due to the angularity of the location, it is virtually a completely blind entrance &amp; exit point. This creates significant risk for pedestrians and other sidewalk users—children on bicycles, etc.—(including me and my family). I’m not aware of any serious injuries to date, but I have personally witnessed or been involved in SEVERAL near-misses between sidewalk users and automobiles (especially at night). With such a high rate of near-misses, it is not a question of 'if', but only 'when' a significant injury or fatality will occur at this intersection if left status quo. I was very disappointed that a flashing light and suitably signage was not placed at this high risk location, but this project may allow for further safety enhancements (which is why I am voicing this concern). I have witnessed some motorists CAREFULLY entering and exiting this driveway, but it is equally common to see motorists NOT stop at the sidewalk (even though it is a blind exit due to the Mary Brown’s building and opposite-side fencing. Rather, many motorists use this as a 'quick' back-entrance and hurriedly beat traffic in an out of the flow on Garden St. without properly assessing sidewalk users leaving them in harms way. Under the reconstruction project of the northern-most tip of Garden St., I’d like to think that this back entrance can perhaps be closed to normal traffic and only available for deliveries (if required), or at the very least, additional safety features may be installed. Thank you for your consideration,</td>
<td>• Existing and potential traffic impacts to streets connecting Garden Street are being noted. We recognize issues associated with the developments at Garden Street and Taunton Road and Fallingbrook Drive where turning restrictions exist. • The concerns regarding this existing configuration have been provide to the Town of Whitby for consideration.</td>
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<td>Resident</td>
<td>We were unable to attend the meeting today regarding the widening of Garden Street. We live on Chiltern Place and our house faces Garden. There are already four lanes there (we are just south of Taunton). Are there any plans to widen the road further outside our house? Any changes to the sidewalk or space separating Garden Street from Chiltern Place that we should be aware of? Will there be any construction at all outside our house? When is the construction scheduled to take place and how long will it go on? Living so close to now what will be major street, we are concerned about the safety of our 2 and 4 year old children. Is there anyway the Town of Whitby could make it safer for the residents who face Garden? With the widening of the road, traffic will be heavier. I would like to see a fence put up between the 'opening' between Chiltern and Garden to provided added safety for the many young children who live on our street. Also, noise is an issue and will be a bigger issue once the road is widening. Are there any considerations for noise in your project? Thank you in advance for considering and addressing our concerns.</td>
<td>• There are no current plans to widen Garden Street beyond the 4-lane cross section proposed. The proposed widening of Garden Street currently provides a 4-lane cross section south of Chiltern Place as Garden Street is a 4 lane cross section in this area. • The traffic analysis undertaken in this study has indicated that forecasted traffic will reach the practical capacity of a two lane arterial road by 2019 and will require additional capacity between Dryden Boulevard and Taunton Road. Recommendations within the ESR include the widening of Garden Street between 2017 and 2021 timeframe. • Construction is anticipated to occur on Garden Street within the timeframe noted above, the construction duration will be determined upon completion of the Detail Design phase of the project. • Pedestrian accommodation has been considered within this study and recommendations have been provided for future pedestrian accommodation options in crossing Garden Street as well as the inclusion of a multi-use path on the west side of Garden Street to improve pedestrian and cycling facilities within the corridor. • The addition of Intersection Pedestrian Signals has been recommended within the ESR at the intersection of Meadowglen Drive and Garden Street. However, full Traffic Signals are not proposed on Garden Street where they do not presently exist. Intersection pedestrian signals have been considered to assist pedestrians in safer travel across Garden Street however, it is noted that the timing and suitability of Intersection Pedestrian Signals is to be determined by the Town of Whitby.</td>
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<td>Resident</td>
<td>I have been looking at Garden St and being a homeowner at 23 Greenwich Place, I am very opposed to this idea. You will be ruining the feel of the neighbourhood by widening the road. Why not widen Brock Street instead? Doing the widening will encourage more traffic on a street that is busy enough as it is. Brock has fewer homes and seems way more suited for widening. I believe it will bring down the value of our home. I walk Garden often and would no longer feel the same walking a four lane street. Please reconsider and find another option. It has taken me awhile to respond and I hope I am</td>
<td>• The traffic analysis undertaken in this study has indicated that forecasted traffic will reach the practical capacity of a two lane arterial road by 2019 and will require additional capacity between Dryden Boulevard and Taunton Road. • Improvements within the corridor are intended to accommodate future development designated in the Town Official Plan and the related growth in travel. Growth in traffic is anticipated regardless of the planned improvement. The concern regarding the potential for higher speeds has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds and volume.</td>
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I have learned that our background and circumstances may have influenced who we are, but we are responsible for who we become.

Resident

I received a notice outlining your intention to widen Garden St. between Dryden Blvd. and Taunton Rd. in the near future. This letter is in response to that notice to express my concerns. I realize this is only an Environmental Assessment Study, but the impact it will have on the affected neighbourhood is such a negative one on so many levels, including the environment I feel it needs to be addressed.

I do realize there is going to be future development in this area but Garden Street runs through a quiet residential neighbourhood and widening it to 4 lanes will only encourage traffic, not alleviate it. As it stands, cars "fly" up that part of the road when they have the opportunity (when no one else is in front of them). If given the opportunity to pass motorists that actually obey the posted speed limits, it will become a constant speedway creating a lot of noise and dust pollution. It’s difficult for residents to sleep with their windows open or enjoy outdoor activities in their own yards already, but it’s still possible. With a highway of traffic running through the area it’ll force residents to close their windows and in turn, use their air conditioners on nights when it wouldn’t normally be necessary. More pollution, higher bills for residents and a bigger drain on our already stressed Hydro delivery system.

In addition, the increase in dust and air pollution will be horrible for residents. I do personally know more than one family that lives on a side street off of Thickson Rd. and they’ve just experienced the same expansion. The impact has been devastating to them. The noise, the speeding traffic, and the dust are intolerable. Many are not able to move at this point - not that they should have to, but it will be in their future. Living beside a highway de-values properties and makes it much more difficult to sell. This wasn’t in my future plans either but I feel, as do many others I spoken to, it may be the only option. Living beside a highway de-values properties and makes it much more difficult to sell. This wasn’t in my future plans either but I feel, as do many others I spoken to, it may be the only option.

I purposely bought a home in a quiet neighbourhood beside a 2 lane road with the expectation more subdivisions would be introduced but I never would have bought in the area with the knowledge a highway would be imposed!

I would also like to point out the high school on Dryden Blvd. at Fallingbrook Rd. During the school year (as well as through the summer) dozens of kids travel up Patrick Dr. and Parnell St. to cross Garden Rd. to get to the variety and pizza stores in the plaza across the street. Maneuvering 4 lanes of traffic to cross will put both the kids and motorists at risk. Of course, putting in a crosswalk or a set of lights will only add to the noise and air pollution with a constant acceleration of cars having stopped for pedestrians.

Many people I’ve spoken to regarding this issue say they aren’t going to show up at the meeting set up at the Municipal Building because they feel their concerns will fall on deaf ears and you will continue with your plans regardless of the disapproval of the majority. Please take my concerns seriously and consider the good of the residents affected by this change. There has to be some peace and quiet, not to mention safety preserved in our neighbourhoods!

Resident

Forgot to go the meeting, but wanted to make sure you have my support for the 4 lane widening of Garden as fast as possible.

I live 150 metres from Garden and have no issue with this much needed widening.

Also Whitby needs the Garden extension to Brooklin to relieve Baldwin congestion. When will that happen?

Thanks and add this to your record.

- The traffic analysis undertaken in this study has indicated that forecasted traffic will reach the practical capacity of a two lane arterial road by 2019 and will require additional capacity between Dryden Boulevard and Taunton Road.
- Improvements within the corridor are intended to accommodate future development designated in the Town Official Plan and the related growth in travel. Growth in traffic is anticipated regardless of the planned improvement. The concern regarding the potential for higher speeds has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds and volume.

- The current preferred alternative within the ESR is a widening of Garden Street from Taunton Road to Dryden Boulevard.
- The extension of Garden Street is beyond the scope of this project, please refer to the Town Official Plan for more information regarding future works.
Resident
Properties close to Garden Street (Patrick Drive) will be losing value because of extra traffic (noise). My street has no access to Garden Street which is the reason why I bought my house. There will be more pedestrian accidents (students from 3 schools in area) that cross the street at noon for pizza, etc., and morning and after when they go home. The numbers are in the hundreds. Pollution from car exhaust is another reason. Spend your money on Brock Road and Rossland starting from Lakeridge – those are your priorities. There is no growth in this area expect for Target.

- The traffic analysis undertaken in this study has indicated that forecasted traffic will reach the practical capacity of a two-lane arterial road by 2019 and will require additional capacity between Dryden Boulevard and Taunton Road.
- Improvements within the corridor are intended to accommodate future development designated in the Town Official Plan and the related growth in travel. Growth in traffic is anticipated regardless of the planned improvement. The concern regarding the potential for higher speeds has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds and volume.
- The addition of Intersection Pedestrian Signals has been recommended within the ESR at the intersection of Meadowglen Drive and Garden Street. However, full Traffic Signals are not proposed on Garden Street where they do not presently exist. Intersection pedestrian signals have been considered to assist pedestrians in safer travel across Garden Street however, it is noted that the timing and suitability of Intersection Pedestrian Signals is to be determined by the Town of Whitby.
- Brock Road and Rossland Road are under the jurisdiction of Durham Region and are not under the jurisdiction of the Town of Whitby.

Resident
Left turn lane on Willowbrook is developed only to the west – 2 property owners lose most of the boulevard leaving traffic too close to property line. There is a lot more room on the east side with backyards abutting to Garden Street. On the west side, homes are very close to the road.

- Alternative #4 was revised following PIC #2 to address resident concerns of unbalanced impacts to adjacent residents. The revised Alternative #4 now includes all left turn lanes being developed about the centerline.
- The addition of Intersection Pedestrian Signals has been recommended within the ESR at the intersection of Meadowglen Drive and Garden Street. However, full Traffic Signals are not proposed on Garden Street where they do not presently exist. Intersection pedestrian signals have been considered to assist pedestrians in safer travel across Garden Street however, it is noted that the timing and suitability of Intersection Pedestrian Signals is to be determined by the Town of Whitby.

Resident
I’ve changed my mind about the trees – I don’t mind if we lose trees as trees will grow. I prefer to know that the west side doesn’t get impacted because of trees.

- Alternative #4 was revised following PIC #2 to address resident concerns of unbalanced impacts to adjacent residents. The revised Alternative #4 now includes all left turn lanes being developed about the centerline.
- The design of proposed improvements on Garden Street will include the provision of boulevard trees. Existing trees will be preserved as much as possible through planning and mitigation measures.

Resident
Prefer Design Alternative Concept 1 – Widen about centerline. This would provide better symmetry and provide equal boulevards to both sides of the street. Would impact both sides of Garden equally. Sorry is that loses a few more trees. Please no traffic lights – as planned already.

- Alternative #4 was revised following PIC #2 to address resident concerns of unbalanced impacts to adjacent residents. The revised Alternative #4 now includes all left turn lanes being developed about the centerline.
- The design of proposed improvements on Garden Street will include the provision of boulevard trees. Existing trees will be preserved as much as possible through planning and mitigation measures.

Resident
As a resident on Greenbush Place, I am requesting to keep Garden Street as two lanes between Taunton and Dryden. This is a residential neighborhood with children that cross Garden for schooling reasons.

- The traffic analysis undertaken in this study has indicated that forecasted traffic will reach the practical capacity of a two-lane arterial road by 2019 and will require additional capacity between Dryden Boulevard and Taunton Road.
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Resident
As a Whitby Resident I think this widening of Garden is a real disappointment. It is a residential area with many children walking this street to public schools. This street is not busy currently and this will only make it busy. I think they are safety issues with widening a residential, children walking street. I decided to live in Whitby, one of the reasons being streets like Garden Street with large beautiful boulevards for walking / driving and with the beautification of the trees. One of the main concerns is the trees that have matured over the years. I do not want to live in a town that looks “city like”. I had sense of pride in Whitby and their community environmental.

- The traffic analysis undertaken in this study has indicated that forecasted traffic will reach the practical capacity of a two-lane arterial road by 2019 and will require additional capacity between Dryden Boulevard and Taunton Road.
- Improvements within the corridor are intended to accommodate future development designated in the Town Official Plan and the related growth in travel. Growth in traffic is anticipated regardless of the planned improvement. The concern regarding the potential for higher speeds has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds and volume.
- Pedestrian accommodation has been considered within this study and recommendations have been provided for future pedestrian accommodation options in crossing Garden Street as well as the inclusion of a multi-use path on the west side of Garden Street to improve pedestrian and cycling facilities within the corridor.
- The addition of Intersection Pedestrian Signals has been recommended within the ESR at the intersection of Meadowglen Drive and Garden Street. However, full Traffic Signals are not proposed on Garden Street where they do not presently exist. Intersection pedestrian signals have been considered to assist pedestrians in safer travel across Garden Street however, it is noted that the timing and suitability of Intersection Pedestrian Signals is to be determined by the Town of Whitby.
- The design of proposed improvements on Garden Street will include the provision of boulevard trees. Existing trees will be preserved as much as possible through planning and mitigation measures.

Resident
I’ve changed my mind about the trees – I don’t mind if we lose trees as trees will grow. I prefer to know that the west side doesn’t get impacted because of trees.

- The traffic analysis undertaken in this study has indicated that forecasted traffic will reach the practical capacity of a two-lane arterial road by 2019 and will require additional capacity between Dryden Boulevard and Taunton Road.
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- The design of proposed improvements on Garden Street will include the provision of boulevard trees. Existing trees will be preserved as much as possible through planning and mitigation measures.
Resident

I understand the need to widen Garden Street but I hope you remember to share the impact of the boulevard cutting – not just west side. Also, pleased that we will have no traffic lights at Meadowglen as cars pile up as it is on Meadowglen.

• Alternative #4 was revised following PIC #2 to address resident concerns of unbalanced impacts to adjacent residents. The revised Alternative #4 now includes all left turn lanes being developed about the centerline.
• The addition of Intersection Pedestrian Signals has been recommended within the ESR at the intersection of Meadowglen Drive and Garden Street. However, full Traffic Signals are not proposed on Garden Street where they do not presently exist. Intersection pedestrian signals have been considered to assist pedestrians in safer travel across Garden Street however, it is noted that the timing and suitability of Intersection Pedestrian Signals is to be determined by the Town of Whitby.

Resident

Prefer Alternative Concept #1 – Widen about Centerline

This would provide better symmetry and provide equal boulevards to both sides of the street and would impact both sides of Garden equally. If this means we loose more trees so be it. Please no traffic lights as currently planned.

• Alternative #4 was revised following PIC #2 to address resident concerns of unbalanced impacts to adjacent residents. The revised Alternative #4 now includes all left turn lanes being developed about the centerline.
• The addition of Intersection Pedestrian Signals has been recommended within the ESR at the intersection of Meadowglen Drive and Garden Street. However, full Traffic Signals are not proposed on Garden Street where they do not presently exist. Intersection pedestrian signals have been considered to assist pedestrians in safer travel across Garden Street however, it is noted that the timing and suitability of Intersection Pedestrian Signals is to be determined by the Town of Whitby.

Resident

Very concerned about safety at Cork Drive and Garden Street.

• High volume of cars using Cork Drive as a turn around street. When Garden Street is made to 4 lanes, I am worried about speed.

• A number of options have been considered to assist in mitigating the current traffic concerns on Cork Drive raised at PIC #1. Upon review and with input from Town staff it was found that the preferred mitigation for existing traffic concerns on Garden Street is to implement a median at the intersection of Cork Drive and Garden Street in an attempt to reduce vehicle speeds and discourage U-Turns on Cork Drive.
• It is also recommended that the Town of Whitby monitor Cork Drive under Town traffic claming policies to determine if any further mitigation is necessary on Cork Drive.
• Improvements within the corridor are intended to accommodate future development designated in the Town Official Plan and the related growth in travel. Growth in traffic is anticipated regardless of the planned improvement. The concern regarding the potential for higher speeds has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds and volume.

Resident

A right in / right out intersection is a preferred intersection for Cork

Send letter to each house on Cork to get feedback.

• A number of options have been considered to assist in mitigating the current traffic concerns on Cork Drive raised at PIC #1. Upon review and with input from Town staff it was found that the preferred mitigation for existing traffic concerns on Garden Street is to implement a median at the intersection of Cork Drive and Garden Street in an attempt to reduce vehicle speeds and discourage U-Turns on Cork Drive.
• It is also recommended that the Town of Whitby monitor Cork Drive under Town traffic claming policies to determine if any further mitigation is necessary on Cork Drive.
• During the review of the option to implement a right-in / right-out configuration or a one-way street configuration were found that introducing restrictions to turning movements at the intersection will have significant impacts to residents within the subdivision immediately east of Garden Street as Cork Drive is the only access from Garden Street to the east between Taunton Road and Dryden Boulevard. Additionally, the turning restrictions will likely divert significant traffic volume to other subdivision access points that do not have traffic control measures and serve to only relocate the traffic issue elsewhere. This option may also impact emergency access as it may result in limiting emergency service access to the area or eliminate alternative access routes. This option was found not to be preferred.

Resident

At present the need for this project is not existent. I agree that widening Garden Street would make sense in case the traffic would become very heavy but not before that.

Please don’t forget that this is a quiet, student friendly area with lots of pedestrian crossings. A 4 lane street promotes vehicle speeding.

• The traffic analysis undertaken in this study has indicated that forecasted traffic will reach the practical capacity of a two-lane arterial road by 2019 and will require additional capacity between Dryden Boulevard and Taunton Road.
• Improvements within the corridor are intended to accommodate future development designated in the Town Official Plan and the related growth in travel. Growth in traffic is anticipated regardless of the planned improvement. The concern regarding the potential for higher speeds has been noted. The design of any proposed improvements will consider alternatives to manage vehicle speeds and volume.
• Pedestrian accommodation has been considered within this study and recommendations have been provided for future pedestrian accommodation options in crossing Garden Street as well as the inclusion of a multi-use path on the west side of Garden Street to improve pedestrian and cycling facilities within the corridor.
Town of Whitby

Notice of Study Completion

Schedule B - Municipal Class Environmental Assessment

Garden Street (Dryden Boulevard to Taunton Road)

The Study
The Town of Whitby has completed a Class Environmental Assessment (Class EA) Study for Garden Street between Dryden Boulevard and Taunton Road. The objective of the project was to study the existing and future transportation needs on Garden Street to accommodate the anticipated growth in this area.

The Study was carried out in accordance with the planning and design process for 'Schedule B' projects as outlined in the Municipal Engineers Association "Municipal Class Environmental Assessment," (2000, as amended in 2010), which is approved under the Ontario Environmental Assessment Act.

Project File Report
A Project File Report was prepared to document the entire study process including background information, public and stakeholder consultation and alternatives evaluated for this study. The Project File Report will be placed on public record for a 30-day review period which begins on Thursday, February 23, 2017. The Project File Report will be available for review at the following locations:
The Project File Report is also available on the Town’s website at:

Further information can also be obtained by contacting the Town of Whitby Public Works Department at 905.430.4307.

Interested persons are encouraged to review this document and provide written comments to the Town of Whitby by Friday, March 31, 2017. Comments should be directed to the Town’s Project Engineer. If concerns regarding this project cannot be resolved in discussions with the Town, a person/party may request that the Minister of the Environment and Climate Change make an order for the project to comply with Part II of the *Ontario Environmental Assessment Act* (referred to as a “Part II Order”). Requests must be received by the Minister, at the address below, by Friday, March 31, 2017. A copy of the request must also be sent to the Town’s Project Engineer and the Town Clerk at the addresses indicated below:

**Glen R. Murray**
Minister of Environment and Climate Change
77 Wellesley Street West
11th Floor, Ferguson Block
Toronto, Ontario M7A 2T5

**Horace Look - Project Engineer**
Town of Whitby
575 Rossland Road East
Whitby, Ontario L1N 2M8

**Chris Harris - Town Clerk**
Town of Whitby
575 Rossland Road East
Whitby, Ontario L1N 2M8

If there are no Part II orders received by Friday, March 31, 2017, the Town may proceed with design and construction as outlined in the Project File Report. The construction work for Garden Street and Cork Drive is currently anticipated to be in 2019/2020 subject to the completion of detailed design, utility relocations and Council approvals.

Personal information is collected under the authority of Section 11 of the *Municipal Act, 2001* and will be used for information purposes only for this project. Questions regarding the collection and use of personal information should be directed to the Town of Whitby Freedom of Information and Protection of Privacy Office, Telephone 905.430.4300.

This Notice was first issued on Thursday, February 23, 2017.
APR - 3 2012

Horace Look, P.Eng.
Project Engineer
Town of Whitby
575 Rossland Rd. East
Whitby, ON L1N 2M8

Re: Town of Whitby
Notice of Study Commencement and Public Information Centre #1
Municipal Class EA Study Garden Street (Dryden Boulevard to Taunton Rd.)

Dear Mr Look:

Thank you for informing the Ministry of Aboriginal Affairs (MAA) of your project. Please note that MAA treats all letters, emails, general notices, etc. about a project as a request for information about which Aboriginal communities may have rights or interests in the project area.

As a member of the government review team, the Ministry of Aboriginal Affairs (MAA) identifies First Nation and Métis communities who may have the following interests in the area of your project:

- reserves;
- land claims or claims in litigation against Ontario;
- existing or asserted Aboriginal or treaty rights, such as harvesting rights; or
- an interest in your project’s potential environmental impacts.

MAA is not the approval or regulatory authority for your project, and receives very limited information about projects in the early stages of their development. In circumstances where a Crown-approved project may negatively impact a claimed Aboriginal or treaty right, the Crown may have a duty to consult the Aboriginal community advancing the claim. The Crown often delegates procedural aspects of its duty to consult to proponents. Please note that the information in this letter should not be relied on as advice about whether the Crown owes a duty to consult in respect of your project, or what consultation may be appropriate. Should you have any questions about your consultation obligations, please contact the appropriate ministry.

You should be aware that many First Nations and/or Métis communities either have or assert rights to hunt and fish in their traditional territories. For First Nations, these territories typically include lands and waters outside of their reserves.
In some instances, project work may impact aboriginal archaeological resources. If any Aboriginal archaeological resources could be impacted by your project, you should contact your regulating or approving Ministry to inquire about whether any additional Aboriginal communities should be contacted. Aboriginal communities with an interest in archaeological resources may include communities who are not presently located in the vicinity of the proposed project.

With respect to your project, and based on the brief materials you have provided, we can advise that the project appears to be located in an area where First Nations may have existing or asserted rights or claims in MAA’s land claims process or litigation, that could be impacted by your project. Contact information is below:

<table>
<thead>
<tr>
<th>Alderville First Nation</th>
<th>Chief James R. Marsden</th>
</tr>
</thead>
<tbody>
<tr>
<td>11696 Second Line</td>
<td>(905) 352-2011</td>
</tr>
<tr>
<td>P.O. Box 46</td>
<td>(Fax) 352-3242</td>
</tr>
<tr>
<td>ROSENEATH, Ontario</td>
<td><a href="mailto:jbmarsden@eagle.ca">jbmarsden@eagle.ca</a></td>
</tr>
<tr>
<td>K0K 2X0</td>
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<tr>
<th>Curve Lake First Nation</th>
<th>Chief Keith Knott</th>
</tr>
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<tbody>
<tr>
<td>22 Winookedea Road</td>
<td>(705) 657-8045</td>
</tr>
<tr>
<td>CURVE LAKE, Ontario</td>
<td>(Fax) 657-8708</td>
</tr>
<tr>
<td>K0L 1R0</td>
<td><a href="mailto:chief@curvelakefn.com">chief@curvelakefn.com</a></td>
</tr>
<tr>
<td></td>
<td><a href="mailto:executivesecretary@curvelake.com">executivesecretary@curvelake.com</a></td>
</tr>
</tbody>
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<tr>
<th>Hiawatha First Nation</th>
<th>Council Chair Greg Cowie</th>
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<tbody>
<tr>
<td>123 Paudash Street</td>
<td>(705) 295-4421</td>
</tr>
<tr>
<td>R.R. #2</td>
<td>(Fax) 295-4424</td>
</tr>
<tr>
<td>KEENE, Ontario</td>
<td><a href="mailto:chief@hiawathafn.ca">chief@hiawathafn.ca</a></td>
</tr>
<tr>
<td>K0L 2G0</td>
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<tr>
<th>Mississaugas of Scugog Island</th>
<th>Chief Tracy Gauthier</th>
</tr>
</thead>
<tbody>
<tr>
<td>22521 Island Road</td>
<td>(905) 985-3337</td>
</tr>
<tr>
<td>PORT PERRY, Ontario</td>
<td>(Fax) 985-8828</td>
</tr>
<tr>
<td>L9L 1B6</td>
<td><a href="mailto:Tgauthier@scugofirstnation.com">Tgauthier@scugofirstnation.com</a></td>
</tr>
</tbody>
</table>
For your information, MAA notes that the following Métis community may be interested in your project given the proximity of their community to the area of the proposed project or because of your project’s potential environmental impacts:

| Peterborough and District Wapiti Métis Council  
| RR 1 Fraserville, ON K0L 1V0 | Terry Bloom, Interim President  
| (705) 944-8913  
| e-mail: wapitimetiscouncil@hotmail.ca |
| Oshawa & Durham Region Métis Council  
| 1288 Rilson Road North, Suite 356 Oshawa, ON L1G 8B2 | Rob Pilon, President  
| (905) 725-1635  
| e-mail: wpilon5188@rogers.com  
| website: www.oshawadurhammetis.com |

Please copy any correspondence to Peterborough and District Wapiti Métis Council and the Oshawa & Durham Region Métis Council to the Métis Nation of Ontario. Contact information is below:

| Métis Nation of Ontario Head Office  
| 500 Old St. Patrick Street, Unit D  
| Ottawa, Ontario, K1N 9G4 | Métis Consultation Unit  
| Fax: (613) 725-4225 |

Through Aboriginal Affairs and Northern Development (AANDC), the Government of Canada sometimes receives claims that Ontario does not receive, or with which Ontario does not become involved. AANDC’s Consultation and Accommodation Unit (CAU) established a “single window” to respond to requests for baseline information held by AANDC on established or potential Aboriginal Treaty and rights. To request information from the Ontario Subject Matter Expert send an email to: UCA-CAU@aadnc-aandc.gc.ca

Additional details about your project or changes to it that suggest impacts beyond what you have provided to date may necessitate further consideration of which Aboriginal communities may be affected by or interested in your undertaking. If you think that further consideration may be required, please bring your inquiry to whatever government body oversees the regulatory process for your project. MAA does not wish to be kept informed of the progress of the project; please be sure to remove MAA from the mailing list.

The information upon which the above comments are based is subject to change. First Nation or Métis communities can make claims at any time, and other developments can occur that could result in additional communities being affected by or interested in your undertaking.

Yours truly,

[Signature]

Wendy Cornet  
Manager, Consultation Unit  
Aboriginal Relations and Ministry Partnerships Division
February 19, 2013

Horace Look
575 Rossland Road East
Whitby, Ontario L1N 2M8

Dear Horace Look,

RE: Notice of Public Information Centre No. 2 Garden Street (Dryden Boulevard to Taunton Road)

We would like to acknowledge receipt of your correspondence, which we received on 1/21/2013 regarding the above noted project.

As you may be aware, the area in which your project is proposed is situated within the Traditional Territory of Curve Lake First Nation. Our First Nation’s Territory is incorporated within the Williams Treaty Territory and is the subject of a claim under Canada’s Specific Claims Policy. We strongly suggest that you provide Karry Sandy-Mackenzie, Williams Treaty First Nation Claims Coordinator, 8 Creswick Court, Barrie, ON L4M 2S7, with a copy of your proposal as your obligation to consult to also extend to the other First Nations of the Williams Treaty.

Although we have not conducted exhaustive research nor have we the resources to do so, Curve Lake First Nation Council is not currently aware of any issues that would cause concern with respect to our Traditional, Aboriginal and Treaty rights.

Please note that we have particular concern for the remains of our ancestors. Should excavation unearth bones, remains or other such evidence of a native burial site or any Archaeological findings, we must be notified without delay. In the case of a burial site, Council reminds you of your obligations under the Cemetery’s Act to notify the nearest First Nation Government or other community of Aboriginal people which is willing to act as a representative and whose members have a close cultural affinity to the interred person. As I am sure you are aware, the regulations further state that the representative is needed before the remains and associated artifacts can be removed. Should such a find occur, we request that you contact our First Nation immediately. Curve Lake First Nation also has available, trained Archaeological Liaisons who are able to actively participate in the archaeological assessment process as a member of a field crew, the cost of which will be borne by the proponent.

If any new, undisclosed or unforeseen issues should arise, that has potential for anticipated negative environmental impacts or anticipated impacts on our Treaty and Aboriginal rights we require that we be notified regarding these as well.

Thank you for recognizing the importance of consultation and respecting your duty to consult obligations as determined by the Supreme Court of Canada.

Should you have further questions or if you wish to hire a liaison for a project, please feel free to contact Melissa Dokis or Krista Coppaway at 705-657-8045x222 or dutytoconsult@curvelakefn.ca.

Yours sincerely,

[Signature]

Chief Phyllis Williams
Curve Lake First Nation

C.C. Ray Bacque, Consultant Project Manager, Cole Engineering
Stage 1 Background Research and Property Inspection

Garden Street Municipal Class Environmental Assessment
Dryden Boulevard to Taunton Road
Town of Whitby, Regional Municipality of Durham

Prepared for:

COLE Engineering Group Ltd
70 Valleywood Drive
Markham, ON L3R 4T5
Tel: (905) 940-6161
Fax: (905) 940-2064
Email: rbacquie@coleengineering.ca
Web: www.coleengineering.ca

Archaeological Licence PO94 (Lisa Merritt)
MTC PIF PO94-079-2011
ASI File :1EA 005

August 31, 2011
Stage 1 Background Research and Property Inspection

Garden Street Municipal Class Environmental Assessment
Dryden Boulevard to Taunton Road
Town of Whitby, Durham Regional Municipality

EXECUTIVE SUMMARY

Archaeological Services Inc. (ASI) was contracted by Cole Engineering Group Ltd to conduct a Stage 1 Background Research and Property Inspection for the widening of Garden Street Environmental Assessment. The project involves the widening of Garden Street from Dryden Boulevard to Taunton Road in accordance with the Municipal Class Environmental Assessment (Schedule B) process.

The Stage 1 background research determined that two archaeological sites have been registered within a 1 km of the Garden Street study area. A review of the archaeological and historical context of the study area also suggests that it has potential for the identification of Aboriginal and Euro-Canadian archaeological resources.

Based on the results of the property inspection, it was determined that Garden Street study area has been heavily disturbed by road construction, utility installation and residential development, and therefore does not retain potential for archaeological potential.

In light of these results, ASI makes the following recommendations:

1. The Garden Street study area does not retain archaeological potential due to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. Additional archaeological assessment is not required; and

2. Should the proposed Garden Street road widening project require new lands beyond the assessed study area, then additional Stage 1 archaeological assessment must be conducted to determine the presence or absence of archaeological potential. This work will be done in accordance with the Ministry of Tourism and Culture’s 2011 Standards and Guidelines for Consultant Archaeologists.
ARCHAEOLOGICAL SERVICES INC.
ENVIRONMENTAL ASSESSMENT DIVISION

PROJECT PERSONNEL

Senior Project Manager: Lisa Merritt, MSc [MTC license P094]
Senior Archaeologist, Assistant Manager, Environmental Assessment Division

Project Director (licensee): Lisa Merritt

Project Manager/Archaeologist: Sarah Jagelewski, Hon. BA
Research Archaeologist

Project Coordinator: Sarah Jagelewski

Field Director: Cailin Lacy, Hon. BA [MTC license R303]
Staff Archaeologist

Report Writer and Graphics: Heidy Schopf, MES
Research Archaeologist

Graphics Jonas Fernandez, MSc
GIS Technician
Heidy Schopf

Report Reviewer: Robert Pihl [MTC license P057]
Partner and Senior Archaeologist, Manager, Environmental Assessment Division
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1.0 PROJECT CONTEXT

Archaeological Services Inc. (ASI) was contracted by Cole Engineering Group Ltd to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) for the Garden Street Environmental Assessment. The project involves the widening of Garden Street from Dryden Boulevard to Taunton Road.

This assessment was conducted under the project management of Sarah Jagelewski and the project direction of Lisa Merritt (PIF P094-079-2011), both of ASI.

The objectives of this report are:

- To provide information about the geography, history, previous archaeological fieldwork and current land condition of the study area;
- To evaluate in detail the archaeological potential of the study area which can be used, if necessary, to support recommendations for Stage 2 Archaeological Assessment for all or parts of the property; and
- To recommend appropriate strategies for Stage 2 Archaeological Assessment, if necessary.

This report describes the Stage 1 assessment that was conducted for this project and is organized as follows: Section 1.0 summarizes the background study that was conducted to provide the archaeological and historical context for the project study area; Section 2.0 addresses the property inspection that was undertaken to document its general environment, current land use history and conditions. Section 3.0 analyses the characteristics of the project study area and evaluates its archaeological potential; Section 4.0 provides recommendations for the next assessment steps; and the remaining sections contain other report information that is required by the Ministry of Tourism and Culture’s (MTC) 2011 Standards and Guidelines for Consultant Archaeologists (Standards and Guidelines), e.g., advice on compliance with legislation, works cited, mapping and photo-documentation.

1.1 Development Context

All work has been undertaken as required by Environmental Assessment Act, RSO (1980) and regulations made under the Act, and are therefore subject to the requirements of the Municipal Class Environmental Assessment (Schedule B) process. All activities carried out during this assessment were completed in accordance with the terms of the Ontario Heritage Act (2005) and the Standards and Guidelines.

Permission to access the study area and to carry out all activities necessary for the completion of the assessment was granted by Cole Engineering Group Ltd on May 27, 2011.

1.2 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within the vicinity of the Garden Street study area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information will be consulted to provide information about previous archaeological research in the
study area; the site record forms for registered sites housed at the MTC; published and unpublished
documentary sources; and the files of ASI.

The Stage 1 property inspection was conducted by Caitlin Pearce (R303), ASI, on August 23, 2011 in
order to gain first-hand knowledge of the geography, topography, and current conditions of the Garden
Street study area. It was a visual inspection only and did not include the excavation or collection of
archaeological resources.

1.2.1 Previous Archaeological Research

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites
Database (OASD) maintained by the MTC. This database contains archaeological sites registered within
the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude
and longitude. A Borden block is approximately 13 km east to west, and approximately 18.5 km north to
south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered
sequentially as they are found. The study area under review is located in Borden blocks ALGr.

According to the OASD (email communication, Robert von Bitter, MTC Data Coordinator, August 9,
2011), two archaeological sites have been registered within 1 km of the study area.

<table>
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<td>-</td>
<td>Euro-Canadian</td>
<td>Homestead</td>
<td>ASI 1994</td>
</tr>
<tr>
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<td>Hannon</td>
<td>Euro-Canadian</td>
<td>Homestead</td>
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</table>

The ALGr-69 site is located at the northwest corner of Rossland Road and Brock Street North on top of a
ridge adjacent to the road allowance. Four artifacts of Euro-Canadian origin were located at the site.
Martin Cooper researched the site in 1993 (ASI 1994), and no further work was recommended.

1.2.2 Geography

In addition to the known archaeological sites, the state of the natural environment is an important
predictor of archaeological potential. Accordingly, a description of the physiography and soils are briefly
discussed for the study area.

Section 1.3.1 of the Standards and Guidelines stipulates that primary water sources (lakes, rivers, streams,
creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.),
ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach
ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of
drained lakes or marshes, cobbles beaches, etc.), as well as accessible or inaccessible shorelines (high
bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are
characteristics that indicate archaeological potential.
Water has been identified as the major determinant of site selection and the presence of potable water is
the single most important resource necessary for any extended human occupation or settlement. Since
water sources have remained relatively stable in Ontario after the Pleistocene era, proximity to water can
be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from
water has been one of the most commonly used variables for predictive modeling of site location.
Section 1.3.1 of the Standards and Guidelines also discusses other geographic characteristics that can indicate archaeological potential: elevated topography (eskers, drumlins, large knobs, plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings. Resource areas, including; food or medicinal plants (migratory routes, spawning areas) are also considered characteristics that indicate archaeological potential.

The Garden Street study area is located within the Iroquois Plain physiographic region of Southern Ontario (Chapman and Putnam 1984). The Iroquois Plain region is the former lake bottom of glacial Lake Iroquois, and as such, the terrain generally consists of sand plains dissected by a series of glacial ravines carrying creeks that drain into existing Lake Ontario. Between the two shorelines, ancient and modern, the surviving bed of Lake Iroquois is a slightly sloping plain with an average width of about 3.2 km. Across the Regional Municipality of Durham the Iroquois Plain has a fairly consistent pattern with the old shoreline well marked by bluffs or gravel bars. The study area features sand as its single primary material, which is a typical material found in the Durham region of the Iroquois Plain (Chapman and Putnam 1984:193; For surficial geology see Figure 2).

The study area features three soil types: Darlington loam, Tecumseth sandy loam, and Granby sandy loam (Olding et al 1956). Darlington loam and Grandby sandy loam come from the same great group. The Darlington loam has good drainage and its topographic characteristics include undulating to rolling and slightly stony. The Tecumseth sandy loam has imperfect drainage and its topography is nearly level with very few stones. Finally, Granby sandy loam has poor drainage and its topographic characteristics are depressional with very few stones (For soil drainage see Figure 3).

In terms of water sources, Pringle Creek is located close to the study area on the east, and Lynde Creek is located to the west. Both creeks drain from the Oak Ridges Moraine to Lake Ontario and are a part of the Lynde Creek watershed (Ontario Streams 2009).

1.3 Historical Context

This section provides a brief summary of historic research for the study area. A review of available primary and secondary source material was undertaken to produce a contextual overview, including a general description of settlement and historic land use. Historically, the study area was located between Lots 24 and 25, Concession III and was bordered on the north by Lots 24 and 25, Concession IV in the former County of Ontario.

1.3.1 Contact Period

The contact period for the north shore of Lake Ontario begins in the early 17th century with the arrival of French explorers, traders and missionaries. The ancestral Huron-Wendat are thought to have been the main group who controlled the region and the presence of European trade goods is first evident in the mid-16th century where European artifacts start to make an appearance at some ancestral Huron-Wendat sites. The occurrence of European artifacts on Huron-Wendat sites increases towards the end of the 16th century as the interaction between the Huron-Wenda and French explorers, traders, and missionaries continued to increase in frequency and intensity. The Huron were eventually dispersed by the Five
Nations Iroquois in 1649 at which point the Seneca, based in New York State, mainly took over control of
the region (Ramsden 1990).

By 1600, most, if not all, of the Aboriginal communities located on the north shore of Lake Ontario had
moved inland, although the Five Nations Iroquois, and in particular the Seneca, were still using the
central north shore of Lake Ontario for hunting, fishing, and for participation in the fur trade. The main
settlements were located near the mouths of the Humber and Rouge Rivers, two branches of the Toronto
Carrying Place, which was the route that linked Lake Ontario to the upper Great Lakes through Lake
Simcoe.

The first Europeans to arrive in the area were transient merchants and traders from France and England,
who followed Aboriginal pathways and set up trading posts at strategic locations along the well-traveled
river routes. All of these occupations occurred at sites that afforded both natural landfalls for Great Lakes
traffic and convenient access, by means of the various waterways and overland trails, into the hinterlands.
Chief among these was Fort Rouillé, a small, wooden trading post on the shore of Lake Ontario east of
the Humber River, which was built for the purpose of intercepting Indian traders before they could cross
the lake to trade with the English on the south shore. Jean Baptiste Rosseau established another
substantial trading post at the mouth of the Humber. Early transportation routes followed existing
aboriginal trails, both along the lakeshore and adjacent to various creeks and rivers with the primary
North-South route being the Carrying Place Trail, which connected Lake Ontario, via the Humber River
and other waterways and trails, to Georgian Bay (ASI 2006).

Beginning in the mid-18th century, the Mississaugas replaced the Seneca as the controlling Aboriginal
group in the region since the Iroquois confederacy had overstretched their territory between the 1650s and
1670s (Williamson 2008). The Iroquois could not hold the region and agreed to form an alliance with the
Mississaugas and share hunting territories with them. In the late 1690s, the Mississaugas established their
settlement of Teiaiagon on the Humber River, which sat astride the most important route of the Toronto
Passage. This route connected Lake Ontario with waterways and trails to Georgian Bay and the north and
gave the Mississaugas a strategic trading position (Williamson 2008). The Mississaugas traded with both
the British and the French in order to have wider access to European materials at better prices, and used
their strategic position on the Humber to act as trade intermediaries between the British and tribes in the
north.

1.3.2 Township Survey and Settlement

Whitby Township was first laid out in the 1790s with its first survey conducted in 1791 (Armstrong 1985:
148). Settlers started to arrive in the area in 1794 and the first settler is said to have been Benjamin
Wilson, a Loyalist from Vermont, who settled along the lakeshore east of Oshawa (Farewell 1907: 18).
Wilson’s house, built on Lot 4 in the Broken Front, was an early landmark that was depicted on several
early township surveys and patent plans.

After its initial survey, Whitby was quickly settled by a mixture of Loyalists, disbanded troops, and
emigrants from the United States, the United Kingdom, and Ireland. Whitby was noted for its “particular
advantages” due to its proximity to the seat of government (Boulton 1805: 90). By 1846, Whitby was
described as a “well settled township … [where] farms are generally well cleared and cultivated, and in
good order” (Smith 1846). By 1851, Whitby had an established reputation as “an exceedingly fine
township” and was considered the first township in the County based on the value of property and
agricultural production (Smith 1851: 26).
Whitby and Oshawa, the two major settlements in the county, were fully established by the mid-1800s. These communities were advantageously located where watersheds (such as Lynde Creek) were crossed by the Kingston Road. Whitby, designated as the County Town in 1852, began to substantially develop in the mid-nineteenth century. Its proximity to the harbour and the laying of the Grand Trunk Railway in the 1850s sparked a boom period in the Town of Whitby that would last for the remainder of the nineteenth century. During the 1860s, land prices soared and large sprawling estates were constructed. By the 1870s, the Town of Whitby emerged as an ideal financial and commercial centre; in 1871 the Dominion Bank established its first branch outside of Toronto in Whitby, and the Canadian Clock Company opened a large factory in 1872.

By the beginning of the twentieth century, development in neighbouring City of Oshawa increased and as a result, the Town of Whitby did not experience substantial growth or commercial activity. By 1960, however, fast-paced residential development emerged in both the City of Oshawa and the Town of Whitby, with the construction of the Highway 401.

1.3.3 Historic Map Review

Tremaine’s 1860 Map of the County of Ontario and the 1877 Illustrated Historical Atlas of the County of Ontario were reviewed to determine the potential for the presence of historical archaeological resources within the study area during the nineteenth century.

Historically, the study area was located between Lots 24 and 25, Concession III and was bordered on the north by Lots 24 and 25, Concession IV in the former County of Ontario (Figures 4 and 5). The historic mapping indicates that Garden Street and Taunton Road are historically surveyed roads and that a few historic features are located in the study area. In addition to a few farmsteads, the 1877 map depicts a rail line running north on the east side of the study area. Details summarizing historic property owners and features are summarized in Table 2.

In addition to the historic atlases, the 1930 historic topographic map of Oshawa was examined to determine any major changes in the study area during the early twentieth century (Figure 6). The 1930 map reveals that a slight intensification of settlement occurred around the intersection of Taunton Road and Garden Street since two more farmsteads are depicted on the later mapping. Other than the addition of these farmsteads, little development is depicted in the study area during the early 1900s.

| Table 2: Summary of Property Owners and Historic Features along the Study Area |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|
| Con | Lot | Property Owners | Historic Features |
| | | 1860 | 1877 | 1860 | 1877 |
| III | 24 | Isabella Dow, Thomas Dow | J. Fitzpatrick | - | Farmstead |
|     | 25 | John A. Donaldson | Dr. Ornston | - | - |
| IV  | 24 | Thomas Dow | W. Patterson | Farmstead |
|     | 25 | Jas. Brebner | O.R. | Farmstead |

Although numerous farmsteads are illustrated on the historic atlas maps, it should be noted that not all features of interest were mapped systematically in the Ontario series of historical atlases. Given that the atlases were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps, some features might be represented in the atlas. Moreover, not every feature of interest would have been within the scope of the atlases.
For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those which are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be captured by the basic proximity to the water model outlined in Section 1.2.2 since these occupations were subject to similar environmental constraints. An added factor, however, is the development of the network of concession roads and railroads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 m of an early settlement road, such as Garden Street, are also considered to have potential for the presence of Euro-Canadian archaeological sites.

Section 1.3.1 of the Standards and Guidelines stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries, are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the Ontario Heritage Act or a federal, provincial, or municipal historic landmark or site are also considered to have archaeological potential.

2.0 FIELD METHODS

A property inspection was conducted by Caitlin Pearce, (R303), ASI, on August 23, 2011 in order to gain first-hand knowledge of the geography, topography, and current conditions of the Garden Street study area. In addition, the archaeological potential of the study area was evaluated and mapped. A property inspection is a visual inspection only and does not include excavation or collection of archaeological resources.

In accordance with Section 1.2, Standard 1 of the Standards and Guidelines, the entire property and its periphery was inspected by random spot-checking and occurred during optimal weather conditions permitting good visibility of land features. Coverage was systematic and proceeded from north to south. Previously identified features of archaeological potential were examined, additional features of archaeological potential not visible on mapping were identified and documented as well as any features that will affect assessment strategies. Field observations are compiled onto maps of the study area in Section 7.0 (Figures 7-9) and associated photography is presented in Section 8.0 (Plates 1-11).

3.0 ANALYSIS AND CONCLUSIONS

The archaeological and historical context has been analyzed to help determine the archaeological potential of the study area. This data is presented below in Section 3.1. Results of the analysis of the property inspection are then presented for the Garden Street study area in Section 3.2.

3.1 Analysis of Archaeological Potential

Section 1.3.1 of the Standards and Guidelines lists characteristics that indicate where archaeological resources are most likely to be found, and archaeological potential is confirmed when one or more features of archaeological potential are present. The study area meets the following criteria used for determining archaeological potential:
Stage 1 Background Research and Property Inspection
Garden Street Municipal Class Environmental Assessment
Town of Whitby, Durham Regional Municipality

- Water source: primary, or secondary (i.e. Pringle Creek, Lynde Creek);
- Pockets of well-drained sandy soil (i.e. Darlington loam);
- Areas of early Euro-Canadian settlement (i.e. farmsteads); and
- Early historical transportation routes (i.e. Garden Street, Taunton Road).

These criteria characterize the study area as having potential for the identification of Aboriginal and historic archaeological resources.

3.2 Analysis of Property Inspection Results

Part of the Garden Street study area is comprised of an active right-of-way (ROW). Typically, the ROW can be divided into two areas: the disturbed ROW, and ROW lands beyond the disturbed ROW. The typically disturbed ROW extends outwards from either side of the centerline of the traveled lanes, and it includes the traveled lanes and shoulders and extends to the toe of the fill slope, the top of the cut slope, or the outside edge of the drainage ditch, whichever is furthest from the centerline. Subsurface disturbance within these lands may be considered extreme and pervasive, thereby negating any archaeological potential for such lands.

ROW construction disturbance may be found to extend beyond the typical disturbed ROW area, and this generally includes additional grading, cutting and filling, additional drainage ditches, watercourse alteration or channelization, servicing, removals, intensive landscaping, and heavy construction traffic. Areas beyond the typically disturbed ROW generally require archaeological assessment in order to determine archaeological potential relative to the type or scale of disturbances that may have occurred in these zones.

The Garden Street study area spans from Dryden Boulevard to Taunton Road. The Garden Street ROW and lands within the study area are beyond the ROW have been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. ROW disturbances in the Garden Street study area can be attributed to typical road construction, including grading and utility installation (i.e. hydro, water, and lighting) (Plates 1, 2, 4, 6-9). Commercial and residential development has also disturbed some of the adjacent landscape (Plates 3, 5, 10, 11). Due to the extent of previous disturbance, the Garden Street study area does not exhibit archaeological site potential. No further archaeological assessment is required on these lands (Figures 7-9: areas marked in yellow).

3.3 Conclusions

The Stage 1 Archaeological Assessment was conducted for the widening along Garden Street from Taunton Road to Dryden Boulevard. The assessment determined that two archaeological sites have been registered within a 1 km radius of the study area. A review of the geographic and historic context of the Garden Street area suggested that the study area has potential for the identification of Aboriginal and Euro-Canadian archaeological resources. The property inspection determined the Garden Street study area is heavily disturbed, and no archaeological potential is present in the study area.
4.0  RECOMMENDATIONS

In light of the results of the background research and property inspection undertaken for the Stage 1 Archaeological Assessment of the Garden Street road widening project, ASI makes the following recommendations:

1. The Garden Street study area does not retain archaeological potential due to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources (Figures 7-9: areas highlighted in yellow). Additional archaeological assessment is not required; and

2. Should the proposed Garden Street road widening project require new lands beyond the assessed study area, then additional Stage 1 archaeological assessment must be conducted to determine the presence or absence of archaeological potential. This work will be done in accordance with the MTC’s 2011 Standards and Guidelines for Consultant Archaeologists.

Notwithstanding the results and recommendations presented in this study, Archaeological Services Inc. notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the Ministry of Tourism and Culture should be immediately notified.

5.0  ADVICE ON COMPLIANCE WITH LEGISLATION

ASI advises compliance with the following legislation:

- This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, RSO 1990, c 0.18. The report is reviewed to ensure that the licensed consultant archaeologist has met the terms and conditions of their archaeological licence, and that the archaeological fieldwork and report recommendations ensure the conservation, preservation and protection of the cultural heritage of Ontario;

- It is an offence under Sections 48 and 69 of the Ontario Heritage Act for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the Ontario Heritage Act.

- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the Ontario Heritage Act; and

remains must notify police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

The documentation related to this archaeological assessment will be curated by Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner(s), the Ontario Ministry of Tourism and Culture, and any other legitimate interest groups.

6.0 WORKS CITED

Archaeological Services Inc. (ASI)

2006 Historical Overview and Assessment of Archaeological Potential Don River Watershed, City Of Toronto. Draft on file with the City of Toronto.

Armstrong, Frederick H.

Boulton, D’Arcy

Beers, J.H. & Co

Chapman, L. J. and F. Putnam

Farewell, J.E.
1907 County of Ontario: A Short Sketch of its Settlement, Physical Features and Resources with Brief Historical Notes as to the early settlement of its Town, Villages, and Townships and their progress. Gazette-Chronicle Press. Whitby, Ontario.

Ministry of Tourism and Culture


Ministry of Transportation

Municipal Engineers Association
2007 Municipal Class Environmental Assessment
Olding, A.B., Wicklund, R.E. and N.R. Richards

Ontario Streams

Ramsden, Peter G.

Smith, W.H.


Tremaine, George C.

Town of Whitby

Williamson, R.
7.0 MAPS

**Figure 1:** Location of the study area

*Base Map: NTS Sheet 30 M/15 (Oshawa)*
Figure 3: Soil drainage in the study corridor
Figure 4: The study area overlaid on Tremaine’s 1860 Map of Ontario County
Base Map: Tremaine’s Map of the County of Ontario (1860)
Figure 5: The study area overlaid on the 1877 map of Ontario County
Base Map: Illustrated Historical Atlas of the County of Ontario (Beers & Co 1877)
Figure 6: The study area overlaid on the 1930 historic topographic map of Oshawa
Figure 8: Garden Street (Sheet 2) - Results of Stage 1 Archaeological Assessment
Figure 9: Garden Street (Sheet 3) - Results of Stage 1 Archaeological Assessment
8.0 IMAGES

Plate 1: West-southwest view across intersection of Garden St and Taunton Rd. All disturbed and no potential.

Plate 2: South-southeast view of Garden Street. All disturbed and no potential.

Plate 3: Northwest view across Garden Street towards Taunton Rd. All disturbed and no potential.

Plate 4: South-southeast view along Garden Street. ROW is disturbed and landscaped. No Potential.

Plate 5: Northwest view along Garden Street. Disturbed ROW, landscaping, and residential development. No potential.

Plate 6: South-southeast view along Garden Street. Disturbed ROW, landscaping, and buried utility lines. No potential.
Plate 7: Close up of buried utilities located in the Garden St ROW.

Plate 8: North-northwest view along Garden St. Disturbed ROW and landscaped/graded lawn. No potential.

Plate 9: South-southeast view along Garden St. Disturbed ROW and landscaped/graded lawn. No potential.

Plate 10: North-northwest view across Garden St. Disturbed ROW and landscaping. Residential development beyond ROW. No potential.

Plate 11: South-southeast view along Garden St towards Dryden Blvd. Disturbed ROW, landscaping and residential development. No potential.
September 7, 2011

Town of Whitby
575 Rossland Road East
Whitby, Ontario L1N 2M8

Attention: Mr. Horace Look

Re: Tree Inventory and Assessment
Garden Street Widening Class EA
Town of Whitby
Project No. 12230

In support of the Class EA for the widening of Garden Street between Taunton Road and Dryden Boulevard, a tree inventory was completed on August 13, 2012. The trees were identified (i.e., species), mapped on a supplied topographic survey, measured (diameter-at-breast-height), and assessed with respect to condition/health. Suitability for transplant was also assessed.

Tree Inventory

Tree location maps are provided in Attachment A and the associated tree inventory list in Attachment B. All trees were physically tagged with an identification number. These tag numbers are used in both attachments.

During the tree inventory survey, a total of 357 trees consisting of 15 species were identified. Of the trees inventoried, 20% were native and the remaining 80% were non-native species. Only five of the 15 inventoried species were native. The trees varied in age from approximately five to 20+ years with 71% of the trees observed to be in good condition. Species included in the attached table consist of Norway Maple, Locust, Horsechestnut, Red Pine, Crabapple, Ash, Silver Maple, Spruce Cultivar, Ginkgo, Maple Cultivar (Amur), Maple Cultivar, Basswood, Turkish Hazel, Oak, Greenspire Linden and Cherry Cultivar.

Transplanting Guidelines

The success of tree transplants relies upon the size, age, species and health of the tree, as well as the time of year in which it is completed. The smaller the tree, the greater success it has in surviving transplantation. It is noted that for every 2.5 cm increase in DBH, an additional year is needed for the tree to recover and return to its natural growth cycles (Jackson et al., 1998). The inventory list (Attachment B) includes an assessment of tree transplantability. Disregarding other criteria, only trees up to 10 cm DBH are recommended for transplant. Trees that are 10 to 15 cm DBH are more difficult to transplant due to the size of root ball required for excavation (see guidelines below), and they require a longer recovery period following transplant.
Jackson et al. (1998) provide a list of species and an evaluation of transplant success for each. This information, in part, was used to assess transplantability in the inventory list.

Transplanting causes stress. Therefore, if a tree's health is in decline then there is less likelihood that transplanting will be successful.

The most successful season for transplanting is early spring after the ground thaws but before the buds start to swell. Trees can be transplanted in the fall, but it must be done immediately after leaf drop and before the ground freezes. Outside of these seasons, potential injury to the transplanted trees is greatly increased and therefore not recommended.

Non-native species were not considered for transplant as they may have negative impacts on the natural environment and biodiversity. Of the 357 trees inventoried, 60 were identified as being candidates for transplanting; 25 were considered to be potential candidates for transplanting; and 272 were noted as being non-native and/or too large or unhealthy for transplanting.

The following is a list of guidelines to consider with regards to excavating, transplanting and post-transplant maintenance:

- It is suggested to water the trees for 2 to 3 days prior to excavation to ensure the root system stays wet.
- Use a sharp spade to make sure the roots are cut clean.
- Ensure that a soil ball is attached to the roots. The size of the soil/root ball should increase in radius 30 cm for every 3 cm increase in DBH.
- Ideally a trench at least 60 cm in depth should be dug around the tree to make certain that the spade can cut the roots at a 45 degree angle and cleanly cut them from underneath the tree before it is lifted out.
- The trees should be planted as soon as possible taking care to keep the soil ball moist, and protected with burlap if planting cannot be done immediately.
- During transit and storage they should be kept out of direct sunlight, and protected from wind and temperature extremes.
- The planting pits should be 2 to 3 times wider than the soil ball, pre-watered and planted at the same depth and orientation as in its previous location. No fertilizer or manure should be mixed with the fill soil.
- Initially the newly transplanted trees should be thoroughly watered, followed by a deep watering into the roots every 10 to 14 days whether by rain or hand watering.
- Install organic mulch 10 cm deep around the tree leaving a 10 cm mulch-free area around the trunk.
- Prune insect-infested, dead or diseased limbs from the tree following transplant as required.
- Stake the tree using two support stakes (three for trees larger than 10 cm DBH). Removal of these stakes should occur after the first growing season.
Please contact the undersigned should you have any questions or comments.

Respectfully submitted,

GEOMORPHIC SOLUTIONS

Kevin Tabata, M.Sc.
Associate, Project Leader
Fluvial Geomorphologist

Michael Lawson, C.Tech.
Restoration Technician
REFERENCES

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EXISTING INTERSECTION OPERATIONS ANALYSES
### HCM Signalized Intersection Capacity Analysis

**3: Taunton Road East & Garden Street**

**Existing AM**

**6/9/2011**

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**Intersection Summary**

- **HCM Average Control Delay**: 47.5
- **HCM Level of Service**: D
- **HCM Volume to Capacity ratio**: 0.99
- **Actuated Cycle Length (s)**: 75.9
- **Sum of lost time (s)**: 16.0
- **Intersection Capacity Utilization**: 87.3%
- **ICU Level of Service**: E
- **Analysis Period (min)**: 15

*Critical Lane Group*
### Movement Lane Configurations

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### Intersection Summary

- **HCM Average Control Delay**: 31.5
- **HCM Level of Service**: C
- **HCM Volume to Capacity ratio**: 0.82
- **Actuated Cycle Length (s)**: 84.9
- **Sum of lost time (s)**: 8.0
- **Intersection Capacity Utilization**: 87.3%
- **ICU Level of Service**: E
- **Analysis Period (min)**: 15

---

**Note:** All values are rounded to the nearest whole number.
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#### Intersection Summary

- HCM Average Control Delay: 11.9
- HCM Volume to Capacity ratio: 0.34
- Actuated Cycle Length (s): 74.4
- Sum of lost time (s): 8.0
- Intersection Capacity Utilization: 46.7%
- HCM Level of Service: B
- ICU Level of Service: A
- Analysis Period (min): 15
- Critical Lane Group
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### Direction, Lane #

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### Intersection Summary

| Average Delay | 2.8 |
| Intersection Capacity Utilization | 41.6% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |
## Movement Analysis

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| Median type | None |
| Upstream signal (m) |     |
| pX, platoon unblocked |     |
| vC, conflicting volume | 1053 503 518 |
| vC1, stage 1 conf vol |     |
| vC2, stage 2 conf vol |     |
| vCu, unblocked vol | 1053 503 518 |
| tC, single (s) | 6.5 6.2 4.1 |
| tC, 2 stage (s) |     |
| tF (s) | 3.6 3.3 2.2 |
| p0 queue free % | 81 85 98 |
| cM capacity (veh/h) | 234 565 1025 |

### Lane Configurations

**Volume Total** | 130 23 503 509 |
**Volume Left** | 45 23 0 0 |
**Volume Right** | 86 0 0 35 |
**cSH** | 381 1025 1700 1700 |
**Volume to Capacity** | 0.34 0.02 0.30 0.30 |
**Queue Length (m)** | 11.3 0.5 0.0 0.0 |
**Control Delay (s)** | 19.3 8.6 0.0 0.0 |
**Lane LOS** | C A |
**Approach Delay (s)** | 19.3 0.4 0.0 |
**Approach LOS** | C |

### Intersection Summary

**Average Delay** | 2.3 |
**Intersection Capacity Utilization** | 39.5% |
**ICU Level of Service** | A |
**Analysis Period (min)** | 15 |
## Movement

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### Lane Configurations

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| Volume (veh/h) | 50 | 101 | 81 | 379 | 416 | 15 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 54 | 110 | 88 | 412 | 452 | 16 |
| Pedestrians | 1 | 1 |
| Lane Width (m) | 3.7 | 3.7 |
| Walking Speed (m/s) | 1.2 | 1.2 |
| Percent Blockage | 0 | 0 |
| Right turn flare (veh) | |

### Median type

| Median type | None |
| Upstream signal (m) | 307 |
| pX, platoon unblocked |
| vC, conflicting volume | 1050 | 461 | 469 |
| vC1, stage 1 conf vol |
| vC2, stage 2 conf vol |
| vCu, unblocked vol | 1050 | 461 | 469 |
| tC, single (s) | 6.5 | 6.2 | 4.1 |
| tC, 2 stage (s) |
| tF (s) | 3.6 | 3.3 | 2.2 |
| p0 queue free % | 76 | 82 | 92 |
| cM capacity (veh/h) | 227 | 602 | 1091 |

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### Intersection Summary

- HCM Average Control Delay: 59.6
- HCM Level of Service: E
- HCM Volume to Capacity ratio: 1.13
- Actuated Cycle Length (s): 86.4
- Sum of lost time (s): 16.0
- Intersection Capacity Utilization: 96.4%
- ICU Level of Service: F
- Analysis Period (min): 15
- Critical Lane Group: c

---

Cole Engineering Group Ltd
Synchro 6 Report
Page 1
### Movement Lane Configurations

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**HCM Average Control Delay** 46.6
**HCM Volume to Capacity ratio** 1.06
**Actuated Cycle Length (s)** 89.6
**Sum of lost time (s)** 16.0
**Intersection Capacity Utilization** 96.4%
**ICU Level of Service** F
**Analysis Period (min)** 15
## HCM Signalized Intersection Capacity Analysis

### Existing PM

#### Movement

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### Intersection Summary

| HCM Average Control Delay | 9.0 |
| HCM Volume to Capacity ratio | 0.28 |
| Actuated Cycle Length (s) | 79.0 |
| Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 47.1% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

---

Cole Engineering Group Ltd

Synchro 6 Report

Page 2
### Movement

<table>
<thead>
<tr>
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<th>WBL</th>
<th>WBR</th>
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### Lane Configurations

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### Grade

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### Pedestrians

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### Lane Width (m)

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### Walking Speed (m/s)

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### Percent Blockage

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### Right turn flare (veh)

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### Median storage veh)

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### pX, platoon unblocked

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<th>586</th>
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### vC1, stage 1 conf vol

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### vCu, unblocked vol

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### tC, single (s)

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### p0 queue free %

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### cM capacity (veh/h)

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### Direction, Lane #

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<th>NB 1</th>
<th>SB 1</th>
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### Volume Right

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### cSH

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### Control Delay (s)

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### Lane LOS

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### Approach LOS

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### Intersection Summary

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<td>---------------</td>
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<td>Sign Control</td>
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<td>Hourly flow rate (vph)</td>
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<td>vC, conflicting volume</td>
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<td>vC1, stage 1 conf vol</td>
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<td>vC2, stage 2 conf vol</td>
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<tr>
<td>vCu, unblocked vol</td>
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<td>Approach LOS</td>
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### Movement

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<th>NBL</th>
<th>NBT</th>
<th>SBT</th>
<th>SBR</th>
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#### Lane Configurations
- Sign Control: Stop, Free, Free
- Grade: 0%, 0%, 0%
- Volume (veh/h): 26, 54, 69, 582, 446, 26
- Peak Hour Factor: 0.92, 0.92, 0.92, 0.92, 0.92, 0.92
- Hourly flow rate (vph): 28, 59, 75, 633, 485, 28
- Pedestrians: 6, 1
- Lane Width (m): 3.7, 3.7
- Walking Speed (m/s): 1.2, 1.2
- Percent Blockage: 1, 0
- Right turn flare (veh): 

#### Median type
- None
- Median storage veh: 

#### Upstream signal (m)
- PX, platoon unblocked: 307

#### vC, conflicting volume
- VC1, stage 1 conf vol: 1289, 505, 519
- VC2, stage 2 conf vol: 

#### vCu, unblocked vol
- TC, single (s): 6.5, 6.2, 4.1
- TC, 2 stage (s): 
- TF (s): 3.6, 3.3, 2.2
- P0 queue free %: 83, 90, 93
- CM capacity (veh/h): 164, 566, 1042

#### Direction, Lane #

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<td>Approach LOS</td>
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#### Intersection Summary
- Average Delay: 1.9
- Intersection Capacity Utilization: 43.7%
- ICU Level of Service: A
- Analysis Period (min): 15
### Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR

#### Lane Configurations

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<th>EBR</th>
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#### Volume (vph)

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#### Turn Type pm+pt Perm pm+pt pm+pt pm+pt Perm

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<th>pm+pt</th>
<th>pm+pt</th>
<th>Perm</th>
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#### Level of Service

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Cole Engineering Group Ltd

Synchro 6 Report

Page 1
## Movement Lane Configurations

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### Intersection Summary

- HCM Average Control Delay: 13.4
- HCM Level of Service: B
- HCM Volume to Capacity ratio: 0.50
- Actuated Cycle Length (s): 74.3
- Sum of lost time (s): 8.0
- Intersection Capacity Utilization: 57.7%
- ICU Level of Service: B
- Analysis Period (min): 15

**Critical Lane Group**
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<tr>
<td>Control Delay (s)</td>
<td>166.8</td>
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<tr>
<td>Lane LOS</td>
<td>F</td>
<td>A</td>
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<tr>
<td>Approach Delay (s)</td>
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</tr>
<tr>
<td>Approach LOS</td>
<td>F</td>
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### Intersection Summary

- **Average Delay**: 20.3
- **Intersection Capacity Utilization**: 55.9%  
  **ICU Level of Service**: B  
- **Analysis Period (min)**: 15
### Lane Configurations

<table>
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<tr>
<th>Movement</th>
<th>EBL</th>
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<th>NBL</th>
<th>NBT</th>
<th>SBT</th>
<th>SBR</th>
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<tbody>
<tr>
<td>Sign Control</td>
<td>Stop</td>
<td>Free</td>
<td>Free</td>
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<tr>
<td>Grade</td>
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<td>0%</td>
<td>0%</td>
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### Volume (veh/h)

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<th>NBT</th>
<th>SBT</th>
<th>SBR</th>
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<tbody>
<tr>
<td>Volume (veh/h)</td>
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<td>111</td>
<td>30</td>
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### Peak Hour Factor

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<th>SBT</th>
<th>SBR</th>
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<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
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### Hourly flow rate (vph)

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<th>NBT</th>
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<tbody>
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<td>Hourly flow rate (vph)</td>
<td>63</td>
<td>121</td>
<td>33</td>
<td>710</td>
<td>668</td>
<td>49</td>
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### Pedestrians

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### Lane Width (m)

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### Walking Speed (m/s)

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### Percent Blockage

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### Right turn flare (veh)

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<tbody>
<tr>
<td>Median type</td>
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<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<tr>
<td>Upstream signal (m)</td>
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<td>PX, platoon unblocked</td>
<td>PX, platoon unblocked</td>
<td>PX, platoon unblocked</td>
<td>PX, platoon unblocked</td>
<td>PX, platoon unblocked</td>
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<tr>
<td>vC, conflicting volume</td>
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<td>705</td>
<td>726</td>
<td>1481</td>
<td>705</td>
<td>726</td>
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<tr>
<td>vC1, stage 1 conf vol</td>
<td>1481</td>
<td>705</td>
<td>726</td>
<td>1481</td>
<td>705</td>
<td>726</td>
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<tr>
<td>vC2, stage 2 conf vol</td>
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<td>705</td>
<td>726</td>
<td>1481</td>
<td>705</td>
<td>726</td>
</tr>
<tr>
<td>vCu, unblocked vol</td>
<td>1481</td>
<td>705</td>
<td>726</td>
<td>1481</td>
<td>705</td>
<td>726</td>
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<tr>
<td>tC, single (s)</td>
<td>6.5</td>
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<td>4.1</td>
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<td>72</td>
<td>96</td>
<td>50</td>
<td>72</td>
<td>96</td>
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<tr>
<td>cM capacity (veh/h)</td>
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<td>434</td>
<td>856</td>
<td>126</td>
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<td>856</td>
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### Direction, Lane #

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<th>NB 2</th>
<th>SB 1</th>
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<tbody>
<tr>
<td>Volume Total</td>
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<td>710</td>
<td>717</td>
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<td>Volume Left</td>
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<tr>
<td>Volume Right</td>
<td>121</td>
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<td>0</td>
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<td>cSH</td>
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<td>A</td>
<td>A</td>
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<td>Approach Delay (s)</td>
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<tr>
<td>Approach LOS</td>
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### Intersection Summary

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<tr>
<th>Movement</th>
<th>Average Delay</th>
<th>Intersection Capacity Utilization</th>
<th>ICU Level of Service</th>
<th>Analysis Period (min)</th>
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<tr>
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<td><strong>Lane Configurations</strong></td>
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<td>Free</td>
<td>Free</td>
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<tr>
<td><strong>Grade</strong></td>
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<td>0%</td>
<td>0%</td>
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<td><strong>Hourly flow rate (vph)</strong></td>
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<td>580</td>
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<td><strong>Lane Width (m)</strong></td>
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<td><strong>Walking Speed (m/s)</strong></td>
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<td><strong>Percent Blockage</strong></td>
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<tr>
<td><strong>Right turn flare (veh)</strong></td>
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<tr>
<td><strong>Median type</strong></td>
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<tr>
<td><strong>Upstream signal (m)</strong></td>
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<tr>
<td><strong>pX, platoon unblocked</strong></td>
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<tr>
<td><strong>vC, conflicting volume</strong></td>
<td>1479</td>
<td>649</td>
<td>661</td>
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<tr>
<td><strong>vC1, stage 1 conf vol</strong></td>
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<td><strong>vC2, stage 2 conf vol</strong></td>
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<td>649</td>
<td>661</td>
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<td><strong>TC, single (s)</strong></td>
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<td><strong>Direction, Lane #</strong></td>
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<td><strong>Volume to Capacity</strong></td>
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**Intersection Summary**

- **Average Delay**: 14.8
- **Intersection Capacity Utilization**: 61.0%
- **ICU Level of Service**: B
- **Analysis Period (min)**: 15
### HCM Signalized Intersection Capacity Analysis

#### 3: Taunton Road East & Garden Street

**6/9/2011**

#### Movement

<table>
<thead>
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<th>Movement</th>
<th>EBL</th>
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#### Intersection Summary

- **HCM Average Control Delay**: 157.8
- **HCM Level of Service**: F
- **HCM Volume to Capacity ratio**: 1.44
- **Actuated Cycle Length (s)**: 120.0
- **Sum of lost time (s)**: 12.0
- **Intersection Capacity Utilization**: 128.0%
- **ICU Level of Service**: H
- **Analysis Period (min)**: 15

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**Cole Engineering Group Ltd**

**Synchro 6 Report**

**Page 1**
### Movement Lane Configurations

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### Intersection Summary

- **HCM Average Control Delay**: 9.3
- **HCM Level of Service**: A
- **HCM Volume to Capacity ratio**: 0.40
- **Actuated Cycle Length (s)**: 73.5
- **Sum of lost time (s)**: 8.0
- **Intersection Capacity Utilization**: 54.5%
- **ICU Level of Service**: A
- **Analysis Period (min)**: 15
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## Intersection Summary

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## Movement Summary

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## Intersection Summary

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| ICU Level of Service | B |
| Analysis Period (min) | 15 |
## Movement

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## Intersection Summary

- **HCM Average Control Delay**: 219.3
- **HCM Level of Service**: F
- **HCM Volume to Capacity ratio**: 1.64
- **Actuated Cycle Length (s)**: 119.9
- **Sum of lost time (s)**: 8.0
- **Intersection Capacity Utilization**: 144.5%
- **ICU Level of Service**: H
- **Analysis Period (min)**: 15
- c Critical Lane Group
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### Intersection Summary

- **HCM Average Control Delay**: 21.2
- **HCM Level of Service**: C
- **HCM Volume to Capacity ratio**: 0.84
- **Actuated Cycle Length (s)**: 87.6
- **Sum of Lost time (s)**: 8.0
- **Intersection Capacity Utilization**: 73.9%
- **ICU Level of Service**: D
- **Analysis Period (min)**: 15
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## Direction, Lane #

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<tr>
<td>Lane LOS</td>
<td>F</td>
<td>B</td>
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<tr>
<td>Approach Delay (s)</td>
<td>Err</td>
<td>0.0</td>
<td>0.6</td>
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<tr>
<td>Approach LOS</td>
<td>F</td>
<td></td>
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</tbody>
</table>

## Intersection Summary

| Average Delay      | 1203.0 |
| Intersection Capacity Utilization | 73.9% |
| ICU Level of Service | D    |
| Analysis Period (min) | 15    |
### Movement Lane Configurations

<table>
<thead>
<tr>
<th>Movement</th>
<th>EBL</th>
<th>EBR</th>
<th>NBL</th>
<th>NBT</th>
<th>SBT</th>
<th>SBR</th>
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<tbody>
<tr>
<td>Sign Control</td>
<td>Stop</td>
<td>Free</td>
<td>Free</td>
<td></td>
<td></td>
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<tr>
<td>Grade</td>
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<td>0%</td>
<td>0%</td>
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<tr>
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<td>152</td>
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<td>0.92</td>
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<td>86</td>
<td>165</td>
<td>43</td>
<td>968</td>
<td>912</td>
<td>67</td>
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<td>4</td>
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<td>3.7</td>
<td>3.7</td>
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<td>1.2</td>
<td>1.2</td>
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### Median type
- None
- Median storage veh

### Upstream signal (m)
- pX, platoon unblocked

### vC, conflicting volume
- 2014 | 958 | 988

### vC1, stage 1 conf vol

### vC2, stage 2 conf vol

### vCu, unblocked vol
- 2014 | 958 | 988

### tC, single (s)
- 6.5 | 6.2 | 4.1

### tC, 2 stage (s)
- 3.6 | 3.3 | 2.2

### tF (s)
- 0 | 47 | 94

### cM capacity (veh/h)
- 57 | 310 | 682

### Direction, Lane #

<table>
<thead>
<tr>
<th>Direction</th>
<th>Lane</th>
<th>EB 1</th>
<th>NB 1</th>
<th>NB 2</th>
<th>SB 1</th>
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<td>979</td>
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<tr>
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### Intersection Summary

| Intersection Capacity Utilization | 68.6% |
| ICU Level of Service | C |
| Analysis Period (min) | 15 |
## Movement EBL  EBR  NBL  NBT  SBT  SBR

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<th>EBR</th>
<th>NBL</th>
<th>NBT</th>
<th>SBT</th>
<th>SBR</th>
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<tr>
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<td>Free</td>
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<td></td>
<td></td>
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<tr>
<td>Grade</td>
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<td>0%</td>
<td>0%</td>
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<td>156</td>
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<td>0.92</td>
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<td>170</td>
<td>793</td>
<td>871</td>
<td>32</td>
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<td>1</td>
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<tr>
<td>Lane Width (m)</td>
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<td>3.7</td>
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<tr>
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<td>1.2</td>
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<td>1.2</td>
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### Median type
None

### Median storage veh

### Upstream signal (m)
307

### pX, platoon unblocked

### vC, conflicting volume
2021 887 903

### vC1, stage 1 conf vol

### vC2, stage 2 conf vol

### vCu, unblocked vol
2021 887 903

### tC, single (s)
6.5 6.2 4.1

### tC, 2 stage (s)
3.6 3.3 2.2

### tf (s)
p0 queue free %
0 39 77

cM capacity (veh/h) 48 344 752

### Direction, Lane #

<table>
<thead>
<tr>
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<th>SB 1</th>
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### Approach Delay (s)

### Approach LOS

### Queue Length (m)

### Analysis Period (min)

### Intersection Summary

<table>
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### Movement Lane Configurations

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<th>SBL</th>
<th>SBT</th>
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<tr>
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<td>1900</td>
<td>1900</td>
<td>1900</td>
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<td>1900</td>
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<td>1900</td>
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<td>Flt Permitted</td>
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<td>Satd. Flow (perm)</td>
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<td>470</td>
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</table>

### Volume (vph)

- **Total**: 143, 2821, 141, 355, 1890, 141, 808, 429, 342, 564, 336, 125
- **Peak-hour factor, PHF**: 0.92, 0.92, 0.92, 0.92, 0.92, 0.92, 0.92, 0.92, 0.92, 0.92, 0.92
- **Adjust Flow (vph)**: 155, 3066, 153, 386, 2054, 153, 878, 466, 372, 613, 365, 136

### Traffic Flow Reduction (vph)

- **Total**: 0, 0, 31, 0, 0, 47, 0, 120, 0, 0, 84
- **Lane Group Flow (vph)**: 155, 3066, 122, 386, 2054, 106, 878, 718, 0, 613, 365, 52

### Confl. Peds. (#/hr)

- **Total**: 7, 7, 12, 12

### Heavy Vehicles (%)

- **Total**: 2%, 4%, 6%, 1%, 2%, 5%, 0%, 3%, 2%, 2%, 3%, 0%

### Turn Type

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<th>Turn Type</th>
<th>pm+pt</th>
<th>Perm</th>
<th>pm+pt</th>
<th>Perm</th>
<th>pm+pt</th>
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<td>Actuated Green, G (s)</td>
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<td>49.3</td>
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### Level of Service

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<th>F</th>
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<td>F</td>
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<td></td>
<td></td>
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</table>

### Intersection Summary

- **HCM Average Control Delay**: 326.6
- **HCM Volume to Capacity ratio**: 2.00
- **Actuated Cycle Length (s)**: 120.0
- **Sum of lost time (s)**: 12.0
- **Intersection Capacity Utilization**: 165.6%
- **ICU Level of Service**: H
- **Analysis Period (min)**: 15

---

Cole Engineering Group Ltd

Synchro 6 Report
Page 1
<table>
<thead>
<tr>
<th>Movement</th>
<th>EBL</th>
<th>EBT</th>
<th>EBR</th>
<th>WBL</th>
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<td>1900</td>
<td>1900</td>
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<td>1900</td>
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**Intersection Summary**

- HCM Average Control Delay: 12.3
- HCM Level of Service: B
- HCM Volume to Capacity ratio: 0.57
- Actuated Cycle Length (s): 84.5
- Sum of Lost time (s): 8.0
- Intersection Capacity Utilization: 66.9%
- ICU Level of Service: C
- Analysis Period (min): 15

---

Cole Engineering Group Ltd

Synchro 6 Report
Page 2
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**Intersection Summary**

- **Average Delay**: 52.7
- **Intersection Capacity Utilization**: 79.5%
- **ICU Level of Service**: D
- **Analysis Period (min)**: 15
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<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
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</tr>
<tr>
<td>Hourly flow rate (vph)</td>
<td>63</td>
<td>122</td>
<td>213</td>
<td>1054</td>
<td>858</td>
<td>75</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>16</td>
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</tr>
<tr>
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<td>3.7</td>
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<tr>
<td>Walking Speed (m/s)</td>
<td>1.2</td>
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<td>1.2</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Percent Blockage</td>
<td>1</td>
<td></td>
<td>0</td>
<td></td>
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</tr>
<tr>
<td>Right turn flare (veh)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median type</td>
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<td></td>
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</tr>
<tr>
<td>Median storage veh</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Upstream signal (m)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>pX, platoon unblocked</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>vC, conflicting volume</td>
<td>2393</td>
<td>911</td>
<td>949</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vC1, stage 1 conf vol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vC2, stage 2 conf vol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vCu, unblocked vol</td>
<td>2393</td>
<td>911</td>
<td>949</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tC, single (s)</td>
<td>6.5</td>
<td>6.2</td>
<td>4.1</td>
<td></td>
<td></td>
<td></td>
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<td>tC, 2 stage (s)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>tF (s)</td>
<td>3.6</td>
<td>3.3</td>
<td>2.2</td>
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<td>p0 queue free %</td>
<td>0</td>
<td>63</td>
<td>70</td>
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</tr>
<tr>
<td>cM capacity (veh/h)</td>
<td>24</td>
<td>329</td>
<td>702</td>
<td></td>
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</tr>
</tbody>
</table>

### Direction, Lane #

<table>
<thead>
<tr>
<th>Direction, Lane #</th>
<th>EB 1</th>
<th>NB 1</th>
<th>NB 2</th>
<th>SB 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume Total</td>
<td>185</td>
<td>213</td>
<td>1054</td>
<td>933</td>
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<tr>
<td>Volume Left</td>
<td>63</td>
<td>213</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Volume Right</td>
<td>122</td>
<td>0</td>
<td>0</td>
<td>75</td>
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<tr>
<td>cSH</td>
<td>62</td>
<td>702</td>
<td>1700</td>
<td>1700</td>
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<tr>
<td>Volume to Capacity</td>
<td>2.99</td>
<td>0.30</td>
<td>0.62</td>
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<tr>
<td>Queue Length (m)</td>
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<tr>
<td>Control Delay (s)</td>
<td>1039.3</td>
<td>12.3</td>
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<td>0.0</td>
</tr>
<tr>
<td>Lane LOS</td>
<td>F</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach Delay (s)</td>
<td>1039.3</td>
<td>2.1</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Approach LOS</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Intersection Summary

- Average Delay: 81.6
- Intersection Capacity Utilization: 76.8%
- ICU Level of Service: D
- Analysis Period (min): 15
## Movement

<table>
<thead>
<tr>
<th>Movement</th>
<th>EBL</th>
<th>EBR</th>
<th>NBL</th>
<th>NBT</th>
<th>SBT</th>
<th>SBR</th>
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### Lane Configurations

<table>
<thead>
<tr>
<th>Sign Control</th>
<th>Stop</th>
<th>Free</th>
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<tbody>
<tr>
<td>Grade</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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### Volume (veh/h)

<table>
<thead>
<tr>
<th></th>
<th>EBL</th>
<th>EBR</th>
<th>NBL</th>
<th>NBT</th>
<th>SBT</th>
<th>SBR</th>
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</thead>
<tbody>
<tr>
<td>Volume (veh/h)</td>
<td>50</td>
<td>104</td>
<td>133</td>
<td>1121</td>
<td>859</td>
<td>50</td>
</tr>
<tr>
<td>Peak Hour Factor</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
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<tr>
<td>Hourly flow rate (vph)</td>
<td>54</td>
<td>113</td>
<td>145</td>
<td>1218</td>
<td>934</td>
<td>54</td>
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<tr>
<td>Pedestrians</td>
<td>6</td>
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<td></td>
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</tr>
<tr>
<td>Lane Width (m)</td>
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<td>3.7</td>
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<tr>
<td>Walking Speed (m/s)</td>
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<td>1.2</td>
<td></td>
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<td></td>
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<tr>
<td>Percent Blockage</td>
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<td></td>
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<tr>
<td>Right turn flare (veh)</td>
<td></td>
<td></td>
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### Median type

<table>
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### Upstream signal (m)

<table>
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### vC, conflicting volume

<table>
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<tr>
<th></th>
<th>vC1, stage 1 conf vol</th>
<th>vC2, stage 2 conf vol</th>
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</thead>
<tbody>
<tr>
<td>vCu, unblocked vol</td>
<td>2475</td>
<td>967</td>
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### tC, single (s)

<table>
<thead>
<tr>
<th></th>
<th>EB 1</th>
<th>NB 1</th>
<th>NB 2</th>
<th>SB 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>tC, single (s)</td>
<td>6.5</td>
<td>6.2</td>
<td>6.1</td>
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<tr>
<td>tC, 2 stage (s)</td>
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<td>2.2</td>
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### cM capacity (veh/h)

<table>
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<th>EB 1</th>
<th>NB 1</th>
<th>NB 2</th>
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</thead>
<tbody>
<tr>
<td>cM capacity (veh/h)</td>
<td>25</td>
<td>308</td>
<td>692</td>
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### Direction, Lane #

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<th>EB 1</th>
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<th>NB 2</th>
<th>SB 1</th>
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</thead>
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<tr>
<td>Volume Total</td>
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<td>145</td>
<td>1218</td>
<td>988</td>
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<td>Volume Left</td>
<td>54</td>
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<tr>
<td>Volume Right</td>
<td>113</td>
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<td>54</td>
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<tr>
<td>cSH</td>
<td>66</td>
<td>692</td>
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<td>1700</td>
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<td>Volume to Capacity</td>
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<td>Control Delay (s)</td>
<td>829.7</td>
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<td>0.0</td>
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<tr>
<td>Lane LOS</td>
<td>F</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach Delay (s)</td>
<td>829.7</td>
<td>1.2</td>
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<tr>
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### Intersection Summary

<table>
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<tr>
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<th>Average Delay</th>
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<tr>
<td>Intersection Capacity Utilization</td>
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</table>
EXISTING TRANSIT STOP

PROPOSED 1.8m RAISED MEDIAN

EXISTING INFORMAL PEDESTRIAN CROSSING TO BE REMOVED

EXISTING TRANSIT STOP (TO BE RELOCATED)

GREENBUSH PLACE

PATRICK DRIVE

PATRICK DRIVE

PARNELL CRESCENT

PROPOSED 2.0m - 3.0m MULTI-USE PATH

EXISTING INFORMAL PEDESTRIAN CROSSING TO BE REMOVED

EXISTING TRANSIT STOP

MILLSTONE CRESCENT

TOWN OF WHITBY

GARDEN STREET ENVIRONMENTAL ASSESSMENT

DATE: SEPTEMBER 2013

SCALE: 1:1000

PROJECT No.: T11-118

LEGEND

EXISTING PROPERTY LINES

PROPOSED CURB - GUTTER

PROPOSED MULTI-USE PATH

PROPOSED CONC. MEDIAN / TRANSIT STOP

DESIGN CONCEPT #1 - WIDEN ABOUT CENTRELINE

GARDEN STREET ENVIRONMENTAL ASSESSMENT

TOWN OF WHITBY

SCALE: 1:1000

FIGURE No.: 2

MATCH LINE 'B'

MATCH LINE 'C'

MATCH LINE 'C'

MATCH LINE 'C'

PRELIMINARY
EXISTING TRANSIT STOP

PROPOSED 2.0m - 3.0m MULTI-USE PATH

PROPOSED TRANSIT STOP (RELOCATED)

PROPOSED FUTURE CROSSWALK & PEDESTRIAN TRAFFIC SIGNAL

MATCH LINE A

MATCH LINE B

PRELIMINARY

SEE SECTION 7.2.3 FOR RECOMMENDED IMPROVEMENTS ON CORK DRIVE

GARDEN STREET ENVIRONMENTAL ASSESSMENT
TOWN OF WHITBY
EXISTING TRANSIT STOP

PROPOSED 1.8m RAISED MEDIAN

PROPOSED 2.0m - 3.0m MULTI-USE PATH

EXISTING INFORMAL PEDESTRIAN CROSSING TO BE REMOVED

PROPOSED TRANSIT STOP

PROPOSED CONC. MEDIAN / TRANSIT STOP

PATRICK DRIVE

GREENBUSH PLACE

PARNELL CRESCENT

MILLSTONE CRESCENT

WILLOWBROOK DRIVE

GARDEN STREET

BELLFIELD COURT

COLE ENGINEERING

THE CORPORATION OF THE
TOWN OF WHITBY
PUBLIC WORKS DEPARTMENT

LEGEND
E: EXISTING PROPERTY LINES
PROPOSED CURB - GUTTER
PROPOSED MULTI-USE PATH
PROPOSED CONC. MEDIAN / TRANSIT STOP

DESIGN CONCEPT 2 - WIDEN TO THE EAST
GARDEN STREET ENVIRONMENTAL ASSESSMENT
TOWN OF WHITBY

DATE: SEPTEMBER 2013
PROJECT No.: 711-118
SCALE: 1:1000
FIGURE No.: 5

MATCH LINE 'B'

MATCH LINE 'C'

MATCH LINE 'B'

MATCH LINE 'C'

PRELIMINARY
**STAKEHOLDER AGENCY COMMENTS**

**Class Environmental Assessment of Garden Street from Dryden Boulevard to Taunton Road**

<table>
<thead>
<tr>
<th>Stakeholder Comment Received</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ministry of Environment (Dorothy Moszynski)</strong></td>
<td><strong>Ecosystem Protection and Restoration</strong></td>
</tr>
<tr>
<td>[received via email – Mar. 15, 2012]</td>
<td>• No impacts to the ecosystem are anticipated.</td>
</tr>
<tr>
<td></td>
<td>• No natural heritage features are located within the study area.</td>
</tr>
<tr>
<td></td>
<td>• The watercourse to the west is approximately 2-3 km outside of our study area, no impacts are anticipated.</td>
</tr>
<tr>
<td></td>
<td>• MNR was consulted and has indicated that: “our records do not indicate any ANSIs, wetlands, or any species at risk located at or immediately adjacent to this location.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ministry of Environment (cont.)</strong></th>
<th><strong>Surface Water</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• The ESR must include a sufficient level of information to demonstrate that there will be no negative impacts on the natural features or ecological functions of any watercourses within the Study Area. Measures should be included in the planning and design process to ensure that any impacts to watercourses from construction or operational activities (e.g. spills, erosion, pollution) are mitigated as part of the proposed undertaking. The MOE Guideline B-6, Evaluating Construction Activities Impacting on Water Resources should be used to plan and construct this project.</td>
</tr>
<tr>
<td></td>
<td>• Additional stormwater runoff from new pavement can impact receiving watercourses and flood conditions. Quality and quantity control measures to treat stormwater runoff should be considered for all new impervious areas and, where possible, existing surfaces. MOE’s Stormwater Management Planning and Design Manual (2003) should be referenced in the ESR and utilized when designing stormwater control methods. We recommend that a Stormwater Management Plan should be prepared as part of the Class EA process that includes:</td>
</tr>
<tr>
<td></td>
<td>• Strategies to address potential water quantity and erosion impacts related to stormwater draining into streams or other sensitive environmental features, and to ensure that adequate (enhanced) water quality is maintained</td>
</tr>
<tr>
<td></td>
<td>• Watershed information, drainage conditions, and other relevant background information</td>
</tr>
<tr>
<td></td>
<td>• Future drainage conditions, stormwater management options, information on erosion and sediment control during construction, and other details of the proposed works</td>
</tr>
<tr>
<td></td>
<td>• Information on maintenance and monitoring commitments</td>
</tr>
<tr>
<td></td>
<td>• No watercourses are within the study area, mitigation measures for construction activities are outlined within the ESR Mitigation Table (ref. Table 8.1 – Summary of Anticipated Mitigation Measures)</td>
</tr>
<tr>
<td></td>
<td>• A Stormwater Management Report has been prepared for the project and can be found in Appendix I.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ministry of Environment (cont.)</strong></th>
<th><strong>Groundwater</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• The status of, and potential impacts to any well water supplies should be addressed. Appropriate information to define existing groundwater conditions should be included in the ESR.</td>
</tr>
<tr>
<td></td>
<td>• If the potential construction or decommissioning of water wells is identified as an issue, the ESR should refer to Ontario Regulation 903, Wells, under the Ontario Water Resources Act.</td>
</tr>
<tr>
<td></td>
<td>• Potential impacts to groundwater-dependent natural features should be addressed. Any potential effects should be identified, and appropriate mitigation measures should be recommended. The level of detail required will be dependent on the significance of the potential impacts.</td>
</tr>
<tr>
<td></td>
<td>• Any potential approval requirements for groundwater taking or discharge should be identified in the ESR. In particular, a Permit to Take Water (PTTW) under the Ontario Water Resources Act will be required for any water takings that exceed 50,000 litres per day. For more information on the application and approval process, we suggest you refer to the MOE Permit to Take Water Manual (April 2005).</td>
</tr>
<tr>
<td></td>
<td>• The study area is fully urbanized with subdivisions on either side serviced by Storm Sewers, Sanitary Sewers and Watermains. No wells are anticipated in or adjacent to the Study Area.</td>
</tr>
<tr>
<td></td>
<td>• The study area is fully developed and the corridor is fully urbanized. No impacts to groundwater-dependant natural features are anticipated.</td>
</tr>
<tr>
<td></td>
<td>• No groundwater taking in excess of 50,000 litres per day or groundwater discharge is anticipated.</td>
</tr>
<tr>
<td>Stakeholder</td>
<td>Comment Received</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ministry of Environment (cont.)</td>
<td><strong>Air Quality and Noise</strong>&lt;br&gt;• Any air quality impacts should be assessed and used in the evaluation of alternatives for the proposed project. Any appropriate mitigation measures should be identified.&lt;br&gt;• Dust and noise control measures should be addressed and included in the construction plans to ensure that nearby residential and other sensitive land uses within the Study Area are not adversely affected during construction activities. If dust suppressants are proposed to be used, we recommend the use of non-chloride based compounds to protect water quality.&lt;br&gt;• The ESR should consider the potential impacts of increased noise levels during the operation of the undertaking. The proponent should explore all potential measures to mitigate significant noise impacts during the assessment of alternatives.</td>
</tr>
<tr>
<td>Ministry of Environment (cont.)</td>
<td><strong>Contaminated Soils</strong>&lt;br&gt;• Since the removal or movement of soils may be required, appropriate tests to determine contaminant levels from previous land uses or dumping should be undertaken. If the soils are contaminated, you must determine how and where they are to be disposed of, consistent with Part XV.1 of the Environmental Protection Act (EPA) and Ontario Regulation 153/04, Records of Site Condition, which details the new requirements related to site assessment and clean up. We recommend contacting the MOE York Durham District Office in Ajax for further consultation if contaminated sites are present.&lt;br&gt;• The location of any underground storage tanks should be included in the ESR. Measures should be identified to ensure the integrity of these tanks and to ensure an appropriate response in the event of a spill. The MOE Spills Action Centre must be contacted in such an event.&lt;br&gt;• Any current or historical waste disposal sites should be identified in the ESR. The status of these sites should be determined to confirm whether approval pursuant to Section 46 of the Environmental Protection Act may be required for land uses on former disposal sites.&lt;br&gt;• The ESR should identify any underground transmission lines in the Study Area. The owners should be consulted to avoid impacts to this infrastructure, including potential spills.</td>
</tr>
<tr>
<td>Ministry of Environment (cont.)</td>
<td><strong>Mitigation and Monitoring</strong>&lt;br&gt;• Design and construction reports and plans should be based on a best management approach that centres on the prevention of impacts, protection of the existing environment, and opportunities for rehabilitation and enhancement of any impacted areas.&lt;br&gt;• All waste generated during construction must be disposed of in accordance with MOE requirements.&lt;br&gt;• Contractors must be made aware of all environmental considerations so that all environmental standards and commitments for both construction and operation are met. Mitigation measures should be clearly referenced in the ESR and regularly monitored during the construction stage of the project. In addition, we encourage proponents to conduct post-construction monitoring to ensure all mitigation measures have been effective and are functioning properly. The proponent’s construction and post-construction monitoring plans should be documented in the ESR.</td>
</tr>
<tr>
<td>Ministry of Environment (cont.)</td>
<td><strong>Planning and Policy</strong>&lt;br&gt;• The 2005 Provincial Policy Statement contains policies that protect Ontario’s Natural Heritage. Applicable policies should be referenced in the ESR, and the proponent should demonstrate how this proposed project is consistent with these policies.&lt;br&gt;• The Places to Grow Plan contains policies which guide decisions on a range of issues such as infrastructure planning and land-use planning to ensure that stronger and more prosperous communities are built in the Greater Golden Horseshoe. The ESR should demonstrate how this project adheres to the relevant policies of the Places to Grow Plan, including Section 3, which contain policies for Infrastructure to Support Growth.</td>
</tr>
<tr>
<td>Stakeholder</td>
<td>Comment Received</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------</td>
</tr>
</tbody>
</table>
| Ministry of Environment (cont.) | **Class EA Process**  
• The ESR should provide clear and complete documentation of the planning process in order to allow traceability of decision-making. It must also demonstrate how the consultation provisions of the Class EA have been fulfilled, including documentation of all public consultation efforts undertaken during the planning process. Additionally, it should identify all concerns that were raised and how they have been addressed throughout the planning process. The Class EA also directs proponents to include copies of comments submitted on the project by interested stakeholders, and the proponent’s responses to these comments.  
• The Class EA requires the consideration of the effects of each alternative on all aspects of the environment. The ESR should include a level of detail (e.g. hydrogeological investigations, terrestrial and aquatic assessments) such that all potential impacts can be identified and appropriate mitigation measures can be developed. Any supporting studies conducted during the Class EA process should be referenced and included as part of the ESR.  
• Please include in the ESR a list of all subsequent permits or other approvals that may be required for the implementation of the preferred alternative, including Permits to Take Water, Certificates of Approval or other ministerial approvals, approval under the Canadian Environmental Assessment Act (CEAA), and conservation authority permits.  
• Please note that MOE guidelines and other information related to the issues noted above are available at www.ene.gov.on.ca under the publications link. We encourage the proponent to review all the available guides and to reference any relevant information in the ESR. | **Noted**  
A list of all subsequent permits and approvals has been included within the ESR document in Section 8.3.2. |
| Ministry of Environment (cont.) | **First Nations Consultation**  
• Please note that as part of the required stakeholder and agency consultation, proponents are advised to contact the Ministry of Aboriginal Affairs and the Department of Indian and Northern Affairs to determine potentially affected Aboriginal peoples in the project area. Please refer to the website http://www.ene.gov.on.ca/en/eaab/aboriginal-resources.php for a list of appropriate government contacts.  
• Once identified, you are advised to provide notification directly to the Aboriginal peoples who may be affected by the project and provide them with an opportunity to participate in any planned public consultation sessions and comment on the project. | **The Ministry of Aboriginal Affairs and Department of Northern Affairs have been contacted through the distribution of the notice of commencement and will be circulated on subsequent PIC notices as well as the notice of completion.** |
| Ministry of Environment (cont.) | Thank you for the opportunity to comment on this project. A draft copy of the ESR should be sent to this office prior to the filing of the final draft, allowing approximately 30-days review time for the ministry’s technical reviewers to provide comments. Please also forward our office the Notice of Completion and ESR when completed. Should you or any members of your project team have any questions regarding the above, please contact me at (416) 326-3469. | **A notice of completion will be distributed to all stakeholders upon study completion.** |
| Ministry of Natural Resources | **Ministry of Natural Resources (MNR) Staff have reviewed the location identified in your Notice of Commencement for the Garden St. Environmental Assessment Study. Please note that our records do not indicate any ANSIs, wetlands, or any species at risk located at or immediately adjacent to this location. As such we have no concerns with your project at this time.**  
If during your field assessment of the project area you identify any indications of species at risk, please work to avoid them and contact Melinda Thompson, Species at Risk Biologist at our Office at 905-713-7425.  
If you have any further questions or comments regarding this project, please reference MNR file “D-12-003-W” in the correspondence. | **Noted** |
| Durham Region – Traffic (Amanda Spencer) | [received via email – Mar. 14, 2012]  
Our comments for the Town of Whitby’s/Cole Engineering’s consideration:  
The NS through lanes shown have more laterals shift than we typically recommend. Extending the median areas north and south of Cork Drive and north of Dryden Boulevard would help smooth the deflection of the through lanes through these short sections without LT lanes. | **Left turn lanes have been designed in coordination with the Town of Whitby, while a continuous centre left turn lane would eliminate the lateral deflection the impacts to existing boulevard tress will be significant and was not found to be preferred.** |
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<tr>
<th>Stakeholder</th>
<th>Comment Received</th>
<th>Response</th>
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<tbody>
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<td>Durham Region – Transit (Tony Francis)</td>
<td>[received via email – Feb. 9, 2012] After review, here are the DRT comments: 1) Garden northbound @ Dryden - we require a new northbound DRT stop in line with the north side of Bellfield Court 2) The DRT stop on Garden northbound at Patrick Drive should be moved north to the nearside of Meadowglen Drive (for better stop spacing) 3) Although outside of the design area, there are northbound and southbound stops at Clune Place/Chiltern Place that are not noted on the map</td>
<td>• Transit stops have been added or relocated on the design alternatives as per Durham Region Transit comments.</td>
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<td>Durham Region – Transit (Tony Francis)</td>
<td>[received via email – May 9, 2012] Re: request to relocate the following transit stops FROM nearside TO farside: • Existing Garden Street SB @ Meadowglen Drive – Nearside • Existing Garden Street SB @ Willowbrook Drive – Nearside • Existing Garden Street SB @ Dryden Boulevard - Nearside • Existing Garden Street NB @ Cork Drive – Midblock Nearside No objection to the proposed relocations except for Garden SB @ Dryden. Our preference would be to keep the stop nearside at a signalized intersection.</td>
<td>• The transit stop for SB Garden Street @ Dryden has been retained as a nearside stop.</td>
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<td>Durham Region – General (Chris Lettch)</td>
<td>[received via email – Feb. 29, 2012] Thank you for sending us the cross-sections and plan of the proposed design for Garden Street. Transportation Planning and Transportation Design have reviewed the plans and do not have any comments at this time.</td>
<td>• N/A</td>
</tr>
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<td>Curve Lake First Nation (Chief Phyllis Williams)</td>
<td>[received via mail by Town of Whitby – Feb. 21, 2013] We would like to acknowledge receipt of your correspondence, which we received on 01/21/2013 regarding the above noted project. As you may be aware, the area in which your project is proposed is situated within the Traditional Territory of Curve Lake First Nation. Our First Nation’s Territory is incorporated within the Williams Treaty Territory and is the subject of a claim under Canada’s Specific Claims Policy. We strongly suggest that you provide Karry Sandy-Mackenzie, Williams Treaty First Nation Claims Coordinator, 8 Creswick Court, Barrie, ON L4M 2S7, with a copy of your proposal as your obligation to consult to also extend to the other First Nations of the Williams Treaty. Although we have not conducted exhaustive research nor have we the resources to do so, Curve Lake First Nation Council is not currently aware of any issues that would cause concern with respect to our Traditional, Aboriginal and Treaty rights. Please note that we have particular concern for the remains of our ancestors. Should excavation unearth bones, remains or other such evidence of a native burial site or any Archaeological findings, we must be notified without delay. In the case of a burial site, Council reminds you of your obligations under the Cemeteries Act to notify the nearest First Nation Government or other community of Aboriginal people which is willing to act as a representative and whose members have a close cultural affinity to the interred person. As I am sure you are aware, the regulations further state that the representative is needed before the remains and associated artifacts can be removed. Should such a find occur, we request that you contact our First Nation immediately. Curve Lake First Nation also has available, trained Archaeological Liaisons who are able to actively participate in the archaeological assessment process as a member of a field crew, the cost of which will be borne by the proponent. If any new, undisclosed or unforeseen issues should arise, that has potential for anticipated negative environmental impacts or anticipated impacts on our Treaty and Aboriginal rights we require that we be notified regarding these as well. Thank you for recognizing the importance of consultation and respecting your duty to consult obligations as determined by the Supreme Court of Canada. Should you have further questions or if you wish to hire a liaison for a project, please feel free to contact Melissa Dokis or Krista Coppaway at 705-657-8045x222 or <a href="mailto:dutytoconsult@curvelakefn.ca">dutytoconsult@curvelakefn.ca</a>.</td>
<td>• It has been recommended within the ESR that the Town of Whitby provide updates to the Curve Lake First Nation on the project details in advance of and during the Detail Design Stage as noted in Sections 1.8 and 7.3.3 of the ESR</td>
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<td>Ministry of Aboriginal Affairs (Wendy Cornet)</td>
<td>MAA identified numerous First Nations and Metis Community Councils to be contracted for their comment on the project. MAA requested that no future correspondence on the project be sent to the MAA.</td>
<td><em>The Notice of Commencement / PIC #1 and notice of PIC #2 were provided to all parties identified by the MAA.</em></td>
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| Ministry of Tourism and Culture (Rosi Zirger) | [received via email – Jan. 28, 2013] On January 21, 2013 the Ministry of Tourism, Culture and Sport (MTCS) received a Notice of Public Information Centre #2 for the project mentioned above. As part of the Class Environmental Assessment process, the MTCS has an interest in the conservation of cultural heritage resources including:  
  - archaeological resources,  
  - built heritage resources, and  
  - cultural heritage landscapes.  
  
  Could you advise whether cultural heritage resources have been considered as part of this EA? I attached our Ministry’s standard checklists to assist you in your consideration of heritage:  
  1. *Criteria for Evaluating Archaeological Potential*, which identifies characteristics of the property that indicate whether archaeological resources might be present and/or impacted. The criteria will assist you in determining whether an archaeological assessment by an archaeologist licensed under the Ontario Heritage Act will be necessary for this project.  
  2. *Screening for Impacts to Built Heritage and Cultural Heritage Landscapes*, which will assist you in identifying potential heritage resources within the study area.  
  
  Please advise if, after you have completed these checklists, the project has the potential to impact cultural heritage resources. Feel free to contact me should you have any questions or concerns. | *The project included a Stage 1 Archeological Assessment included in Appendix I. The findings for Archaeological and Cultural Heritage have been documented in Section 3.2 of the ESR.* |