

TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT
PHASE 2 REPORT

Appendix C

Consultation Plan and
Record of Stakeholder and
Public Consultation

September 30, 2019

**TOWNSHIP OF NORTH DUNDAS
SCHEDULE 'C' MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
(DRINKING WATER SUPPLY SYSTEM CLASS EA)**

CONSULTATION PLAN

The Municipal Class Environmental Assessment (Class EA) planning process typically includes the development of a consultation plan. The following provides a summary of the consultation plan for the Township of North Dundas, Schedule 'C' Municipal Class Environmental Assessment for the North Dundas Drinking Water Supply System Capacity Expansion. Please note that the project is referenced herein as the Drinking Water Supply System Class EA. The consultation plan takes into consideration the mandatory requirements and objectives of effective consultation with the public and other potential stakeholders, as outlined in the Municipal Engineers Association (MEA) Class Environmental Assessment Document by addressing the following:

- Identification of potential stakeholders
- Level of consultation
- Appropriate means of contact
- General timing of contact

Consultation plans for Class EAs are not required to be formal documents, but rather an approach or methodology that is determined early in the study and may be documented (e.g. minutes, memo, etc.).

Township Council

Council will be informed of progress and points of public contact directly by Township Staff.

Identification of Potential Stakeholders

A list of stakeholders to be contacted for the Drinking Water Supply System Class EA is attached; responses will be documented. The contact list will be periodically updated as the project progresses.

Level of Consultation

The level of consultation depends largely on the problem or opportunity being addressed, the level of complexity, potential environmental issues and impacts, specific community characteristics and needs, available resources, and approaches used on similar studies in the Township.

This Class EA will be initiated as a Schedule 'C' that requires at minimum two (2) Public Information Centres (PICs) while one (1) PIC is required for a Schedule 'B' Class EA. The Class EA Schedule will be reviewed and confirmed after completion of Phase 1 (Problem/Opportunity definition) and Phase 2 (Evaluate Alternative Solutions). The North Dundas Drinking Water Supply System Class EA PICs will be scheduled to present the major findings of Phase 2 (Evaluate Alternative Solutions) and if required Phase 3 (Evaluate Alternative Solutions and Prepare Draft Environmental Study Report) of the Class EA process, allowing public input prior to finalizing the Environmental Study Report. The outline below indicates timing for major work tasks, and consultation.

To facilitate the consultation process and consider feedback from interested Stakeholders, the Project Committee will meet at regular intervals, where the Project Committee includes representative(s) from the

Township of North Dundas, Ontario Clean Water Agency (OCWA), the Consultant and other Stakeholders, if and when required.

Appropriate Means of Contact

The following means of contact have been confirmed for the Drinking Water Supply System Class EA planning process:

PURPOSE	MEANS OF CONTACT
Notification	<ul style="list-style-type: none"> ▪ Notices in newspapers ▪ Notices mailed to persons directly affected (as required) ▪ Notices mailed to review agencies and interested parties directly ▪ Notices posted on Township's web page
Information Collection/Exchange	<ul style="list-style-type: none"> ▪ Public Information Centre(s) (two required for a Schedule 'C' and one for Schedule 'B' projects). <p>Other forms of information collection and exchange will include:</p> <ul style="list-style-type: none"> ▪ Site visits/meetings ▪ Comment sheets ▪ Telephone calls ▪ Written communication ▪ E-mail addresses which are used to communicate feedback

General Timing

The general timing of key consultation points are summarized below:

DATE	MILESTONE
September 2019	Project start-up
September 2019 – November 2019	Phase 1: Identify and Describe the Problem or Opportunity
October 2019	Notify Potential Stakeholders and confirm level of interest/involvement
December 2019 to April 2020	Phase 2: Evaluate Alternative Solutions
April 2020	Notify Stakeholders of Schedule 'C' Phase 2 Report and Conduct Public Consultation (PIC No.1)
April 2020	Finalize Schedule 'C' Phase 2 Report
May 2020 to August 2020	Phase 3: Alternative Design Concepts of Preferred Solution
August 2020	Notify Stakeholders of Draft Environmental Study Report and Conduct Public Consultation (PIC No. 2)
September 2020	Finalized Environmental Study Report and Issue Notice of Completion
October 2020	Public Review Period for the Study File

Summary

In summary, consultation with project stakeholders is mandatory in the Class EA planning process. The consultation plan was developed to define stakeholders, levels of consultation, means of communication, approximate project scheduling and implemented as such.

LIST OF POTENTIAL STAKEHOLDERS
Township of North Dundas - Drinking Water Supply System Capacity Expansion Class EA



HEA REVIEW AGENCIES	NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION CLASS	NOTES
PRIMARY AGENCIES TO BE CONTACTED IN ALL CASES		
MINISTRY OF THE ENVIRONMENT AND CLIMATE CHANGE - DISTRICT OFFICE (CORNWALL)	✓	To be notified in every situation
MINISTRY OF THE ENVIRONMENT AND CLIMATE CHANGE - REGIONAL OFFICE ENVIRONMENTAL ASSESSMENT COORDINATOR (KINGSTON)	✓	To be notified in every situation
OTHER DIRECTLY AFFECTED MUNICIPALITIES	See OTHER below	
TO BE CONTACTED AS APPROPRIATE		
MINISTRY OF INDIGENOUS RELATIONS AND RECONCILIATION	✓	To be contacted for direction on consultation with First Nations
MINISTRY OF ATTORNEY GENERAL	#	Not to be contacted in this case
Ministry of Community Safety and Correctional Services		Contact to see if they have an interest in the EA
MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS (LAND USE PLANNING)	✓	Only required if designated for prime agricultural (see class 1, 2 or 3) in Official Plan (note: surrounding area - agricultural use)
MINISTRY OF COMMUNITY AND SOCIAL SERVICES	#	Only required in situations involving a social service facility
MINISTRY OF TOURISM, CULTURE AND SPORTS	✓	To be notified for this project
MINISTRY OF ECONOMIC DEVELOPMENT, EMPLOYMENT AND INFRASTRUCTURE	#	To be contacted in situations involving significant job creation potential or supply chain benefits to the region or province
MINISTRY OF HEALTH AND LONG-TERM CARE	✓	To be contacted in situations involving groundwater or potential impacts on public health
MINISTRY OF MUNICIPAL AFFAIRS & HOUSING	✓	To be contacted in situations involving a municipal proposal, route to municipal servicing or have federal involvement
MINISTRY OF NATURAL RESOURCES AND FORESTRY - DISTRICT OFFICE (KEMPTVILLE)	✓	To be contacted in situations involving permanent and intermittent watercourses and water bodies and navigable water bodies
MINISTRY OF NATURAL RESOURCES AND FORESTRY - SOUTHERN REGIONAL OFFICE	✓	To be contacted in situations involving permanent and intermittent watercourses and water bodies and navigable water bodies
MINISTRY OF NORTHERN DEVELOPMENT AND MINES	✓	To be notified for this project - agency will review if there are impacts on mining resources
MINISTRY OF INFRASTRUCTURE (INFRASTRUCTURE ONTARIO)	#	Not to be contacted in this case
MINISTRY OF TRANSPORTATION	#	To be contacted in situations involving Provincial Highway / Road / If a city. Not to be contacted in this case
HEALTH CANADA	#	CEAA to determine if HC is to be contacted
ELECTRICAL UTILITIES	See OTHER below	
LOCAL CONSERVATION AUTHORITY - SOUTH NATION CONSERVATION AUTHORITY	✓	To be contacted in situations involving permanent and intermittent watercourses and water bodies and navigable water bodies
NAGARA ESCARPMENT COMMISSION	#	Not Applicable
ONTARIO PROVINCIAL POLICE	See OTHER below	
WATERFRONT REGENERATION TRUST	#	Not Applicable
ONTARIO GROWTH SECRETARIAT	#	Not Applicable
FEDERAL DEPARTMENTS AND AGENCIES		
FISHERIES AND OCEANS CANADA - COMMUNICATION BRANCH	✓	To be contacted in situations involving fish and fish habitat and water
TRANSPORT CANADA - NAVIGABLE WATERS PROTECTION PROGRAM - CANADIAN COAST GUARD	✓	To be reviewed at the end of Phase 2 if St. Lawrence is preferred
TRANSPORT CANADA - ENVIRONMENTAL MANAGEMENT PROGRAMS - ONTARIO REGION	✓	To be reviewed at the end of Phase 2 if St. Lawrence is preferred
CANADIAN TRANSPORT AGENCY	#	Not required - not likely to effect transportation service facilities related to Canadian Transport Facilities
CANADIAN HERITAGE - PARKS CANADA	#	Not required - not likely to effect historical, paleontological and architectural resources
ENVIRONMENT CANADA - ONTARIO REGION	#	To be contacted in situations where CEAA requirements may be applicable
CANADIAN ENVIRONMENTAL ASSESSMENT AGENCY	#	To be contacted in situations involving permanent and intermittent watercourses and water bodies and navigable water bodies
CANADIAN ENVIRONMENTAL PROTECTION AGENCY	#	Not to be contacted in this case
NORTH AND NORTHERN AFFAIRS CANADA	#	Not to be contacted in this case - Ministry of Aboriginal Affairs and Local First Nation Groups contacted directly
INDUSTRY CANADA	#	Not to be contacted in this case
OTHER		
COUNTIES, DISTRICTS, MUNICIPALITIES AND PLANNING BOARDS:		
United Counties of Simcoe, Dundas and Grey	✓	To be notified for this project
Surrounding Municipalities (North Dundas)	#	To be notified for this project
Township of North Dundas Staff	✓	To be notified for this project
Township of North Dundas Mayor, Deputy Mayor and Councillors	#	Township staff to notify as required
EMERGENCY SERVICES (FIRE, POLICE, AMBULANCE)		
North Dundas Fire Department	#	Not to be contacted in this case
O.P.P. Detachment (Winchester)	#	Not to be contacted in this case
Paramedic Services (Winchester)	#	Not to be contacted in this case
SCHOOL BOARDS	#	Not to be contacted in this case
GO Transit and Metrolinx	#	Not to be contacted in this case
ENR AND CP RAIL	#	Not to be contacted in this case
ONTARIO POWER GENERATION	#	Not to be contacted in this case
PROPERTY OWNERS ADJACENT TO PROJECT SITE AND DIRECTLY AFFECTED PUBLIC LANDOWNERS	#	To be notified in every situation (150 m RADIIUS)
Ministry of Education	#	Not to be contacted in this case

Ministry of Advanced Education, Skills & Training	*	Not to be contacted in this case
UTILITIES (NATURAL GAS, CABLE, TELEPHONE)	*	Not to be contacted in this case
Hydro One	*	Not to be contacted in this case
Union Gas	*	Not to be contacted in this case
Bell Canada	*	Not to be contacted in this case
EASTERN ONTARIO HEALTH UNIT	✓	To be notified for this project
FIRST NATIONS		
Algonquins of Ontario – Consultation Office	✓	To be notified for this project
Huron-Wendat Nation Council	✓	Notify only if highly likely that archaeological resources will be discovered, or once they have been found
LOCAL INTEREST GROUPS		
Permittee (Lacklé)	✓	To be notified for this project

Township of North Dundas - Drinking Water Supply System Capacity Expansion Class EA

[illegible]

Township of North Dundas Drinking Water Supply Class EA
List of Stakeholders
Updated November 30, 2022

Salutation	First Name	Last Name	Title	Agency	Address Line 1	Address Line 2	Email Address
Ms.	Genevieve	Sulatycky	Manager	Strategic Support Unit - Ministry of Energy, Northern Development and Mines (Ministry of Mines)	Willat Green Miller Centre, 2nd Floor, 853 Ramsey Lake Road	Sudbury, ON P3E 6B5	genevieve.sulatycky@ontario.ca
Ms.	Melanie	Johnson	Senior Strategic Initiatives Lead	Strategic Support Unit - Ministry of Energy, Northern Development and Mines (Ministry of Mines)	Willat Green Miller Centre, 2nd Floor, 853 Ramsey Lake Road	Sudbury, ON P3E 6B5	mjohnson@ontario.ca
Mr.	Carl	Bickerdie	CAO	South Nation Conservation Authority	33 Victoria Street, P.O. Box 29	Finch, ON K0C 1K0	cbickerdie@snca.on.ca
Mr.	Alex	Jolicoeur	Senior Planner	South Nation Conservation Authority	33 Victoria Street, P.O. Box 29	Finch, ON K0C 1K0	ajolicoeur@snca.on.ca
Mr.	Michael	Elms	Manager Community Planning and Development	Eastern Municipal Services Office - Ministry of Municipal Affairs & Housing - Planning, Community P & D	8 Estate Lane, Rockwood House	Kingston, ON K7M 9A5	michael.elms@ontario.ca
			Fisheries Protection Program	Fisheries and Oceans Canada	867 Lakeshore Road	Burlington, ON L7S 1A1	fisheriesprotection@info.mcg-pro.ca carls.bartolot@ontario.ca
Ms.	Karla	Burboise	Team Lead (IA), Heritage	Heritage Planning Unit, Programs and Services Branch - Ministry of Citizenship and Multiculturalism (Ministry of Tourism, Culture and Sport)	401 Bay Street, Suite 1700	Toronto, ON M5A 0A7	karla.burboise@ontario.ca
Ms.	Karen	Hardford	Supervisor	Ministry of Natural Resources and Forestry - Kemptville District Office	51 Riverside Drive	Pembroke, ON K8A 8X4	karen.hardford@ontario.ca
Mr.	Jon	Orzanga	Regional Environmental Planner	Ministry of the Environment, Conservation and Parks - Kingston Regional Office	1269 Gardiners Road, PO Box 22032	Kingston, ON K7M 8S5	jon.Orzanga@ontario.ca
			EA Notification (Eastern Region)	Ministry of the Environment, Conservation and Parks - Kingston Regional Office	1269 Gardiners Road, PO Box 22032	Kingston, ON K7M 8S5	jon.Orzanga@ontario.ca
Mr.	John	O'Neill	Rural Planner	Ministry of Agriculture and Food & Rural Affairs	1111 J. - 58 Ministry Road, Box 2004, ORC Building	Kemptville, ON K0G 1J0	john.o'neil@ontario.ca
Mr.	Joerg	Wittenbrink	Manager(A) Governance, Strategy and Analytics Branch	Strategic Policy and Analytics Branch, Strategic, Network and Agency Policy Division - Ministry of Energy, Northern Development and Mines	77 Grenville St., 6th Flr.	Toronto, ON M7A 1B3	joerg.wittenbrink@ontario.ca
Mr.	Rami	Basha	Program Manager	Eastern Ontario Health Unit	1000 Pitt Street	Cornwall, ON K6J 5T1	rbasha@rohu.ca
Ms.	Angela	Rutley	Chief Administration Officer	Township of North Dundas	938 St. Lawrence Street, PO Box 489	Winchester, ON K0C 2K0	angela@northdundas.com
Mr.	Bruce	Shurtliff	Director of Operations - Winchester Dairy Food Group	Parmalat Canada Inc.	490 Gordon Street	Winchester, ON K0C 2K0	bruce.shurtliff@parmalat.ca
Mr.	André	Jose	Project Manager	Lactalis Canada			Andre.Jose@lactalis.com
Mr.	Remy	Vincent	Grand Chief	Huron-Wendat Nation Council	255 Place Chei-Michel-Lévesque	Wendake, QC G0A 4V0	remy.vincent@huronwendat.com
Ms.	Sarah	Cronier	Cultural Heritage Program Coordinator	Algonquins of Ontario - Consultation Office	31 Riverside Drive, Suite 101	Pembroke, ON K8A 8R6	sarahcronier@algonquins.com
Mr.	Wesley	Plant	Manager, Environmental Assessment Section	Algonquins of Ontario - Consultation Office	31 Riverside Drive, Suite 101	Pembroke, ON K8A 8R6	wplant@algonquins.com
Mr.	Dave	Lanham	Deputy Fire Chief	Environment Canada-Ontario Region	4505 Dufferin St.	Downsview, ON M3H 5T4	dave.lanham@ec.gc.ca
Mr.	Sandy	Johnston	Deputy Fire Chief	Chesesterville Fire Department	c/o Fire Services - Station #4, PO Box 459, 836 St. Lawrence St.	Winchester, ON K0C 2K0	Mail
Mr.	Shannon	Geraghty	CAO	Winchester Fire Department	c/o Fire Services - Station #3, PO Box 459, 836 St. Lawrence St.	Winchester, ON K0C 2K0	Mail
Mr.	Roy	Hunter	Deputy Fire Chief	Municipality of South Dundas	34 Ottawa Street, PO Box 740	Morrisburg, ON K0C 1X0	roy.hunter@southdundas.com
Mr.	Robert	Greene	Director	South Dundas Fire Department	1 Dundas Street, PO Box 38	Ironbridge, ON K0E 1K0	Mail
Ms.	Karla	Sunday	Environmental Science Officer	Ministry of Community Safety and Correctional Services (Ministry of the Solicitor General)	George Drew Building, 25 Grosvenor Street, 13th Floor	Toronto, ON M7A 1Y5	karla.sunday@ontario.ca
Mr.	Enik	Qios	President	Monark Council of Akwesasne	101 Tewkesbury Road	Akwesasne, ON K9H 0G6	enik.qios@akwesasne.ca
Ms.	Lisa	Van De Ligt	Project Manager	Ottawa Region Mills Council	214 Montreal Road	Ottawa, ON K1L 8L8	lisa.vandeligtd@ottawaregion.ca
				Lands, Resources & Consultations - Metis Nation of Ontario (MNO)	Suite 1100 - 86 Slater Street	Ottawa, ON K1P 5H1	landresources@metisnation.org
				Raisin-South Nation Source Protection Region	18045 County Road 2	PO BOX 429Cornwall, ON K6B	lisa.vandeligtd@metisnation.ca

Notice of Study Commencement



Township of North Dundas North Dundas Drinking Water Supply System Capacity Expansion Municipal Class Environmental Assessment

The Township of North Dundas (Township) has initiated a Class Environmental Assessment (Class EA) to determine the most suitable expansion and/or upgrades to the North Dundas Drinking Water Supply System over the next 20 years.

How Will This Affect Me?

The study will assess current and future requirements of the North Dundas Drinking Water Supply System to address the reliability and redundancy of the communal water system and the anticipated demand increase due to planned residential expansions and growing industrial needs in Winchester and Chesterville.

Public and agency consultation is a key element of the process. Based on your input, alternative strategies will be evaluated to identify optimal community, environmental and economic opportunities.

How Do I Get More Information?

Two (2) Public Information Centre(s) (PIC) will be conducted and notice of these sessions will be provided at least two (2) weeks in advance. In the meantime, the study team is reviewing background data and determining alternative solutions. You are also invited to contact a member of the study team at anytime with questions or to provide input into the study.

Updates will be provided throughout the study on the Township website, and if you have any questions regarding the study, please visit the website at www.northdundas.com or contact one of the people listed below.



TO FIND OUT MORE
VISIT

www.northdundas.com

Mark Buchanan, P.Eng.
Senior Civil Engineer
J.L. Richards & Associates Limited
864 Lady Ellen Place
Ottawa, ON K1Z 5M2
mbuchanan@jlrichards.ca
Phone: 613-728-3571

Dave Markell
Ontario Clean Water Agency
5 Industrial Drive
Chesterville, ON K0C 1H0
DMarkell@ocwa.com
Phone: 613-448-3098

This study is being initiated according to the requirements of a Schedule 'C' project under the Municipal Class Environmental Assessment process (October 2000, as amended in 2015). This Notice issued September 27, 2019.

Notice of Public Information Centre



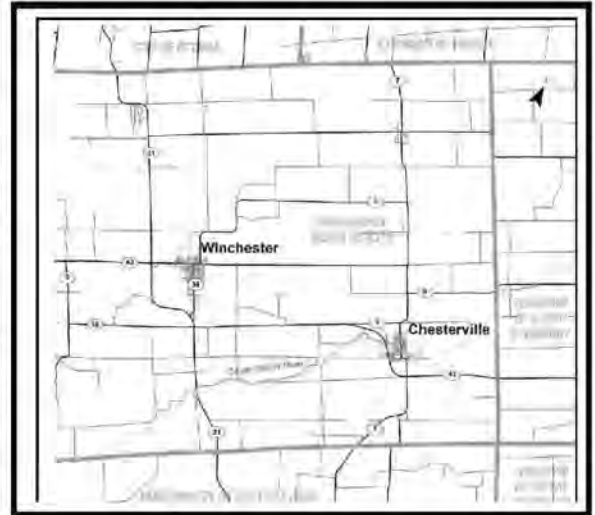
The Township of North Dundas North Dundas Drinking Water Supply System Capacity Expansion Municipal Class Environmental Assessment

The Township of North Dundas is advancing a Schedule B Class Environmental Assessment (Class EA) to determine the most suitable option to increase water supply to the communities of Winchester and Chesterville.

How Will This Affect Me?

The study will assess current and future requirements of the North Dundas Drinking Water Supply System to address the reliability and redundancy of the communal water system and the anticipated demand increase due to planned residential expansions and growing industrial needs in Winchester and Chesterville.

The proposed alternative solution involves a new groundwater well on Lafleur Road, as well as seeking supplemental water sources. These sources include continuing investigations for additional well sites, and consideration to connect to the South Dundas Drinking Water system, through a watermain along County Road 31.



We Want To Hear From You!

Public consultation is a key component to this Study. A Public Information Centre will be held to identify the existing drinking water system constraints, as well as proposed alternative solutions. The Public Information Centre is scheduled as follows:

Date: Thursday, December 15, 2022

Time: Open House from 5:00 p.m. – 7:00 p.m.

Location: Council Chambers, Township of North Dundas Office

Address: 636 St. Lawrence Street, Winchester ON, K0C 2K0

All those interested in the project are urged to attend. Project information will also be available to the public on the Municipality's website, <https://www.northdundas.com/>. If you have any questions regarding the study please contact one of the people listed below. We welcome your feedback.

Mark Buchanan, P.Eng.
Project Manager
J.L. Richards & Associates Limited
1000-343 Preston Street,
Ottawa, ON K1S 1N4
mbuchanan@jrichards.ca
Phone: 343-804-5349

Angela Rutley
Chief Administrative Officer
Township of North Dundas
636 St. Lawrence Street, P.O. Box 489,
Winchester, ON K0C 2K0
arutley@northdundas.com
Phone: (613) 774-2105 x 231

This study is being conducted according to the requirements of a Schedule B project under the Ontario Municipal Class Environmental Assessment process (October 2000, as amended in 2015).

The Notice was issued on **December 1, 2022**



1

Notice of Public Information Centre



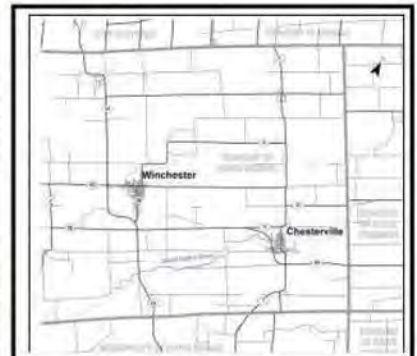
The Township of North Dundas North Dundas Drinking Water Supply System Capacity Expansion Municipal Class Environmental Assessment

The Township of North Dundas is advancing a Schedule B Class Environmental Assessment (Class EA) to determine the most suitable option to increase water supply to the communities of Winchester and Chesterville.

How Will This Affect Me?

The study will assess current and future requirements of the North Dundas Drinking Water Supply System to address the reliability and redundancy of the communal water system and the anticipated demand increase due to planned residential expansions and growing industrial needs in Winchester and Chesterville.

The proposed alternative solution involves a new groundwater well on Lafleur Road, as well as seeking supplemental water sources. These sources include continuing investigations for additional well sites, and consideration to connect to the South Dundas Drinking Water system, through a watermain along County Road 31.



We Want To Hear From You!

Public consultation is a key component to this Study. A Public Information Centre will be held to identify the existing drinking water system constraints, as well as proposed alternative solutions. The Public Information Centre is scheduled as follows:

Date: Thursday, December 15, 2022

Time: Open House from 5:00 p.m. – 7:00 p.m.

Location: Council Chambers, Township of North Dundas Office

Address: 636 St. Lawrence Street, Winchester ON, K0C 2K0

All those interested in the project are urged to attend. Project information will also be available to the public on the Municipality's website, <https://www.northdundas.com/>. If you have any questions regarding the study please contact one of the people listed below. We welcome your feedback.

Mark Buchanan, P.Eng.
Project Manager
J.L. Richards & Associates Limited
1000-343 Preston Street,
Ottawa, ON K1S 1N4
mbuchanan@jlrichards.ca
Phone: 343-804-5349

Angela Rutley
Chief Administrative Officer
Township of North Dundas
636 St. Lawrence Street, P.O. Box 489,
Winchester, ON K0C 2K0
arutley@northdundas.com
Phone: (613) 774-2105 x 231

This study is being conducted according to the requirements of a Schedule B project under the Ontario Municipal Class Environmental Assessment process (October 2000, as amended in 2015).

The Notice was issued on **December 1, 2022**



What can we help you find..



Project Updates

[Home](#) / [Municipal Services](#) / Project Updates

Water and Sewer Infrastructure Project Update

A A A  

J.L. Richards's August 2022 Project Updates



Drinking Water Supply System EA

North Dundas Drinking Water Supply System Capacity Expansion



The Township of North Dundas has initiated a Class Environmental Assessment to determine the most suitable expansion and/or upgrades to the North Dundas Drinking Water Supply System over the next 20 years.

[Notice of Commencement](#)

[North Dundas Water and Wastewater Servicing Study](#)

[North Dundas Hydraulic Water Model](#)

[North Dundas Drinking Water Supply System Capacity Expansion Phase 1 Report](#)

[Notice of Public Information Centre to be held December 15th, 2022](#)

Municipal Services

[Public Works](#) +

[Water & Sewer](#) +

[Public Safety](#) +

[Landfill & Recycling](#) +

[Animal Services](#) +

[Lotteries, Licences & Certificates](#) +

[← Project Updates](#)



Township of North Dundas
North Dundas Drinking Water Supply System Capacity Expansion
Schedule B Class Environmental Assessment
Public Information Centre

December 15, 2022

Sign-in Sheet

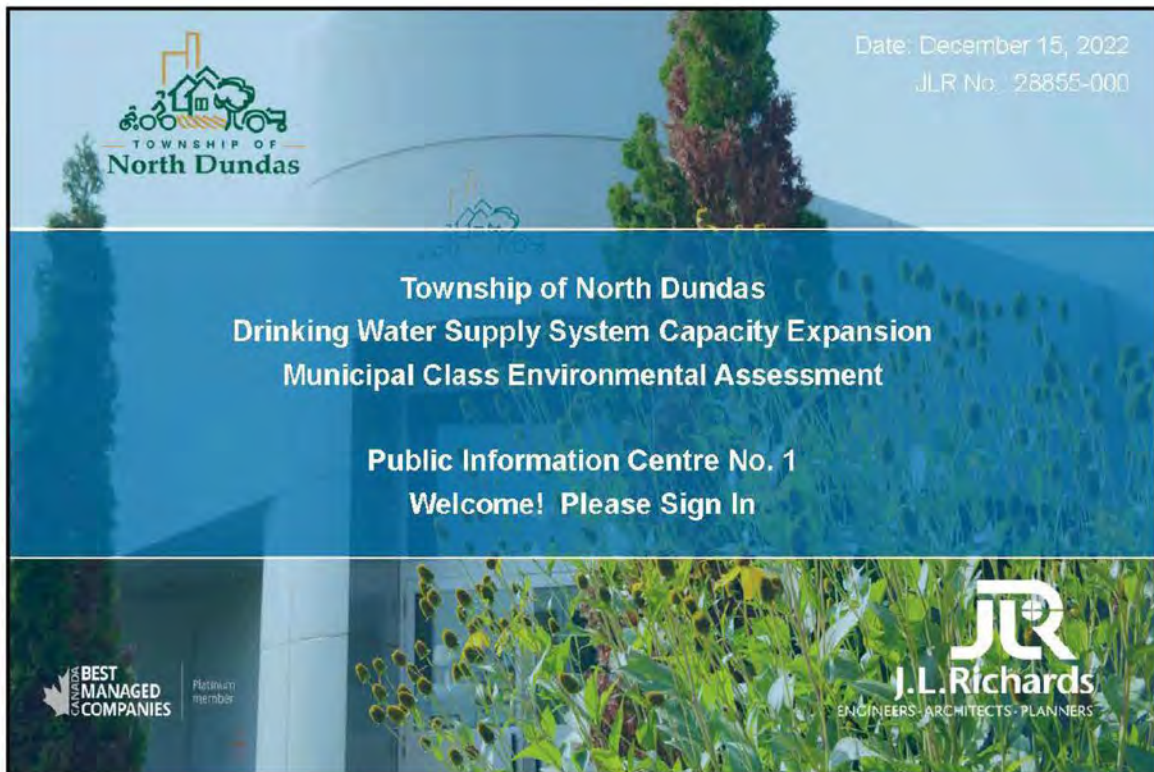


Please Print Clearly

Name	Address	Postal Code	Email	Telephone
Theresa Bergeron	South Mountain			
JOHN RACKO	WINCHESTER			
Blair Henderson	Ingliside			
Dave Markell	Ingliside			
Blaise & Sandra Freeman	Winchester			
Matthew Uhrig	Winchester			
JOHN MEHARD	CHESTERVILLE			
Sarah Meharg	Chesterville			
Victoria Meharg	Chesterville			
JONAS FOSSITT	WINCHESTER			
Michelle Cavanagh (SNC)	Winchester			
Emily Beach	Mountain			



J.L. Richards
JOURNALISM • ARCHITECTURE • DESIGN



1

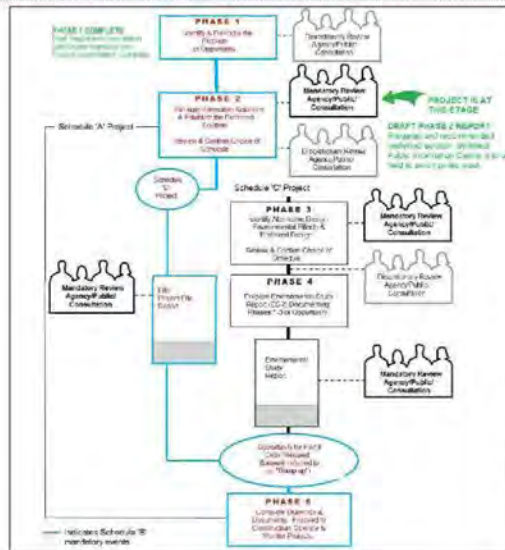
Presentation Overview

- | | |
|---|--|
| 1. Class EA Process Overview | 7. Screened Alternative Solutions |
| 2. Existing Water Infrastructure | 8. Identification of Preferred Alternative |
| 3. Population and Demand Projections | 9. Future Environmental Considerations |
| 4. Problem and Opportunity Statement | 10. Project Schedule |
| 5. Preliminary Evaluation of Alternatives | 11. Next Steps |
| 6. Evaluation of Alternative Solutions | |

1

2

Class EA Process Overview



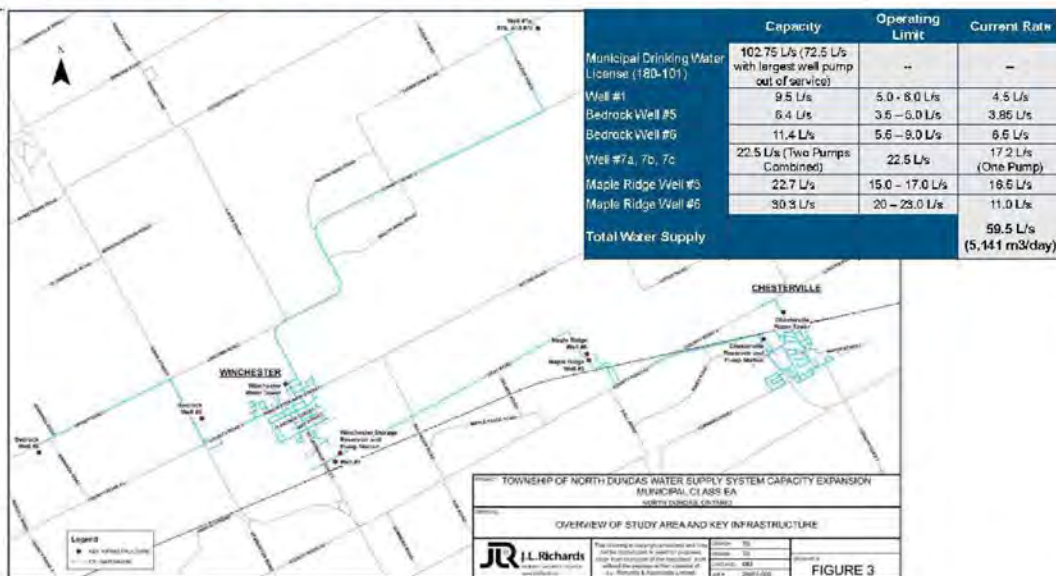
- ✓ Notice of Study Commencement (Schedule 'C')
- ✓ Phase 1 – Identification of Problem or Opportunity
- ✓ Phase 2 – Evaluation of Alternative Solutions and Identification of Recommended Solutions (Re-evaluated as Schedule 'B')
- ✓ Review Project Schedule

Public Information Centre No. 1

Place Project File Report on Public Record for 30-day Review Period

3

Existing Water Infrastructure



4

2

Population and Demand Projections

1) Serviced Population Growth

	Service Population	
	Low Growth	High Growth
Existing Population (2019)	4,355	4,355
Projected Growth (2019-2039)	1,884	2,874
Projected Population (2039)	6,030	7,229

2) Projected Maximum Day Demand

	Projected Conditions (2039)	
	Low Growth	High Growth
Residential Demand (m ³ /day)	4,515	5,349
Commercial Demand (m ³ /day)	3,221	3,221
Total Maximum Day Demand (m³/day)	7,736	8,570

3) Calculating Projected Water Supply Deficit

	Projected Conditions (2039)	
	Low Growth	High Growth
Projected Maximum Day Demand (m ³ /day)	7,736	8,570
Current Total Water Supply Capacity (m ³ /day, Largest Pump out of Service)	5,141	5,141
Projected Water Supply Deficit (m³/day)	2,595	3,429

The future deficit is 2,595 m³/d and 3,429 m³/d, based on the 2039 projected maximum day demand for both low growth and high growth respectively, compared to the current water supply capacity of the existing wells of 5,141 m³/d (59.5 L/s) with the largest well out of service.

5

Problem and Opportunity Statement

"The Township of North Dundas is serviced by a communal potable water supply system that generally consists of eight active groundwater wells, five pump houses with chlorine disinfection, two storage reservoirs, two elevated storage tanks and distribution system. While the system has been operating in accordance with all applicable legislation and is generally achieving all required water quality standards, it is anticipated that the Township will not be able to meet potable water supply requirements as recommended by the Ministry of the Environment, Conservation and Parks within the next 20 years timeframe if projected growth and associated water demand is realized. The Township is therefore in need of a solution that will address water supply constraints and improve the redundancy and reliability in delivering treated water to the community over the next 20 years."

3

6

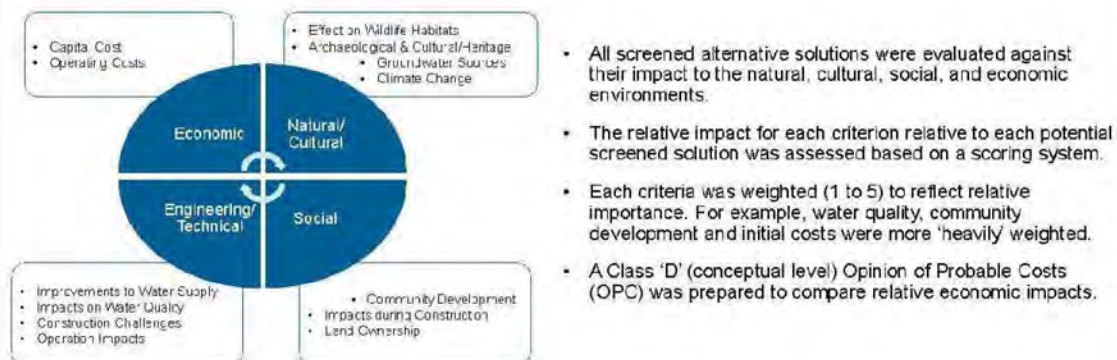
Preliminary Evaluation of Alternatives

The options were pre-screened and selected to be carried forward for further evaluation:

Option	Description	Preliminary Evaluation
1	Do Nothing	Carry Forward (as baseline)
2	Maintain and Redevelop Existing Wells	Do Not Carry Forward
3A	Alternate Water Source (New Treatment Plant at South Nation River)	Do Not Carry Forward
3B	Alternate Water Source (Connect to South Dundas Water System on St. Lawrence River)	Carry Forward in combination with other options
4	New Groundwater Source (Lafleur Road)	Carry Forward in combination with other options
4A	New Groundwater Source (Lafleur Road) and Expand Groundwater System	Carry Forward
5	New Well and Connect to South Dundas	Carry Forward
6	New Well and Acquire Supplemental Water Sources (Expand Groundwater and Connect to South Dundas)	Carry Forward
7	Implement Water Conservation Program	Do Not Carry Forward
8	Limiting Community Growth	Do Not Carry Forward

7

Evaluation of Alternative Solutions



4

8

Alternative Solutions



Option 4A: New Lafleur Rd. Well Site

Option 1: Do Nothing

- Maintaining status quo – Generally carried forward for detailed assessment as a baseline for review.
- Class 'D' OPC = \$ 0

Option 4A: New Well and Expanded Groundwater Sources

- Establish new groundwater well to provide short term water supply deficits (site located on Lafleur Rd.)
- Remaining water supply deficits to be met with additional groundwater wells (further investigations required)
- May require additional off-site utility serving upgrades (e.g. Power Supply)
- Class 'D' OPC = \$ 11,000,000

9

Alternative Solutions



Options 5 & 6: Conceptual Watermain Alignment: Winchester to Morrisburg

Option 5: New Well and Connect to South Dundas

- Establish new groundwater well to provide short term water supply deficits (site located on Lafleur Rd.)
- Remaining water supply deficits to be met by connecting to South Dundas water system.
- Class 'D' OPC = \$ 53,500,000

Option 6: New Well and Acquire Supplemental Water Sources

- Establish new groundwater well to provide short term water supply deficits (site located on Lafleur Rd.)
- Remaining water supply deficits to be met by
 - Additional wells
 - Connect to South Dundas water system
- Class 'D' OPC = \$ 59,000,000

5

10

Evaluation of Alternative Solutions

Option	Score	Rank	Comments
Option 1: Do Nothing	62	3	- No impacts to public or environment (no construction) - Limits future development in Township
Option 4A: New Well and Expand Groundwater System	85	2	- New well at Lafleur Rd site increases water supply with minimal impact
Option 5: New Well and Connect to South Dundas	59	4	- Same comments as Option 4A - Connection to surface water source provides resilience to climate change drought impacts - Very High Capital/Operation Costs
Option 6: New Well and Acquire Supplemental Water Sources <small>Preferred Alternative</small>	87	1	- Same Comments as Options 4A and 5. - Offers short-term solution for water supply demand, with flexibility to address remaining supply deficits. - Very High Capital/Operation Costs

11

Future Environmental Considerations

The following include additional studies and construction measures to mitigate potential environmental impacts:

Cultural Environment

- Stage 2 & 3 Archaeological Assessment will be conducted during detailed design.

Natural Environment Protection

- Species at Risk (SAR) study of new well site.
- Construction Timing Windows (i.e. In-water works, migratory bird nesting season, etc.)

Surface Water Protection

- Erosion and sediment control measures during construction
- Trenchless crossings across rivers/creeks etc.

6

12

Source Protection Planning

A new well will require amendment to the Source Protection Plan

Activities during detailed design will include:

- Additional pump testing, modelling and reporting to confirm Wellhead Protection Area (WHPA) delineations and vulnerability assessment.
- Additional Public Consultations with:
 - Public
 - South Nation Conservation
 - Raisin-South Nation Source Protection Council
- Preparation of Amendment request for review and approval by the Ministry of the Environment, Conservation and Parks (MECP).



13

Project Schedule and Next Steps

- CURRENT TASKS**

FUTURE TASKS

- Obtain and evaluate public, stakeholders and agency comments and confirm the preferred solution (December 2022)
 - Finalize Phase 2 Report (January 2023)
 - Issue Notice of Completion and Post Class EA Project File for a 30-day Review Period (January 2023)
 - Finalize Class EA documents (February 2023)
 - Proceed to preliminary and detailed design and project implementation (March 2023)
 - Estimated timelines to implement the recommended solution:
 - Preliminary Design: 6 months
 - Design Phase: 6 to 12 months
 - Approvals: 12 months
 - Construction Phase: 12 to 18 months (dependent on equipment procurement)

14

Project Contacts and More Information

- **Township of North Dundas**

Angela Rutley, Chief Administrative Officer
Township of North Dundas
636 ST. Lawrence Street, P.O. Box 489
Winchester, ON K0C 2K0
arutley@northdundas.com
Phone: (513) 774-2105 x231

- **Consultant - J.L. Richards & Associates Limited**

Mark Buchanan, P.Eng., Project Manager
J.L. Richards & Associates Limited
1000-343 Preston Street
Ottawa, ON K1S 1N4
mbuchanan@jlrichards.ca
Phone: (343) 804-5349

**Please provide comments
by December 22, 2022**

Ongoing information about this
project can be found at:
www.northdundas.com

**Ministry of the
Environment,
Conservation and Parks**
Eastern Region
1259 Gardiners Road, Unit 3
Kingston ON K7P 3J6
Phone: 613.549.4000
or 1.800.267.0974

**Ministère de l'Environnement,
de la Protection de la nature
et des Parcs**
Région de l'Est
1259, rue Gardiners, unité 3
Kingston (Ontario) K7P 3J6
Tél: 613 549-4000
ou 1 800 267-0974



By email only

November 14, 2019

Township of North Dundas

Attention: Jo-Anne McCaslin, Deputy CAO / Clerk
jmccaslin@northdundas.com

Dear Ms. McCaslin:

Re: Township of North Dundas Drinking Water Supply

Thank you for the October 16, 2019 letter notifying us of the initiation of this project, and the Notice of Commencement dated September 27, 2019. The project involves identifying and assessing potential sources of water to address the Township's needs for the next 20 years. The project is being planned as a schedule C project in accordance with the *Municipal Class Environmental Assessment* (Class EA).

Here are MECP preliminary comments on the project. Please consider these comments as you proceed through the Class EA process. The comments are grouped under these headings:

- Class EA process,
- MECP technical review issues,
- Aboriginal consultation.

Class Environmental Assessment Process

Notification

As the Regional EA Coordinator for this project, Jon Orpana will be responsible for circulating project notices and information to MECP reviewers and coordinating the MECP response during the Class EA process. Mr. Orpana is a mandatory contact for all notices issued for the project. In addition, please provide copies of other relevant information such as information updates, technical studies related to MECP's mandate, interim reports and technical memoranda, and two copies of the final report when it is available.

Preferred methods of correspondence are email for notices, one hard copy of technical reports and final reports (i.e. Environmental Study Report), and one copy of the report on a thumb drive. It is helpful to provide scanned copies of the notices as they appear in newspapers, and confirm the dates of publication.

Please contact:

Jon Orpana, Environmental Assessment Coordinator
Ministry of the Environment, Conservation and Parks
1259 Gardiners Road
P.O. Box 22032
Kingston, Ontario
K7M 8S5
email: jon.orpana@ontario.ca

Please ensure that the Notice of Completion states that Part II Order requests should be addressed in writing to:

Minister Jeff Yurek
Ministry of Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
minister.mecp@ontario.ca

and

Director, Environmental Assessment and Permissions Branch
Ministry of Environment and Climate Change
135 St. Clair Ave. W, 1st Floor
Toronto ON, M4V 1P5
enviopermissions@ontario.ca

The notice should also state that a Part II Order Request Form must be used to request a Part II Order. The Part II Order Request Form is available online on the Forms Repository Website (<http://www.forms.ssb.gov.on.ca>) by searching "Part II Order" or "012-2206E" (the form number).

Consultation with Review Agencies

In addition to public consultation, consultation with review agencies is an important component of the Class EA process. Please ensure that you contact review agencies directly to determine their interest in the project at the Notice of Commencement stage.

The MECP Regional office is a mandatory contact for all notices (please refer to contact information above). In addition, other ministries and agencies that may have an interest in the project are listed in section A.3.6 and Appendices 3 and 7. The provincial ministries that are most often involved in Class EA project review include the Ministry of Municipal Affairs (for example, expansion of settlement boundaries, consistency with Growth Plan), Ministry of Natural Resources and Forestry (for example, significant wetlands), and Ministry of Tourism, Culture and Sport (for example, cultural heritage or archaeological resources).

The final report should include information on correspondence with review agencies, issues raised by reviewers, and how these issues will be addressed. This could include technical studies or other information, and commitments to obtain specific approvals or permits.

MECP Technical Review

This Ministry's interest in water projects includes:

- MECP inspections of existing facilities,
- raw water quality of the drinking water source,
- source protection of drinking water supplies,
- impacts to / interference with area wells during operation of new communal water supply,
- impacts to groundwater and surface water due to construction (i.e. dewatering of trenches during installation of watermains, control of erosion and sedimentation, construction and/or dredging at water crossings, spill control),
- proposed water service area compared to sewage service area,
- potential for encountering waste disposal sites, contaminated soil, contaminated sediment or groundwater,
- management of excess materials, waste, contaminated soil and groundwater.

These environmental issues, and appropriate mitigation measures, should be addressed during the Class EA process.

We recommend that you contact this office as soon as possible during the environmental assessment process if you become aware of:

- contaminated sites in the study area or influence area of the project,
- a source water protection vulnerable area in the vicinity of the project, or
- issues that are contentious to the general public, aboriginal communities or review agencies.

Water Resources

For a new or expanded groundwater supply, this office is interested in reviewing the hydrogeological assessment as part of the Class EA process rather than at the Permit To Take Water stage. The hydrogeological assessment provides important information to the proponent, MECP reviewers, and other interested parties on potential environmental impacts, and it is necessary to evaluate this information as part of the Class EA process.

Source Protection

Proponents undertaking a Municipal Class EA project must identify early in the process whether a project is occurring within a source water protection vulnerable area, or changes vulnerable areas or creates new vulnerable areas. This must be clearly documented in a Master Plan, Project File report or Environmental Study Report. Specifically, the report should discuss whether or not the project changes or creates new vulnerable areas, and provide applicable details about the area. This section should then be used to inform and should be reflected in other sections of the report, such as the identification of net positive or negative effects of alternatives, mitigation measures, evaluation of alternatives etc.

In cases that result in delineation of new vulnerable areas (WHPA/IPZ) or amendment of existing vulnerable areas, completion of other technical work to assess source water vulnerability scores within the new or expanded vulnerable areas may be necessary, and may result in the development or extension of source protection policies to areas where they previously did not apply. If creating or changing a vulnerable area, proponents should document whether any existing uses or activities may potentially be affected by the implementation of source protection policies.

The proponent should contact and consult with the appropriate Conservation Authority/Source Protection Authority (CA/SPA) to discuss these issues early in the process.

Ontario Regulation 205/18 applies to source protection areas and ensures that municipal residential drinking water sources are protected *before* drinking water can be provided to the public. Where owners of municipal residential drinking water systems are applying for a drinking water works permit for a change that results in new or expanded vulnerable areas, the regulation requires:

- identification of vulnerable areas and vulnerability scoring,
- written confirmation from the Source Protection Authority (SPA) that
 - the SPA is satisfied that the vulnerability area mapping and scoring is complete,
 - identifies amendments necessary to the source protection plan (SPP),
 - indicates when the source protection authority will be able to propose amendments to the SPP, and
 - identifies if any of the amendments have already been made,
- a condition in the drinking water works permit or license that prevents the supply of drinking water to users of the new or expanding system until any necessary amendments to the SPP have been approved.

In summary, we recommend that early in the Class EA process the proponent contact the local SPA to discuss source protection implications. We recommend that during the Class EA process, delineation of new or expanded vulnerable areas and vulnerability scoring be completed, and businesses and landowners be consulted about source protection implications resulting from the new or expanded water supply.

Planning for Sewage and Water Servicing

As discussed in section 1.6.6 of the 2014 Provincial Policy Statement (PPS) under the Planning Act, municipal sewage and water services are the preferred form of servicing for settlement areas. Where municipal services are not provided, municipalities may allow the use of private communal sewage and water services. Partial services shall only be permitted to address failed individual on-site services in an existing development, or to allow infilling and minor rounding out of existing development on partial services, provided that site conditions are suitable for the long-term provision of such services with no negative impacts.

The Environmental Study Report should include a discussion of these servicing options, and a rationale for proceeding with one of the less preferred types of servicing, and the environmental implications of the servicing. For example, in cases where private communal water and septic systems are proposed, the report should discuss why municipal servicing is not feasible, why full services are not feasible, and whether any impacts to the environment (for example, impacts to the effectiveness of individual septic systems) could result.

As discussed in PPS section 1.1.3.8, settlement areas can only be identified or expanded during a comprehensive review of the Official Plan. We recommend that the local Ministry of Municipal Affairs Municipal Services Office be circulated on notices and reports and consulted on issues related to new or expanded settlement areas.

Contaminated Sites and Waste Management

The proponent should consider the potential that the project may be constructed in an area of contamination. If an area of contamination is present, the EA should determine the appropriate management of contaminated soil, sediment and groundwater as well as consider health and safety measures.

Waste, including contaminated soil, must be managed in accordance with MECP standards. The *Environmental Protection Act* (EPA) and Regulation 347 require waste to be classified and disposed of appropriately. When determining the waste category, the proponent must ensure compliance with Schedule 4 of Regulation 347.

Consultation with First Nation and Métis Communities

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before you can proceed with this project, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of this duty to project proponents while retaining oversight of the process.

Your proposed project may have the potential to affect Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act* 1982. Where the Crown's duty to consult is triggered in relation to your proposed project, **the MECP is delegating the procedural aspects of rights-based consultation to you through this letter.** The Crown intends to rely on the delegated consultation process in discharging its duty to consult and maintains the right to participate in the consultation process as it sees fit.

Based on information you have provided to date and the Crown's preliminary assessment you are required to consult with the following Aboriginal communities who have been identified as potentially affected by your proposed project:

- Algonquins of Ontario (AOO)
- Mohawk Council of Akwesasne
- Ottawa Region Métis Council – please cc Métis Nation of Ontario (MNO) on any correspondence going to the council

Steps that you may need to take in relation to Aboriginal consultation for your proposed project are outlined in the "Code of Practice for Consultation in Ontario's Environmental Assessment Process" which can be found at the following link:

<https://www.ontario.ca/document/consultation-ontarios-environmental-assessment-process>

Additional information related to Ontario's Environmental Assessment Act is available online at: www.ontario.ca/environmentalassessments

You must contact the Director of Environmental Assessment and Permissions Branch under the following circumstances subsequent to initial discussions with the communities identified by MECP:

- Aboriginal or treaty rights impacts are identified to you by the communities
- You have reason to believe that your proposed project may adversely affect an Aboriginal or treaty right
- Consultation has reached an impasse
- A Part II Order request or elevation request is expected

The Director can be notified by email, mail or fax using the information provided below:

Email:	enviropermissions@ontario.ca Subject: Potential Duty to Consult
Fax:	416-314-8452
Address:	Environmental Assessment and Permissions Branch 135 St. Clair Avenue West, 1 st Floor Toronto, ON, M4V 1P5

The MECP will then assess the extent of any Crown duty to consult for the circumstances and will consider whether additional steps should be taken, including what role you will be asked to play should additional steps and activities be required.

Yours Truly,

US 17.5/11

Vicki Mitchell
Environmental Assessment Coordinator
Eastern Region

cc: Mark Buchanan, P.Eng., J.L. Richards & Associates Limited,
mbuchanan@jlrichards.ca

Dave Markell, Ontario Clean Water Agency, DMarkell@ocwa.com

Jim Mahoney, MECP

Source Protection Programs Branch, MECP

Jon Orpana, MECP

From: [Mark Buchanan](#)
To: [Mitchell, Vicki \(MECP\)](#)
Cc: [EA Notices to ERegion \(MECP\)](#); jmccaslin@northdundas.com; dmarkell@ocwa.com; MPlummer@northdundas.com; dbelleau@northdundas.com; [Sara Jamaliniya](#)
Subject: RE: North Dundas drinking water supply, notice of initiation
Date: Tuesday, November 5, 2019 11:55:00 AM
Attachments: [28855-000.1 Notice of Commencement.pdf](#)
[MECP Initiation Letter Oct 16 2019.pdf](#)
[28855 North Dundas Water Supply streamlined ea project information form 2.xlsx](#)

Hello Vicki,

Thank you for the clarification. We will ensure our first mandatory stakeholder letter, that shall be issued prior to Public Information Centre No. 1 is prepared in accordance with the approved Municipal Class Environmental Assessment, (MEA 2015). The initial project letter exceeds with minimum consultation requirements. Also, the attached public notice has been published on the Township's website and contains a project map and contact from the Township.

In accordance with the current submission process, we have attached the initial project letter, public notice, Project Information Form (Excel spreadsheet) and copied the eanotification.eregion@ontario.ca address. All future project notices shall be directed to this email address and copy you.

We look forward to consulting with the MECP on the this project.

Should you require anything further, please do not hesitate to contact us.

Regards,

From: Mitchell, Vicki (MECP) <Vicki.Mitchell@ontario.ca>
Sent: Thursday, October 31, 2019 2:27 PM
To: Mark Buchanan <mbuchanan@jlrichards.ca>
Cc: EA Notices to ERegion (MECP) <eanotification.eregion@ontario.ca>; jmccaslin@northdundas.com; dmarkell@ocwa.com
Subject: North Dundas drinking water supply, notice of initiation

Hello Mark,

I received a hard copy of a notice of initiation for the Township of North Dundas drinking water system expansion.

I am contacting you because the information is incomplete and has not been submitted in accordance with the MECP approved process. The notice does not contain the information required in a notice of commencement, including a map of the project location, and the contact at the Township of North Dundas.

MECP has a new process for submission of notices of commencement for Class EA projects to our ministry (since May 2018). We request that you follow the new process and submit an electronic copy of the notice (pdf) and the Project Information Form (Excel spreadsheet) to the appropriate Regional email account.

For projects in Eastern Region, please send the requested information to eanotification.eregion@ontario.ca

I have attached a copy of the Project Information Form and instructions. Information on the new process can be found at <https://www.ontario.ca/page/class-environmental-assessments-approved-class-ea-information>.

Please submit copies of all notices via email only. MECP prefers not to receive paper copies of notices.

Thank you for your attention to this matter,

Vicki Mitchell

Regional EA Coordinator

MECP Eastern Region

1259 Gardiners Road, Kingston ON

(613) 549-4000 ext. 2614

Ministry of Heritage, Sport,
Tourism and Culture Industries

Programs and Services Branch
401 Bay Street, Suite 1700
Toronto, ON M7A 0A7
Tel: 416.314.7643

Ministère des Industries du Patrimoine,
du Sport, du Tourisme et de la Culture

Direction des programmes et des services
401, rue Bay, Bureau 1700
Toronto, ON M7A 0A7
Tél: 416.314.7643



February 3rd, 2020

EMAIL ONLY

Mark Buchanan, P. Eng.
Senior Civil Engineer
J.L. Richards & Associates Ltd.
864 Lady Ellen Place
Ottawa, ON K1Z 5M2
Mbuchanan@jlrichards.ca

MHSTCI File : 0011637
Proponent : Township of North Dundas
Subject : Notice of Commencement – Municipal Class EA
Project : North Dundas Drinking Water Supply System Capacity Expansion
Location : North Dundas

Dear Mark Buchanan:

Thank you for providing the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) with the Notice of Commencement for the above-referenced project. MHSTCI's interest in this Environmental Assessment (EA) project relates to its mandate of conserving Ontario's cultural heritage, which includes:

- Archaeological resources, including land and marine;
- Built heritage resources, including bridges and monuments; and,
- Cultural heritage landscapes.

Under the EA process, the proponent is required to determine a project's potential impact on cultural heritage resources.

Project Summary

The Township of North Dundas is initiating a planning process to assess expanding the capacity of the existing drinking water supply system. The Township is seeking to secure additional source(s) of potable drinking water to increase the reliability of the drinking water system and address anticipated demand increase due to the planned residential expansions and growing industrial needs. The project is being initiated within the requirements for a Schedule 'C' project under the Municipal EA process.

Identifying Cultural Heritage Resources

While some cultural heritage resources may have already been formally identified, others may be identified through screening and evaluation. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to these communities. Municipal Heritage Committees, historical societies and other local heritage organizations may also have knowledge that contributes to the identification of cultural heritage resources.

Archaeological Resources

This EA project may impact archaeological resources and should be screened using the MHSTCI [Criteria for Evaluating Archaeological Potential](#) to determine if an archaeological assessment is needed. MHSTCI archaeological sites data are available at archaeology@ontario.ca. If the EA project area exhibits archaeological potential, then an archaeological assessment (AA) should be undertaken by an archaeologist licenced under the OHA, who is responsible for submitting the report directly to MHSTCI for review.

Built Heritage and Cultural Heritage Landscapes

The MHSTCI [Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes](#) should be completed to help determine whether this EA project may impact cultural heritage resources. If potential or known heritage resources exist, MHSTCI recommends that a Heritage Impact Assessment (HIA), prepared by a qualified consultant, should be completed to assess potential project impacts. Our Ministry's [Info Sheet #5: Heritage Impact Assessments and Conservation Plans](#) outlines the scope of HIAs. Please send the HIA to MHSTCI and make it available to local organizations or individuals who have expressed interest in review.

Environmental Assessment Reporting

All technical cultural heritage studies and their recommendations are to be addressed and incorporated into EA projects. Please advise MHSTCI whether any technical cultural heritage studies will be completed for this EA project, and provide them to MHSTCI before issuing a Notice of Completion or commencing any work on the site. If screening has identified no known or potential cultural heritage resources, or no impacts to these resources, please include the completed checklists and supporting documentation in the EA report or file.

Thank you for consulting MHSTCI on this project and please continue to do so throughout the EA process. If you have any questions or require clarification, do not hesitate to contact me.

Sincerely,

Joseph Harvey

On behalf of

Kimberly Livingstone

Heritage Planner

Kimberly.Livingstone@ontario.ca

Copied to: Dave Markell, Ontario Clean Water Agency

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. MHSTCI makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MHSTCI be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Please notify MHSTCI if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the *Ontario Heritage Act* and the *Standards and Guidelines for Consultant Archaeologists*.

If human remains are encountered, all activities must cease immediately and the local police as well as the Registrar, Burials of the Ministry of Government and Consumer Services (416-326-8800) must be contacted. In situations where human remains are associated with archaeological resources, MHSTCI should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

The **purpose of the checklist** is to determine:

- if a property(ies) or project area:
 - is a recognized heritage property
 - may be of cultural heritage value
- It includes all areas that may be impacted by project activities, including – but not limited to:
 - the main project area
 - temporary storage
 - staging and working areas
 - temporary roads and detours

Processes covered under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – [separate checklist](#)
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Property Name

Township of North Dundas Drinking Water Supply System Environmental Assessment - Lafleur Well Site

Project or Property Location (upper and lower or single tier municipality)

Lafleur Road, Lot 14, Concession 9, Village of Winchester, Township of North Dundas

Proponent Name

Township of North Dundas

Proponent Contact Information

Angela Rutley, CAO, 636 St. Lawrence Street, P.O. Box 489, Winchester, ON K0C 2K0, arutley@northdundas.com

Screening Questions

	Yes	No
1. Is there a pre-approved screening checklist, methodology or process in place?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

Part A: Screening for known (or recognized) Cultural Heritage Value

	Yes	No
2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

	Yes	No
3. Is the property (or project area):		
a. identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. a National Historic Site (or part of)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. designated under the <i>Heritage Railway Stations Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. designated under the <i>Heritage Lighthouse Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

Part B: Screening for Potential Cultural Heritage Value

	Yes	No
4. Does the property (or project area) contain a parcel of land that:		
a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. has or is adjacent to a known burial site and/or cemetery?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. is in a Canadian Heritage River watershed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. contains buildings or structures that are 40 or more years old?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Part C: Other Considerations

	Yes	No
5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):		
a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. has a special association with a community, person or historical event?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. contains or is part of a cultural heritage landscape?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act*, *Planning Act* processes
- maintained by the property owner, proponent or approval authority

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
 - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's [Ontario Heritage Toolkit](#) or [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

In this context, the following definitions apply:

- **qualified person(s)** means individuals – professional engineers, architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's [Standards & Guidelines for Conservation of Provincial Heritage Properties](#) [s.B.2.]

Part A: Screening for known (or recognized) Cultural Heritage Value

2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) - or equivalent - has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

Note: Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

- i. designated under the *Ontario Heritage Act*
 - individual designation (Part IV)
 - part of a heritage conservation district (Part V)

Individual Designation – Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the *Ontario Heritage Act*]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note:** To date, no properties have been designated by the Minister.

Heritage Conservation District – Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
- [Ontario Heritage Trust](#)
- local land registry office (for a title search)

ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the *Ontario Heritage Act*

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- [Ontario Heritage Trust](#) - for an agreement, covenant or easement [clause 10 (1) (c) of the *Ontario Heritage Act*]
- municipal clerk – for a property that is the subject of an easement or a covenant [s.37 of the *Ontario Heritage Act*]
- local land registry office (for a title search)

iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the *Ontario Heritage Act* (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
- municipal heritage planning staff
- municipal heritage committee

iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the *Ontario Heritage Act*)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the *Ontario Heritage Act*
- section 34.6 of the *Ontario Heritage Act*. **Note:** To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk – for a property that is the subject of notice of intention [s. 29 and s. 40.1]
- [Ontario Heritage Trust](#)

v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at registrar@ontario.ca.

3b. Is the property (or project area) a National Historic Site (or part of)?

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the [National Historic Sites website](#).

3c. Is the property (or project area) designated under the *Heritage Railway Stations Protection Act*?

The *Heritage Railway Stations Protection Act* protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the [Directory of Designated Heritage Railway Stations](#).

3d. Is the property (or project area) designated under the *Heritage Lighthouse Protection Act*?

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the [Heritage Lighthouses of Canada](#) website.

3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the [Federal Heritage Buildings Review Office](#).

See a [directory of all federal heritage designations](#).

3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – [World Heritage Site website](#).

Part B: Screening for potential Cultural Heritage Value

4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations

For more information, contact:

- [municipal heritage committees](#) or local heritage organizations – for information on the location of plaques in their community
- Ontario Historical Society's [Heritage directory](#) – for a list of historical societies and heritage organizations
- Ontario Heritage Trust – for a [list of plaques](#) commemorating Ontario's history
- Historic Sites and Monuments Board of Canada – for a [list of plaques](#) commemorating Canada's history

4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services – for a [database of registered cemeteries](#)
- Ontario Genealogical Society (OGS) – to [locate records of Ontario cemeteries](#), both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to [locate early cemeteries](#)

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the [Canadian Heritage River System](#).

If you have questions regarding the boundaries of a watershed, please contact:

- your conservation authority
- municipal staff

4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

Note: 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide [Heritage Property Evaluation](#).

Part C: Other Considerations

5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- [municipal heritage committees](#) or local heritage organizations
- Ontario Historical Society's "[Heritage Directory](#)" - for a list of historical societies and heritage organizations in the province

An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through [Ontario Trails](#).

Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes A Checklist for the Non-Specialist

The **purpose of the checklist** is to determine:

- if a property(ies) or project area:
 - is a recognized heritage property
 - may be of cultural heritage value
- It includes all areas that may be impacted by project activities, including – but not limited to:
 - the main project area
 - temporary storage
 - staging and working areas
 - temporary roads and detours

Processes covered under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – [separate checklist](#)
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Property Name

Township of North Dundas Drinking Water Supply System Environmental Assessment - Proposed Watermain

Project or Property Location (upper and lower or single tier municipality)

Road allowance along County Road 31, from Morrisburg to Winchester

Proponent Name

Township of North Dundas

Proponent Contact Information

Angela Rutley, CAO, 636 St. Lawrence Street, P.O. Box 489, Winchester, ON K0C 2K0, arutley@northdundas.com

Screening Questions

	Yes	No
1. Is there a pre-approved screening checklist, methodology or process in place?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

Part A: Screening for known (or recognized) Cultural Heritage Value

	Yes	No
2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

	Yes	No
3. Is the property (or project area):		
a. identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. a National Historic Site (or part of)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. designated under the <i>Heritage Railway Stations Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. designated under the <i>Heritage Lighthouse Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

Part B: Screening for Potential Cultural Heritage Value

	Yes	No
4. Does the property (or project area) contain a parcel of land that:		
a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. has or is adjacent to a known burial site and/or cemetery?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. is in a Canadian Heritage River watershed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. contains buildings or structures that are 40 or more years old?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Part C: Other Considerations

	Yes	No
5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):		
a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. has a special association with a community, person or historical event?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. contains or is part of a cultural heritage landscape?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act*, *Planning Act* processes
- maintained by the property owner, proponent or approval authority

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
 - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's [Ontario Heritage Toolkit](#) or [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

In this context, the following definitions apply:

- **qualified person(s)** means individuals – professional engineers, architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's [Standards & Guidelines for Conservation of Provincial Heritage Properties](#) [s.B.2.]

Part A: Screening for known (or recognized) Cultural Heritage Value

2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) - or equivalent - has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

Note: Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

- i. designated under the *Ontario Heritage Act*
 - individual designation (Part IV)
 - part of a heritage conservation district (Part V)

Individual Designation – Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the *Ontario Heritage Act*]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note:** To date, no properties have been designated by the Minister.

Heritage Conservation District – Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
- [Ontario Heritage Trust](#)
- local land registry office (for a title search)

ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the *Ontario Heritage Act*

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- [Ontario Heritage Trust](#) - for an agreement, covenant or easement [clause 10 (1) (c) of the *Ontario Heritage Act*]
- municipal clerk – for a property that is the subject of an easement or a covenant [s.37 of the *Ontario Heritage Act*]
- local land registry office (for a title search)

iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the *Ontario Heritage Act* (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
- municipal heritage planning staff
- municipal heritage committee

iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the *Ontario Heritage Act*)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the *Ontario Heritage Act*
- section 34.6 of the *Ontario Heritage Act*. **Note:** To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk – for a property that is the subject of notice of intention [s. 29 and s. 40.1]
- [Ontario Heritage Trust](#)

v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at registrar@ontario.ca.

3b. Is the property (or project area) a National Historic Site (or part of)?

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the [National Historic Sites website](#).

3c. Is the property (or project area) designated under the *Heritage Railway Stations Protection Act*?

The *Heritage Railway Stations Protection Act* protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the [Directory of Designated Heritage Railway Stations](#).

3d. Is the property (or project area) designated under the *Heritage Lighthouse Protection Act*?

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the [Heritage Lighthouses of Canada](#) website.

3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the [Federal Heritage Buildings Review Office](#).

See a [directory of all federal heritage designations](#).

3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – [World Heritage Site website](#).

Part B: Screening for potential Cultural Heritage Value

4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations

For more information, contact:

- [municipal heritage committees](#) or local heritage organizations – for information on the location of plaques in their community
- Ontario Historical Society's [Heritage directory](#) – for a list of historical societies and heritage organizations
- Ontario Heritage Trust – for a [list of plaques](#) commemorating Ontario's history
- Historic Sites and Monuments Board of Canada – for a [list of plaques](#) commemorating Canada's history

4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services – for a [database of registered cemeteries](#)
- Ontario Genealogical Society (OGS) – to [locate records of Ontario cemeteries](#), both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to [locate early cemeteries](#)

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the [Canadian Heritage River System](#).

If you have questions regarding the boundaries of a watershed, please contact:

- your conservation authority
- municipal staff

4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

Note: 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide [Heritage Property Evaluation](#).

Part C: Other Considerations

5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- [municipal heritage committees](#) or local heritage organizations
- Ontario Historical Society's "[Heritage Directory](#)" - for a list of historical societies and heritage organizations in the province

An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through [Ontario Trails](#).

December 7, 2022

Dear Mark Buchanan,

SUBJECT: North Dundas Drinking Water Supply System Capacity Expansion

The Ministry of Natural Resources and Forestry (MNRF) received the Notice of Public Information Centre on December 1, 2022. Thank you for circulating this to our office. Please note that we have not completed a screening of natural heritage or other resource values for the project at this time. This response, however, does provide information to guide you in identifying and assessing natural features and resources as required by applicable policies and legislation, as well as engaging with the ministry for advice as needed.

Please also note that it is the proponent's responsibility to be aware of, and comply with, all relevant federal or provincial legislation, municipal by-laws or other agency approvals.

Natural Heritage

MNRF's natural heritage and natural resources GIS data layers can be obtained through the ministry's [Land Information Ontario \(LIO\)](#) website. You may also view natural heritage information online (e.g., Provincially Significant Wetlands, ANSI's, woodlands, etc.) using the [Make a Map: Natural Heritage Areas](#) tool.

We recommend that you use the above-noted sources of information during the review of your project proposal.

Natural Hazards

A series of natural hazard technical guides developed by MNRF are available to support municipalities and conservation authorities implement the natural hazard policies in the Provincial Policy Statement (PPS). For example, standards to address flood risks and the potential impacts and costs from riverine flooding are addressed in the *Technical Guide River and Stream Systems: Flooding Hazard Limit (2002)*. We recommend that you consider these technical guides as you assess specific improvement projects that can be undertaken to reduce the risk of flooding.

Petroleum Wells & Oil, Gas and Salt Resources Act

There may be petroleum wells within the proposed project area. Please consult the Ontario Oil, Gas and Salt Resources Library website (www.ogsrlibrary.com) or [GeoHub](#) for the best-known data on any wells recorded by MNRF. Please reference the 'Definitions and Terminology Guide' listed in the publications on the library website to better understand the well information available. Any oil and gas wells in your project area are regulated by the *Oil,*

Has and Salt Resource Act, and the supporting regulations and operating standards. If any unanticipated wells are encountered during development of the project, or if the proponent has questions regarding petroleum operations, the proponent should contact the Petroleum Operations Section at POSRecords@ontario.ca or 519-873-4634.

Mineral Aggregates

There may be mineral aggregate operations within the proposed project area. Please consult [Pits and Quarries Online \(gov.on.ca\)](http://gov.on.ca) to see the locations of active pits and quarries. If a well or watermain is proposed to be built on or adjacent to a pit or quarry, the aggregate operator should be contacted to ensure safety of the aggregates site and the water supply project, and to identify any need to update the aggregate site plan.

Fish and Wildlife Conservation Act

Please note, that should the project require:

- The relocation of fish outside of the work area, a Licence to Collect Fish for Scientific Purposes under the *Fish and Wildlife Conservation Act* will be required.
- The relocation of wildlife outside of the work area (including amphibians, reptiles, and small mammals), a Wildlife Collector's Authorization under the *Fish and Wildlife Conservation Act* will be required.

Public Lands Act & Lakes and Rivers Improvement Act

Some projects may be subject to the provisions of the *Public Lands Act* or *Lakes and River Improvement Act*. Please review the information on MNRF's web pages provided below regarding when an approval is, or is not, required. Please note that many of the authorizations under the *Lakes and Rivers Improvement Act* are administered by the local Conservation Authority.

- For more information about the *Public Lands Act*: <https://www.ontario.ca/page/crown-land-work-permits>
- For more information about the *Lakes and Rivers Improvement Act*: <https://www.ontario.ca/page/lakes-and-rivers-improvement-act-administrative-guide>

After reviewing the information provided, if you have not identified any of MNRF's interests stated above, there is no need to circulate any subsequent notices to our office. If you have identified any of MNRF's interests and/or may require permit(s) or further technical advice, please feel free to contact me.

Best Regards,

[original signed by]

Karen Cook

Regional Planner
Ministry of Natural Resources and Forestry
(705) 772- 3096
karen.cook2@ontario.ca

Sara Jamaliniya

From: Mark Buchanan
Sent: Wednesday, October 23, 2019 10:58 AM
To: Sara Jamaliniya
Subject: FW: North Dundas Drinking Water Supply System Expansion Class EA
Attachments: KVD_In_Water_Work_Timing_Guidelines_2018-02-27.pdf; NHGuide_MNRF_2019-04-01.pdf; RE: North Dundas Drinking Water Supply System Expansion Class EA

Hey Sara,

Please file in our stakeholder response folder and update our contact list.

Thanks,

Mark Buchanan, P.Eng.
Associate
Senior Civil Engineer

J.L. Richards & Associates Limited
700 - 1565 Carling Avenue, Ottawa, ON K1Z 8R1
Tel: 613-728-3571 Fax: 613-728-6012



**J.L. Richards
& Associates Limited**
ENGINEERS • ARCHITECTS • PLANNERS



From: Dillon, Mary (MNRF) <Mary.Dillon@ontario.ca>
Sent: Wednesday, October 23, 2019 9:26 AM
To: Mark Buchanan <mbuchanan@jlrichards.ca>
Subject: North Dundas Drinking Water Supply System Expansion Class EA

Dear Mr. Buchanan,

Thank you for the Notice of Project Initiation in accordance with the Municipal Class EA for the North Dundas Drinking Water Supply Expansion which was received by mail on October 21, 2019.

You may already be aware of the process, but I have attached a guide to help you access natural heritage data from convenient online sources and in-water timing guidelines should the proposed project activities require fisheries considerations. It is the proponent's responsibility to complete a preliminary screening for each project, obtain available information from multiple sources, conduct any necessary field studies, and to consider any potential environmental impacts that may result from an activity. If there are any questions or concerns regarding the Ministry's interests following completion of the preliminary screening, we would be happy to provide technical information and advice. Please note that Species at Risk data is no longer provided by the MNRF. All Endangered Species Act or Species at Risk enquiries should be directed to the Ministry of Environment, Climate Change and Parks at SAROntario@ontario.ca.

Here is some additional information to help you determine whether other legislation is applicable.

Petroleum Wells & Oil, Gas and Salt Resource Act

There may be petroleum wells within the proposed project area. Please consult the Ontario Oil, Gas and Salt Resources Library website (www.ogsrlibrary.com) for the best known data on any wells recorded by MNRF. Please reference the 'Definitions and Terminology Guide' listed in the publications on the Library website in order to better understand the well information available. Any oil and gas wells in your project area are regulated by the Oil, Gas and Salt Resource Act, and the supporting regulations and operating standards. If any unanticipated wells are encountered during development of the project, or if the proponent has questions regarding petroleum operations, the proponent should contact the Petroleum Operations Section at 519-873-4634.

Public Lands Act & Lakes and Rivers Improvement Act

Some Municipal projects may be subject to the provisions of the *Public Lands Act* or *Lakes and Rivers Improvement Act*. Please review the information on MNRF's web pages provided below regarding when an approval is required or not. Please note that many of the authorizations issued under the *Lakes and Rivers Improvement Act* are administered by the local Conservation Authority.

- For more information about the *Public Lands Act*: <https://www.ontario.ca/page/crown-land-work-permits>
- For more information about the *Lakes and Rivers Improvement Act*: <https://www.ontario.ca/document/lakes-and-rivers-improvement-act-administrative-guide>

We wish to remain engaged in this project and review the project report that is produced. Please contact me if you have any questions or concerns regarding MNRF interests.

Sincerely,

Mary Dillon
District Planner – Kemptville District
Ministry of Natural Resources and Forestry
613-258-8470



**Township of North Dundas
North Dundas Drinking Water Supply System Capacity Expansion**

AGENCY / STAKEHOLDER RESPONSE FORM

DATE: Oct. 22, 2019

Name (please print): Mary Dillon

Agency: Ministry of Natural Resources and Forestry

1) Is your agency interested in being involved in this project? (Circle One) ☒ YES ☐ NO

2) If you are interested in being involved in this project, please identify a contact person:

Name and Title: Mary Dillon, District Planner

Address: 10-1 Campus Dr. Kemptonville, ON

Postal Code: K0G 1J0

Telephone: (613) 258-8470

Fax: (613) 258-3920

E-mail: Mary.dillon@ontario.ca

3) If you presently have any comments or questions about this project please outline them below or attach on a separate sheet of paper.

4) Do you have any information regarding the Study Area that will assist us in our planning process? If so, please outline below or attach on a separate sheet of paper.

See email attachment

Please submit to:

Mark Buchanan, P.Eng., Senior Civil Engineer
J.L. Richards & Associates Limited
864 Lady Ellen Place
Ottawa, ON K1Z 5M2
Telephone: 613-728-3571
Facsimile: 613-728-6012
E-mail: mbuchanan@jlrichards.ca

Note: If you wish to respond via email, please write directly on the form and scan a copy before emailing it to the address above. Comments and information regarding this Study are being collected to assist the Ministry in meeting the requirements of the EA Act. This material will be maintained on file for use during the Study and may be included in project documentation. With the exception of personal information, all comments will become part of the public record.

Last Revised: February 27, 2018

SUBJECT: UPDATED IN-WATER WORK TIMING GUIDELINES IN KEMPTVILLE DISTRICT

To: all interested parties

The Ministry of Natural Resources and Forestry Kemptville District Office has recently reviewed and updated its In-water Work Timing Guidelines. These guidelines are intended to provide the timing for in-water work related to an activity, in order to protect fish during spawning and other critical life stages. Timing guidelines are based on species* presence and are therefore subject to change if new information becomes available.

Timing Guidelines in Kemptville District are:

Waterbody (and applicable geography or Fisheries Management Zone)	Timing Guidelines (no in-water works)
○ St. Lawrence River (FMZ 20)	March 15 – July 15 (Spring spawning species)
○ Ottawa River – Lac Des Chats (FMZ 12)	October 1 to July 15 (Spring and fall spawning species, including Lake Trout and Lake Whitefish)
○ Ottawa River – Lac Deschenes (FMZ 12)	October 15 to July 15 (Spring and fall spawning species, including Cisco)
○ Ottawa River – Lac Dollard des Ormeaux (FMZ 12)	January 1 to July 15 (Winter and spring spawning species, including Burbot)
○ Big Rideau Lake (South Burgess, North Burgess, Bastard and South Elmsley Twps) ○ Charleston Lake (Lansdowne and Escott Twps) ○ Crow Lake (South Crosby Twp)	October 1 to June 30 (Spring and fall spawning species, including Lake Trout)
○ Bass Lake (South Elmsley Twp) ○ Lower Rideau Lake (South Elmsley Twp) ○ Bob's Lake (South Sherbrooke Twp) ○ Christie Lake (South Sherbrooke Twp) ○ Dalhousie Lake (Dalhousie Twp) ○ Davern Lake (South Sherbrooke Twp) ○ Farren Lake (South Sherbrooke Twp) ○ Grippen Lake (Leeds Twp) ○ Indian Lake (South Crosby Twp) ○ Little Long Lake (Lansdowne Twp) ○ Millpond Lake (South Burgess) ○ Otter Lake (South Elmsley, South Burgess and Bastard Twps)	October 15 to June 30 (Spring and Fall spawning species, including Lake Whitefish and Cisco)

<ul style="list-style-type: none"> ○ Otty Lake (North Burgess and North Elmsley Twps) ○ Pike Lake (North Burgess Twp) ○ Silver Lake (South Sherbrooke Twp) ○ Redhorse Lake (Lansdowne Twp) ○ Tay River (South Sherbrooke, Bathurst, Drummond and North Elmsley Twps) ○ Wolfe Lake (North Crosby Twp) 	
<ul style="list-style-type: none"> ○ Bennett Lake (Bathurst Twp) ○ Crosby Lake (North Crosby Twp) ○ Gananoque River (Leeds Twp) ○ Lac Georges (Plantagenet and Alfred Twps) ○ Gillies Lake (Lanark Twp) ○ Little Crosby Lake (North Crosby Twp) ○ McLaren Lake (North Burgess Twp) ○ Mississippi Lake (Drummond, Beckwith and Ramsay Twps) ○ Mississippi River (Beckwith, Ramsay, Pakenham and Fitzroy Twps) ○ Raisin River below Martintown dam (Charlottenburgh Twp) ○ Rideau River (Wolford, Oxford, Montague, Marlborough, South Gower, North Gower, Osgood, Nepean and Gloucester Twps) ○ South Lake (Leeds Twp) ○ South Nation River below Plantagenet weir (Plantagenet Twp) ○ Upper Rideau Lake (North Crosby Twp) ○ Westport Sand Lake (North Crosby Twp) 	<p>January 1 – June 30 (Winter and spring spawning species, including Burbot)</p>
<ul style="list-style-type: none"> ○ Small rivers and streams (denoted on 1:50,000 National Topographic System maps as being one-lined) ○ All other waterbodies in FMZ 18 	<p>March 15 to June 30 (Spring spawning species)</p>

**Additional timing guidelines may apply as they relate to endangered and threatened species for works in both water and wetland areas. Timing guidelines are subject to change, depending on species found in a given waterbody.*

Should you have any questions, please do not hesitate to contact Joffre Côté, Management Biologist (at 613-258-8214 or joff.cote@ontario.ca) or Jane Devlin, Management Biologist (at 613-258-8418 or jane.devlin@ontario.ca).

Sincerely,

John Boos

Resources Management Supervisor
Kemptville District Office
Ministry of Natural Resources and Forestry

Ministry of Natural Resources and Forestry



Natural Heritage Information Request Guide

Regional Operations Division, Ministry of
Natural Resources & Forestry

Update – April 1, 2019

Table of Contents

1.0 Background, Purpose and Scope	2
1.1 Background	2
1.2 Purpose of this Guide	2
1.3 Scope	2
1.4 Audience	3
1.5 Disclaimer.....	3
2.0 Data Resources	4
2.1 Make a Map: Natural Heritage Areas.....	4
2.2 Land Information Ontario (LIO)	4
2.3 MNRF District Office	5
2.4 Public Agencies	5
2.5 Contacting the MNRF	5
Appendix A: Natural Heritage Mapping Resources	7
Appendix B: Natural Heritage Information Resources	11
Appendix C: Other information Sources	12

1.0 Background, Purpose and Scope

1.1 Background

The Ministry of Natural Resources and Forestry (MNRF) maintains a substantial amount of natural heritage information. The Government of Ontario is committed to transparency, customer service, and making information more publicly accessible. Access to natural heritage information is critical to informing municipal planning processes, development activities, and other initiatives such as science and research. To make natural heritage information more accessible and better understood, this document consolidates available MNRF natural heritage information and outlines how this information can be accessed.

1.2 Purpose of this Guide

The purpose of this guide is three-fold:

1. To provide a directory of natural heritage information sources available from the MNRF;
2. To reduce wait times for users to access the data, especially considering that much of the information is open and accessible; and
3. To help users efficiently access available data.

It remains the proponent's responsibility to:

- Complete a preliminary screening for their projects,
- Obtain available information from multiple sources,
- Conduct any necessary field studies, and
- Consider any potential environmental impacts that may result from a proposed activity.

To provide the most efficient service possible, proponents should complete natural heritage screenings **prior** to contacting Government of Ontario Ministry offices or other agencies for more detailed technical information and advice. This guide provides detailed information on where and how to access information to screen a study area in advance of consulting with Ministries.

1.3 Scope

MNRF maintains and provides information related to its resource management and land use planning mandate, including natural heritage, fisheries, wildlife, mineral aggregate resources, crown lands, protected lands and more. This information is made available to organizations, private individuals, consultants, and developers through online sources and is often considered under various pieces of legislation or as part of regulatory

approvals and planning processes. This guide has been created to help users navigate the available natural heritage information to support various activities. This guide additionally provides a list of other sources of information beyond MNRF, although it is not intended to be an exhaustive list of available sources.

This guide does not replace the Natural Heritage Reference Manual but is intended to support it. This guide is not intended to circumvent any field studies that may be necessary to document features and assess impacts.

This guide is a resource for proponents during project planning. Reviewing the layers listed in the appendices will enable proponents to prepare for both proponent and government led Environmental Assessments. For projects proposed on crown land, MNRF is the permitting agency and there may be additional initial screening requirements. Further studies may be required depending on the nature and location of the project.

1.4 Audience

The intent of this public guide is to make it easier for the proponents and consultants to access relevant information. This guide will also help internal Ministry staff who are responding to information requests or site screenings.

1.5 Disclaimer

The information available from MNRF and the sources listed below in the appendices should **not be considered as a substitute for site visits and appropriate field surveys**. Generally, information available from MNRF can be regarded as a starting point from which to conduct further field studies, if needed. While this data represents MNRF's best available current information, it is important to note that a lack of information for a site does not mean that additional features and values are not present. There are many areas where MNRF does not currently have information. On-site assessments can better verify site conditions, identify natural features and values and confirm presence of species at risk and/or their habitats.

This guide will be updated from time to time. For a current version of this guide, please contact your local or regional Government of Ontario Ministry office. Up-to-date contact information for Ministry offices can be obtained through the Government of Ontario Employee and Organization Directory, Info-GO, available at <http://www.infogo.gov.on.ca/infogo/home.html>.

2.0 Data Resources

2.1 Make a Map: Natural Heritage Areas

The MNRF maintains the [Make a Natural Heritage Area Map](http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US): http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US which provides public access to natural heritage information without the user needing to have Geographic Information System (GIS) capability. It allows users to view and identify natural heritage features, mark areas of interest, and create and print a custom map directly from the web application. The tool also shows topographic information such as roads, rivers, contours and municipal boundaries.

Make a Natural Heritage Area Map should be consulted as a first step in screening for natural heritage features. This tool does not provide access to all of the MNRF's natural heritage information and some layers may be incomplete.

Users are advised that sensitive information has been removed from the natural areas dataset and the occurrences of species at risk, rare plant communities and wildlife concentration areas has been generalized to a 1-kilometre grid.

The web-based mapping tool displays natural heritage data, including:

- Generalized Species at risk occurrence data (based on a 1-km square grid),
- provincial parks and conservation reserves,
- Areas of Natural and Scientific Interest,
- Wetlands,
- Woodlands, and
- Natural Heritage Information Centre data.

Data cannot be downloaded directly from this web map, however, information included in this application is available digitally through [Land Information Ontario](https://www.ontario.ca/page/land-information-ontario): <https://www.ontario.ca/page/land-information-ontario> (LIO).

2.2 Land Information Ontario (LIO)

Most natural heritage data is publicly available. This data is managed in a large corporate database called the LIO Warehouse and can be discovered through the [LIO Metadata Management Tool](https://www.javacoeapp.lrc.gov.on.ca/geonetwork/srv/en/main.home): <https://www.javacoeapp.lrc.gov.on.ca/geonetwork/srv/en/main.home>. This tool provides descriptive information about the characteristics, quality and context of the data. Publicly available geospatial data can be downloaded directly from this site.

The LIO Metadata Management Tool helps users to find, assess and access GIS data and houses up to 350 data and information products. Geospatial data are available through this tool, including (but not limited to):

- **Aquatic Resource Area (ARA) data classes:** general fisheries spatial data including water body type, thermal regime and fish species
- **Spawning Area (fish)**
- **Nursery Area (fish)**
- **Nesting Site (birds)**
- **Areas of Natural and Scientific Interest (ANSIs)**
- **Wetlands**
- **Wintering Area (deer, moose, etc.)**
- **Fire (Potential Hazardous Forest Types for Wildland Fire)**

[Appendix A](#) links MNRF's authoritative, relevant data sets to the location in the LIO Database where the data can be downloaded.

Note that while most data is publicly available, some data may be considered highly sensitive (i.e., Nursery Areas for fish, species at risk observations), and as such, restrictions are in place limiting access to this information.

2.3 Species at Risk

For detailed information on species at risk, please visit [Make a Natural Heritage Areas Map](#) or contact the Ministry of Environment, Conservation and Parks at SAROntario@ontario.ca.

2.4 Public Agencies

Ministries, Municipalities and Conservation Authorities may have proposed infrastructure work that requires screening. In these instances, these broader public sector organizations should contact the appropriate Ministry Office to explore more efficient ways to access information and make decisions. This could include entering into data sharing agreements. Please note that many public agencies already have ongoing data sharing agreements in place with LIO and the Natural Heritage Information Centre (NHIC).

2.5 For Additional Information

For information pertaining to corporate data, contact LIO for support by email at lio@ontario.ca or by telephone at 705-755-1878.

For further information pertaining to the NHIC, including data sharing agreements, please email NHICrequests@ontario.ca or call 705-755-2159.

There may be circumstances where a local Government of Ontario office should be consulted for additional information and/or technical advice. For instance, projects proposed on Crown Land should be discussed early in the project planning process with local MNRF District staff.

A listing of District offices can be found on this web page
<https://www.ontario.ca/page/ministry-natural-resources-and-forestry-regional-and-district-offices>

Appendix A: Natural Heritage Mapping Resources

The table below provides users links to maps and GIS data depicting natural heritage. This list is intended to help guide a natural heritage screening exercise. Click in the *Information Source* column for hyperlinks.

Information Source	Theme	Instructions for using this information
Wetland	Significant Wetlands	Use field "WETLAND_SIGNIFICANCE = Evaluated-Provincial" for provincially significant wetlands.
	Coastal Wetlands	Use field "COASTAL_IND=Yes" for Coastal Wetlands
	Fish & Wildlife, Wetlands	Support evaluation and identification of habitat and wetlands. Please consult user guide for details. Consult the User Guide for more information.
Make a Natural Heritage Areas Map	Endangered and Threatened Species	Turn on the NHIC 1 km Grid square and use the Find ... tool to query for species intersecting the grid. Consult the User guide for more information.
	Fish & Wildlife Habitat	Turn on the NHIC 1 km Grid square and use the Find ... tool to query for species intersecting the grid. Consult the User guide for more information.
Provincially Tracked Species 1KM Grid	Endangered and Threatened Species	Use field "SARO_STAUS= 'Endangered' or SARO_STATUS='Threatened'" for Endangered and Threatened species
Wintering Area	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
Aquatic Feeding Area	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
Breeding Area	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
Calving Fawning Site	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.

Information Source	Theme	Instructions for using this information
Den Site	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
Feeding Area, Wildlife	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
Habitat Planning Range	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
Mineral Lick	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
Nesting Site	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
Nursery Area, Wildlife	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
Resting Area	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
Staging Area, Wildlife	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
Travel Corridor, Wildlife	Wildlife Habitat	Supports evaluation and identification of wildlife habitat.
ANSI	Significant Areas of Natural and Scientific Interest	Use the field "ANSI_SIGNIFICANCE = Provincial" if you need to view only Provincially Significant ANSI. Consult the User Guide for more information.
Wooded Area	Woodlands	Supports evaluation and identification of significant woodlands and wildlife habitat
ARA Line Segment	Fish Species and Habitat	Supports evaluation and identification of fish habitat by indicating fish species present in the water feature. Consult the User Guide for more information.

Information Source	Theme	Instructions for using this information
ARA Polygon Segment	Fish Species and Habitat	Supports evaluation and identification of fish habitat by indicating fish species present in the water feature. Consult the User Guide for more information.
	At Capacity Lake Trout Lakes	Use field "AT_DEVELOPMENT_CAPACITY_IND = Yes" for designated at capacity lakes
Aquatic Resource Area (ARA) Survey Point	Fish Species	Supports evaluation and identification of fish habitat by indicating fish species present at that location. Consult the User Guide for more information.
Spawning Area	Fish Habitat	Supports evaluation and identification of fish habitat
Nursery Area, Fish	Fish Habitat	Supports evaluation and identification of fish habitat
Staging Area, Fish	Fish Habitat	Supports evaluation and identification of fish habitat
Feeding Area, Fish	Fish Habitat	Supports evaluation and identification of fish habitat
Travel Corridor Fish	Fish Habitat	Supports evaluation and identification of fish habitat
Ecoregion	Ecoregions	Used to determine what ecoregion covers your area
Natural heritage System Area	Natural Heritage System	Identifies Natural Heritage System Areas within the Greenbelt Plan, the Oak Ridges Moraine Conservation Plan, the Niagara Escarpment Plan and the Growth Plan for the Greater Golden Horseshoe. Consult this guide for more information.
Breeding Bird Atlas	Wildlife Habitat	Provides additional information on the location of Breeding Birds
eBird	Wildlife Habitat	Provides additional information on bird sightings

Information Source	Theme	Instructions for using this information
Ontario Reptile and Amphibian Atlas	Wildlife Habitat	Provides additional information on Reptile and Amphibian sightings
iNaturalist	Fish & Wildlife Habitat	Provides additional information on fish & wildlife sightings

Appendix B: Natural Heritage Information Resources

The table below provides users links to Natural Heritage policies and documentation that should be referenced when conducting a natural heritage screening exercise. Click in the *Information Source* column for hyperlinks

Information Source	Theme	Description
https://www.ontario.ca/document/water-work-timing-window-guidelines	Water Work Timing windows	An information source that can be used to determine in-water work timing windows
Inland Lakes designated for Lake Trout management	Fish Habitat	A list of lakes in Ontario that are managed as Lake Trout lakes
Significant wildlife habitat guide	Wildlife Habitat	Provides detailed information on the identification, description and prioritization of significant wildlife habitat.
Significant wildlife habitat ecoregional criteria schedules: Ecoregion 6E	Wildlife Habitat	Provides detailed information on the description, criteria, information sources and assessment methods for significant wildlife habitat in Ecoregion 6E
Significant wildlife habitat ecoregional criteria schedules: Ecoregion 7E	Wildlife Habitat	Provides detailed information on the description, criteria, information sources and assessment methods for significant wildlife habitat in Ecoregion 7E
Significant wildlife habitat ecoregional criteria schedules: Ecoregion 5E	Wildlife Habitat	Provides detailed information on the description, criteria, information sources and assessment methods for significant wildlife habitat in Ecoregion 5E
Significant wildlife habitat ecoregional criteria schedules: Ecoregion 3E	Wildlife Habitat	Provides detailed information on the description, criteria, information sources and assessment methods for significant wildlife habitat in Ecoregion 3E
Significant wildlife habitat ecoregional criteria schedules: Ecoregion 3W	Wildlife Habitat	Provides detailed information on the description, criteria, information sources and assessment methods for significant wildlife habitat in Ecoregion 3E
Significant wildlife habitat ecoregional criteria schedules: Ecoregion 4E	Wildlife Habitat	Provides detailed information on the description, criteria, information sources and assessment methods for significant wildlife habitat in Ecoregion 3E
Significant wildlife habitat mitigation support tool	Wildlife Habitat	Provides advice and recommendations on how to mitigate wildlife habitat during a development process
Natural heritage reference manual	Natural Heritage	Provides guidance for implementing the natural heritage policies of the Provincial policy Statement

Appendix C: Other information Sources

The table below provides users links to other data and resources that could be relevant when screening for development. Click in the *Information Source* column for hyperlinks

Information Source	Theme
Crown Land Use Policy Atlas	Crown Land
Make a Topographic Map	Base Data Mapping
Pits and Quarries	Aggregates
Aggregate resources policies and procedures	Aggregates
Aggregate resources study	Aggregates
Exploring for and extracting oil, natural gas and salt resources	Oil, Gas and Salt Resources
Petroleum wells	Oil, Gas and Salt Resources
Great Lakes – St. Lawrence River System and Large inland lakes: Technical Guides for flooding, erosion and dynamic beaches in support of natural hazards policies 3.1 of the provincial policy statement	Hazards
Adaptive Management of Stream Corridors in Ontario including Natural Hazards Technical Guides	Hazards
The Wildland Fire Risk Assessment and Mitigation Reference Manual	Hazards

Information Source	Theme
Public Lands Act	Crown Land
Crown land work permits	Crown Land
Aggregate resources	Aggregates
Lakes and Rivers Improvement Act	Crown Land
Licence to collect fish for scientific or education purposes	Fish
https://www.ontario.ca/search/data-catalogue	Base Data mapping
Fire - Potential Hazardous Forest Types for Wildland Fire	Hazards
MNR Region	Base Data mapping
MNR District	Base Data mapping
GeoBase	Base Data mapping
Mining Lands Administration System (MLAS) – Map Viewer	Mines
Geoconnections	Base Data mapping

Information Source	Theme
Ministry of Northern Development and Mines Mapping and link to Geology Ontario databases	Mines
Ministry of Environment, Conservation and Parks Data	Environment
National Air Photo Library	Aerial photos
Archives Ontario Aerial Photography	Aerial photos
GEOGratis	Base Data mapping
County Soils Maps	Base Data mapping
Forest Fire Info Map	Hazards
Agricultural Information Atlas	Agriculture
Crown Land Automated Internet Mapping System	Mines
COSINE	Base Data mapping
GEONAME	Base Data mapping
Government-wide data inventory	Base Data mapping

UNCLASSIFIED

From: [Mark Buchanan](#)
To: [David Scholz](#)
Cc: [Sara Jamaliniva](#); [Dave Markell](#)
Subject: RE: Drinking Water Supply System Capacity Expansion Class Environmental Assessment
Date: Tuesday, October 22, 2019 11:35:00 AM
Attachments: [doc03559120191022100125.pdf](#)

Thanks you for the stakeholder response form David,

We'll be sure to include South Nation Conservation as an interested stakeholder.

Can you provide us the current source water protection plan that covers the Township of North Dundas or the website link to download it?

Regards,

From: David Scholz <dscholz@nation.on.ca>
Sent: Tuesday, October 22, 2019 11:10 AM
To: Mark Buchanan <mbuchanan@jlrichards.ca>
Subject: RE: Drinking Water Supply System Capacity Expansion Class Environmental Assessment

Good morning Mr. Buchanan,

Please see SNC's Response Form.

Thank you and have a great day!

Best,
David



David Scholz | Administrative and Approvals Assistant

38 Victoria Street, Box 29, Finch, ON K0C 1K0
Tel: 613-884-2948 or 1-877-984-2948 | Fax: 613-884-2872
nation.on.ca | [make a donation](#) ☐ ☐ ☐ ☐

Our Local Environment. We're in it Together.

RECEIVED OCT 21 2019



**J.L. Richards
& Associates Limited**
864 Lady Ellen Place
Ottawa, ON Canada
K1Z 5M2
Tel: 613 728 3571
Fax: 613 728 6012

October 16, 2019
Our File: 28855-000.1

VIA EMAIL

Ms. Angela Coleman
General Manager/Secretary-Treasurer
South Nation Conservation Authority
38 Victoria Street, P.O. Box 29
Finch, ON K0C 1K0

Dear Ms. Coleman:

**Re: Township of North Dundas
Schedule 'C' Municipal Class Environmental Assessment
North Dundas Drinking Water Supply System Capacity Expansion
Notice of Project Initiation**

This letter is to inform you that the Township of North Dundas (the Township) is initiating a planning process to assess expanding the capacity of the existing drinking water supply system. The Township is seeking to secure additional source(s) of potable drinking water to increase the reliability of the drinking water system and address anticipated demand increase due to planned residential expansions and growing industrial needs.

The project is being initiated within the requirements for a Schedule 'C' project under the Terms of the Municipal Class Environmental Assessment (Class EA) process, which is approved under the *Environmental Assessment Act* (The project Schedule will be confirmed during the EA process).

BACKGROUND

The Township of North Dundas Drinking Water System supplies treated water to the Village of Winchester and the Village of Chesterville, in addition to key industrial, commercial and institutional users (notably Lactalis Group in Winchester and Winchester District Memorial Hospital). With its proximity to Ottawa, the population growth rate is projected to increase due to future developments.

Currently, the potable water system is comprised of eight active groundwater wells, five pump houses with chlorine disinfection, two storage reservoirs, two elevated storage tanks and approximately 40 km of distribution system. Exploring new water sources has been a long-standing focus for the Township and with the anticipated increase in water demand, this Class EA will focus on identifying and assessing potential sources of water to address the Township's needs for the next 20 years.

October 16, 2019
Our File: 28855-000.1

DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION CLASS ENVIRONMENTAL ASSESSMENT

The Township has retained the services of J.L. Richards & Associates Limited (JLR) in association with Golder Associates Ltd. to initiate Phases 1 to 4 of a Schedule 'C' Class EA.

The Class EA process will consider the following:

- Sufficient water supply capacity for both residential and industrial use
- Enhanced water supply system reliability and redundancy
- Appropriate treated water storage and efficient distribution\

PROJECT CONTACT INFORMATION

We are interested in hearing any comments or concerns that you may have about this project, and will be maintaining a record of comments and including them in the study documentation that will be made available for public review. Parties interested in providing input or that wish to obtain additional information at this time, are asked to submit comments in writing to:

Mark Buchanan, P.Eng.
Senior Civil Engineer
J.L. Richards & Associates Limited
864 Lady Ellen Place
Ottawa, ON K1Z 5M2
Telephone: 613-728-3571
Facsimile: 613-728-6012
E-mail: mbuchanan@jlrichards.ca

Please find attached a form to assist you in advising us of your interest in this project.

If you do not believe your involvement is necessary at this time, or if there is another member of your staff whom we should be in contact with, please advise us accordingly. Your written response in either case would be appreciated.

Yours very truly,

J.L. RICHARDS & ASSOCIATES LIMITED



Mark Buchanan, P.Eng.

SJ/MB/jd
Attach.

cc: Mr. Dave Markell, Ontario Clean Water Agency



**Township of North Dundas
North Dundas Drinking Water Supply System Capacity Expansion**

AGENCY / STAKEHOLDER RESPONSE FORM

DATE: 2019/10/22

Name (please print): Michael Melaney

Agency: South Nation Conservation Authority

1) Is your agency interested in being involved in this project? (Circle One) YES NO

2) If you are interested in being involved in this project, please identify a contact person:

Name and Title: Michael Melaney, Hydrogeologist

Address: 38 Victoria Street, Ench, ON

Postal Code: K0A 1K0

Telephone: (613) 984-2448 Fax: ()

E-mail: mmelaney@sncon.on.ca

3) If you presently have any comments or questions about this project please outline them below or attach on a separate sheet of paper.

4) Do you have any information regarding the Study Area that will assist us in our planning process? If so, please outline below or attach on a separate sheet of paper.

Source protection information.

Please submit to:

Mark Buchanan, P.Eng., Senior Civil Engineer
J.L. Richards & Associates Limited
864 Lady Ellen Place
Ottawa, ON K1Z 5M2
Telephone: 613-728-3571
Facsimile: 613-728-6012
E-mail: mbuchanan@jlrichards.ca

Note: If you wish to respond via email, please write directly on the form and scan a copy before emailing it to the address above. Comments and information regarding this Study are being collected to assist the Ministry in meeting the requirements of the EA Act. This material will be maintained on file for use during the Study and may be included in project documentation. With the exception of personal information, all comments will become part of the public record.

Matthew Marcuccio

From: Alix Jolicoeur <ajolicoeur@nation.on.ca>
Sent: Tuesday, November 1, 2022 11:49 AM
To: Matthew Marcuccio
Cc: Mark Buchanan; Henderson, Brian (Ottawa); Alison McDonald; Carl Bickerdike; Michael Melaney
Subject: RE: North Dundas Water Supply Class EA - Lafleur Road WHPA Review - Meeting Minutes

[CAUTION] This email originated from outside JLR. Do not click links or open attachments unless you recognize the sender and know the content is safe. If in doubt, please forward suspicious emails to Helpdesk.

Good morning,

Please find below comments from Michael Melaney on the draft EA report for your consideration. These comments mirror those discussed at the meeting October 19, 2022.

- From our understanding this is just for the EA, therefore, Mike has only provided some of very high-level comments
- The development of a WHPA's using the current average pumping rates, does not assess the maximum extent to which a WHPA should be defined. This type of assessment would require the augmentation of the PTTW to reflect that average pumping rate maximum. Additionally, this method is diverging from how the original WHPA were modelled. This must be justified and confirmed acceptable by the reviewing group (MOECC) versus what has been completed in the past.
- Infiltration rates based on the assumed esker at surface and sand flank locations might be a source of a potential area of conceptual/simulated modelling error. Based on aerial imagery it does not appear to be as consistent nor evident for the modelled scenario. Esker materials are definitely located at surface through portions of the identified simulated area but not at the modelled amounts. Simulated recharge across multiple kilometers of assumed esker at surface should be revisited or justified through aerial photography, Lidar (potentially) available, and site testing.
- Calibration methodology and further validation should be explored, the current simulated amount of water within highly conductive materials is likely overestimating the amount of water available. In discussions with the SNC, Golder/JLR had mentioned issues pertaining to maintaining the expected pumping capacity of Wellfield #7. This should be explored and included in the conceptual model and simulated version of the aquifer. Justification/validation as to why the current model is representing the physical and hydrological processes at an expected and acceptable calibration should be established.
- Buffering WHPA's by 100 m versus sensitivity estimates should be justified and discussed with MOE prior to submittal as they might not accept this methodology.
- Again, this review is high level and is not required at this time as someone at the SNC or a designated third party by the source water protection region will provide comments prior to the submission to the MOECC.

Please let us know if you have any questions or concerns.

Regards,
Alix Jolicoeur

From: Matthew Marcuccio <mmarcuccio@jlrichards.ca>

Sent: November 1, 2022 10:22 AM

To: Alix Jolicoeur <ajolicoeur@nation.on.ca>; Michael Melaney <mmelaney@nation.on.ca>

Cc: Mark Buchanan <mbuchanan@jlrichards.ca>; Henderson, Brian (Ottawa) <Brian_Henderson@golder.com>

Subject: RE: North Dundas Water Supply Class EA - Lafleur Road WHPA Review - Meeting Minutes

External email - if you don't know or can't confirm the identity of the sender, please exercise caution and do not open links or attachments.

Good morning Alix, Michael,

Per our meeting on October 19, it was understood that SNC would provide comments on the Draft WHPA Study within a couple of weeks of the meeting, taking into account Michael's upcoming departure.

Please advise the status of the review comments or if there are any concerns.

Thank you,
Matthew Marcuccio

Matthew Marcuccio, P.Eng.
Civil Engineer

J.L. Richards & Associates Limited
1000-343 Preston Street, Ottawa, ON K1S 1N4
Direct: 343-803-4554



**J.L. Richards
& Associates Limited**
ENGINEERS • ARCHITECTS • PLANNERS



**BEST
MANAGED
COMPANIES**

From: Matthew Marcuccio

Sent: Friday, October 28, 2022 1:40 PM

To: Mark Buchanan <mbuchanan@jlrichards.ca>; Holtze, Dale <Dale_Holtze@golder.com>; Henderson, Brian (Ottawa) <Brian_Henderson@golder.com>; Smolkin, Paul <Paul_Smolkin@golder.com>; Sarah Gore <sgore@jlrichards.ca>; Angela Rutley <arutley@northdundas.com>; Blair Henderson <BHenderson@ocwa.com>; Dave Markell <DMarkell@ocwa.com>; Michael Melaney <mmelaney@nation.on.ca>; Ajolicoeur@nation.on.ca; Dawn Crump <DCrump@ocwa.com>; Caroline Lamarche <CLamarche@ocwa.com>

Subject: North Dundas Water Supply Class EA - Lafleur Road WHPA Review - Meeting Minutes

Good afternoon,

Please find attached the minutes from last week's meeting regarding the review of Golder's Draft Lafleur Rd Wellhead Protection Area Study Report for the North Dundas Water Supply EA. If there are any errors or omissions, please notify me by Tuesday November 1, 2022.

Thank you,
Matthew Marcuccio

-----Original Appointment-----

From: Mark Buchanan <mbuchanan@jlrichards.ca>

Sent: Tuesday, August 23, 2022 9:30 AM

To: Mark Buchanan; Holtze, Dale; Henderson, Brian (Ottawa); Smolkin, Paul; Sarah Gore; Matthew Marcuccio; Angela Rutley; Blair Henderson; Dave Markell; Michael Melaney; Ajolicoeur@nation.on.ca

Cc: Dawn Crump; Caroline Lamarche; Ottawa Sussex Meeting Room

Subject: North Dundas Water Supply Class EA - Lafleur Road WHPA Review

When: Wednesday, October 19, 2022 10:00 AM-12:00 PM (UTC-05:00) Eastern Time (US & Canada).

Where: Microsoft Teams Meeting

Hello All,

Revised meeting date based on timing to receive the draft well head protection study now expected the week of Oct 7.

Mark

Hello Team,

Putting this meeting place holder in our calendars to review and discuss any questions on the draft Well Head Protection Study expected by the of August.

Michael/Alix: Please do not hesitate to share this invite with any of your colleagues that should attend.

Regards,
Mark

Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

Meeting ID: 297 992 157 791

Passcode: Fvk3kX

[Download Teams](#) | [Join on the web](#)

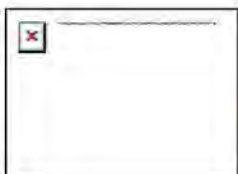
Or call in (audio only)

[+1 437-703-4646,,55680960#](#) Canada, Toronto

Phone Conference ID: 556 809 60#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)



Alix Jolicoeur | Senior Planner

38 Victoria Street, Box 28, Finch, ON K0C 1K0
Tel: 613-984-2948 or 1-877-984-2948 | Fax: 613-984-2872

nation.on.ca | [make a donation](#)

Our local environment, we're in it together.

Notre environnement local, protégeons-le ensemble.

Matthew Marcuccio

From: Lisa Van De Ligt <lisa.vandeligt@rrca.on.ca>
Sent: Thursday, December 1, 2022 1:32 PM
To: Matthew Marcuccio
Cc: Angela Rutley; Dave Markell; Mark Buchanan; Alison McDonald
Subject: RE: 28855-000.1 North Dundas Water Supply EA - Source Protection

[CAUTION] This email originated from outside JLR. Do not click links or open attachments unless you recognize the sender and know the content is safe. If in doubt, please forward suspicious emails to Helpdesk.

Hello Matthew,

Thank you for the update on the North Dundas Water Supply EA. I have also received your invitation to the Public Information Centre.

The local Drinking Water Source Protection program is a joint effort between the Raisin Region Conservation Authority and South Nation Conservation. SNC has been keeping us informed of the progress of this project.

I've copied Alison McDonald on this e-mail. She provides the planning expertise to the Raisin-South Nation Source Protection Region.

I will connect with you should I have any questions.

Regards,

Lisa

Lisa Van De Ligt
Team Lead, Communications and Stewardship
Raisin Region Conservation Authority
613-938-3611 ext. 223 | www.rrca.on.ca

DISCLAIMER: The information contained in this e-mail may be confidential and is intended solely for the use of the named addressee. Access, copying or re-use of the e-mail or any information contained herein by any other person is not authorized. If you are not the intended recipient please notify us immediately by returning the e-mail to the originator.

From: Matthew Marcuccio <mmaruccio@jlrichards.ca>
Sent: November 23, 2022 2:35 PM
To: Lisa Van De Ligt <lisa.vandeligt@rrca.on.ca>
Cc: Angela Rutley <arutley@northdundas.com>; Dave Markell <DMarkell@ocwa.com>; Mark Buchanan <mbuchanan@jlrichards.ca>
Subject: 28855-000.1 North Dundas Water Supply EA - Source Protection

Good afternoon Lisa,

We received your contact from the MECP to advise on requirements for wellhead protection area delineations in North Dundas, specifically as a part of consultation requirements in the Class Environmental Assessment.

The Township of North Dundas retained J. L. Richards & Associates Limited (JLR) in association with Golder Associates Ltd. (Golder) to undertake a Class Environmental Assessment (Class EA) for the Township's drinking water supply system to address long-term potable water supply needs and evaluate servicing solutions for the 20-year planning horizon. The project is proceeding as a Schedule 'B' Class EA, and is currently in Phase 2 (identification and evaluation of alternative solutions). Part of the preferred solution is the installation of a new municipal drinking water well in Winchester to connect to the existing distribution system.

Golder has prepared a wellhead protection area assessment report, estimating the wellhead protection area from the proposed well location and identification of potential vulnerable areas in the vicinity of the new well. We have already commenced consultation with South Nation Conservation to review the report.

It should be noted that there is no intention to amend the Source Protection Plan at this time. The objective of the investigations and consultations to date are to satisfy the source protection component in the Class EA. A request for a Source Protection Plan Amendment will be done at a later date, once the new well is installed, tested and modeled, and further agency and public consultations are completed.

We are in the process of finalizing the Phase 2 of the Class EA and will soon be scheduling a Public Information Centre. We will add your contact to the Class EA distribution list to receive further notices and opportunities to review the Phase 2 report and the proposed solution.

Let us know if you have any questions at this time, or if you want to have a call to review the project in more detail.

Regards,
Matthew Marcuccio

Matthew Marcuccio, P.Eng.
Civil Engineer

J.L. Richards & Associates Limited
1000-343 Preston Street, Ottawa, ON K1S 1N4
Direct: 343-803-4554



**J.L. Richards
& Associates Limited**
ENGINEERS • ARCHITECTS • PLANNERS



**BEST
MANAGED
COMPANIES**



Matthew Marcuccio

From: Mark Buchanan
Sent: Friday, November 1, 2019 10:18 AM
To: Sara Jamaliniya
Subject: FW: Township of North Dundas - Schedule 'C' Municipal Class EA
Attachments: Transport Canada - Township of North Dundas.pdf

File and log this one.

Remove them from further notices unless it impacts federal land. For this project it would be a schedule C, WTP on the St. Lawrence that would impact CNWA.

Mark Buchanan, P.Eng.
Associate
Senior Civil Engineer

J.L. Richards & Associates Limited
700 - 1565 Carling Avenue, Ottawa, ON K1Z 8R1
Tel: 613-728-3571 Fax: 613-728-6012



**J.L. Richards
& Associates Limited**
ENGINEERS • ARCHITECTS • PLANNERS



From: Jo-Anne Davidson <jodavidson@jlrichards.ca>
Sent: Friday, November 1, 2019 9:57 AM
To: Mark Buchanan <mbuchanan@jlrichards.ca>
Subject: FW: Township of North Dundas - Schedule 'C' Municipal Class EA

Mark,

A response from Transport Canada. FYI!

Jo-Anne Davidson
Project Administrator

J.L. Richards & Associates Limited
700 - 1565 Carling Avenue, Ottawa, ON K1Z 8R1
Tel: 613-728-3571 Fax: 613-728-6012



**J.L. Richards
& Associates Limited**
ENGINEERS • ARCHITECTS • PLANNERS



From: EnviroOnt <EnviroOnt@tc.gc.ca>
Sent: Friday, November 1, 2019 9:49 AM
To: Jo-Anne Davidson <jodavidson@jlrichards.ca>
Subject: FW: Township of North Dundas - Schedule 'C' Municipal Class EA

Greetings,

Thank you for your correspondence.

Please note Transport Canada **does not** require receipt of all individual or Class EA related notifications. We are requesting project proponents to self-assess if their project:

1. Will interact with a federal property and/or waterway by reviewing the Directory of Federal Real Property, available at www.tbs-sct.gc.ca/dfrp-rbif/; and
2. Will require approval and/or authorization under any Acts administered by Transport Canada* available at <http://www.tc.gc.ca/eng/acts-regulations/menu.htm>.

Projects that will occur on federal property prior to exercising a power, performing a function or duty in relation to that project, will be subject to a determination of the likelihood of significant adverse environmental effects, per Section 67 of the *Canadian Environmental Assessment Act, 2012*.

If the aforementioned does not apply, the Environmental Assessment program should not be included in any further correspondence and future notifications will not receive a response. If there is a role under the program, correspondence should be forwarded *electronically* to: EnviroOnt@tc.gc.ca with a **brief description of Transport Canada's expected role**.

*Below is a summary of the most common Acts that have applied to projects in an Environmental Assessment context:

- **Canadian Navigable Waters Act (CNWA)** – the Act applies primarily to works constructed or placed in, on, over, under, through, or across navigable waters set out under the Act. The Navigation Protection Program administers the CNWA through the review and authorization of works affecting navigable waters. Information about the Program, CNWA and approval process is available at: <http://www.tc.gc.ca/eng/programs-621.html>. Enquiries can be directed to NPPONT-PPNONT@tc.gc.ca or by calling (519) 383-1863.
- **Railway Safety Act (RSA)** – the Act provides the regulatory framework for railway safety, security, and some of the environmental impacts of railway operations in Canada. The Rail Safety Program develops and enforces regulations, rules, standards and procedures governing safe railway operations. Additional information about the Program is available at: <https://www.tc.gc.ca/eng/railsafety/menu.htm>. Enquiries can be directed to RailSafety@tc.gc.ca or by calling (613) 998-2985.
- **Transportation of Dangerous Goods Act (TDGA)** – the transportation of dangerous goods by air, marine, rail and road is regulated under the TDGA. Transport Canada, based on risks, develops safety standards and regulations, provides oversight and gives expert advice on dangerous goods to promote public safety. Additional information about the transportation of dangerous goods is available at: <https://www.tc.gc.ca/eng/tdg/safety-menu.htm>. Enquiries can be directed to TDG-TMDOntario@tc.gc.ca or by calling (416) 973-1868.
- **Aeronautics Act** – Transport Canada has sole jurisdiction over aeronautics, which includes aerodromes and all related buildings or services used for aviation purposes. Aviation safety in Canada is regulated under this Act and the Canadian Aviation Regulations (CARs). Elevated Structures, such as wind turbines and communication towers, would be examples of projects that must be assessed for lighting and marking requirements in accordance with the CARs. Transport Canada also has an interest in projects that have the potential to cause interference between wildlife and aviation activities. One example would be waste facilities, which may attract birds into commercial and recreational flight paths. The *Land Use In The Vicinity of Aerodromes* publication recommends guidelines for and uses in the vicinity of aerodromes, available at: <https://www.tc.gc.ca/eng/civilaviation/publications/tp1247-menu-1418.htm>. Enquires can be directed to at tc.aviationservicesont-servicesaviationont.tc@tc.gc.ca or by calling 1 (800) 305-2059 / (416) 952-0230.

Please advise if additional information is needed.

Thank you,

Environmental Assessment Program, Ontario Region

Transport Canada / Government of Canada / 4900 Yonge St., Toronto, ON M2N 6A5

EnviroOnt@tc.gc.ca / Facsimile : (416) 952-0514 / TTY: 1-888-675-6863

Programme d'évaluation environnementale, Région de l'Ontario

Transports Canada / Gouvernement du Canada / 4900, rue Yonge, Toronto, ON, M2N 6A5

EnviroOnt@tc.gc.ca / télécopieur: (416) 952-0514

From: Jo-Anne Davidson [<mailto:jodavidson@jlrichards.ca>]

Sent: Monday, October 21, 2019 3:57 PM

To: EnviroOnt <EnviroOnt@tc.gc.ca>

Subject: Township of North Dundas - Schedule 'C' Municipal Class EA

Dear Sir/Madam:

Please see attached our Notice of Project Initiation letter.

Regards,

Jo-Anne Davidson

Project Administrator

J.L. Richards & Associates Limited

700 - 1565 Carling Avenue, Ottawa, ON K1Z 8R1

Tel: 613-728-3571 Fax: 613-728-6012



**J.L. Richards
& Associates Limited**
ENGINEERS • ARCHITECTS • PLANNERS



From: [Mark Buchanan](#)
To: [Rami Basha](#)
Cc: "[Dave Markell](#)"; [Dan Belleau](#); MPlummer@northdundas.com
Subject: RE: Township of North Dundas Drinking Water Supply System Capacity Expansion....
Date: Monday, February 10, 2020 4:42:00 PM

Thank you for the retuning the response form Rami.

We'll continue to provide updates and solicit feedback as the project progress.

Regards,

From: Rami Basha <rbasha@eohu.ca>
Sent: Monday, February 10, 2020 4:28 PM
To: Mark Buchanan <mbuchanan@jlrichards.ca>
Subject: Township of North Dundas Drinking Water Supply System Capacity Expansion....

Dear Mr. Buchanan,

Please, find attached the Agency/Stakeholder Response Form.

Regards,

Rami Basha, MPH, CPHI(C)
Program Manager, Safe Water, Food Safety and Rabies Control
Gestionnaire de programme, salubrité de l'eau, des aliments et contrôle de la rage

1000 rue Pitt Street, Cornwall, ON, K6J 5T1
Tel/tél. : 613-933-1375 ext.1269
Fax/télécopieur : 613-933-7930

Eastern Ontario Health Unit
www.EOHU.ca | [Twitter](#) | [Facebook](#) | [YouTube](#) | [Instagram](#)

Bureau de santé de l'est de l'Ontario
www.BSEO.ca | [Twitter](#) | [Facebook](#) | [YouTube](#) | [Instagram](#)

Do you really need to print this e-mail? Help preserve our environment.
Devez-vous vraiment imprimer ce courriel? Pensons à l'environnement.

The information in this e-mail is intended solely for the addressee(s) named, and is confidential. Any other distribution, disclosure or copying is strictly prohibited. If you have received this communication in error, please reply by e-mail to the sender and delete or destroy all copies of this message.

Les renseignements contenus dans le présent message électronique sont confidentiels et concernent exclusivement le(s) destinataire(s) désigné(s). Il est strictement interdit de distribuer ou de copier ce message. Si vous avez reçu ce message par erreur, veuillez répondre par courriel à l'expéditeur et effacer ou détruire toutes les copies du présent message.



**Township of North Dundas
North Dundas Drinking Water Supply System Capacity Expansion**

AGENCY / STAKEHOLDER RESPONSE FORM

DATE: Feb. 10, 2020

Name (please print): Rami Basha CPHI(C), MPH

Agency: Eastern Ontario Health Unit

1) Is your agency interested in being involved in this project? (Circle One) YES NO

2) If you are interested in being involved in this project, please identify a contact person:

Name and Title: Rami Basha CPHI(C), MPH Program Manager

Address: 1000 Pitt Street Safe Water
Cornwall, ON Postal Code: K6J 5T1

Telephone: (613) 933-1375 Fax: (613) 933-7930

E-mail: rbasha@eohu.ca

3) If you presently have any comments or questions about this project please outline them below or attach on a separate sheet of paper.

4) Do you have any information regarding the Study Area that will assist us in our planning process? If so, please outline below or attach on a separate sheet of paper.

N/A

Please submit to:

Mark Buchanan, P.Eng., Senior Civil Engineer
J.L. Richards & Associates Limited
864 Lady Ellen Place
Ottawa, ON K1Z 5M2
Telephone: 613-728-3571
Facsimile: 613-728-6012
E-mail: mbuchanan@jlrichards.ca

Note: If you wish to respond via email, please write directly on the form and scan a copy before emailing it to the address above. Comments and information regarding this Study are being collected to assist the Ministry in meeting the requirements of the EA Act. This material will be maintained on file for use during the Study and may be included in project documentation. With the exception of personal information, all comments will become part of the public record.

From: [Cronier, Sarah \(Algonquins Of Ontario\)](#)
To: [Mark Buchanan](#)
Cc: [Stavinga, Janet \(Algonquins Of Ontario\)](#)
Subject: Township of North Dundas Schedule "C" Municipal Class Environmental Assessment, North Dundas Drinking Water Supply System Capacity Expansion Notice of Project Initiation (Our File CP 78-42-1-10)
Date: Monday, July 27, 2020 11:53:24 AM
Attachments: [We found suspicious links.msg](#)

Please see the attached correspondence.

****Important Notice****

In light of the ongoing developments resulting from the novel Coronavirus (COVID-19), the Algonquins of Ontario are taking proactive steps to keep our employees and workplace safe and secure. **Effective Monday, March 16, 2020 the AOO Consultation Office will be closed until further notice.**

During this time, to maintain our business continuity, we will be monitoring emails and will respond when possible. If you require immediate assistance or have any pressing inquiries, please contact our general inbox at algonquins@tanakiwin.com or visit our website at www.tanakiwin.com.

Thank you for your patience, understanding and support.

Sarah Cronier

Cultural Heritage Program Coordinator

Algonquins of Ontario Consultation Office

31 Riverside Drive, Suite 101

Pembroke, ON K8A 8R6

Tel: [613-735-3759](tel:613-735-3759) Ext. 215

Fax: [613-735-6307](tel:613-735-6307)

Email: scronier@tanakiwin.com

Website: www.tanakiwin.com

CONFIDENTIAL AND PRIVILEGED INFORMATION NOTICE

This e-mail, and any attachments, may contain information that is confidential, subject to copyright, or exempt from disclosure. Any unauthorized review, disclosure, retransmission, dissemination or other use of or reliance on this information may be unlawful and is strictly prohibited.



Algonquins of Ontario

July 27, 2020

Mark Buchanan, P.Eng.
Senior Civil Engineer
J.L. Richards & Associates Limited
864 Lady Ellen Place
Ottawa, ON K1Z 5M2

BY EMAIL ONLY

mbuchanan@jlrichards.ca

Dear Mr. Buchanan,

Subject: Township of North Dundas Schedule 'C' Municipal Class Environmental Assessment, North Dundas Drinking Water Supply System Capacity Expansion Notice of Project Initiation (Our File CP 78-42-1-10) – Request for Additional Information and Engagement on Matters related to Cultural Heritage and Archaeological Assessments

The Algonquins of Ontario (AOO) appreciate the correspondence of the Township of North Dundas Schedule 'C' Municipal Class Environmental Assessment, North Dundas Drinking Water Supply System Capacity Expansion Notice of Project Initiation received on October 16, 2019. Based on our initial review of the project, the AOO are requesting additional information and engagement on matters related to cultural heritage and archaeological assessments.

Algonquins of Ontario

The Algonquins lived in present-day Ontario for thousands of years before Europeans arrived. Algonquin territory originally extended from the St. Lawrence River to the French River in the west, south to the Adirondack mountains in New York State, and north above Lake Abitibi. Over the past several hundred years, the description of Algonquin Territory has changed to be the lands and waters on both sides of the Ottawa River watershed from modern Hawkesbury to Lake Nipissing and north past the headwaters of the Ottawa River. Today, ten Algonquin communities comprise the Algonquins of Ontario:

- The Algonquins of Pikwakanagan First Nation
- Antoine
- Kijicho Manito Madaouskarini (Bancroft)
- Bonnechere
- Greater Golden Lake
- Mattawa/North Bay

31 Riverside Drive, Suite 101, Pembroke, Ontario K8A 8R6

Telephone: (613) 735-3759 Fax: (613) 735-6307

Website: www.tanakiwin.com

E-Mail: algonquins@tanakiwin.com

- Ottawa
- Shabot Obaadjiwan (Sharbot Lake)
- Snimikobi (Ardoch)
- Whitney and Area

Based on a Protocol signed in 2004, these communities are working together to provide a unified approach to negotiate a modern-day Treaty. The Algonquins of Ontario Settlement Area includes a territory of nine million acres within the watersheds of the Kichi-Sibi¹ and the Mattawa River in Ontario.

This unceded territory, encompasses most of Eastern Ontario, including the City of Ottawa, and most of Algonquin Provincial Park. More than 1.2 million people live and work within the unceded AOO Settlement Area. There are 84 municipal jurisdictions fully and partially located within the unceded AOO Settlement Area, including 75 lower and single tier municipalities and nine upper tier municipalities.

On October 18, 2016, the AOO and the Governments of Ontario and Canada reached a major milestone in their journey toward reconciliation and renewed relationships with the signing of the Agreement-in-Principle (AIP). The signing of the AIP is a key step toward a Final Agreement, which will clarify the rights of all concerned and open up new economic development opportunities for the benefit of the AOO and their neighbours in the Settlement Area in Eastern Ontario.

Furthermore, by signing the AIP, the AOO and the Crown have expressed, in a formal way, their mutual intention and desire for a lasting partnership. This event signaled the beginning of a new relationship between the AOO and the Crown, one in which the mistakes of the past must be supplanted by a new type of mutual respect and cooperation.

The AIP is not a legally binding document. Rather, it opens the way for continued negotiations toward a Final Agreement that will define the ongoing rights of the Algonquins of Ontario to lands and natural resources within the Settlement Area in Eastern Ontario.

For further information about the AIP please refer to our website at www.tanakiwin.com. An interactive web-based map has also been developed to provide a single access point for users to easily explore and navigate through the AIP's various Reference Maps and Descriptive Plans associated with the proposed land selections and Areas of Algonquin Interest. To access the map, click [here](#).

The Negotiation Teams are now hard at work to ensure that the next phase of negotiations towards a Final Agreement will succeed. If a Final Agreement is achieved through this next phase, and if it is ratified by Algonquins and by the federal Parliament and provincial Legislature, it will take the form of a modern-day treaty setting out Algonquin Aboriginal and treaty rights protected under Section 35 of the Constitution Act, 1982.

Key Elements in Archaeological Assessments and Cultural Heritage Evaluation Reports

1. Recognition of Algonquin History and Presence

The Algonquin Traditional Territory is composed of a diversity of indigenous cultural landscapes. An Indigenous cultural landscape is a living landscape that indigenous people value because of their enduring relationship with that place and its continuing importance to their cultural identity. Traditional Environmental Knowledge (TEK), an intimate knowledge of an

¹ The Ottawa River, otherwise known as the Big River or Kichi-Sibi, has also been referred to in the Algonquin language as "Kichisipi", "Kichissippi", "Kitchissippi" and "Kichissippi"

area's landforms, plants and animals, is reflected in an indigenous cultural landscape. Many archaeological sites within the Algonquin Traditional Territory are small and contain a minimal amount of archaeological material, and these materials may be of great significance to the Algonquins of Ontario (AOO).

For thousands of years the Algonquin Traditional Territory was characterized by glacial lakes and/or inland seas, resulting in high water levels that have left a sequence of paleo-shorelines and associated archaeological sites often far inland from modern shorelines that are the familiar focus of many archaeologists. The archaeological "visibility" of sites on relict shorelines and fossil islands in the Algonquin Traditional Territory is further affected by the expedient use of local stone for tools, a technology which may unfamiliar and "invisible" to archaeologists. In the past, at the Stage 1 or any other level or archaeological assessment, engagement with the AOO or any specific Algonquin community, has often been lacking. As a result, valuable sources of Algonquin oral history and TEK are frequently lacking or omitted from reports.

The AOO regard all cultural heritage sites – from sacred burials to every-day stone tool workshop sites – to be of importance and worthy of investigation and protection. With such importance placed on even the smallest of sites, the use of alternatives method for evaluating archaeological potential, as cited within the *Standards and Guidelines for Consultant Archaeologist* (Ministry of Tourism and Culture, 2011), can lead to sites being missed and therefore forgotten or lost entirely. The use of alternatives method for evaluating archaeological potential should not be used without consultation with the AOO.

Currently, the AOO are in the process of developing the *AOO Enhanced Archaeology Standards and Guidelines* that will enable the authors of archaeological and cultural heritage reports to understand how to satisfy AOO requirements from the start and to prevent costly backtracking and study/reporting revisions. We look forward to an opportunity to speak further about this important initiative in the future. In the interim, please see the attached *AOO Enhanced Archaeology Standards and Guidelines – References and Supplementary Sources* to aid in the completion of the Environmental Assessment, archaeological assessments and Cultural Heritage Evaluation Reports.

2. Engagement of Algonquin Archaeological Liaisons

Effective and successful engagement with the AOO begins with early notification. Specific to archaeology this includes the notification of the intention to complete a Stage 1 through Stage 4, the review of these draft reports, as well as the participation of Algonquin Archaeological Liaisons during Stages 2 through Stage 4, and possibly Stage 1 if a site visit is planned.

For any Algonquin Archaeological Liaison participation, **the AOO require a minimum of 25 business days notification in advance of the scheduled field work.** This is due in large part to the nature of our program as significant time is required for our outreach and selection process. Our Algonquin Archaeological Liaisons are located throughout the unceded Algonquin Traditional Territory and they are not permanently staffed within the AOO Consultation Office. Therefore, these individuals have their own work schedules and require sufficient lead time to participate on various projects. All of which can be further complicated by adverse weather or specific archaeological assessment requirements (e.g. project requires ploughed and weathered fields).

Upon notification of a Stage 1 site visit or Stage 2 through 4 fieldwork with the sufficient time as noted above, the proponent is asked to fill out a project outreach template which will be provided by the AOO. **This template must be returned to the AOO, including key location maps and a Liaison mustering location, within five business days.**

Once returned by the Project Proponent the outreach template is circulated by the AOO to our Algonquin Archaeological Liaisons. The Project Proponent will be advised of the individual(s) who will be serving as the Algonquin Archaeological Liaison(s) for the project **no later than five business days in advance of the commencement of the proposed field work.**

The Project Proponent is expected to fund, and/or ensure funding is provided for the reasonable costs of engaging Algonquin Archaeological Liaisons in a meaningful and informed way in any archaeological projects. **Details of these costs can be found in Attachment 2.**

Engagement Measures for Algonquin Archaeological Liaisons due to COVID-19

In light of the ongoing developments resulting from the novel Coronavirus (COVID-19), the Algonquins of Ontario (AOO) are taking proactive steps to keep our employees and workplace safe and secure. Consequently, the AOO are pursuing alternative accommodation measures from proponents and consultant archaeologists to ensure the effective engagement of our Algonquin Archaeological Liaisons in the completion of archaeological assessments.

These alternative accommodation measures are as follows:

1. Postpone archaeological projects where engagement is not feasible at this time
2. Extend the time for the Algonquins of Ontario to respond to engagement requests
3. Offer virtual opportunities for the Algonquins of Ontario to participate in engagement
4. Offer regular teleconference updates about the archaeological work
5. Offer "physical distance" monitoring opportunities
6. Explore other engagement opportunities with the Algonquins of Ontario

Furthermore, in correspondence from the Ministry of Heritage, Sport, Tourism and Culture Industries, dated March 27, 2020, the Ministry encouraged project proponents and consultant archaeologists to be flexible to ensure the meaningful community engagement processes within Indigenous communities. The accommodation measures cited above are drawn from this outreach by the Ministry.

The AOO look forward to speaking with you further about your proposed project and how we can ensure the effective engagement of Algonquin Archaeological Liaisons in the completion of archaeological assessments in these unprecedented and challenging times.

3. Review of Draft Reports

Given that archaeological assessments can be accessed in the *Ontario Public Register of Archaeological Reports* and can be used for research and educational purposes, the AOO request that the above elements be integrated during the completion of any archaeological assessment reports and/or Cultural Heritage Evaluation Reports. Furthermore, the AOO request that these reports be provided in draft form for our review and comment.

The AOO also request that the following information be included in the recommendation section of any draft archaeological reports:

Since the potential always exists to miss important information in archaeological surveys; if any artifacts of indigenous interest or human remains are encountered during the development of the subject property, please contact:

Algonquins of Ontario Consultation Office
31 Riverside Drive, Suite 101
Pembroke, Ontario K8A 8R6
Tel: 613-735-3759
Fax: 613-735-6307
E-mail: algonquins@tanakiwin.com

The AOO will review any draft archaeological assessments and Cultural Heritage Evaluation Reports under the context of the use of First Nations cultural resources (oral tradition, local consultation, archaeological material), historical documents (historical air photos, census information, genealogical information), and geotechnical data (glacial/postglacial lake/river succession, local surficial geology, soils, property description).

The AOO ask that the above comments/requests be considered and included in any draft documentation, which is then to be submitted to the AOO for our review to ensure it satisfactorily responds to our concerns. However, if the concerns of the AOO are not satisfactorily addressed, we will provide a review letter outlining any concerns or comments so adjustments can be made by the Project Proponent. Once the revisions are completed the draft documents are to be resubmitted to the AOO for final review. Provided the draft reports satisfactorily respond to our concerns, these reports can then be submitted to Ontario Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) or other relevant Ministries. We look forward at that time to receiving a copy of the "Review and Entry" notification letter issued by the MHSTCI.

Again, the Project Proponent is expected to fund, and/or ensure funding is provided for the reasonable costs associated with the review of any Draft Reports. **Details of these costs can also be found in Attachment 2.**

When the draft Archaeological Assessments, Cultural Heritage Evaluation and/or Environmental Assessment reports are available please send to algonquins@tanakiwin.com in digital form.

Moving Forward

In conclusion, engagement in a meaningful and informed way in any archaeological projects includes the notification of a Stage 1 to be undertaken, the presence of Algonquin Archaeological Liaisons during any Stage 2, 3 and 4 fieldwork as well as the opportunity to review and provide comments on any draft reports. We also look forward to further opportunities to be effectively engaged in any future archaeological work that may arise with this project and future projects.

Should you have any questions or require further information, please do not hesitate to contact me either by telephone at 613-735-3759 ext. 215 or by email at scronier@tanakiwin.com.

Sincerely,



Sarah Cronier
Cultural Heritage Program Coordinator

References and Supplementary Sources

- Attach 2 AOO Schedule for Project Proponents – Expenses associated with Archaeological Assessments

Algonquins of Ontario
Archaeology Enhanced Standards and Guidelines
References/Supplementary Sources

Oral History

- Benton-Banai, Edward. (1988). The Seven Fires Prophecy. In *The Mishomis Book: The Voice of the Ojibway*. Indian Country Communications Inc.
- Benton-Banai, Edward. (1988). The Migration of the Anishinabe. In *The Mishomis Book: The Voice of the Ojibway*. Indian Country Communications Inc.
- Morrison, J. (2005). Algonquin history in the Ottawa River Watershed. In *A Background Study for Nomination of the Ottawa River Under the Canadian Heritage Rivers System*, ed. Len Hopkins, pp. 17–32. Quebec-Labrador Foundation, Ipswich, MA.

History and Ethnology

- The Algonquins of Ontario (n.d.). Our proud history. The Algonquins of Ontario, <https://www.tanakiwin.com/algonquins-of-ontario/our-proud-history/> (includes links to important historical documents, such as petitions and letters).
- The Algonquins of Ontario (n.d.). History of the Algonquins <http://www.tanakiwin.com/wp-system/uploads/2013/10/a-History-of-the-Algonquins.pdf>
- Bonnechere Algonquin First Nation (n.d.). History of the Bonnechere Algonquin First Nation. <http://www.bafn.ca/history.html>
- Circare Consultants. (2005). A historical profile of mixed European-Indian communities in the Outaouais." Circare Consultants.
- Clémont, Daniel (ed.) (1996). *The Algonquins*. Mercury Series Canadian Ethnology Service Paper 130. Canadian Museum of Civilization, Hull.
- Day, G. M., and B. G. Trigger (1978). Algonquin. In *Handbook of North American Indians: Vol. 15, Northeast*, ed. B. Trigger, pp. 792–797. Smithsonian Institution, Washington, D.C.
- Hanewich, Kim (2009). Omamiwinini: The Invisible People, Our Story. Omamiwinini Pimadjiwini, www.thealgonquinway.ca
- Hessel, P. (1993) *The Algonkin Nation - The Algonkins of the Ottawa Valley: An Historical Outline*. Kichesippi Books, Arnprior, ON. www.thealgonquinway.ca/e-books
- Holmes, Joan. (1993). "Aboriginal Use and Occupation of the Ottawa River Watershed" *Algonquins of Golden Lake Claim* Vol. 2. Prepared by Joan Holmes and Associates Inc., for the Ontario Native Affairs Secretariat, Ottawa. www.thealgonquinway.ca/e-books

**Algonquins of Ontario
Archaeology Enhanced Standards and Guidelines
References/Supplementary Sources**

- Joan Holmes and Associates Inc. (n.d.). *Algonquins of Golden Lake Claim: Executive Summary*
<http://www.joanholmes.ca/Execsum.pdf>
- Joan Holmes and Associates Inc. (1998). Hidden Communities: Research Difficulties encountered in Research Non-Status Algonquins in the Ottawa Valley, presented at 30th Algonquin Conference, Boston. <http://www.joanholmes.ca/Algonquin%20Non-Status%20Paper.pdf>
- Jones, Gwynneth C.D. (1999). Historic Populations of Mixed Aboriginal/non-Aboriginal Ancestry in Ontario, Mattawa and Environs. Prepared for the Ontario Ministry of Natural Resources and Forestry.
- Lovelace, Bob (n.d.). An Algonquin History. Ardoch Algonquin First Nation
www.aafna.ca/history.html
- Mattawa/North Bay Algonquin First Nation. (n.d.). Our History. Mattawa/North Bay Algonquin First Nation <http://mattawanorthbayalgonquinfirstnation.com/AboutUs.html>
- Morel, Leo (1980). "Mattawa the Meeting of the Waters" Societe de Mattawa Historical Society.
- Morrison, J. (2005). Algonquin History in the Ottawa River Watershed. In *A Background Study for Nomination of the Ottawa River Under the Canadian Heritage Rivers System*, ed. Len Hopkins, pp. 17–32. Quebec-Labrador Foundation, Ipswich, MA. www.thealgonquinway.ca
- Pendergast, J.F. (1999). The Ottawa River Algonquin Bands in a St. Lawrence Iroquoian Context. *Canadian Journal of Archaeology* vol. 23 (1&2):63–136.
- Sarazin, Greg (n.d.). 220 Years of Broken Promises.
<http://www.gretergoldenlake.com/220.html>
- Speck, F.G. (1913). *Family Hunting Territories and Social Life of Various Algonkian Bands of the Ottawa Valley*. Department of Mines Geological Survey Memoir 70: No. 8, Anthropological Series. Government Printing Bureau, Ottawa.
- Trigger, B.G., and G.M. Day (1994). Southern Algonquin Middlemen: Algonquin, Nipissing, and Ottawa, 1550–1780. In *Aboriginal Ontario: Historical Perspectives on the First Nations*, ed. E.S. Rogers and D.B. Smith, pp. 64–79. Dundurn Press, Toronto.

Algonquins of Ontario
Archaeology Enhanced Standards and Guidelines
References/Supplementary Sources

Whiteduck, K.J. (2002). *Algonquin Traditional Culture: The Algonquins of the Kitchissippi Valley; Traditional Culture at the Early Contact Period*. The Algonquins of Pikwàkanagàn, Golden Lake.

Archaeology

Note: historical references to archaeological discoveries can be found in the William Wintemberg's notes, filed by Township in the archives of the Museum of History. Additional historical reference to archaeological material can be found in the AARO 1888–1929.

Allen, W. (2007). Nineteenth Century Aboriginal Farmers of the Nineteenth Century, Partners to the Past: Making Connections in the Ottawa River Valley, Ontario Archaeological Symposium, Petawawa.

Clermont, Norman and Claude Chapdelaine (1998). Île Morrison: Lieu sacré et atelier de l'Archaïque dans l'Outaouais. Paléo-Québec No. 28. Recherches amérindiennes au Québec, Québec. Available in English at: www.thealgonquinway.ca/e-books

Clermont, Norman, Claude Chapdelaine, and Jacques Cinq-Mars (2003). Île aux Allumettes: L'Archaïque supérieur dans l'Outaouais. Paléo-Québec No. 30. Recherches amérindiennes au Québec, Québec.

Chapdelaine, C., and N. Clermont (2006). Adaptation, Continuity and Change in the Middle Ottawa Valley: A View from the Morrison and Allumettes Island Late Archaic Sites. In *The Archaic of the Far Northeast*, ed. D. Sanger and P. Renouf, pp. 191–219. University of Maine Press, Orono.

Emerson, J.N. (1949). Preliminary report on the excavations of the Kant site, Renfrew Co. Ontario. *National Museum of Man Bulletin* No.113, Ottawa.

Kennedy, C.C. (1967). Preliminary Report on the Morrison Island-6 Site. In *Contributions to Anthropology*, Part 1, pp. 100-124. National Museum of Man, Ottawa.

Kidd, K. (1948). A prehistoric camp site at Rock Lake, Algonquin Park, Ontario, *Southwestern Journal of Anthropology* 4:1, pp. 98–106.

Mitchell, B.M. (1969). Archaeology of the Petawawa River: the second site at Montgomery Lake. *Michigan Archaeologist* vol. 15(1–2) pp. 1–53.

Mitchell, B.M.

1987; 1988; 1989; 1990; 1991 - Reports on field work relating to the Wilber Lake sites—reports on file with OMCL, Toronto.

**Algonquins of Ontario
Archaeology Enhanced Standards and Guidelines
References/Supplementary Sources**

- Mitchell, B.M., Butler P., Ford J., and J. Lance (1966). The multi-component Montgomery Lake site. *Ontario Archaeology* No.9 pp.5–23.
- Mitchell, B.M., Croft, D.A., Butler P.J. and R.J. Cawthorn (1970). The Petawawa Small Sites Report. *Ontario Archaeology* v. 15 pp. 20–55, Toronto.
- Pendergast, J.F. (1957). Report on the Kant site, BjGh-I [sic]. MS on file in the archives of the Canadian Museum of Civilization, Hull Québec.
- Pilon, Jean-Luc (ed.) (1999). *Ottawa Valley Prehistory*. Outaouais No. 6. Outaouais Historical Society, Hull.
- Von Gernet, A. (1991). 1990–1991 Excavations at the Highland Lake Site. Report on file with OMCL, Toronto.
- Watson, Gordon. (1991). Palaeo-Indian and Archaic Occupations of the Rideau Lakes. *Ontario Archaeology* 50: 5–26.

Geotechnical

Note: “Seamless” Surficial geological mapping for Algonquin Traditional Territory is available through the Ontario Geological Survey, MRD 128REV.

Soil maps are available from the Soil Surveys of Ontario.

- Anderson, T.W., Mott, R.J., and L.D. Delorme (1985). Evidence for a Pre-Champlain Sea glacial lake phase in the Ottawa Valley, Ontario, and its implications. In *Current Research, Part A, Geological Survey of Canada, Paper 85-1A*, pp 239–245. Ottawa: Geological Survey of Canada.
- Barnett, P.J. (1979). No. 26 Quaternary Geology of the Pembroke (31 F/14) Area, Renfrew County. In *Summary of Fieldwork, 1979*, p. 138–139. Ottawa: Ontario Geological Survey.
- Barnett, P.J. (1988). History of the northwestern arm of the Champlain Sea. In N.R. Gadd (ed.) *The Late Quaternary Development of the Champlain Sea Basin*, Geological Association of Canada, Special Paper 35, pp. 25–36. St. John’s: Geological Association of Canada.
- Barnett, P.J. (1989). *Quaternary Geology of the Bancroft Area, Southern Ontario*. Ontario Geological Survey Report 262. Toronto: Ministry of Northern Development and Mines.

**Algonquins of Ontario
Archaeology Enhanced Standards and Guidelines
References/Supplementary Sources**

- Barnett, P.J. (1991). Quaternary Geology of Ontario. In *Geology of Ontario*, Ontario Geological Survey Special Volume 4, Chapter 21 pp.1011–1088.
- Catto, N.R., Patterson R.J., and Gorman, W.A. (1982). The late Quaternary geology of the Chalk region, Ontario and Quebec. *Canadian Journal of Earth Sciences* 19:1218–1231.
- Chapman, L.J. (1975). *The Physiography of the Georgian Bay-Ottawa Valley Area of Southern Ontario*. Ontario Division of Mines, Geoscience Report 128. Accompanied by Map 2228 scale 1:252440. Toronto: Ontario Division of Mines.
- Dadswell, M.J. (1973). *Distribution, Ecology, and Postglacial Dispersal of Certain Crustaceans and Fishes in Eastern North America*. Unpublished PhD dissertation, Department of Biology, Carleton University.
- Dadswell, M.J. (1974). *Distribution Ecology, and Postglacial Dispersal of Certain Crustaceans and Fishes in Eastern North America*. National Museums of Canada Publications in Zoology, No 11. Ottawa: National Museums of Canada.
- Dyke, A.S., and V.K. Prest, (1987). Palaeogeography of northern North America, 18 000 to 5 000 years ago. *Geological Survey of Canada Map 1703A*, scale 1:250 000.
- Dyke, A.S., and V.K. Prest, (1987). Late Wisconsinan and Holocene History of the Laurentide ice sheet. *Geographie physique et quaternaire* 41:237–263.
- Ford, M.J. and R.S. Geddes (1986). Quaternary geology of the Algonquin Park area. *Ontario Geological Survey Open File Report 5600*. Ottawa: Ministry of Northern Development and Mines.
- French, H.M. & P.T. Hanley (1975). Post Champlain Sea drainage evolution near Pembroke, Upper Ottawa Valley. *Canadian Geographer* 19:149–158.
- Fulton, R.J. and Richard, S.H. (1987). Chronology of late Quaternary events in the Ottawa region. In R.J. Fulton (ed.) *Quaternary Geology of the Ottawa Region, Ontario and Quebec*, pp. 24-30. Geological Survey of Canada Paper 86-23. Ottawa: Geological Survey of Canada.
- Gadd, N.R. (1963). "Surficial geology Chalk River, Ontario-Quebec". *Geological Survey of Canada Map 1132A*, scale 1:63, 360.
- Gadd, Nelson. (1987). Geological setting and Quaternary deposits of the Ottawa region. In R.J. Fulton (ed.) *Quaternary Geology of the Ottawa Region, Ontario and Quebec*, pp. 3–9. Geological Survey of Canada Paper 86-23. Ottawa: Geological Survey of Canada.

**Algonquins of Ontario
Archaeology Enhanced Standards and Guidelines
References/Supplementary Sources**

- Gadd, Nelson. (2011). Late-glacial regional ice-flow patterns in eastern Ontario. *Canadian Journal of Earth Sciences*. 17. 1439-1453. 10.1139/e80-152.
- Harrison, J.E. (1971). *Quaternary geology of the North Bay – Mattawa region*. Geological Survey of Canada Paper 71–26. Ottawa: Department of Energy, Mines and Resources.
- Karrow, P. (2004). “Algonquin-Nipissing Shorelines, North Bay, Ontario” *Geographie physique et Quaternaire* v.58 (2-3): 297–304.
- Lewis, C.F.M. and T.W. Anderson (1989). Oscillations of levels and cool phases of the Laurentian Great Lakes caused by inflows from glacial Lakes Agassiz and Barlow-Ojibway. *Journal of Paleolimnology* 2:99–146.
- Spek, Constance M. (1975). *Brief Geomorphology and Geology of the Bonnechere Study Area, Including Bonnechere Provincial Park; Nipissing District and Renfrew County, Ontario*. Unpublished report on file with Ontario Ministry of Natural Resources and Forestry, Ontario Parks, Algonquin Region, Huntsville, Ontario.
- Teller, J.T. (1988). “Lake Agassiz and its contribution to flow through the Ottawa-St. Lawrence System”. In N.R. Gadd (ed.) *The Late Quaternary development of the Champlain Sea*, pp. 281–289. Geological Association of Canada Special Paper 35. St. John’s: Geological Association of Canada.
- Teller, J.T. and D.W. Leverington (2004). Glacial Lake Agassiz: a 5000 yr history of change and its relationship to the $\delta^{18}\text{O}$ record of Greenland. *Geological Society of America Bulletin* 116(5/6):729–742.
- Watson, Gordon (1976). The Paleoenvironment of the Rideau Lakes/Eastern Ontario Area. Unpublished paper on file at Department of Anthropology, Trent University, Peterborough and at the Ontario Ministry of Culture, Toronto.
- Watson, Gordon (1991). Palaeo-Indian and Archaic Occupations of the Rideau Lakes. *Ontario Archaeology* 50: 5–26.



ALGONQUINS OF ONTARIO

Schedule 1 for Project Proponents

Expenses associated with Archaeological Assessments

(rates as of April 1, 2020)

The following activities and associated expenses related to the engagement of the Algonquins of Ontario (AOO) in archaeological assessments will be covered by Project Proponents:

1. Archaeological Field Liaisons review of any previous archaeological assessments related to the Project:

- a. **Hourly rate:** \$31.25/hour plus HST

NOTES:

- i. Archaeological Field Liaisons do not have the authority to provide comments or archaeological advice on behalf of the AOO. Rather, the review of these reports will be completed to familiarize the Archaeological Field Liaisons with the study area and any previously completed work.
- ii. The Archaeological Field Liaisons will be allocated an upset amount of time to review previous reports based on the scope of the project and the number of reports to be reviewed. This upset amount will be determined by the AOO in conjunction with the Project Proponent.

2. Archaeological Field Liaisons participation in the project field work:

- a. **Hourly rate:** \$31.25/hour plus HST
- b. **Meals**¹: Breakfast – \$20.50, Lunch – \$20.10, Dinner – \$50.65 (meal allowances will be subject to AOO guidelines and preapproval)
- c. **Mileage**²: 58¢ per kilometer for the first 5,000 kilometers driven (52¢ per kilometer driven after that) Mileage is charged as follows:

¹ Government of Canada. "Travel Directive Appendix C: Meals and Allowances." Canada.ca. <https://www.canada.ca/en/revenue-agency/corporate/about-canada-revenue-agency-cra/travel-directive/appendix-c-meals-allowances-april-2019.html> (accessed April 9, 2019).

² Government of Canada. "Automobile Allowance Rates." Canada.ca. <https://www.canada.ca/en/revenue-agency/services/tax/businesses/topics/payroll/benefits-allowances/automobile/automobile-motor-vehicle-allowances/automobile-allowance-rates.html?pedisable=false&> (accessed April 9, 2019)

- i. Home Address of Liaison to arranged Accommodation
 - ii. Accommodation to the Job Site
 - iii. Job Site to Accommodation
 - iv. Accommodation to Home Address of Liaison
- d. **Accommodation:** If required, Basic Room Rate plus HST

NOTE:

- i. The AOO include the Archaeological Field Liaisons under our Workplace Safety and Insurance Board (WSIB) coverage.
- 3. The Archaeological Field Liaison will be required to prepare and submit a Field Summary to the AOO following completion of any field work:
 - a. **Hourly rate:** \$31.25/ hour plus HST

NOTE:

- i. The Archaeological Field Liaison will be provided an upset amount of time by the AOO based upon the scope of the project, and in particular on the number of days in the field. The AOO will determine this scope of work in conjunction with the Project Proponent.
- 4. Review of all draft archaeological assessments (Stages 1 through 4) by a Licensed Archaeologist and Technical Advisor to the AOO based on the following billable rate
 - a. **Hourly rate:** \$90.00/hour plus HST (subject to change with AOO approval)

NOTE:

- i. The Archaeologist and Technical Advisor will be allocated an upset amount of time to review reports based on the scope of the project. This upset amount will be determined by the AOO in conjunction with the Project Proponent.
- 5. Project Management and Administration Fee of 15% of the overall component costs, noted above, plus HST. These fees are related to: 1) Project Management including general correspondence; internal meetings; management of all deliverables; financial management; human resource management, and 2) Administration including printing, the use of office equipment, administrative staff time and other expenses, as required.



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

PROJECT INITIATION MEETING NO.1

ATTENDANCE:	Angela Rutley	Township of North Dundas (Township)
	Dan Belleau	Township of North Dundas (Township)
	Mary Lynn Plummer	Township of North Dundas (Township)
	Dave Markell	Ontario Clean water Agency (OCWA)
	Dawn Crump	Ontario Clean water Agency (OCWA)
	Stephane Barbarie	Ontario Clean water Agency (OCWA)
	Brian Henderson	Golder Associates Limited (Golder)
	Paul Smolkin	Golder Associates Limited (Golder)
	Sarah Gore	J.L. Richards & Associates Limited (JLR)
	Mark Buchanan	J.L. Richards & Associates Limited (JLR)
	Sara Jamaliniya	J.L. Richards & Associates Limited (JLR)

The meeting commenced at 2:30 P.M., Friday, September 6, 2019 at the Office of the Township of North Dundas

The following summary of the discussions of this meeting has been prepared to record and direct the project. Please advise the undersigned of any errors or omissions.

ITEM		<u>ACTION</u>
1.0	<p>S. Gore provided a brief overview of the project and introductions were made by all.</p> <p>S. Gore noted that the objective of this project is to determine solution(s) to address the Township's concerns regarding reliability of their communal water system and the anticipated demand increase due to planned residential expansions and growing industrial needs.</p>	<u>INFO</u>
1.1	<p>Project roles and responsibilities are as following:</p> <ul style="list-style-type: none"> • Dan Belleau, Township Director of Public Works • Angela Rutley, Township CAO • Mary Lynn Plummer, Township Water/Sewer Assistant Manager • Dave Markell, OCWA Project Manager • Dawn Crump, OCWA Operator • Stephane Barbarie, OCWA Operator • Brian Henderson, Golder Project Manager • Paul Smolkin, Golder Principal-In-Charge/Technical Advisor • Sarah Gore, JLR Project Manager • Brian Hein, JLR Principal-In-Charge/Technical Advisor • Mark Buchanan, JLR Assistant PM/Class EA Lead • Sara Jamaliniya, JLR Environmental Engineering Designer 	<u>INFO</u>



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

PROJECT INITIATION MEETING NO.1

<u>ITEM</u>	<u>ACTION</u>
The primary contacts for this project are:	
<ul style="list-style-type: none"> • Dan Belleau, Township • Dave Markell, OCWA Project Manager • Brian Henderson, Golder Project Manager • Sarah Gore, JLR Project Manager • Mark Buchanan, JLR Class EA Lead/ Assistant PM 	
<p>1.2 JLR shall provide comments on the Engineering Agreement to the Township.</p> <p>All project correspondence shall be directed to Dave Markell for distribution to the Technical Steering Committee (TSC). Conversely, all day to day correspondence shall be directed to Mark Buchanan for distribution within the project team.</p>	<u>JLR</u>
<p>1.3 M. Buchanan provided an overview of the proposed work plan and schedule. The key points discussed are provided herein:</p> <ul style="list-style-type: none"> • An important consideration for this project is to determine if this Class EA needs to be completed as a Schedule 'B' or a Schedule 'C' project. M. Buchanan indicated that the study will begin assuming Schedule 'C' process which will be reviewed at the completion of Phase 1 and 2 if it should be modified to a Schedule 'B'. • Schedule 'C' projects generally include the construction of new drinking water facilities (i.e. new surface water treatment plant) and major expansions to existing facilities while Schedule 'B' projects includes improvements and minor expansions to existing facilities (i.e. new or increased ground water well capacity). • As part of Phase 1, in addition to problem and opportunity identification, existing conditions and water capacity constraints are to be clearly defined. • B. Henderson noted that there is a gap between the information from existing documents (previous studies and permits) and the Township's drinking water supply system's current operational constraints that needs to be studied thoroughly. • D. Markell indicated that Chesterville Well No.6 has required cleaning several times in the past years. OCWA requested that a long-term solution for cleaning this well be included as part of the problem statement of this Class EA. • Consultation with the Township's Planning Department is required to establish the 20-year growth projection for Winchester and Chesterville. 	<u>INFO</u>



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

PROJECT INITIATION MEETING NO.1

<u>ITEM</u>	<u>ACTION</u>
<ul style="list-style-type: none"> • Consultation with the MECP district office and local health unit is expected to provide an introduction to the project and assist in identifying any regulatory water supply constraints. • Consultation with Parmalat (Lactalis) Canada on projected water usage is needed; Township to provide JLR with contacts information from Parmalat (Lactalis) Canada. 	
<p><u>Post-Meeting Note:</u> The Township advised JLR that Bruce Shurtleff is the contact for Parmalat (Lactalis).</p>	
<ul style="list-style-type: none"> • As part of Phase 2, various servicing alternatives will be developed/screened, and evaluated to determine the preferred option to address the problem and/or opportunity identified in Phase 1. • A. Rutley indicated that the Township of North Dundas Council requested that the study consider obtaining surface water from South Dundas (i.e. St. Lawrence River) as a potential servicing alternative during Phase 2. • As part of Phase 2, additional studies associated with the provisional items will be considered and undertaken, if required. • If it is determined that the project is to proceed as a Schedule 'C' process, an Environmental Study Report (ESR) will be prepared and filed for thirty day public review; otherwise, the Schedule 'B' Phase 2 report will be filed for thirty day public review. • Key deliverables for the project are included in the schedule (e.g. Phase 1 Report, Phase 2 Report, draft ESR, and final ESR). • JLR expects that the project will be completed in 12 months (September-October 2020). 	
<p>1.4 JLR shall provide a draft Public Consultation Plan to the OCWA/Township for review. JLR shall prepare and provide the Project Initiation Notice to the OCWA/Township for review and for posting on the Township's website. A. Rutley indicated that the name of Parmalat has changed to Lactalis.</p>	<u>JLR</u>
<p>1.5 Township indicated that the main issue to address is reliability and redundancy of the existing water supply system in North Dundas. D. Markell noted that OCWA suspects that Winchester Wells No.4 (abandoned) and No.5 are hydraulically connected.</p>	



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

PROJECT INITIATION MEETING NO.1

<u>ITEM</u>	<u>ACTION</u>
D. Markell indicated that the sodium limit has been exceeded in Winchester Well No.5 in several occasions in the past. It was noted that JLR will arrange/coordinate a site visit to each well to discuss the current situation and operational constraints with operators.	<u>JLR</u>
1.6 A preliminary list of required documentation was presented to all in the meeting. M. Buchanan noted that required documentation list is a work in progress as additional documentation may be needed and it will be updated by JLR/Golder as the project continues. JLR shall provide the FTP site access so that all available documentation can be shared. Post-Meeting Note: JLR provided FTP site access details to the Township/OCWA and Golder. Various documentation has been added by OCWA/Township to the FTP site; attached is an updated list of background documentation requirements. Township shall provide digital release of data Agreement to JLR and Golder to sign before sharing any County GIS data.	<u>Township</u>
1.7 Next Meeting: To be determined.	

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED

Sara Jamaliniya

Sara Jamaliniya, M.Eng.

Distribution: All present

**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

LIST OF DOCUMENTATION

No.	Description	Action / Status
GENERAL		
1.1	Certificate of approval, July 2010	Received
1.2	Drinking Water Works Permit, July 2018	Received
1.3	Municipal Drinking Water License, March 2016	Received
1.4	North Dundas Drinking Water System- Supply Wells	Received
1.5	Winchester Water Supply System Upgrade Class Environmental Assessment Project File, Stantec August 2009	Received
1.6	2018 North Dundas Water Operations Budget	Received
1.7	Permits to Take Water for each Well	
1.8	Drinking Water Operation and Maintenance Manuals	
WATER DISTRIBUTION		
2.1	2016-2018 Water Consumption Spreadsheet Data	Received
2.2	As-Constructed Drawings for Water Distribution System (Watermains, Towers, Pumping Stations)	Received
2.3	GIS Data of Watermain Network	
2.4	2014-2018 (5 Years) Hourly Well Production Records, Water Level, Water Quality (Spreadsheet Data)	Received
2.5	2016-2018 MECP Inspection Report (if any)	Received
2.6	2016-2018 Annual Drinking Water Report	Received
2.7	Maintenance Records	Received
GEOTECHNICAL		
3.1	Golder Associates and Sauriol Environmental Inc., Environmental Study Report Phase I and II, Hydrogeological Components, Townships of North Dundas and Russell, Ontario, January 2005	Received
PLANNING		
4.1	Township of North Dundas Official Plan	Received



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 2 – LACTALIS STAKEHOLDER MEETING

ATTENDANCE:	Bruce Shurtleff	Parmalat Canada (Lactalis)
	William Bruining	Parmalat Canada (Lactalis)
	Dan Belleau	Township of North Dundas (Township)
	Mary Lynn Plummer	Township of North Dundas (Township)
	Dave Markell	Ontario Clean water Agency (OCWA)
	Mark Buchanan	J.L. Richards & Associates Limited (JLR)
	Sara Jamaliniya	J.L. Richards & Associates Limited (JLR)

The meeting commenced at 10:00 A.M., Wednesday, December 11, 2019 at the Lactalis Site

The following summary of the discussions of this meeting has been prepared to record and direct the project. Please advise the undersigned of any errors or omissions.

<u>ITEM</u>	<u>ACTION</u>
2.1 Introductions were made by all.	INFO
2.2 M. Buchanan noted that the objective of the meeting is to better understand Lactalis' 20 year water demand projections to be considered as part of the North Dundas drinking water supply Class Environmental Assessment (Class EA).	INFO
2.3 M. Buchanan indicated that the Township is undertaking a Municipal Class EA to address concerns regarding reliability of their communal water system and the anticipated demand increase due to planned residential expansions and growing industrial needs.	INFO
2.4 M. Buchanan provided a brief overview of the Municipal Class EA process. The key points discussed are provided herein: <ul style="list-style-type: none"> In the Province of Ontario, municipalities are required to complete a Municipal Class EA to identify the preferred servicing solution for municipal infrastructure projects such as roads, water, wastewater and transit. Depending on the environmental impact, the process requires consultation with the public, stakeholders and regulatory agencies to identify the preferred servicing solution. Since projects undertaken by municipalities can vary in their environmental impact, such projects are classified in terms of schedules: <ul style="list-style-type: none"> Schedule A: Least environmental impact, which generally includes normal or emergency operational and maintenance activities. Schedule B: Moderate environmental impact, which generally includes improvements and minor expansions to existing facilities (i.e., new or increased ground water well capacity). 	INFO



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 2 – LACTALIS STAKEHOLDER MEETING

<u>ITEM</u>	<u>ACTION</u>
<ul style="list-style-type: none"> ○ Schedule C: Highest environmental impact, which generally includes the construction of new drinking water facilities (i.e., new surface water treatment plant) and major expansions to existing facilities. 	
<p>2.5 The attached Lactalis and Township water consumption rates from 2015 to 2018 Tables were reviewed by all at the meeting.</p> <p>B. Shurtleff indicated that Lactalis' water demand is project and process capacity dependent. Water consumption was notably increased in 2018 due to a project that required more cleaning and cooling starting from mid-2017. W. Bruining indicated that any future process modifications would be 1 for 1, with no change in water consumption.</p> <p>B. Shurtleff indicated that Lactalis' process requires removal of the chlorine and hardness levels present in the potable water. M. Buchanan indicated that the chlorine residual is maintained in the communal potable water system to satisfy secondary disinfection criteria in accordance with regulatory requirements and hardness is typical of a groundwater source. B. Shurtleff advised a surface water source water could be desirable to Lactalis to address the hardness constraints in their process.</p> <p>B. Shurtleff advised that Lactalis has a technical objective to consume 1,000 m³/day.</p> <p>B. Shurtleff confirmed that no major expansions have been identified in the longer term to significantly change the water volume. Specifically, he anticipates water consumption to remain consistent over the next 5 years to remain at 2019 level (1,000 ± 200 m³/day).</p> <p>M. Buchanan indicated that the Lactalis water consumption will be considered to remain at 2019 level for the next 20 years for planning purposes of this Class EA.</p>	INFO

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED

Sara Jamaliniya

Sara Jamaliniya, M.Eng.

Distribution: All present

**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

AGENDA FOR MEETING NO. 2

The meeting is to be held at 10:00 A.M., Wednesday, December 11, 2019 at the Lactalis Site.

- 1.0 Introductions and Opening Remarks
- 2.0 Objectives of Meeting
- 3.0 Township of North Dundas Water Supply Class EA
- 4.0 Brief review of the Municipal Class EA Process
- 5.0 Question: Lactalis 20 year Water Demand Projections
 - Less than current water consumption (by how much)
 - Consistent with current demand
 - Increased water consumption (by how much)

Table 1: Lactalis Water Consumption from 2015 to 2019

Year	Monthly Average Consumption (m ³ /month)	Max Monthly Consumption (m ³ /month)	Daily Average Consumption (m ³ /day)	Max Daily Average Consumption (m ³ /day)
2019 ⁽¹⁾	38,080	43,860	1,253.7	1,462.0
2018	42,021	51,009	1,381.5	1,645.5
2017	35,701	41,767	1,172.8	1,351.8
2016	28,642	33,959	939.3	1,078.0
2015	26,274	30,984	863.2	999.5

(1) 2019 data for Lactalis is up to the end of August 2019

Table 2: Township of North Dundas Water Consumption from 2015 to 2018

Year	Monthly Average Consumption (m ³ /month)	Max Monthly Consumption (m ³ /month)	Daily Average Consumption (m ³ /day)	Max Daily Average Consumption (m ³ /day)	% Monthly Consumption of Lactalis
2019					
2018	82,051	92,318	2,703.4	2,978.0	51%
2017	73,982	82,190	2,430.4	2,676.5	48%
2016	68,280	76,202	2,244.0	2,458.1	42%
2015	65,571	71,450	2,156.8	2,305.8	40%



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 3 – DEVELOPMENT PROJECTIONS MEETING

ATTENDANCE:	Angela Rutley	Township of North Dundas (Township)
	Dan Belleau	Township of North Dundas (Township)
	Mary Lynn Plummer	Township of North Dundas (Township)
	Calvin Pol	Township of North Dundas (Township)
	Dave Markell	Ontario Clean Water Agency (OCWA)
	Dawn Crump	Ontario Clean Water Agency (OCWA)
	Stephane Barbarie	Ontario Clean Water Agency (OCWA)
	Mark Buchanan	J.L. Richards & Associates Limited (JLR)
	Jordan Morrisette	J.L. Richards & Associates Limited (JLR)

The meeting commenced at 8:30 A.M., Wednesday, February 12, 2020 at the Township Office.

The following summary of the discussions of this meeting has been prepared to record and direct the project. Please advise the undersigned of any errors or omissions.

<u>ITEM</u>	<u>ACTION</u>
<p>3.1 Introductions were completed. M. Buchanan noted that the objective of the meeting is to review the development projections and technical memorandum that will be used as the basis for determining the 20-year water demand projections (low-growth and high-growth scenarios) to be considered as part of the North Dundas Drinking Water Supply Class Environmental Assessment (Class EA).</p> <p>The Township explained that they will be presenting the development projections to Council in order to obtain buy-in prior to proceeding with the development projections as part of the Class EA. M. Buchanan noted that JLR is currently holding on progress of the Phase 1 Report until confirmation is received.</p>	<p>INFO</p>
<p>3.2 It was noted that from a cursory review of the projected water demand associated with the draft growth projections for Winchester and Chesterville, it appears that there would be water supply deficits of approximately 17 L/s and 29 L/s for the low and high growth scenarios, respectively. These deficits are based on the existing operating limits of the wells with one of the largest wells out of service.</p> <p>It is our understanding that well reliability is a concern that shall be considered as part of this Class EA (i.e., well production and history of watermain breaks between Winchester and Wells 7a, 7b, and 7c). Guidance on firm capacity requirements from groundwater supplies is not outlined in the current Ministry of the Environment, Conservation and Parks (MECP) Water Design Guidelines (2008); however, the Province of Ontario is a member of the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers. A Report from this Board's Water Supply Committee entitled Recommended Standards for Water Works, (2007 Edition) indicated that the ground water source capacity should be equal or greater than the maximum day demand with the largest</p>	



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 3 – DEVELOPMENT PROJECTIONS MEETING

<u>ITEM</u>		<u>ACTION</u>
	producing well out of service. Projected water demand and well firm capacity will be reviewed for the low and high growth scenario as part of Phase 1.	
3.3	<p>JLR noted that 2.5 persons per unit was used to estimate the projected population increase based on the potential development areas in Winchester identified previously by the Township. It was noted that an annual growth rate of 1.5% and 3.5% was used for the low and high growth scenarios in Chesterville, respectively.</p> <p>Table 1: Winchester Future Potential Development was reviewed by the Township. It was requested that Phase 1 of the Wellings of Winchester Development be included within the low growth scenario. Additional projected units were identified for Area 22 and Area 24A. Phasing was also reviewed at the meeting as part of a separate project.</p>	INFO
3.4	The Township noted that the Urban Settlement Area boundary on Figure M1-1 should be updated to reflect the area identified on Schedule A1a Winchester of the Counties of SD&G Official Plan.	
3.5	<p>JLR is currently developing a model of the existing water network. In order to run simulations under different scenarios, information about the pumping capacity of the wells and the operating set points of the reservoirs is needed. As a start, OCWA will provide JLR with well pump curves to be added within the model. OCWA was also requested to flag if the wells operate with any known deviations from the pump curves. Elevations of the set points for the reservoirs that will be provided by OCWA will be referenced to grade.</p> <p>OCWA noted that they will also send the operating strategy for the wells and reservoir.</p>	OCWA OCWA
3.6	<p>JLR is to update the Technical Memorandum with new projected units and new growth scenarios by February 17, 2020.</p> <p>Post-Meeting Note: Refer to the attached updated technical memorandum for projected units and growth scenarios.</p>	JLR

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED

Jordan Morrisette, M.Eng., P.Eng.

Attach.

Distribution: All present

MEMORANDUM



**J.L. Richards
& Associates Limited**
864 Lady Ellen Place
Ottawa, ON Canada
K1Z 5M2
Tel: 613 728 3571
Fax: 613 728 6012

PAGE 1 OF 5

TO: Calvin Pol, BES, MCIP, RPP
Director of Planning, Building
and By-Law Enforcement
Township of North Dundas

DATE: February 14, 2020

FROM: Jordan Morrisette, M.Eng., P.Eng.

JOB NO.: 28855-000

RE: **North Dundas Drinking Water
Supply System Capacity
Expansion Class EA Technical
Memorandum No. 1
Population Growth and
Development Projections (Rev. 1)
DRAFT**

CC: Angela Rutley, Township of North Dundas
Dan Belleau, Township of North Dundas
Dave Markell, Ontario Clean Water Agency
Sarah Gore, P.Eng., J.L. Richards & Associates
Limited
Mark Buchanan, P.Eng., J.L. Richards &
Associates Limited

INTRODUCTION

The purpose of this Memorandum is to assist in establishing proposed 20 year population projections for the Village of Winchester and the Village of Chesterville within the Township of North Dundas (Township) by determining their potential development opportunities for growth. The 20 year population projections will serve as the basis for establishing the drinking water supply system requirements for the North Dundas Drinking Water Supply System Capacity Expansion Class Environmental Assessment (Class EA).

EXISTING POPULATION AND GROWTH SCENARIOS (WINCHESTER AND CHESTERVILLE)

A review of available 2016 Census information indicates that the population in 2016 within Winchester and Chesterville was approximately 2,394 and 1,677 persons, respectively. It is noted that based on 2011 Census information, the population was 2,460 people in Winchester and 1,448 people in Chesterville, representing an annual percentage growth rate of approximately -0.5% and 3.1%, respectively over the five (5) year period. Due to the development anticipated within both villages over the next 20+ years, the following growth scenarios are proposed to be used for the Class EA:

Low Growth Scenario

- Winchester: Projected annual growth rate of 1.5% from 2016 to 2019. Projected population growth from 2019 to 2039 based on the future potential development within Winchester provided by the Township (refer to Table 1) not including Phase 2 to Phase 5 of the proposed Wellings of Winchester development (Area 11);
- Chesterville: Projected at an annual growth rate of 3.5% from 2016 to 2019 and at an annual growth rate of 1.5% from 2019 to 2039.

High Growth Scenario

- Winchester: Projected annual growth rate of 1.5% from 2016 to 2019. Projected population growth from 2019 to 2039 based on the future potential development within Winchester provided by the Township (refer to Table 1) including Phase 2 to Phase 5 of the proposed Wellings of Winchester development (Area 11);

- Chesterville: Projected at an annual growth rate of 3.5% from 2016 to 2019 and at an annual growth rate of 3.5% from 2019 to 2039.

POPULATION PROJECTIONS FOR WINCHESTER

In order to determine the potential population increase in Winchester for the Low Growth and High Growth Scenarios, an updated list of potential development areas and their associated types of land-use was obtained from the Township. Table 1 provides a description of the future potential developments in Winchester and the total projected units and/or commercial area estimated. The areas identified in Table 1 are illustrated in Figure M1-1.

TABLE 1: WINCHESTER FUTURE POTENTIAL DEVELOPMENT¹

Area	Description	Total Projected Units or Residents	Commercial Area
A	Existing – Not Connected	28	-
1	Pioneer Gas Restaurant / Car Wash	Constructed	-
2A	Commercial #31 Strip	-	1.13 ha
2B	Commercial #31 Strip	-	1.22 ha
3	Commercial #43 / #31 corner	-	0.97 ha
4	Industrial/Commercial John Deere	-	6.17 ha
5	Commercial – Main Street South side	-	0.45 ha
6	Commercial – Main Street North side	-	(0.33 L/s)
7	Motel	14	-
8	Restaurant – Country Kitchen	7	-
9A	Commercial/Residential	-	5.07 ha
9B	Commercial/Residential	-	Buildout ²
10	Commercial	Mini storage	0.88 ha
11A	Wellings of Winchester + Commercial (Phase 1)	68 (refer to Table 2)	2.28 ha
11B	Wellings of Winchester (Phase 2 to Phase 5)	432 (refer to Table 3)	
12	Commercial	-	0.8 ha
13	Residential Infill/Apartment in-houses	15	-
14	Winfields Subdivision	9	-
15	Residential – Winfields Phase 2	-	Buildout ²
16	Commercial	-	0.75 ha
17	Residential (connected)	connected	-
18	New Dundas Manor ³	-	-
19	Old Dundas Manor Building and Property	-	1.19 ha
20	Guy Racine Subdivision – Phase 3	8	-
21A	Seniors Complex	54 residents	-
21B	Development	36	-
22A	Winchester Meadows Subdivision	22	-
22B	Winchester Meadows Subdivision	22	-
23	Vacant Residential	-	Buildout ²
24A	Woods Development	78	-
24B	High Density Apartments	21	-
25A	Woods Development	19	-
25B	Singles & Semis & Townhomes	36	-

Area	Description	Total Projected Units or Residents	Commercial Area
26	Residential – Barnhart	-	Buildout ²
27	Residential - M. Lafortune Investments	-	Buildout ²
28A	Residential	2	-
28B	Wintonia Drive / James Street	10	-
29A	Residential	15	-
29B	Esper Lane	51	-
30	Commercial	-	4.34 ha
31	Commercial	-	0.40 ha
LOW GROWTH SCENARIO⁴		393 units + 68 units Wellings + 54 residents	25.65 ha + 0.33 L/s
HIGH GROWTH SCENARIO⁵		393 units + 500 units Wellings + 54 residents	25.65 ha + 0.33 L/s
1. List of potential development areas and their associated types of land-use were provided by the Township. 2. Additional development areas are available; these development areas are projected beyond a 20-year period. 3. The flow from the new Dundas Manor is anticipated to remain the same as the flow from existing Dundas Manor. 4. Low Growth Scenario includes Phase 1 of the Wellings of Winchester Development only. 5. High Growth Scenario includes Phase 1 to Phase 5 of the Wellings of Winchester Development.			

Although, the Township's Official Plan (based on 2016 Census information) indicates a household occupancy of 2.45 persons per unit within the United Counties of Stormont, Dundas and Glengarry, the Township has reported that based on more recent information available, the household occupancy to be used for the Class EA is 2.5 persons per unit. The Township has also identified that the Wellings of Winchester development will have a different household occupancy since the proposed development is intended to be for seniors. Table 2 and Table 3 below presents Phase 1 potential population increase for Wellings of Winchester development (Area 11) as well as the total potential population increase for Phase 2 to Phase 5.

TABLE 2: POTENTIAL POPULATION INCREASE (PHASE 1) - WELLINGS OF WINCHESTER

Unit	Number of Residential Units	Household Occupancy (Persons per unit)	Potential Population Increase
1 - bedroom	42	1.17	49
2 - bedroom	26	1.62	42
TOTAL	68		91

TABLE 3: POTENTIAL POPULATION INCREASE (PHASE 2 TO PHASE 5) - WELLINGS OF WINCHESTER

Unit	Number of Residential Units	Household Occupancy (Persons per unit)	Potential Population Increase
1 - bedroom	286	1.17	335
2 - bedroom	146	1.62	237
TOTAL	432		572

Using the number of total projected units and residents (Table 1) and the different household occupancy for Phase 1 of the Wellings of Winchester development (Table 2), the total potential population increase for the Low Growth Scenario is summarized in Table 4 below.

TABLE 4: POTENTIAL POPULATION INCREASE IN WINCHESTER (LOW GROWTH SCENARIO)

Number of Residential Units	Household Occupancy (Persons per unit)	Number of People (based on units)	Number of Additional Residents (Seniors Complex)	Potential Population Increase
393	2.5	983	54	1,037
68	See Table 2	91	-	91
461	-	1,074	54	1,128
1. The above equivalent population is based on the Low Growth Scenario which does not include Phase 2 to Phase 5 of Area 11 – Wellings of Winchester Development.				

Using the above information, the 2039 population projections for the Low Growth and High Growth Scenarios in Winchester were determined and presented in Table 5.

TABLE 5: POPULATION PROJECTIONS IN WINCHESTER (2016 – 2039)

Year	Low Growth Scenario		High Growth Scenario	
	Projected Population Increase (Persons)	Population Projected (Low Growth Scenario)	Projected Population Increase (Persons)	Population Projected (High Growth Scenario)
2016	-	2,394 ¹	-	2,394 ¹
2019	108 ²	2,502	108 ²	2,502
2039	1,128 ³	3,630	1,128 ⁴ + 572 ⁵	4,202
1. Population based on the 2016 Census Information for Winchester. 2. 2019 population increase is based on an assumed annual growth rate of 1.5%. 3. Based on the potential population increase for Low Growth Scenario identified in Table 4. 4. Based on the potential population increase for Low Growth Scenario (including Phase 1 of the Wellings of Winchester development) identified in Table 4. 5. Based on the potential population increase for Phase 2 to Phase 5 of the Wellings of Winchester development identified in Table 3.				

POPULATION PROJECTIONS FOR CHESTERVILLE

As determined in consultation with the Township, Table 6 illustrates the projected population for the Low Growth and High Growth Scenarios for Chesterville to 2039 based on annual growth rates of 1.5% and 3.5% respectively.

TABLE 6: POPULATION PROJECTIONS IN CHESTERVILLE (2016 – 2039)

Year	Low Growth Scenario		High Growth Scenario	
	Annual Projected Growth Rate (%)	Population Projected (Low Growth Scenario)	Annual Projected Growth Rate (%)	Population Projected (High Growth Scenario)
2016	-	1,677 ¹	-	1,677 ¹
2019	3.5 ²	1,853	3.5 ²	1,853
2039	1.5 ²	2,409	3.5 ²	3,027
1. Population based on the 2016 Census Information for Chesterville. 2. 2019 population increase is based on an assumed annual growth rate of 3.5%. 3. Low annual growth rate (1.5%) and high annual growth rate (3.5%) developed in consultation with the Township.				

TOTAL PROJECTED POPULATION FOR CLASS EA

As summarized in Table 7, the total projected population for Winchester and Chesterville based on the Low Growth and High Growth Scenarios are 6,039 and 7,229 people, respectively. These population projections will be used to determine water supply requirements for the drinking water system as part of the Class EA.

TABLE 7: TOTAL POPULATION PROJECTIONS IN WINCHESTER AND CHESTERVILLE (2039)

Village	2019 Total Population	Total Projected Population (Low Growth Scenario)	Total Projected Population (High Growth Scenario)
Winchester	2,502	3,630	4,202
Chesterville	1,853	2,409	3,027
TOTAL	4,355	6,039	7,229

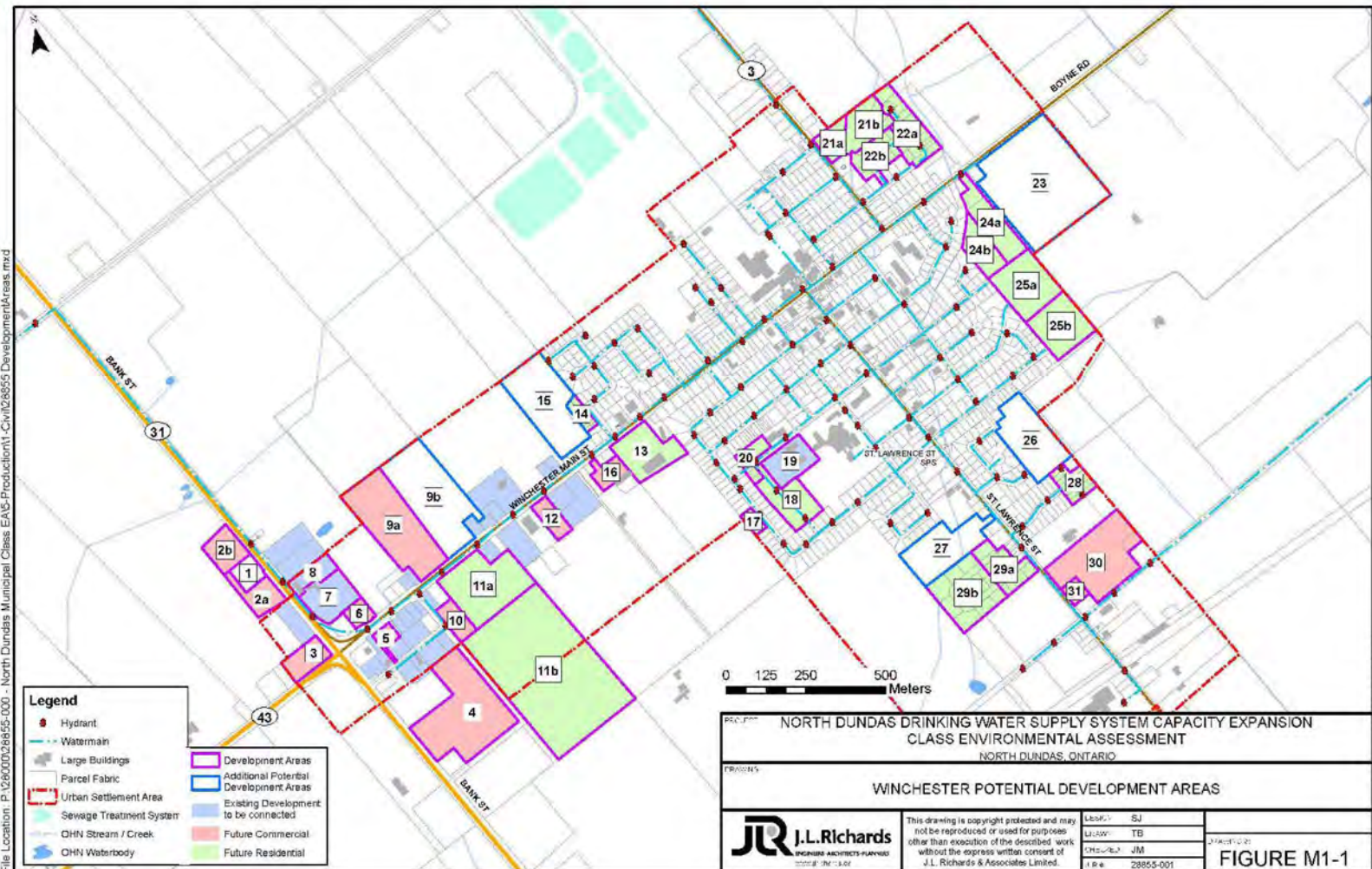
Prepared by
J.L. RICHARDS & ASSOCIATES LIMITED

Reviewed by
J.L. RICHARDS & ASSOCIATES LIMITED

Sara Jamaliniya, M.Eng.

Jordan Morrissette, M.Eng., P.Eng.

File Location: P:\26000\26855-000 - North Dundas Municipal Class EAS-Production\1-Civil\26855 DevelopmentAreas.mxd



Plot Date: Friday, February 14, 2020 2:10:30 PM



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 4 – PHASE 1 REVIEW MEETING

ATTENDANCE:	Angela Rutley	Township of North Dundas (Township)
	Mary-Lynn Plummer	Township of North Dundas (Township)
	Dave Markell	Ontario Clean Water Agency (OCWA)
	Paul Smolkin	Golder Associates (Golder)
	Brian Henderson	Golder Associates (Golder)
	Sarah Gore	J.L. Richards & Associates Limited (JLR)
	Mark Buchanan	J.L. Richards & Associates Limited (JLR)

The meeting commenced at 9:00 A.M., Thursday, July 2, 2020 via video conference.

The following summary of the discussions of this meeting has been prepared to record and direct the project. Please advise the undersigned of any errors or omissions.

ITEM

ACTION

4.1 S. Gore welcomed all to the Water Supply Expansion draft Phase 1 Report review meeting.

M. Buchanan provided a status/review of the consultation activities completed to date:

- Notice of Commencement – Issued Letter to Agencies October 16, 2019
- Notice of Commencement – Published on Township Website September 27, 2019
- Responses to Date:
 - **Public:** None to date.
 - **Transport Canada:** Request to be removed from mailing list, if the project does not impact federal land.
 - **Ministry of Environment, Conservation and Parks:** Provided comments regarding the Class EA process, technical review issues and aboriginal consultation.
 - **Ministry of Natural Resources and Forestry:** Request proponent complete preliminary screening of natural heritage data from convenient online sources; requested to be provided with the Study Reports for review.
 - **Ministry of Heritage, Sport, Tourism and Culture Industries:** Request proponent complete screening for Archaeological Resources and Built Heritage and Cultural Landscapes using the provided MHSTCI criteria.
 - **South Nation Conservation Authority** – Input for Source Water Protection.
 - **Eastern Ontario Health Unit:** Confirmed continued interest and involvement in project.

S. Gore noted that Lactalis stakeholder consultation was completed in December 2019 to understand their long-term water demand projections as the community's single largest water users that accounts for approximately 50% of water consumption.



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 4 – PHASE 1 REVIEW MEETING

ITEM

ACTION

4.2 S. Gore reviewed the following well rated and operational capacity

Table 1: Well Rated and Operational Capacity Comparison

Location	Rated Capacity (L/s)	Operating Limit (L/s)	Current Rate (L/s)
Winchester Well #1	9.5	5.0 – 6.0	4.5
Winchester Well #5	6.4	3.5 – 5.0	3.85
Winchester Well #6	11.4	5.5 – 9.0	6.5
Winchester Wells #7a, b, and c	22.5	22.5	17.2
Chesterville Well #5	22.7	15.0 – 17.0	16.5
Chesterville Well #6	30.3	20 – 23.0	11 (was 18)
Total	102.8	71.5 – 82.5	59.5

B. Henderson indicated that the well capacity and operating limits were obtained from historical records provided by OCWA. The well operating limit represents variation in well supply from wet to dry weather conditions, while the current rate is the average well capacity.

P. Smolkin clarified that well capacity has been established through operations and proven yield and can differ from the initial well rating developed shortly after the well was originally drilled, in some cases years ago.

D. Markell advised that Winchester Wells #1, 5 and 6 were maintaining their static water level this year but OCWA has lowered their current production rate.

D. Markell enquired if there is a way to provide chemically treat biofouling in Chesterville Well #6 to mitigate the frequency of well maintenance. Golder/JLR to investigate and advise.

Golder/JLR

Post Meeting Note: OCWA provided JLR/Golder 2019 Chestville Well #5 video inspection and 2018 Chesterville Well #6 Rehabilitation Report.



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 4 – PHASE 1 REVIEW MEETING

ITEM

ACTION

- 4.3 S. Gore reviewed the low and high growth water demands and projected water supply deficits as follows:

Table 2: Water Supply Deficit Comparison

Scenario	Maximum Day Demand	Current Rated Capacity	Deficit
Low Growth	89.5 L/s (7,736 m ³ /day)	59.5 L/s (5,140m ³ /day)	30 L/s (2,596 m ³ /day)
High Growth	99.2 L/s (8,570 m ³ /day)		39.7 L/s (3,430 m ³ /day)

M. Buchanan advised that the current MECP Water Design Guidelines do not comment on redundancy requirements for groundwater supplied systems. As a conservative option, the Class EA is currently following the water supply requirements published in the Ten States Standard that recommend the maximum day demand be met by the system while the largest well is out of service, subject to the approval of the regulatory authority.

D. Markell advised that Lactalis' recently commissioned sewage treatment system may increase their average water demand by approximately 15 m³/day. In addition, Lactalis has experienced an acute water demand increase as a result of modified processed milk products experienced during COVID-19. OCWA to review Lactalis' 2020 water demands and advise.

Post Meeting Note: OCWA provided Lactalis' 2020 average day water demand that ranged from 999 m³/day to 1380 m³/day from January to June. These demands remain consistent and less than the 1,400 m³/day water demand projection accounted for in the Class EA, therefore, no water supply increase is warranted for Lactalis.

- 4.4 S. Gore advised that continued consultation with the MECP and South Nation Conservation Authority will be scheduled following development of potential servicing alternatives in Phase 2.



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 4 – PHASE 1 REVIEW MEETING

<u>ITEM</u>	<u>ACTION</u>
<p>4.5 S. Gore recommended advancing the additional studies to assess opportunities in existing groundwater supply system, particularly at Chesterville Well #6 assessment.</p> <p>B. Henderson advised that the work plan currently included a visual inspection, "down hole" camera inspection and pump test (within the current rated capacity). Pump test can be scheduled after the visual inspection and "down-hole" camera inspection are completed.</p> <p>D. Markell advised that Well #6 was serviced in 2018 to help return the well capacity closer to its rated capacity. It was successful but the Township/OCWA is experiencing lower capacity again, two years after well servicing work.</p> <p>S. Gore recommended the Hydrogeological study can be advanced following Chesterville Well #6 assessment and refinement of available water supply potential from the existing groundwater wells.</p> <p>Post Meeting Note: OCWA/Township provided JLR/Golder 2018 Chesterville Well #6 service inspection Report and invoice for consideration as part of lifecycle costing in Phase 2.</p>	
4.6 B. Henderson to coordinate with D. Markell/OCWA to schedule Well #6 visual and "down-hole" camera inspection.	Golder/OCWA
4.7 S. Gore advised that JLR will update the project schedule.	JLR
4.7 Next meeting date to be scheduled to review Phase 2 assessment criteria and potential servicing options.	

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED

Mark Buchanan, P.Eng.

Attach.

Distribution: All present



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 5 – TSC MEETING

ATTENDANCE:	Angela Rutley	Township of North Dundas (Township)
	Khurram Tunio	Township of North Dundas (Township)
	Mary-Lynn Plummer	Township of North Dundas (Township)
	Dave Markell	Ontario Clean Water Agency (OCWA)
	Stephane Barbarie	Ontario Clean Water Agency (OCWA)
	Paul Smolkin	Golder Associates (Golder)
	Brian Henderson	Golder Associates (Golder)
	Sarah Gore	J.L. Richards & Associates Limited (JLR)
	Mark Buchanan	J.L. Richards & Associates Limited (JLR)

The meeting commenced at 9:00 A.M., Wednesday, October 28, 2020 via video conference.

The following summary of the discussions of this meeting has been prepared to record and direct the project. Please advise the undersigned of any errors or omissions.

<u>ITEM</u>	<u>ACTION</u>
5.1	M. Buchanan welcomed all to the Team Meeting, including the newest member Khurram Turino as Director of Public Works for the Township.
5.2	M. Buchanan provided a brief review of the proposed Class EA Work Plan.
5.3	M. Buchanan reviewed the Phase 1 Problem/Opportunity Statement: The Township of North Dundas is serviced by a communal potable water supply system that generally consists of eight active groundwater wells, five pump houses with chlorine disinfection, two storage reservoirs, two elevated storage tanks and distribution system. While the system has been operating in accordance with all applicable legislation and is generally achieving all required water quality standards, it is anticipated that the Township will not be able to meet potable water supply requirements as recommended by the Ministry of the Environment, Conservation and Parks within the next 20 years timeframe, if projected growth and associated water demand is realized. The Township is therefore in need of a solution that will address water supply constraints and improve the redundancy and reliability in delivering treated water to the community over the next 20 years.
5.4	M. Buchanan reviewed the status of the consultation activities completed to date: <ul style="list-style-type: none">• Notice of Commencement – Issued Letter to Agencies October 16, 2019• Notice of Commencement – Published on Township Website September 27, 2019• Responses to Date:<ul style="list-style-type: none">◦ Public: None to date.◦ Transport Canada: Request to be removed from mailing list, if the project does not impact federal land.



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 5 – TSC MEETING

<u>ITEM</u>	<u>ACTION</u>
--------------------	----------------------

- | | |
|---|--|
| <ul style="list-style-type: none"> ○ Ministry of Environment, Conservation and Parks: Provided comments regarding the Class EA process, technical review issues and aboriginal consultation. ○ Ministry of Natural Resources and Forestry: Request proponent complete preliminary screening of natural heritage data from convenient online sources; requested to be provided with the Study Reports for review. ○ Ministry of Heritage, Sport, Tourism and Culture Industries: Request proponent complete screening for Archaeological Resources and Built Heritage and Cultural Landscapes using the provided MHSTCI criteria. ○ South Nation Conservation Authority: Input for Source Water Protection. ○ Eastern Ontario Health Unit: Confirmed continued interest and involvement in project. ○ Township of South Dundas: Issued notice of commencement. No response received. | |
|---|--|

S. Gore indicated that virtual public consultation will need to be considered as part of the Phase 2 Public Information Centre.

5.5 M. Buchanan reviewed the following well rated and operational capacity.

Table 1: Well Rated and Operational Capacity Comparison

Location	Rated Capacity (L/s)	Operating Limit (L/s)	Current Rate (L/s)
Winchester Well #1	9.5	5.0 – 6.0	4.5
Winchester Well #5	6.4	3.5 – 5.0	3.85
Winchester Well #6	11.4	5.5 – 9.0	6.5
Winchester Wells #7a, b, and c	22.5	22.5	17.2
Chesterville Well #5	22.7	15.0 – 17.0	16.5
Chesterville Well #6	30.3	20 – 23.0	11 (was 18)
Total	102.8	71.5 – 82.5	59.5

D. Markell advised that OCWA has observed the Chesterville Well #6 capacity has increased to 21 L/s following the visual well and down-hole camera inspection.

M. Buchanan indicated the Phase 1 water supply deficit shall continue to be based on the lower Chesterville Well #6 capacity of 11 L/s.

**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 5 – TSC MEETING

ITEM

ACTION

- 5.6 M. Buchanan reviewed the low and high growth water demands and projected water supply deficits as follows:

Table 2: Water Supply Deficit Comparison

Scenario	Maximum Day Demand	Current Rated Capacity	Deficit
Low Growth	89.5 L/s (7,736 m ³ /day)	59.5 L/s (5,140m ³ /day)	30 L/s (2,596 m ³ /day)
High Growth	99.2 L/s (8,570 m ³ /day)		39.7 L/s (3,430 m ³ /day)

Based on the growth projections and water supply deficit, and the demonstrated long term operating rates of the overburden wells (Winchester #7 and Chesterville #5 and #6) it is anticipated that two additional groundwater wells completed within these same overburden aquifer formations would be required to meet the 20 year maximum day demand.

- 5.7 M. Buchanan reviewed the planned Phase 2 next steps.

Chesterville Well #6 Test: As requested by the Township, the Chesterville Well #6 Pump Test would be scheduled for a 72-hour test in lieu of the proposed 6 hour to better assess potential remaining well capacity. Golder will review their work plan and advise on any modifications to the level of effort and/or OCWA assistance for the 72 hour test. Intent is to schedule a well test in early November.

Golder

Golder is to provide a map indicating potential additional overburden well locations to assist in the selection of suitable well test sites. Township is to review currently owned property in the vicinity of suitable locations to help assess property acquisition constraints. Golder noted the importance of the Township acquiring an Option to Purchase the well site(s) prior to proceeding with test well drilling.

Golder/Township

M. Buchanan reviewed the following list of potential alternatives to be assessed during Phase 2:

1. Do-Nothing
2. Expanding the groundwater supply system
3. Connecting to other water system
4. A new surface water treatment plant

Township and JLR to consult with the Township of South Dundas to assess connection to other water system options.



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 5 – TSC MEETING

ITEM

ACTION

Post Meeting Note: On Wednesday, October 28, JLR provided the Township with the following questions to commence consultation with South Dundas.

Township

1. Can the Township provide 39.7 L/s (3,430 m³/day) of water supply to meet North Dundas' 20 year maximum day demand deficit (high growth)?
2. If not, how much capacity is available?
3. What is the cost to purchase this capacity in perpetuity?
4. Where is the proposed watermain connection location?
5. What is the current cost per cubic metre of water charged to users?

Following South Dundas' consultation and prior to advancing the hydrogeological well testing, a brief summary and screening of potential water supply options including technical, property, and financial constraints will be provided to the Township along with recommended next steps to review and solicit Council input.

M. Buchanan advised that continued consultation with the MECP and South Nation Conservation Authority will be scheduled following development and assessment of technical information on potential servicing alternatives in Phase 2.

- 5.8 M. Buchanan advised the project remains a Schedule C Class EA, but will be reviewed and updated in Phase 2. It is expected that expansion of the groundwater system and connection to a neighbouring water supply system would proceed as a Schedule B.
- 5.9 M. Buchanan provided the attached tentative schedule and advised the schedule will be updated upon completion of the well testing and South Dundas consultation.
- 5.10 Next meeting date to be determined prior to Council update.

JLR

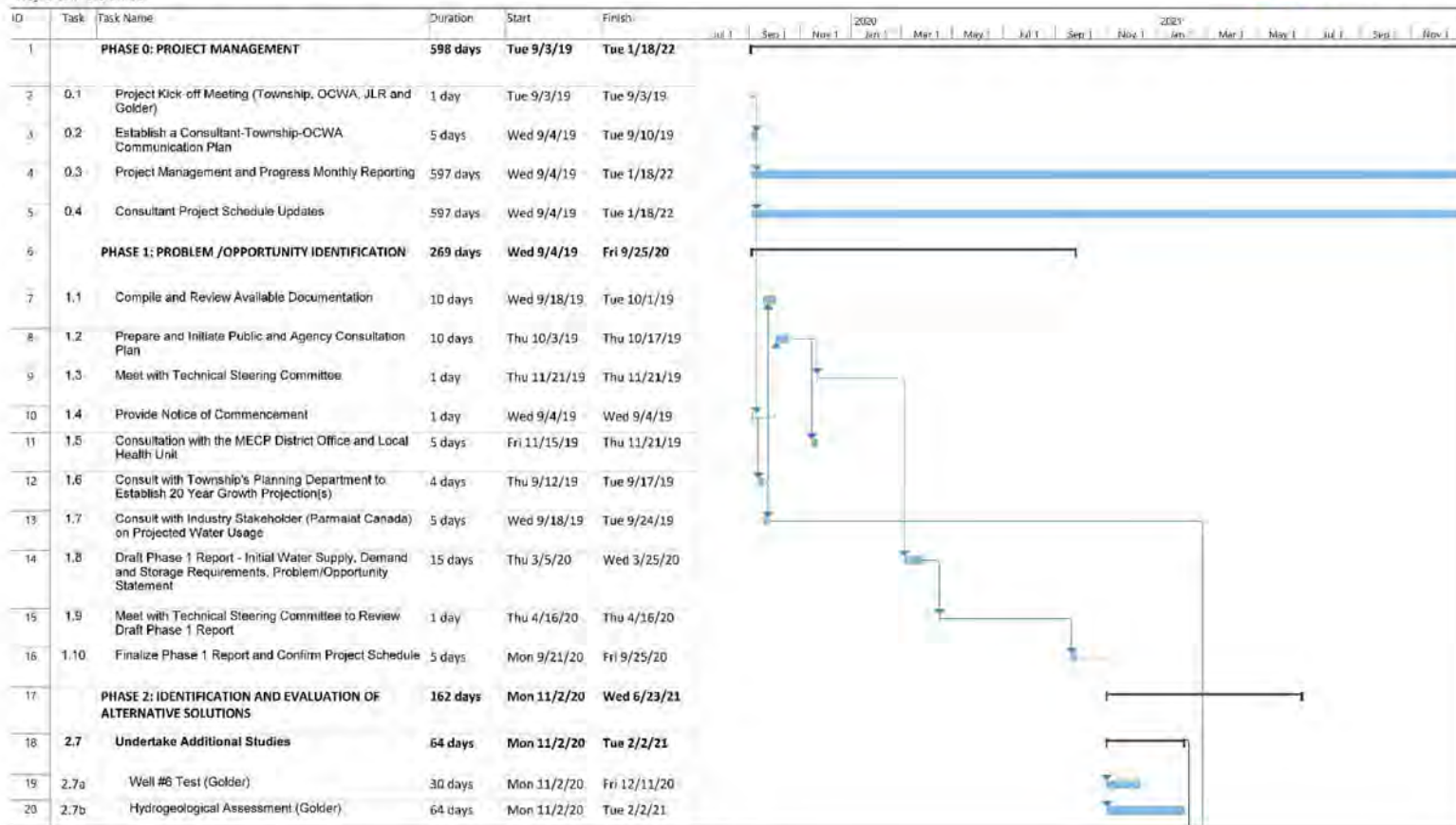
Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED

Mark Buchanan, P.Eng.

Attach.

Distribution: All present









**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

**WATER SUPPLY ALTERNATIVE – CONSULTATION WITH SOUTH DUNDAS
MEETING MINUTES**

ATTENDANCE:	Tony Fraser	Mayor	Township of North Dundas (North Dundas)
	Angela Rutley	Chief Administrative Officer	Township of North Dundas (North Dundas)
	Khurram Tunio	Director of Public Works	Township of North Dundas (North Dundas)
	Steven Byvelds	Mayor	Township of South Dundas (South Dundas)
	Shannon Geraghty	Chief Administrative Officer	Township of South Dundas (South Dundas)
	Danielle Watson	Director of Environmental Services	Township of South Dundas (South Dundas)
	Denis Villeneuve	Supervisor of Water and Wastewater Operations	Township of South Dundas (South Dundas)
	Dave Markell	Project Manager	Ontario Clean Water Agency (OCWA)
	Sarah Gore	Project Manager	J.L. Richards & Associates Limited (JLR)
	Mark Buchanan	EA Lead	J.L. Richards & Associates Limited (JLR)
	Matthew Marcuccio	Civil Engineer	J.L. Richards & Associates Limited (JLR)

The meeting commenced at 11:00 A.M., Tuesday February 9, 2021 via video conference.

The following summary of the discussions of this meeting has been prepared to record and direct the project. Please advise the undersigned of any errors or omissions.

ITEM

ACTION

1.0 Introductions and Opening Remarks

1. Introductions were made by all attendees.
2. Opening remarks were made by the Mayors of North Dundas and South Dundas. Both Townships are open to considering the water supply option and are willing to work together to evaluate its feasibility.

2.0 Project Introduction – North Dundas Drinking Water Supply System Capacity Expansion Class Environmental Assessment

1. The purpose of the meeting is to gather information regarding the water supply availability at the South Dundas Water Treatment Plant (WTP), to assist in the evaluation of this option as a possible solution. Other aspects of the option, such as determining infrastructure/operation requirements and financial estimates, will be discussed at a later date when more information is available.



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

**WATER SUPPLY ALTERNATIVE – CONSULTATION WITH SOUTH DUNDAS
MEETING MINUTES**

<u>ITEM</u>	<u>ACTION</u>
2.	<p>To introduce the project, JLR presented the Problem/Opportunity Statement from the Environmental Assessment Phase 1 Report:</p> <p><i>“The Township of North Dundas is serviced by a communal potable water supply system that generally consists of eight active groundwater wells, five pump houses with chlorine disinfection, two storage reservoirs, two elevated storage tanks and distribution system. While the system has been operating in accordance with all applicable legislation and is generally achieving all required water quality standards, it is anticipated that the Township will not be able to meet potable water supply requirements as recommended by the Ministry of the Environment, Conservation and Parks within the next 20 years timeframe if projected growth and associated water demand is realized. The Township is therefore in need of a solution that will address water supply constraints and improve the redundancy and reliability in delivering treated water to the community over the next 20 years.”</i></p>
3.0	<p>Brief Review of Class Environmental Assessment Process</p> <p>1. JLR noted that this project is a Schedule 'C' Class Environmental Assessment (Class EA) and is currently in Phase 2 (Identification and Evaluation of Preferred Solutions). The draft Phase 2 report is anticipated to be completed in Summer 2021, where the Class EA schedule will be updated.</p>
4.0	<p>Response to Questions:</p> <p>1. JLR reviewed South Dundas' responses to questions that were given prior to the meeting:</p> <p>Question #1: Can South Dundas provide 39.7 L/s (3,430 m³/day) of water supply to meet North Dundas' 20-year maximum day demand deficit (high growth)?</p> <p>South Dundas Response: Currently the Municipality of South Dundas utilizes approximately 4,000 cubic meters per day. Under our water taking license we are permitted to pull 10,445 cubic meters per day from the St. Lawrence River and the WTP can produce 9,445 cubic meters. The WTP has the capacity to generate additional consumption as this can be added to the water plant filters which are scheduled to be replaced in 3-4 years. This would need to be engineered but would be expected once all the filters were full in the trains this could provide an additional 3,150 cubic meters of water per day. We would also need a Ministry approval for increasing water taking/production.</p> <p>1. South Dundas clarified that the 4,000 m³/day is the max day demand.</p>



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

**WATER SUPPLY ALTERNATIVE – CONSULTATION WITH SOUTH DUNDAS
MEETING MINUTES**

ITEM	ACTION
<p>2. North Dundas asked if the current infrastructure at the WTP can accommodate the increased intake of water. South Dundas noted that the Plant itself is oversized, currently using approximately 40% of its rated capacity.</p> <p>Question #2: If not (reference to Question #1), how much capacity is available?</p> <p>South Dundas Response: As being in the preliminary stages and with further investigative work to be undertaken depending on the direction, the Municipality would be in a position to provide the anticipated water flow to the Township of North Dundas based on the 20-year maximum demand.</p> <p>1. As a follow up question, JLR asked if South Dundas had considered their own 20-year growth projections in the available WTP capacity. South Dundas has not done so yet, and will review their own 20-year plans and advise North Dundas/JLR on the remaining WTP capacity.</p> <p>2. South Dundas noted that if the proposed watermain route is along County Road 31, there may be interest in providing water service to the passing communities in the Township, such as Williamsburg and Winchester Springs. South Dundas will review and advise if they will be considering this scenario in their 20-year projections and advise on the remaining WTP capacity.</p> <p>Question #3: What is the cost to purchase this capacity in perpetuity?</p> <p>South Dundas Response: This would need further discussion with the Ministry to determine what engineering studies would need to be required for their approval. In addition, we would need to determine if an additional booster station and reservoir would need to be operated. At this time there are too many unknowns to provide any estimate, but willing to work with North Dundas and its consultants to provide more clarity and ultimately what is needed and associated costs.</p> <p>1. As a follow-up question, JLR asked for the construction cost of the existing WTP. South Dundas said the cost was approximately \$18M, which the Township is currently paying off.</p> <p>2. South Dundas advised there is little interest to sell off ownership of parts of the WTP capacity. North Dundas clarified that they have no intention of owning part of the plant. JLR also clarified that the capital cost was requested to help estimate the cost of this option. Further discussions and agreements regarding payment arrangements between both Townships would need to take place to better understand the cost sharing of this alternative.</p>	<p>South Dundas</p> <p>South Dundas</p> <p>North Dundas/ South Dundas</p>



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

**WATER SUPPLY ALTERNATIVE – CONSULTATION WITH SOUTH DUNDAS
MEETING MINUTES**

ITEM**ACTION**

Question #4: Where is the proposed watermain connection location?

South Dundas Response: The ideal connection to the watermain would be County Road 31 (North of County Road 2) but would need to be further investigated on the ability to provide this option (behind Canadian Tire) or alternative solutions with costing estimates provided.

1. South Dundas noted that another potential tie-in point is on County Road 31 at Felker Way. South Dundas will send JLR a map of the water system in the area.

South
Dundas

Question #5: What is the current cost per cubic meter of water charged to users?

South Dundas Response: The Municipality currently has a debenture with Infrastructure Ontario for a 20-year loan on the construction of the Water Treatment Plant which was commissioned in 2006 and payments commenced in 2008. The water costs are broken into fixed and variable based on the modelling undertaken several years back to better navigate the revenue to expenses.

Annual Water Fixed/Flat Rate

Residential	\$ 423.87
Multi-Residential	\$ 423.87

Industrial, Commercial, Institutional:

Meter Size	Fixed Rate
5/8" – 3/4"	\$ 423.87
1"	\$ 593.43
1 1/2"	\$ 762.92
2"	\$1,229.25
3"	\$1,229.25
4"	\$1,229.25

Water Metered/Consumption Rate

Residential	\$0.70 per m ³
Industrial, Commercial, Institutional	\$0.70 per m ³
Multi-Residential	\$0.70 per m ³

Sewer Upfront/Service Connection Fee/Unit

Upfront/Service Connection Fee per dwelling unit	\$5,000.00
--	------------

Capital Levy (Covers Debenture Payment – IO)

Consumption Charge/User \$0.80/m³ (no minimum charge)



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

**WATER SUPPLY ALTERNATIVE – CONSULTATION WITH SOUTH DUNDAS
MEETING MINUTES**

<u>ITEM</u>	<u>ACTION</u>
1. South Dundas confirmed that the foregoing information is publicly available and can be published as part of this Class EA..	
5.0 Other Discussion Items:	
1. North Dundas indicated that they have the intention to solicit funding from the Provincial and Federal governments and stressed that the Class EA report will need to be prepared to support their request.	
6.0 Next Steps:	
<ul style="list-style-type: none">JLR to schedule an internal meeting with North Dundas to debrief from this meeting and go over all the options being considered to date.South Dundas to review their 20-year projections.	JLR South Dundas

The Meeting was adjourned at 12:00 PM.

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED

Matthew Marcuccio, P.Eng.

Attach.

Distribution: All present



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 6 – TSC MEETING

ATTENDANCE:	Angela Rutley	Township of North Dundas (Township)
	Khurram Tunio	Township of North Dundas (Township)
	Dave Markell	Ontario Clean Water Agency (OCWA)
	Dawn Crump	Ontario Clean Water Agency (OCWA)
	Sarah Gore	J.L. Richards & Associates Limited (JLR)
	Mark Buchanan	J.L. Richards & Associates Limited (JLR)
	Matthew Marcuccio	J.L. Richards & Associates Limited (JLR)

The meeting commenced at 10:30 A.M., Friday, February 26, 2021 via video conference.

The following summary of the discussions of this meeting has been prepared to record and direct the project. Please advise the undersigned of any errors or omissions.

ITEM		ACTION
5.1	<p><u>Confirmation of Phase 1 Servicing Area and Problem Statement</u></p> <p>1. Rural Servicing (South Dundas Water Supply)</p> <p>a. If the South Dundas Water Supply Alternative is selected, the new watermain would be passing through communities (such as Winchester Springs), rural properties or other future development not currently serviced by the Township.</p> <p>b. The Township will ask Council if there is any interest expanding the Phase 1 servicing area to includes these additional properties. JLR to provide a list of questions and additional context for the Township to provide to Council to understand the implication of expanding the study area.</p> <p>c. Township stated that there has been requests in the past from properties west of Winchester (along CR-43 south of Main St.) to connect to the Township's water supply. Currently that area is outside the urban boundary and on private services.</p> <p>d. M. Buchanan advised the Township likely cannot service beyond the current urban boundaries. Township to confirm the urban settlement area shown in the February 2020 Growth Projections Memorandum is correct.</p> <p>Post Meeting Note: JLR confirmed that properties located outside the urban settlement boundary cannot be serviced in the United Counties of Stormont Dundas Glengarry Official Plan (SDG OP). Establishing municipal water and sewer services or partial services beyond the established urban boundaries requires an Official Plan Amendment supported by the County.</p>	<p>JLR</p> <p>Township</p>



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 6 – TSC MEETING

<u>ITEM</u>	<u>ACTION</u>
2. Lactalis fire flow	
<ul style="list-style-type: none"> a. Lactalis is reviewing their fire suppression infrastructure and enquired about potential water supply flow rate and duration for their fire flow requirements. Township provided the Phase 1 Water Supply Class EA Report and Water and Wastewater Servicing Study (JLR, 2020) and is awaiting their response. b. JLR noted that fire flow is typically provided through water storage as opposed to water supply. Depending on Lactalis review and findings, additional water storage measures could be resolved on-site. c. Township also expressed that Council would not want to give up additional home developments to accommodate Lactalis's fire flow needs. d. JLR also noted that the EA is focused on the Township's water supply only. The Water and Wastewater Servicing Study assessed water storage needs up to proposed build-out, which did include Lactalis's fire flow requirement the Township received in 2021. 	
3. Future Industrial Development	
<ul style="list-style-type: none"> a. Prior to the meeting, there was consideration whether to plan for water supply demands from future industrial development. b. Township clarified that these industrial facilities do not require potable water, so they do not need to be serviced as part of this Class EA. 	

5.2 New Well Supply Alternatives

JLR provided Golder's progress update for the review of potential well sites:

1. Moorewood Esker

- a. For the potential location north of Well 7. We do not know anything about the pit location relative to where a new well might be located, but what are the Township's potential concerns with a nearby pit operation? This is the same situation that exists for Chesterville wells 5 and 6 and the previous operation of the Provost pit adjacent to well 7. If the pits are not dewatered (which is normal for pits), they will not be expected to affect water quantity. Excavation in the pit below the water table creates suspended solids but that would not affect water supply quality because the sand formation acts as a natural filter between the pit and the well. Ideally, the well would be located as far from the pit operation as possible. Similar to the other wells (Winchester 7 and Chesterville 5 and 6), GUDI would have to be addressed. Vibration associated with pit operations, and especially associated with the adjacent railway tracks was a concern for well 6;



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 6 – TSC MEETING

<u>ITEM</u>	<u>ACTION</u>
<p>because of that it was studied extensively and found not to be a concern. We would recommend keeping this location as an option for a new well.</p> <p>b. For the potential location to the south of Well 7 along Lafleur Road (former St. Pierre pit), it would be good to understand what material had been placed in the pit and for how long to assess potential impacts on groundwater quality. Maybe removing the material from the pit area could be part of a new well water supply from that location; the presence of trees/brush should not necessarily eliminate it from consideration.</p> <p>c. The yield available from the Winchester well 7 site is controlled by the aquifer and not the pump. Through previous studies at the well location, the safe yield for the aquifer was estimated at 25.1 L/s. It is currently permitted for 22.5 L/s, a difference of only approximately 2.5 L/s.</p>	
<p>2. <u>Maple Ridge Esker</u></p>	
<p>a. The potential location 'behind school farmed' towards the east is of interest. The other potential well locations are at the edge of the mapped esker (and in the case of the Township garage there are its historical activities and possible expansion); as such, wells at these locations may not have sufficient water for a communal well and should be considered to be low importance.</p>	
<p>3. JLR will coordinate a meeting between OCWA/Golder/JLR to review and refine the recommended sites for well testing. Township will then proceed in contact property owners to secure interest in potential property sale should well testing yield suitable supply.</p>	JLR
<p>Post Meeting Note: Meeting occurred on Friday, March 5, 2021 between OCWA, Golder and JLR that reviewed and refined the priority future potential well locations. List of priority potential well locations in the Morewood and Maple Ridge Eskers were sent to the Township on March 8. Township to advise on viable properties for access, testing and potential purchase by March 23.</p>	
<p>4. JLR to contact South Nation Conservation Authority (SNC) about their non-intrusive means to evaluate well sites.</p>	JLR



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 6 – TSC MEETING

<u>ITEM</u>	<u>ACTION</u>
5.3 <u>South Dundas Water Supply Alternative</u>	
<ol style="list-style-type: none"> 1. JLR noted that the alternative would likely require additional desktop studies (archeological, species at risk, etc.), regulatory consultation and review of the various watermain crossings from South Dundas to North Dundas (CN Rail, Highway No. 401, South Nation River, Municipal Drains crossings, etc.). A blending/treatability study is recommended to identify any concerns with blending surface water and groundwater sources. <ol style="list-style-type: none"> a. JLR to confirm the applicable Class EA Schedule and provide a summary of the studies needed to evaluate the option. JLR will also provide the costs to conduct the studies. 2. JLR to follow up with South Dundas to determine the timing when they will provide their updated 20-year water supply availability. 	Township
<p>Post Meeting Note: JLR requested the Township of South Dundas provide refined WTP capacity input by Monday March 22, 2021.</p>	JLR
5.4 <u>Schedule</u>	
<ol style="list-style-type: none"> 1. JLR to determine critical path activities to deliver the Phase 2 draft report by mid-July 2021. 2. Post Meeting Note: The current critical path activity is securing a priority well test property or multiple properties by Tuesday March 23 to mobilize well driller for test well. 	
5.5 <u>Next Meeting</u>	
<ol style="list-style-type: none"> 1. Next meeting date to be determined. 	
5.6 Meeting adjourned at 12:00 A.M.	

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED

Matthew Marcuccio

Matthew Marcuccio, P.Eng.

Attach.

Distribution: All present



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 7 – TSC MEETING

ATTENDANCE:	Angela Rutley	Township of North Dundas (Township)
	Khurram Tunio	Township of North Dundas (Township)
	Dave Markell	Ontario Clean Water Agency (OCWA)
	Dawn Crump	Ontario Clean Water Agency (OCWA)
	Stephane Barbarie	Ontario Clean Water Agency (OCWA)
	Sarah Gore	J.L. Richards & Associates Limited (JLR)
	Mark Buchanan	J.L. Richards & Associates Limited (JLR)
	Matthew Marcuccio	J.L. Richards & Associates Limited (JLR)
	Brian Henderson	Golder Associates Limited (Golder)
	Paul Smolkin	Golder Associates Limited (Golder)

The meeting commenced at 9:00 A.M., Tuesday, June 1, 2021 via video conference.

The following summary of the discussions of this meeting has been prepared to record and direct the project. Please advise the undersigned of any errors or omissions.

ITEM	ACTION
7.1 Well Site Selection Update	
1. JLR to update and submit to the Township watermain costs for each well site option (<i>Post Meeting Note: watermain opinion of probable costs has been provided to the Township after the meeting.</i>).	JLR
2. The Township to select a site for Golder to proceed with the well investigations.	Township
3. Site #1a:	
a. The Township noted that this site is no longer an option.	
4. Site #1b:	
a. The Township noted that the Owner is willing to sell approximately 5 acres of the property. Township will provide Golder with a markup of the delineation of the property to show the sale area.	Township
b. Golder mentioned that they have done test drilling in Site 1b in the past, they recalled that the Site #1b location should be near the gravel core of the Morewood Esker. Golder also noted that drilling the well in the central part of the existing pit property along Lafleur Road is expected to increase the chances to access the gravel core of the esker.	
c. The Township noted that the owner may still want to maintain agricultural and excavation works adjacent to the well site. Golder mentioned that an active pit beside the well site excavated to below the water table would require a GDI assessment and may be a hinderance to obtaining the communal water supply	



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 7 – TSC MEETING

<u>ITEM</u>	<u>ACTION</u>
<p>PTTW license from the Ministry. A communal well and the associated WHPA may also result in restrictions on aggregate extraction operations in the vicinity of the well.</p> <p>i. The Township to request for pit license from owner showing drawings of the pit operations and send them to Golder.</p>	Township
<p>5. Site #2:</p> <p>a. Township to request a clear and complete pit license and drawings from the owner and provide them to Golder. Golder wants to review the license to know the depth and extent of operations as well as the pit expansion plans to check how the pit operations may affect the well site operation. Golder noted that the well needs to be located in the coarse central core area of the esker, which may coincide with the licensed pit location</p> <p>b. The owner of Site #2 requested hydrogeological investigation of the site area, to determine if the new well site would interfere with the owner's pit operations on the property. Township to advise if the investigation should be conducted following review of watermain costing.</p>	Township
<p>6. Site #3/#4/#5</p> <p>a. JLR reviewed conceptual costs for the watermain to connect to the existing main on Gray Rd./Gypsy Ln., along Maple Ridge Rd. and Helmer Rd. JLR noted there is a rail crossing which would significantly increase watermain routing costs. The Township suggested to revise the route of the connecting watermain to travel east on County Road 43 towards the existing watermain from Wells #5 and #6, at CR-43 and Ball Rd. JLR will revise the route and opinion of probable cost for the watermain. JLR also noted that modifications to the existing Chesterville Well #5 and #6 pump station may be required to accommodate the servicing to both Winchester and Chesterville.</p> <p>b. Golder noted that Sites #3/4/5 are located at the tail end of the Maple Ridge Esker, which may be less certain that groundwater of sufficient quantity is available at these locations compared to Site 1b and 2.</p> <p>c. The Township noted that the Owner of Site #5 is willing to sell a portion of property for the well site, but the Township needs to confirm availability or requirement for an easement to access the site.</p> <p>i. Golder recommends the Township consider advancing a pilot hole to be drilled at Site #5 to identify the site's geological conditions to help inform if a sufficient quantity of groundwater can likely be accessed. Township to consider conducting this exploratory work for the site and advise.</p>	<p>JLR</p> <p>Township</p> <p>Township</p>



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 7 – TSC MEETING

<u>ITEM</u>	<u>ACTION</u>
7. Golder noted that a new communal well, for example Sites #1b or #2, is only expected to provide half of the future demand, so need to be considering the need for two new communal wells. Township to consider pursuing an option to purchase Site #5 in addition to Site #1b or #2 so that the pilot hole can be drilled and determination made whether or not Site #5 is a potential communal well site.	Township
7.2 <u>Well Drilling Investigation</u>	
<ul style="list-style-type: none"> Golder noted that the Ministry is willing to provide the PTTW to conduct the test well investigations, conditional on Golder providing written approval from the landowner. Golder noted that the drilling subcontractor is very busy, and there may be difficulties to schedule timeslot to conduct the test well investigations. At the moment, they are tentatively reserved in July, but Golder requires the Township to advise on their site selection so the drillers can be scheduled. 	Township
7.3 <u>Well Assessment Report – Chesterville Well #6</u>	
<ol style="list-style-type: none"> Golder will submit final report by next week. Golder has investigated potential mitigation measures to manage the fouling at Chesterville Well #6. Golder noted that there is no 'magic bullet', and that regular inspections, testing and maintenance are best practice. Golder reviewed the Township's maintenance procedures for the Well and recommend shortening the frequency of pump tests, from every 5 years to every 3 years. 	Golder
7.4 <u>South Dundas Water Supply Option</u>	
<ol style="list-style-type: none"> JLR is currently reviewing the available and remaining capacities provided by the Township of South Dundas, to determine available water supply for the Township of North Dundas's 20-year deficit. JLR notified the Township that additional studies will be beneficial to evaluate the South Dundas Option for the EA. Such studies include desktop environmental and archaeological investigations along the proposed watermain route. JLR will submit a Scope Change Request for the Township's consideration. 	JLR
7.5 <u>Other Discussions:</u>	
<ol style="list-style-type: none"> Prior to the Meeting, the Township enquired if a pump test at Wellfield #7 would be beneficial to assess increasing well yield capacity at the site. Golder noted that it is unlikely that the aquifer has changed significantly since the last pump test and did not recommend advancing this additional test at this time. <ol style="list-style-type: none"> OCWA noted that they will be replacing a well pump in Wellfield #7. It is expected that the capacity of the well site will increase from 17L/s to 21L/s, 	JLR



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 7 – TSC MEETING

<u>ITEM</u>	<u>ACTION</u>
closer to its PTTW rated capacity of 22.5 L/s.	
2. The Township to send the draft well site agreement to Golder to review that the scope of the well investigations is appropriately included.	Township
7.6 <u>Schedule</u>	
1. The Township is required to provide a July Council update on the project. JLR to provide an updated project schedule by the end of June. It was noted that the schedule will be dependent on the selection and purchase agreement of the well site, as well as the timeline of the investigations.	JLR
7.7 <u>Next Meeting</u>	
1. Next meeting date to be determined.	
7.8 Meeting adjourned at 10:00 A.M.	

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED

Matthew Marcuccio, P.Eng.

Attach.

Distribution: All present



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 8 – TSC MEETING

ATTENDANCE:	Angela Rutley	Township of North Dundas (Township)
	Khurram Tunio	Township of North Dundas (Township)
	Dave Markell	Ontario Clean Water Agency (OCWA)
	Dawn Crump	Ontario Clean Water Agency (OCWA)
	Mark Buchanan	J.L. Richards & Associates Limited (JLR)
	Matthew Marcuccio	J.L. Richards & Associates Limited (JLR)
	Brian Henderson	Golder Associates Limited (Golder)
	Paul Smolkin	Golder Associates Limited (Golder)
	Dale Holtze	Golder Associates Limited (Golder)

The meeting commenced at 11:00 A.M., Thursday, January 27, 2021 via video conference.

The following summary of the discussions of this meeting has been prepared to record and direct the project. Please advise the undersigned of any errors or omissions.

ITEM

ACTION

8.1 Golder Well Test Report Review

1. Golder reviewed the results and recommendations of the Well Test Report at the Lafleur Rd site.
2. Golder noted the test well results show that the potential flow of the test well is approximately 20-30 L/s, but a long-term pumping test with a future production well would be required to determine the long-term yield of the well. For the EA report, a conservative yield of 20 L/s for a production well at the Lafleur Rd. site will be assumed.
3. The report noted that with some treatment, the water quality is suitable as a potable water source. There are exceedances in the aesthetic objective (AO) for manganese, and exceedances in operation guidelines (OG) for hardness and total nitrogen. Treatment for these exceedances will be recommended in the EA Phase 2 report.
4. OCWA noted that in the near future, the Province of Ontario may impose stricter guidelines on manganese levels in drinking water and may result in additional treatment requirements. JLR to include in the Phase 2 report that treatment for manganese is expected to be a requirement for the new well.
5. Township asked if the manganese levels in the groundwater at the Lafleur Rd. site will negatively impact the existing water system. Golder and OCWA mentioned that the manganese levels at the Lafleur site are similar to test results at Well 7a/b/c (same aquifer), so the addition of the new well will not make the issue worse.
6. Report also noted exceedances in Coliforms in the last sample of pump testing. A data logger was installed in the adjacent surface pond during the testing, and noted signs that infer that the groundwater is under direct influence (GUDI) of the pond.



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 8 – TSC MEETING

ITEM

ACTION

- a. Golder recommended in the report to fill the pond in order to remove the potential influence on the well. There are also multiple treatment options available for coliforms. JLR will incorporate options in the EA report including recommendation to fill in the pond with on-site soil materials.

8.2 Preliminary Evaluation of Water Supply Alternatives

1. JLR presented the draft preliminary evaluations of water supply alternatives (attached to minutes). JLR to address the following comments from the Township:
 1. Options 3B and 5 (watermain to St. Lawrence River): Clarify that Options involve connecting to the existing South Dundas water distribution system in Morrisburg.
 2. Option 7 (limit community growth): the noted current agreements with developers have already been settled. Instead, the concern with this Option is that it may conflict with Provincial and County mandates, over which the Township Council has limited control over limiting growth.
2. The new well at Lafleur Rd. may yield approx. 20L/s out of a total maximum day demand deficit of approx. 40L/s identified in Phase 1 of this Class EA. This water supply option will be carried forward in the evaluations as a partial solution to provide additional water supply in the near-term, in combination with longer-term alternatives.
3. Following preliminary evaluations, the options to be carried forward to detailed evaluation would be the following:
 - Do Nothing (carried as a baseline only)
 - New well (at Lafleur Rd. site) and continue expanding groundwater system
 - New well (at Lafleur Rd. site) and install watermain to connect to existing treatment plant on the St. Lawrence River.
- a. Township requested an additional option to the list of alternatives for detailed evaluation: "New well (at Lafleur Rd. site) and expand groundwater sources and install watermain to South Dundas". This would allow them to solicit funding for the watermain while continuing investigations for additional groundwater sources. JLR will review the requested addition.
4. Township recalled past discussions about existing wells at the old Nestle facility in Chesterville, and asked if this would be a viable option for evaluation in the EA. JLR to review records and comment. *(Post Meeting Note: JLR reviewed past correspondence with Golder, who noted that the past approved yield of the combined wells was under 8L/s, and that the actual yield may be less. The yield was considered too low to be considered a viable option.)*

JLR

JLR



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 8 – TSC MEETING

<u>ITEM</u>	<u>ACTION</u>
8.3 <u>Consultation Plan</u>	
1. JLR noted that the new groundwater source will need to be incorporated into the existing Source Water Protection Plan. This will require modeling to determine the wellhead protection area, as well as consultations with agencies and public. JLR mentioned that it is beneficial for source water protection modelling to be conducted concurrently in the EA process, in order to facilitate consultations. The exercise can be done after, but would require re-opening the EA for additional consultations. A conservative flow rate of 30 L/s would be used to develop the largest expected well head protection areas for consultation purposes.	
a. The Township prefers for the source water protection exercise and consultations to occur during the current EA process, and has requested JLR/Golder to prepare a scope change for this specialized study.	JLR/Golder
8.4 <u>Other Discussions:</u>	
1. Township wishes to schedule a Council meeting in February to discuss the progress of the EA and the evaluation of alternatives, and have requested JLR's assistance. JLR to have a separate discussion with the Township to determine required documents and scheduling for the meeting.	JLR / Township
2. Township noted that the current pace of development interest may achieve the 20-year growth projections in 9 years. The Township is interested in an option that includes the transmission main to South Dundas along with the short-term additional groundwater supply development to offer flexibility for potential additional growth. For the Class EA, the Phase 1 problem statement and identified water supply deficit will be maintained.	
8.5 <u>Schedule</u>	
1. JLR will provide draft detailed evaluation of alternatives by Friday February 4.	JLR
8.6 <u>Next Meeting</u>	
1. Next meeting date to be determined.	
8.7 Meeting adjourned at 12:00 P.M.	



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 8 – TSC MEETING

ITEM

ACTION

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED

Matthew Marcuccio

Matthew Marcuccio, P.Eng.

Attach. Draft Preliminary Evaluation of Alternatives presented at the meeting.

Distribution: All present
Sarah Gore, JLR

Description and Preliminary Evaluation of Wastewater Treatment Alternatives

Alternative	Review/Recommendation
Option 1: Do Nothing	
1) Do nothing	<p>Description: Do not carry forward with any alternatives.</p> <p>Review: This option does not address the problem; however, it will be carried forward as a baseline option for comparison.</p> <p>Recommendation: Carry Forward, as a Baseline only.</p>
Option 2: Maintain and Redevelop Existing Well(s)	
2A) Well #1: New well and install additional well pump	<p>Description: Install additional well and pump setup at the existing Well #1 site. The pump can be a standby to introduce redundancy to the system.</p> <p>Review: The additional well will introduce redundancy to the system. However, this option will not increase the Township's water supply capacity.</p> <p>Recommendation: Do Not Carry Forward. However, option may be carried forward in combination with other options as a means to improve system redundancy.</p>
2B) Chesterville Well #5: New well and install additional well pump	<p>Description: Install additional well and pump setup at the existing Well #5 site. The pump can be a standby to introduce redundancy to the system.</p> <p>Review: The additional well will introduce redundancy to the system. However, this option will not increase the Township's water supply capacity.</p> <p>Recommendation: Do Not Carry Forward. However, option may be carried forward in combination with other options as a means to improve system redundancy.</p>
2C) Chesterville Well #6: New well and install additional well pump	<p>Description: Install additional well and pump setup at the existing Well #6 site.</p> <p>Review: The additional well will introduce redundancy to the system. The existing well at Well #6 is prone to fouling, so a second pump will improve reliability of water source. However, this option will not increase the Township's water supply capacity.</p> <p>Recommendation: Do Not Carry Forward. However, option may be carried forward in combination with other options as a means to improve system redundancy.</p>
2D) Well #7a/b/c: Install secondary power supply	<p>Description: Install emergency power supply, to minimize the risk of a power outage stopping the water supply.</p> <p>Review: This option will improve reliability of the water source, but will not increase the capacity.</p> <p>Recommendation: Do Not Carry Forward. However, option may be carried forward in combination with other options as a means to improve system redundancy.</p>
Option 3: Alternate Water Source	
3A) South Nation River	<p>Description: Construct new water treatment plant using the South Nation River as the water source, including new watermains and pumping station(s) to transport to the communities.</p> <p>Review: The South Nation River runs through the Village of Chesterville and 5.5km south of the Town of Winchester, reducing the cost of watermain required for distribution. However, the potential volume for water taking is low. The river water level is greatly influenced by season fluctuations, so at times it may be difficult or</p>

	<p>costly to treat due to possible elevated concentrations of suspended solids and organics.</p> <p>Recommendation: Do Not Carry Forward</p>
3B) St Lawrence River	<p>Description: Connect to existing water treatment plant supplied by the St. Lawrence River (owned by Township of South Dundas), and install new watermain and pumping station(s) to transport to the communities.</p> <p>Review: The St. Lawrence River is approximately 25km from the Village of Winchester, which means a higher cost to install watermain and pumping stations to transport the treated water. The existing treatment plant has additional capacity sufficient to accommodate the Township's projected future deficit, but not enough to replace the existing groundwater well supply. There may be an opportunity for cost sharing between North Dundas and South Dundas for the treatment plant's expansion and possibly for watermain within South Dundas's jurisdiction.</p> <p>Recommendation: Carry Forward, as a stand-alone option or considered in combination with other alternatives</p>
Option 4: New Groundwater Sources	
4) New Well, – Lafleur Rd. Property	<p>Description: Establish new well at property on Lafleur Rd.</p> <p>Review: This option will provide additional water supply capacity to reduce the Township's projected future water supply deficit. This option also improves water supply security, relieving complete reliance on older wells. However, the well will not have sufficient capacity to supply the full future water demand, so other sources of water will need to be obtained. This option may be valuable as a short-term solution, to provide more time to secure an additional and/or larger source of water. In addition, the new well may be susceptible to the same limitations as existing wells, including being affected by seasonal droughts.</p> <p>Recommendation: Do Not Carry Forward as a stand-alone option, but Carry Forward in combination with other alternatives</p>
4A) New Well, and continue to expand groundwater supply system	<p>Description: Establish new well at property on Lafleur Rd, and continue investigations for suitable locations for additional wells.</p> <p>Review: This option expands on Option 4, establishing the new well at the Lafleur Rd. property for the short term, with a long term plan to identify and secure suitable locations and install additional groundwater wells to meet the Township's projected full future water supply demand. This option also improves water supply security, relieving complete reliance on older wells. However, it will be necessary to first identify and the Township to secure an option to purchase hydrogeologically suitable potential well sites; also, the new wells may be susceptible to the same limitations as existing wells, including being affected by seasonal droughts.</p> <p>Recommendation: Carry Forward</p>
Option 5: Hybrid System (New Well and Install Watermain from St Lawrence River)	
5)	<p>Description: Establish new well at the Lafleur Rd. property (Option 4) in the short term, and commence negotiations to connect to South Dundas Water Treatment Plant (Option 3B) to satisfy the full future water supply demand. The existing groundwater wells will remain in operation.</p> <p>Review:</p> <p>Recommendation: Carry Forward</p>

Option 6: Implement Water Conservation Program	
6)	<p>Description: Implement water use conservation program for residential, commercial and/or industrial users. Program may be imposed during droughts of water sources, emergency maintenance of wells, or peak demand periods. May also include initiatives to install water-saving appliances or other such practices.</p> <p>Review: Requires cooperation with Lactalis to reduce water supply.</p> <p>Recommendation: Do Not Carry Forward.</p>
Option 7: Limiting Community Growth	
7)	<p>Description: Impose restrictions on developers to reduce or slow down expansion of communities that rely on the municipal water distribution system.</p> <p>Review: This option may be difficult to impose if there are current agreements with developers.</p> <p>Recommendation: Do Not Carry Forward.</p>

Options to be carried forward for detailed evaluation:

- 1) Do nothing
- 4A) New well and continue to expand groundwater supply system
- 5) New well and install watermain from St Lawrence River

Detailed Evaluation Impact Level and Scoring System

Evaluation Impact Level	Score
Potential for High Positive Impact	4
Potential for Moderate Positive Impact	3
No Anticipated Impact	2
Potential for Moderate Negative Impact	1
Potential for High Negative Impact	0

Description and Weighting of Evaluation Criteria

Major Criteria	Minor Criteria	Description	Weight (1-5)
Natural Environment and Archaeology	Effect on Wildlife Habitats	Assess potential for impacts to wildlife and aquatic habitats.	2
	Archaeological & Cultural / Heritage Sites	Assess potential for impacts to known or potential archaeological, cultural, or heritage sites.	2
	Groundwater Sources	Assess the potential for impacts to groundwater quality and quantity for other users.	3
	Climate Change	Assess potential resiliency/vulnerability to projected climate change effects. (e.g., periods of drought during summer and fall months)	3
Engineering and Technical Considerations	Improvements to Water Supply	Assess the potential for improvements to the reliability and capacity of treated water delivery.	4
	Impacts on Water Quality	Assess potential impact to the quality of water supplied by the Township.	2
	Construction Challenges	Assess the potential for challenges and physical constraints during construction.	2
	Operation Impacts	Assess the potential for impacts to the operation of the water supply system.	3
Social / Community Well Being	Community Development	Assess potential impact to the Township's development and growth.	5
	Impacts to Public During Construction	Assess potential impacts of construction to the public and neighbouring properties.	3
	Land Ownership	Assess potential to purchase more land to permit construction/operation of Option.	1
Financial Impacts	Capital Costs	Assess the impact due to the Option's capital costs	5
	Operational Costs	Assess the impact to the Township's operational costs.	3



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 9 – SOURCE WATER PROTECTION MEETING

ATTENDANCE:	Angela Rutley	Township of North Dundas (Township)
	Khurram Tunio	Township of North Dundas (Township)
	Alison McDonald	South Nation Conservation Authority (SNCA)
	Michael Melaney	South Nation Conservation Authority (SNCA)
	Alix Joliceour	South Nation Conservation Authority (SNCA)
	Sarah Gore	J.L. Richards & Associates Limited (JLR)
	Mark Buchanan	J.L. Richards & Associates Limited (JLR)
	Paul Smolkin	Golder Associates Limited (Golder)
	Brian Henderson	Golder Associates Limited (Golder)
	Dale Holtze	Golder Associates Limited (Golder)

The meeting commenced at 9:00 A.M., Wednesday, May 18, 2022 at the Township Office.

The following summary of the discussions of this meeting has been prepared to record and direct the project. Please advise the undersigned of any errors or omissions.

ITEM

ACTION

9.1 Introductions

K. Tunio welcomed all to the source protection meeting followed by introductions.

9.2 Water Supply Class EA Background

K. Tunio provide a summary of the Township's Schedule B Municipal Water Supply Class Environmental Assessment project. The Township requires additional water supply to service their 20-year growth projections. The preliminary preferred water supply alternative consists of a long-term option to extend a transmission main to South Dundas, while in the short-term developing additional groundwater supply, starting with a new well at the Lafleur Road site.

S. Gore advised based on the growth pressures, there is an immediate need for increased water supply in the short term.

K. Tunio advised that at the conclusion of this water supply Class EA, the Township plans to develop a new well from Lafleur Road in approximately 3 years, while continue to investigate for additional groundwater supply and advance the long-term transmission main to South Dundas.

P. Smolkin advised the purposed of this meeting is to focus on development of a new well at the Lafleur Road site.

9.3 S. Gore advised that JLR can provide the Township an updated project schedule following the meeting.

Post Meeting Note: Schedule update provided July 2022.




**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 9 – SOURCE WATER PROTECTION MEETING

<u>ITEM</u>	<u>ACTION</u>
9.4 A. Joliceour reviewed the regulatory process for a Source Protection Amendment (SPA). See attached Guidance Chart. SNCA to provide a digital copy to JLR. The project team confirmed Steps 1 through 3 are complete. <i>Post Meeting Note:</i> SNCA provided digital copy of SPA process. JLR to add steps for source protection consultation to complete the Class EA SPA flow chart for SNCA's consideration.	JLR
9.5 M. Melaney advised he would be reviewing potential SPA for technical compliance with the Clean Water Act. It is anticipated that MECP staff complete technical review of the well head protection model as part of any SPA when the Owner applies for a Drinking Water Works Permit.	
9.6 A. McDonald recommended contacting Phil Barnes of Raison Region as a knowledgeable contact for threats assessments of the Well Head Protection Assessment.	
9.7 A. Joliceour advised that SNC will resend Golder the data release form for the Well Field No. 7. Once received it and can take up to 2 weeks to provide the files.	
9.8 P. Smolkin advised Golder's intent is to create a new model for the Lafleur Road site. A. McDonald recommended the new model be consistent with the original Well Field No. 7 model, otherwise there is potential the SNC general manager may not accept. M. Melaney advise a new well at the Lafleur Road site is likely to influence Well Field No. 7.	
9.9 Any future Drinking Water Works Permit application review is anticipated to take 12 months to complete.	
9.10 Next meeting date to be determined to review the draft Wellhead Protection Assessment. <i>Post Meeting Note:</i> WHPA reviewing meeting rescheduled to October 19, 2022 at 10:00 a.m.	JLR

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED


Mark Buchanan, P.Eng.

Attach. Source Protection Guidance for Implementing Regulatory Requirements for New or Altered Drinking Water Systems Under the Clean Water Act

Distribution: All present
Matthew Marcuccio, JLR
Dave Markell, OCWA
Blair Henderson, OCWA



**Guidance for Implementing Regulatory Requirements for
New or Altered Drinking Water Systems Under the
Clean Water Act, 2006, S.48 (1.1)(b) of O. Reg. 287/07**

Step	Description	Project Specific Timeline/Details
1) Municipal intention	Municipal residential drinking water system owner (system owner) establishes intent to create or alter a system and identifies municipal Class EA Planning and Design Process (A, A+, B or C).	
2) Category confirmation	System owner conducts preliminary technical work (if applicable) to confirm municipal well / intake alteration category	
3) Early planning	Discussion with municipal residential drinking water system owner and local SPA to discuss the owner's intention of establishing or altering a system.	
4) Notice from owner (287/07, S.48 1.1)	System owner conducts technical EA and gives written notice of intent (of applying for a permit/license) to the local SPR. SPR shares written notice of intent with the SPA. Source protection work can be conducted in parallel as EA work.	
5) EA approval	Approval of the EA by the MECF	
6) Source protection work	Work to be completed and submitted to the SPR. Source protection work includes: system characterization, delineation of vulnerable areas, vulnerability area scoring and threats inventory.	
7) Notice from SPA (287/07, S.48 1.1b)	SPR verifies the technical work and if complete, recommends that the local SPA issue a notice to the owner stating that the work is complete. Owner can then apply for a drinking water works permit/license. MDWL may contain a condition that water not be supplied to the public until the amended SPP is approved by the Ministry.	
8) SPP update	SPC updates the Assessment Report and Source Protection Plan and incorporates the new drinking water system technical work. Update process includes, at a minimum: <ol style="list-style-type: none"> 1. Early engagement with stakeholders / municipality 2. Notice to municipal clerks affected by amendment 3. Municipal Council resolution 4. Notice to implementing bodies 5. Minimum 35-day public consultation which includes: internet posting, newspaper notice, chiefs of bands notice, notice to persons engaged in activity 	Estimated minimum 4-month timeframe from completion of the updated plan to submission of the revised updated plan to the Ministry.
9) SPP submission	Updated SPP submitted to the Ministry for review and approval.	Estimated minimum 2-month timeframe
10) Provision of water	SPP is approved. The system owner can supply water to the public upon approval.	



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 10 – LAFLEUR ROAD WELLHEAD PROTECTION AREA MEETING

ATTENDANCE:	Angela Rutley	Township of North Dundas (Township)
	Dawn Crump	OCWA
	Caroline Lamarche	OCWA
	Sarah Gore	J.L. Richards & Associates Limited (JLR)
	Mark Buchanan	JLR
	Matthew Marcuccio	JLR
	Brian Henderson	Golder Associates Limited (Golder)
	Paul Smolkin	Golder
	Dale Holtze	Golder
	Michael Melaney	South Nation Conservation (SNC)
	Alix Jolicoeur	SNC

The meeting commenced at 10:00 A.M., Wednesday, October 19, 2022 via video conference.

The following summary of the discussions of this meeting has been prepared to record and direct the project. Please advise the undersigned of any errors or omissions.

ITEM

ACTION

1. **Introductions**

Introductions were made by those in attendance.

2. **Class EA Project Update**

JLR provided a brief update of the Class EA progress to date:

- Draft Phase 2 report is currently being finalized, incorporating content from the WHPA report and SNC comments on the WHPA report. The Draft report will then be submitted to the Township for review before it is presented at the Public Information Centre.

3. **Review of Wellhead Protection Area (WHPA) Study and Vulnerability Assessment**

Golder provided a brief overview of the WHPA study report.

- Golder summarized the report conclusions as follows:
 - The WHPA for the combined Wellfield #7 and the new well is generally oriented north-south along the Morewood Esker, different than the WHPA (WESA 2006) that forms the basis for the current Source Protection Plan.
 - No drinking water issues (i.e., water quality) were noted.
 - Golder identified four threats similar to existing conditions which include sewage systems, application of agricultural source material to land, pesticide application and fuel handling and storage. Golder noted that the threats identified during the vulnerability assessment for the new WHPA remain consistent with threats



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 10 – LAFLEUR ROAD WELLHEAD PROTECTION AREA MEETING

ITEM

ACTION

identified for the current WHPA, so the existing Source Protection policies will likely still apply to the new WHPA.

- All other parties in attendance will review and provide comments on the report to JLR. ALL
- The following comments were noted in the meeting: Golder
 - Township noted that the existing aggregate license at the Lafleur well site will be surrendered as a condition to purchase the property. The Township requested for the note to be added in the WHPA report.
 - JLR and the Township suggested to include a new map in the draft Phase 2 report to show the existing WHPA/policies and overlay the approximate boundaries of the new WHPA.
 - JLR and SNC suggested to revise the titles of the "revised WHPA" to clearly indicate that the model is preliminary only and will be subject to change once the new municipal well is developed and tested.
 - JLR will consult with the MECP and the Township before providing direction to Golder. JLR

4. Class EA Expectations

- JLR mentioned that according to the Class EA guidelines, the WHPA study is expected to be sufficient to proceed with completing the Class EA and consulting with affected landowners. There is no intention to amend the Source Protection Plan at this time. The initial WHPA study is to facilitate informed consultation with potential impacted project stakeholders and landowners. Further investigations, model refinements and consultations will occur as part of the Source Protection Plan amendment following the detailed design/installation/testing of the new well and during the Permit to Take Water / Drinking Water Works Permit approval process.
- Impacted owners will need to be consulted, with the understanding that a new drinking water source will be implemented. (Existing policies in place, but the vulnerable areas are expected to be modified.)
 - JLR will consult with MECP and Township regarding how to present the WHPA updates to the public, to notify owners of the potential impacts while understanding that the vulnerable areas may also change. JLR

5. SNC Feedback Timing for Class EA Consultation

- SNC will provide preliminary comments on the WHPA report within two weeks. SNC
- Golder requested for SNC to identify which of their comments, if any, need to be addressed now for the Class EA, and which should be addressed later as part of the future investigations and WHPA modelling. The latter comments would be noted in the



**TOWNSHIP OF NORTH DUNDAS
NORTH DUNDAS DRINKING WATER SUPPLY SYSTEM CAPACITY EXPANSION
CLASS ENVIRONMENTAL ASSESSMENT**

MEETING NO. 10 – LAFLEUR ROAD WELLHEAD PROTECTION AREA MEETING

<u>ITEM</u>	<u>ACTION</u>
Phase 2 report to be carried forward during implementation of the Class EA preferred alternative. <ul style="list-style-type: none">o JLR to solicit MECP feedback on WHPA requirements needed to be addressed in the Class EA stage.	JLR
6. <u>Other Business</u> <ul style="list-style-type: none">• SNC noted that a Notice of Intent by the Owner to the Source Protection Regional Committee is required. This 'formal notice' of an application to add a new well and modify the Source Protection Plan should be submitted before approval is provided by the MECP. SNC will provide a sample notice to JLR and the Township.• M. Melaney is leaving SNC in the next couple weeks. A new reviewer will be assigned to support the remainder of the Class EA process.	SNC
7. <u>Adjournment:</u> Meeting adjourned at 11:00 A.M.	

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED

Matthew Marcuccio

Matthew Marcuccio, P.Eng.

Attach. None

Distribution: All present
Dave Markell, OCWA
Blair Henderson, OCWA