



**THE CORPORATION OF THE
TOWNSHIP OF CENTRE WELLINGTON**

**CLASS ENVIRONMENTAL ASSESSMENT
NORTHEAST FERGUS INDUSTRIAL PARK
STORMWATER MANAGEMENT STRATEGY**

PROJECT FILE

Progress File Date:
JANUARY 2017



***SUMMARY OF
CLASS ENVIRONMENTAL ASSESSMENT PROCESS
Memo dated January 17, 2017***



**TRITON
ENGINEERING
SERVICES
LIMITED**
Consulting Engineers

Memorandum

DATE:	January 17, 2017
TO:	Project File
FROM:	Ray Kirtz
RE:	NORTHEAST FERGUS INDUSTRIAL PARK, SWM STRATEGY: CLASS EA PROCESS
FILE:	G2014A

SUMMARY OF CLASS EA PROCESS

PHASE 1:

Step 1: Identify problem/opportunity:

Background:

- The Township of Centre Wellington is completing a review of the storm drainage requirements for the Northeast Industrial Park (Park) on Gregson Court in Fergus. The review includes delineation of drainage areas and stormwater management (SWM) options. Completion of the review will provide a strategy to address SWM needs for the Northeast Industrial Park.

Problem/Opportunity Statement:

- A Problem/Opportunity Statement as follows was adopted.

“The Township of Centre Wellington is completing a review of the stormwater drainage needs for the Northeast Industrial Park in Fergus. This review is intended to identify stormwater management options, ultimately leading to the establishment of a stormwater management strategy for this development area.”

Inventory/Investigation:

- The Park area is approximately 13 hectares including a cul-de-sac (Gregson Court), two small developed lots and the majority of remaining area undeveloped.
- Delineation of drainage areas has determined that the majority of the Park area could be collected to a central location at the northeast corner of the property. Remaining areas would continue to drain overland to existing receivers including adjacent developed areas or woodlot/wetland.
- An environmental review of the adjacent natural area was completed resulting in a report entitled “Development Constraints and Opportunities Northeast Industrial Park Expansion, Fergus Township of Centre Wellington”, prepared by AECOM, June 2013. This report provides delineation of wetland/woodlot limits, identifies natural heritage features and recommended buffers for future development.
- Stage 1 and 2 Archeological Assessments were completed for the subject area. No significant findings at the site, therefore, concluded that site does not exhibit cultural heritage value or interest.

- Cultural Heritage Resource Assessment. Checklist screening indicated that there was a low potential for built heritage or cultural heritage landscape on the property. Township heritage planning staff has reviewed the site with respect to cultural heritage, they have agreed with the low potential for built heritage or cultural heritage landscape assessment.

This information was used in the formulation and evaluation of alternative strategies.

Step 2: Discretionary Public Consultation:

No public consultation was deemed necessary at this stage of the process.

PHASE 2:

Step 1: Identify alternative solutions and project schedule:

Alternative solutions were considered, however, given the nature of the project the alternatives are limited. A list of the alternatives considered and an evaluation of each is provided.

- Option “A”: Require each development with the industrial park to provide SWM treatment/control for their individual sites.
- Option “B”: Provide a central SWM facility for SWM treatment/control.
- Option “C”: A combination of Options “A” and “B”.
- Option “D”: “Do Nothing”

Alternatives Option “B” and Option “C” would be considered Schedule B projects since they would involve the implementation of a municipal SWM facility. Therefore, Schedule B process was followed.

Steps 2- 4: Evaluate alternative solutions:

Option “A”: SWM strategy for each development site:

- Requires design, approvals and implementation of SWM features/facilities by individual developments. This strategy would be implemented through this Township Site Plan Approval process. Implementing these SWM requirements can be an onerous/expensive process for developers/owners.
- Treatment/control of existing road runoff and existing sites draining to the road would not be addressed by this strategy.
- Piecemeal SWM strategies do not provide as effective SWM treatment as an overall/communal strategy;
 - Individual quantity strategies may conflict with each other resulting in ineffective control.
 - More effective treatment features may not be feasible/suitable due to small catchment areas, limited site area to accommodate features and cost constraints of developer/owners.
- Operation/Maintenance of SWM features;
 - Operation/performance is difficult to evaluate and control/adjust as owners generally do to have staff with appropriate skillset.

- Maintenance of features tends not to be a priority of businesses, as a result may be neglected. Individual property owner will not normally have expertise to operate/maintain features.
- Difficult for municipalities to police operation/maintenance of features.

Option “B”: Central SWM facility for SWM treatment/control of entire service area:

- Design, approval and implementation of SWM strategy along with subsequent operation/maintenance becomes the responsibility of the municipality.
- Treatment, operation and maintenance are improved and more cost effective as compared to an individual site SWM strategy.
- Cannot service the entire subject area with a single central facility due to topographic/drainage constraints.
- Not all SWM requirements are best dealt with by a central facility (i.e. groundwater recharge), local initiatives may be required.

Option “C”: Combination of Options “A” and “B”.

- The majority of the service area as could be reasonably conveyed to a central SWM facility located at the northeast corner of the subject area. The municipality currently owns sufficient lands to accommodate such a facility.
- Independent SWM strategies (i.e. lot level controls) to be provided for areas which cannot be reasonably directed to the central facility for treatment/control. These strategies would be implemented as part of Site Plan Approval process for individual sites.
- Local initiatives (i.e. groundwater recharge) would be addressed as part of Site Plan Approval process for individual sites.
- Allows for an overall SWM strategy which includes the entire service area and provides for effective treatment/control with cost efficient implementation, operation and maintenance.

Option “D”: “Do Nothing”

The development area does not currently have any provisions for SWM. As such, runoff from existing and future development will be directed to the adjacent natural heritage area uncontrolled and untreated. This absence of a SWM strategy/protocol may result in negative impacts to the natural heritage features.

Identification of Recommended Solution:

Based on the preliminary evaluation, the recommended solution is Option “C”. This would establish an all-inclusive SWM strategy which would include the following:

- A Central SWM Facility to service the majority of the service area, along with a requirement for site specific SWM strategies that would deal with areas outside the central facility service area. In addition and address specific local need. This option would satisfy all components of the problem statement.

The Central SWM Facility configuration would include the following:

- Quality Treatment would be provided by an Oil Girt Separator followed by a Dry Pond facility including a polishing swale.

- Quantity Control would be provided by a Dry Pond Facility equipped with a 3 stage outlet include dispersion structure.

Site specific SWM strategies for areas not tributary to the Central Facility, or to address SWM requirements locally, the following are recommended:

- Promote groundwater recharge of clean runoff including roofs and landscaped areas. This requirement is applicable to all developments within the Park.
- Quality treatment and Quantity control through implementation of Low Impact Development (LID) features as part of individual site development. This requirement is applicable primarily to developments, or parts thereof, which cannot be serviced by the Central SWM Facility due to topographic constraints. However, LID strategies will be encouraged for all developments to the extent feasible.

Step 5: Consultation with review agencies and the public:

Notice of Study commencement was sent to relevant agencies, adjacent property owners and general public (adverts). Responses from MTCS, MOECC, MNR, GRCA and an adjacent property owner were received.

Step 6: Selection/Confirmation of the preferred Solution:

Input from interested parties and completion of additional studies/reviews (i.e. Stage 1 and 2 Archaeological Assessment) did not change selection of preferred solution, Option “C” remains recommended option.

Selection of Schedule B approach is appropriate for Option “C”.

End of Class EA process to date.

NOTICE OF COMMENCEMENT LETTERS

Notice Circulation List

Agencies and Stakeholders letters

Township of Centre Wellington
NORTHEAST FERGUS INDUSTRIAL PARK
STORMWATER MANAGEMENT STRATEGY
Class Environmental Assessment

OFFICIAL CONTACT LIST

	Agency	Contact Information
1	Ministry of Environment & Climate Change Environmental Assessment and Approvals Branch (EAAB) 135 St. Clair Avenue West, 1 st Floor Toronto, Ontario M4V 1P5	Director, Class EA's and Declaration Section
2	Ministry of Environment & Climate Change Hamilton Regional Office 12 th Floor, 119 King Street West Hamilton, Ontario L8P 4Y7	Ms. Barbara Slattery EA/Planning Co-Ordinator barbara.slattery@ontario.ca
3	Ministry of Environment & Climate Change Guelph District Office 1 Stone Road West Guelph, Ontario N1G 4Y2	Manpreet Dhesi, Water Inspector manpreet.dhesi@ontario.ca 519-826-4279 (direct line)
4	Ministry of Tourism, Culture & Sport Culture Division 401 Bay Street, Suite 1700 Toronto, Ontario M7A 0A7	Joseph Muller, Heritage Planner Joseph.Muller@ontario.ca Rosi Zirger, Heritage Planner Rosi.zirger@ontario.ca 416-314-7159
5	Ministry of Natural Resources and Forestry (MNRF) Guelph District Office 1 Stone Road West Guelph, Ontario N1G 4Y2	McKenna, Tara, District Planner Tara.McKenna@ontario.ca 519-826-4912 Thompson, Melinda (MNRF), Management Biologist Melinda.Thompson@ontario.ca 519-826-6543 David Marriott, District Planner david.marriott@ontario.ca 519-826-4926 (direct line)
6	Grand River Conservation Authority 400 Clyde Road Box 729 Cambridge, Ontario N1R 5W6	Jason Wagler, MCIP, RPP Resource Planner, Resource Management Division jwagler@grandriver.ca 519-621-2761
7	County of Wellington 74 Woolwich Street Guelph, Ontario N1H 3T9	Aldo Salis, Senior Planner aldos@wellington.ca 519-837-2600
8	Six Nations Land and Resources 2498 Chiefswood Road P.O. Box 5000 Ohsweken, Ontario N0A 1M0	Paul General, Manager E: pgeneral@sixnations.ca Joanne Thomas, Consultation Supervisor E: jthomas@sixnations.ca
9	Ministry of Aboriginal Affairs 4 th Floor, 160 Bloor Street East Toronto, Ontario M7A 2E6	Pauline Wakegijig, Policy Advisor Consultation Unit E: Pauline.wakegijig@ontario.ca

10	Township of Centre Wellington Planning & Development Department 1 MacDonald Square Elora, Ontario N0B 1S0	Mariana Iglesias, Planner miglesias@centrewellington.ca cc: Brett Salmon, Managing Director of Planning & Development
	Stakeholders	Contact
	H & R Machine, 201 Gregson Court, P.O. Box 274 Fergus, Ontario N1M 2W8	Attention: Jamie Hiller hrmachine@bellnet.ca Mr. Fred Hiller c/o 36 Stanley Crescent Elora, Ontario N0B 1S0 fhiller@hrmachine.ca
	Acorn Stair and Railing Company 131 Gregson Court, Fergus, Ontario N1M 2W4	Mr. Bob Vasey, Owner acornstairs@hotmail.com
	Wightman Telecom, (Re: 105 Gregson Court, Fergus) P.O. Box 70, 100 Elora Street North CLIFFORD, Ontario N0G 1M0	Mr. Paul Rhody, Manager, Access Network Design prhody@wightman.ca



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105 Queen Street West, Unit 14
Fergus
Ontario N1M 1S6
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Fax: (519) 843-1943
e-mail: info@tritoneng.on.ca

COPY

ORANGEVILLE • FERGUS • GRAVENHURST
December 22, 2015

Township of Centre Wellington
7444 Wellington Road #21
ELORA, Ontario
NOB 1S0

ATTENTION: Colin Baker
Managing Director of Infrastructure

RE: TOWNSHIP OF CENTRE WELLINGTON
NORTHEAST INDUSTRIAL PARK, FERGUS
STORMWATER MANAGEMENT STRATEGY
CLASS ENVIRONMENTAL ASSESSMENT,
NOTICE OF STUDY COMMENCEMENT
OUR FILE: G2014A

Dear Sir:

The attached letters were sent to the following approval agencies and stakeholders requesting their preliminary comments about the commencement of the Municipal Class Environmental Assessment, Schedule 'B' process for the Northeast Industrial Park (Gregson Court), Fergus, Stormwater Management Strategy.

	Agency (LETTER A)	Contact
1.	Ministry of Environment & Climate Change Environmental Assessment and Approvals Branch (EAAB) 135 St. Clair Avenue, West, 1 st Floor Toronto, Ontario M4V 1L5	Director, Class EA's and Declaration Section
2.	Ministry of Environment & Climate Change Hamilton Regional Office 12 th Floor, 119 King Street West Hamilton, Ontario L8P 4Y7	Barbara Slattery EA/Planning Co-ordinator barbara.slattery@ontario.ca
3.	Ministry of Environment & Climate Change Guelph District Office 1 Stone Road West Guelph, Ontario N1G 4Y2	Manpreet Dhesi, Water Inspector 519-826-4279 (direct line) manpreet.dhesi@ontario.ca
4.	Ministry of Tourism, Culture & Sport 401 Bay Street, Suite 1700 Toronto, Ontario M7A 0A7	Joseph Muller, Heritage Planner joseph.muller@ontario.ca
5.	Ministry of Natural Resources 1 Stone Road West Guelph, Ontario N1G 4Y2	David Marriott, District Planner david.marriott@ontario.ca 519-826-4926 (direct line)



6.	Grand River Conservation Authority 400 Clyde Road Box 729 Cambridge, Ontario N1R 5W6	Jason Wagler, MCIP, RPP Resource Planner, Resource Management Division jwagler@grandriver.ca 519-621-2761
7.	County of Wellington 74 Woolwich Street Guelph, Ontario N1H 3T9	Aldo Salis, Senior Planner aldos@wellington.ca 519-837-2600
8.	Ministry of Aboriginal Affairs 4 th Floor, 160 Bloor Street East Toronto, Ontario M7A 2E6	Pauline Wakegijig, Policy Advisor Consultation Unit E: Pauline.wakegijig@ontario.ca
9.	Six Nations Lands and Resources 2498 Chiefswood Road P.O. Box 5000 Ohsweken, Ontario N0A 1M0	Paul General, Manager pgeneral@sixnations.ca Joanne Thomas, Consultation Supervisor jthomas@sixnations.ca
10.	Township of Centre Wellington Planning and Development Department 1 MacDonald Square Elora, Ontario N0B 1S0	Mariana Iglesias, Planner miglesias@centrewellington.ca cc: Brett Salmon, Managing Director of Planning & Development
	Stakeholders (LETTER B)	Contact
	H & R Machine 201 Gregson Court, Fergus, Ontario N1M 3E2	Mr. Fred Hiller c/o 36 Stanley Crescent Elora, Ontario N0B 1S0 fhiller@hrmachine.ca
	Acorn Stair and Railing Company 131 Gregson Court, Fergus, Ontario N1M 2W4	Mr. Bob Vasey, Owner acornstairs@hotmail.com
	Wightman Telecom P.O. Box 70, 100 Elora Street North, CLIFFORD, Ontario N0G 1M0	Mr. Paul Rhody Manager, Access Network Design prhody@wightman.ca

We trust you will find the enclosed to be in order and should you require additional information, please contact the undersigned.

Yours very truly,

TRITON ENGINEERING SERVICES LIMITED



Ray Kirtz, P. Eng.

RDK/sjp
Encl.
cc:





**TRITON
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Consulting Engineers

105 Queen Street West, Unit 14
Fergus
Ontario N1M 1S6
Tel: (519) 843-3920
Fax: (519) 843-1943
e-mail: Info@tritoneng.on.ca

ORANGEVILLE • FERGUS • GRAVENHURST

December 21, 2015

Ministry of Environment and Climate Change
Environmental Assessment and Approvals Branch (EAAB)
135 St. Clair Avenue West, 1st Floor
TORONTO, Ontario
M4V 1L5

LETTER 'A'

ATTENTION: Director,
Class EA's and Declaration Section

RE: TOWNSHIP OF CENTRE WELLINGTON
NORTHEAST INDUSTRIAL PARK, FERGUS
STORMWATER MANAGEMENT STRATEGY
CLASS ENVIRONMENT ASSESSMENT
OUR FILE: G2014A

Dear Sir/Madam:

The Township of Centre Wellington is commencing a Schedule B Class Environmental Assessment (Class EA) under Ontario's Municipal Class Environmental Assessment (October 2000 as amended in 2007 and 2011). The project involves the evaluation of stormwater management options to service existing and future development within the Northeast Industrial Park (Park) in Fergus.

The Park area is approximately 13 hectares including a cul-de-sac (Gregson Court), two small developed lots and the majority of remaining area undeveloped. The review is expected to include delineation of drainage areas, consideration of existing/future development needs and potential outlets identified and assessed. Based on this, stormwater management options will be considered and evaluated, leading to the selection of a preferred stormwater management strategy. A general location plan of the Park is contained on the attached Notice of Commencement for your reference.

The environmental features and land use in the general area include:

- Locally significant Irvine Creek wetland to the north.
- Existing industrial development to the south and east.
- Agricultural Lands to the west.

The Problem Statement for this project is as follows:

"The Township of Centre Wellington is completing a review of the stormwater drainage needs for the Northeast Industrial Park in Fergus. This review is intended to identify stormwater management options, ultimately leading to the establishment of a stormwater management strategy for this development area."



At this time, the Township requests your preliminary comments and concerns relating to the project so that all environmental features and constraints are identified and potential impacts assessed early on in the project.

We look forward to receiving your preliminary comments and should you have any questions or require additional information, please contact the undersigned.

Yours very truly,

TRITON ENGINEERING SERVICES LIMITED



Ray D. Kirtz, P. Eng.
Project Manager

RDK/sjp
Encl. Notice of Project Commencement
cc: Colin Baker, Managing Director of Infrastructure, Township of Centre Wellington





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Consulting Engineers

105 Queen Street West, Unit 14
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Ontario N1M 1S6
Tel: (519) 843-3920
Fax: (519) 843-1943
e-mail: info@tritoneng.on.ca

ORANGEVILLE • FERGUS • GRAVENHURST

December 21, 2015

Mr. Fred Hiller
H&R Machine
c/o 36 Stanley Court
Elora, ON N0B 1S0

LETTER 'B'

**RE: TOWNSHIP OF CENTRE WELLINGTON
NORTHEAST INDUSTRIAL PARK, FERGUS
STORMWATER MANAGEMENT STRATEGY
CLASS ENVIRONMENTAL ASSESSMENT
NOTICE OF STUDY COMMENCEMENT
OUR FILE: G2014A**

Dear Mr. Hiller,

On behalf of the Township of Centre Wellington, please find enclosed a Notice of Project Commencement for the Northeast Industrial Park, Fergus, Stormwater Management Strategy, Class Environmental Assessment. This Notice initiates the Municipal Class Environmental process for the project.

As the project moves forward, we will continue to provide you with project information. If you are willing to provide us with your email address, the project team can then communicate with you electronically in the future. Please send us an email at the addresses noted in the Notice if email communication is acceptable to you. If we do not receive an email from you, we will continue to send information by regular mail.

We value your comments and input and should you have any questions, please call or email our office.

Yours very truly,

TRITON ENGINEERING SERVICES LIMITED

**Ray D. Kirtz, P.Eng.
Project Manager**

RDK/sjp

Encl.

cc: Colin Baker, Managing Director of Infrastructure, Township of Centre Wellington





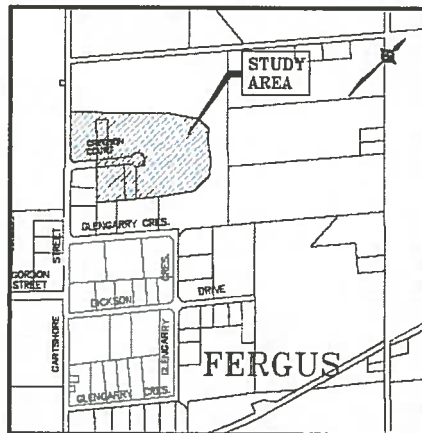
Centre Wellington

**TOWNSHIP OF CENTRE WELLINGTON
CLASS ENVIRONMENTAL ASSESSMENT
NORTHEAST FERGUS INDUSTRIAL PARK, STORMWATER MANAGEMENT STRATEGY
NOTICE OF STUDY COMMENCEMENT**

The Township of Centre Wellington is completing a review of the storm drainage requirements for the Northeast Industrial Park on Gregson Court in Fergus. The review includes delineation of drainage areas and stormwater management options. Completion of the review will provide a strategy to address stormwater management needs for the Northeast Industrial Park.

The Process:

This project is being planned in accordance with the requirements of Schedule B of the Municipal Class Environmental Assessment (October 2000, as amended in 2007 and 2011) which is an approved process under the Ontario Environmental Assessment Act. This Class Environmental Assessment process includes public and approval agency consultation, an evaluation of alternatives to address the identified problem(s), an assessment of potential environmental effects and identification of reasonable measures to mitigate any adverse impacts that may result from the implementation of the project.



How to Participate:

As part of the public consultation program, a project contact list is being created. Those listed will receive information regarding the project (by mail or email based on the preference of the stakeholder) including all formal Notices. To be placed on the project contact list, to provide comments or to request further information, please contact either:

Colin Baker, P. Eng.
Managing Director of Infrastructure Services
Township of Centre Wellington
7444 Wellington Road #21
ELORA, Ontario, NOB 1S0
cbaker@centrewellington.ca
(519) 846-9691 ext. 357 (P)
(519) 846-9858 (F)

Ray Kirtz, P. Eng.
Project Manager
Triton Engineering Services Limited
14-105 Queen Street, West
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rkirtz@tritoneng.on.ca
(519) 843-3920 (P)
(519) 843-1943 (F)

This Notice first issued 18th day of December, 2015.

NOTICE OF COMMENCEMENT

The Wellington Advertiser Newspaper Notices

- ***Published Friday, December 18, 2015***
- ***Published Friday, December 25, 2015***

G2014A

Notices



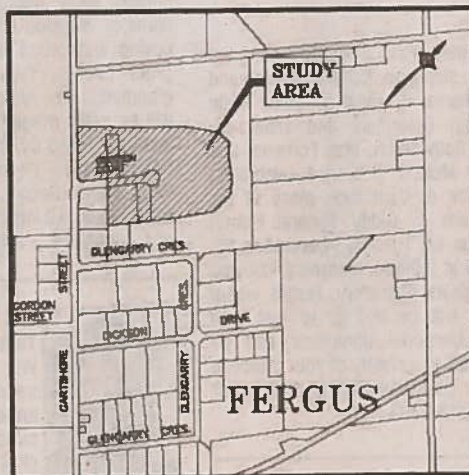
Centre Wellington

TOWNSHIP OF CENTRE WELLINGTON CLASS ENVIRONMENTAL ASSESSMENT NORTHEAST FERGUS INDUSTRIAL PARK, STORMWATER MANAGEMENT STRATEGY NOTICE OF STUDY COMMENCEMENT

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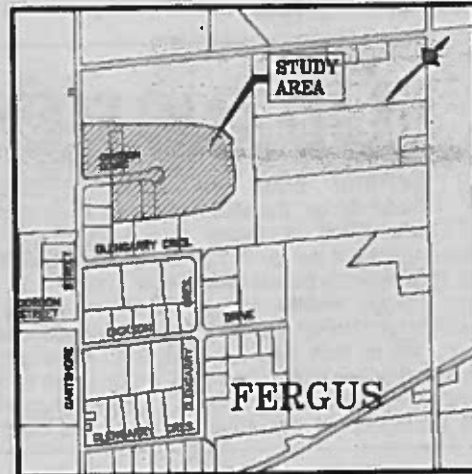


**TOWNSHIP OF CENTRE WELLINGTON
CLASS ENVIRONMENTAL ASSESSMENT
NORTHEAST FERGUS INDUSTRIAL PARK,
STORMWATER MANAGEMENT STRATEGY
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(519) 843-1943 (F)

This Notice first issued 18th day of December, 2015.

***AGENCIES AND STAKEHOLDERS RESPONSES TO
THE NOTICE OF COMMENCEMENT LETTER***

Ray Kirtz

From: pastport <pastport@ontario.ca>
Sent: December-19-16 3:24 PM
To: KHull@asiheritage.ca
Cc: cbaker@centrewellington.ca; Ray Kirtz; PastPort@ontario.ca
Subject: ENTERED INTO REGISTER: Archaeological Report for P128-0134-2016 / *
Attachments: ENTERED INTO REGISTER Archaeological Report for P128-0134-2016.pdf

Dear Katherine Hull,

The ministry has reviewed the Original report for PIF P128-0134-2016 submitted by you as a condition of your licence.

This report has been deemed compliant with ministry requirements for archaeological fieldwork and reporting. It has been entered into the *Ontario Public Register of Archaeological Reports*. Please refer to the attached letter to see the result of this review.

Note: the ministry makes no representation or warrant as to the completeness, accuracy or quality of reports in the register.

Development proponents and approval authorities: the Ontario Ministry of Tourism, Culture and Sport has copied you on this email as you have been identified by the consultant archaeologist as either the proponent or approval authority for this project.

Please **do not** reply to this e-mail. The message will be undeliverable and we are unable to respond from this address.

If you have any questions about this report email us at: Archaeology@ontario.ca

Thank you,

Shari Prowse

Shari.Prowse@ontario.ca

Ministry of Tourism, Culture and Sport

Archaeology Programs Unit
Programs and Services Branch
Culture Division
401 Bay Street, Suite 1700
Toronto ON M7A 0A7
Tel.: (519) 675-6898
Email: Shari.Prowse@ontario.ca

Ministère du Tourisme, de la Culture et du Sport

Unité des programmes d'archéologie
Direction des programmes et des services
Division de culture
401, rue Bay, bureau 1700
Toronto ON M7A 0A7
Tél. : (519) 675-6898
Email: Shari.Prowse@ontario.ca



Dec 19, 2016

Katherine Hull (P128)
ASI Archaeological and Cultural Heritage Services
528 Bathurst Toronto ON M5S 2P9

**RE: Review and Entry into the Ontario Public Register of Archaeological Reports:
Archaeological Assessment Report Entitled, "Stage 1 Archaeological Assessment
Northeast Fergus Industrial Park, Stormwater Management Strategy Part of Lot 10,
Concession 1 (Former Township of West Garafraxa) Town of Fergus, Township of
Centre Wellington County of Wellington, Ontario", Dated Oct 26, 2016, Filed with
MTCS Toronto Office on Dec 14, 2016, MTCS Project Information Form Number
P128-0134-2016, MTCS File Number 0004055**

Dear Dr. Hull:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c 0.18.¹ This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 Standards and Guidelines for Consultant Archaeologists set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.

The report documents the Stage 1 assessment of the study area as depicted in Figure 8 of the above titled report and recommends the following:

The study area is considered to possess archaeological potential. These lands require Stage 2 archaeological assessment by pedestrian survey at a maximum 5 m transect interval prior to any proposed impacts to the property;

Should the proposed work extend beyond the current study area, further Stage 1 archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 Standards and Guidelines for Consultant Archaeologists and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Shari Prowse
Archaeology Review Officer

cc. Archaeology Licensing Officer
Ray Kirtz, Triton Engineering Services Limited
Colin Baker, Township of Centre Wellington

¹In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

RECEIVED
JAN 04 2016
y2014



Ontario

**Ministry of the Environment and
Climate Change**

West-Central Region
Technical Support Section
Air, Pesticides & Environmental
Planning
12th Floor
119 King St W
Hamilton ON L8P 4Y7
Fax: (905) 521-7820
Tel:

**Ministère de l'Environnement et de
l'Action en matière de changement
climatique**

Direction régionale du Centre-Ouest
Section du Soutien Technique
Air, pesticides et planification
environnementale
12e étage
119 rue King W
Hamilton ON L8P 4Y7
Télécopieur: (905) 521-7820
Tél:

December 22, 2015

Mr. Ray Kirtz
Triton Engineering Services Limited
105 Queen Street West, Unit 14
Fergus, ON
N1M 1S6

Dear Mr. Kirtz:

RE: Response to Notice of Commencement
Northeast Industrial Park, Stormwater Management Strategy
Reference Number 0885-A5FQAG

This letter is our response to the Notice of Commencement for the above noted project. This response acknowledges that the Township of Centre Wellington has indicated that its study is following the requirements of the MEA Class Environmental Assessment for projects that fall under Schedule "B" in order to determine the most appropriate means of addressing stormwater management for the existing and future development within this industrial park. Thank you for the opportunity to comment on this project.

The ministry has information which may be useful including:

- Stormwater Management Planning and Design Manual which can be downloaded from: <http://www.ontario.ca/document/stormwater-management-planning-and-design-manual>
- Water Management Policies, Guidelines, Provincial Water Quality Objectives (PWQO) of the Ministry of the Environment and Climate Change (*also referred to as the 'Blue Book'*)

The internet also contains numerous references to municipal projects that have successfully implemented Low Impact Development (LID) as part of their stormwater management infrastructure.

Consultation with First Nation and Métis Communities

Your proposed project may have the potential to affect Aboriginal communities who hold or

claim Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act* 1982. The Crown has a duty to consult First Nation and Métis communities when it knows about established or credibly asserted Aboriginal or treaty rights, and contemplates decisions or actions that may adversely affect them.

Although the Crown remains responsible for ensuring the adequacy of consultation with potentially affected Aboriginal communities, it may delegate procedural aspects of the consultation process to project proponents.

The environmental assessment process requires proponents to consult with interested persons and government agencies, including those potentially affected by the proposed project. This includes a responsibility to conduct adequate consultation with First Nation and Métis communities.

The Ministry relies on consultation conducted by proponents when it assesses the Crown's obligations and directs proponents during the regulatory process.

Where the Crown's duty to consult is triggered in relation to your proposed project, the Ontario Ministry of the Environment and Climate Change is delegating the procedural aspects of rights-based consultation to you through this letter.

Steps that you may need to take in relation to Aboriginal consultation for your proposed project are outlined in the attached "Aboriginal Consultation Information" document. Please complete the checklist contained there, and keep related notes as part of your consultation record. Doing so will help you assess your project's potential adverse effects on Aboriginal or treaty rights.

You must contact the Director, Environmental Approvals Branch if you have reason to believe that your proposed project may **adversely affect an Aboriginal or treaty right, consultation has reached an impasse**, or if a Part II Order is anticipated. The Ministry will then assess the extent of any Crown duty to consult in the circumstances, and will consider whether additional steps should be taken and what role you will be asked to play in them.

Because of this ministry's legislative authority relating to the approval of stormwater management, you are encouraged to consult more actively with this office as the EA study unfolds. This way, we are able to provide advice especially in terms of future approval requirements.

Should you or any members of your project team have any questions regarding the material above, please contact me at either (905) 521-7864 or at Barbara.slattery@ontario.ca

Yours truly,



Barbara Slattery
EA/Planning Coordinator
West Central Region

File Storage Number: EAO5 CW CL NO

ABORIGINAL CONSULTATION INFORMATION

Consultation with Interested Persons under the Ontario Environmental Assessment Act

Proponents subject to the Ontario *Environmental Assessment Act* are required to consult with interested persons, which may include First Nations and Métis communities. In some cases, special efforts may be required to ensure that Aboriginal communities are made aware of the project and are afforded opportunities to provide comments. Direction about how to consult with interested persons/communities is provided in the Code of Practice: Consultation in Ontario's Environmental Assessment Process available on the Ministry's website:

<https://www.ontario.ca/environment-and-energy/consultation-ontarios-environmental-assessment-process>

As an early part of the consultation process, proponents are required to contact the Ontario Ministry of Aboriginal Affairs' Consultation Unit and visit Aboriginal Affairs and Northern Development Canada's Aboriginal and Treaty Rights Information System (ATRIS) to help identify which First Nation and Métis communities may be interested in or potentially impacted by their proposed projects.

ATRIS can be accessed through the Aboriginal Affairs and Northern Development Canada website:

http://sidait-atris.aadnc-aandc.gc.ca/atris_online/

For more information in regard Aboriginal consultation as part of the Environmental Assessment process, refer to the Ministry's website:

www.ontario.ca/government/environment-assessments-consulting-aboriginal-communities

You are advised to provide notification directly to all of the First Nation and Métis communities who may be interested in the project. You should contact First Nation communities through their Chief and Band Council, and Metis communities through their elected leadership.

Rights-based consultation with First Nation and Métis Communities

Proponents should note that, in addition to requiring interest-based consultation as described above, certain projects may have the potential to adversely affect the ability of First Nation or Métis communities to exercise their established or credibly asserted Aboriginal or treaty rights. In such cases, Ontario may have a duty to consult those Aboriginal communities.

Activities which may restrict or reduce access to unoccupied Crown lands, or which could result in a potential adverse impact to land or water resources in which harvesting rights are exercised, may have the potential to impact Aboriginal or treaty rights. For assistance in determining whether your proposed project could affect these rights, please refer to the attached "Preliminary Assessment Checklist: First Nation and Métis Community Interest."

If there is likely to be an adverse impact to Aboriginal or treaty rights, accommodation may be required to avoid or minimize the adverse impacts. Accommodation is an outcome of consultation and includes any mechanism used to avoid or minimize adverse impacts to Aboriginal or treaty rights and traditional uses. Solutions could include mitigation such as

adjustments in the timing or geographic location of the proposed activity. Accommodation may in certain circumstances involve the provision of financial compensation, but does not necessarily require it.

For more information about the duty to consult, please see the Ministry's website at:

www.ontario.ca/government/duty-consult-aboriginal-peoples-ontario

The proponent must contact the Director, Environmental Approvals Branch if a project may adversely affect an Aboriginal or treaty right, consultation has reached an impasse, or if a Part II Order or an elevation request is anticipated; the Ministry will then determine whether the Crown has a duty to consult.

The Director of the Environmental Approvals Branch can be notified either by email with the subject line "Potential Duty to Consult" to EAASIBgen@ontario.ca or by mail or fax at the address provided below:

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

Delegation of Procedural Aspects of Consultation

Proponents have an important and direct role in the consultation process, including a responsibility to conduct adequate consultation with First Nation and Métis communities as part of the environmental assessment process. This is laid out in existing environmental assessment codes of practice and guides that can be accessed from the Ministry's environmental assessment website at

www.ontario.ca/environmentalassessments

The Ministry relies on consultation conducted by proponents when it assesses the Crown's obligations and directs proponents during the regulatory process. Where the Crown's duty to consult is triggered, various additional procedural steps may also be asked of proponents as part of their delegated duty to consult responsibilities. In some situations, the Crown may also become involved in consultation activities.

Ontario will have an oversight role as the consultation process unfolds but will be relying on the steps undertaken and information you obtain to ensure adequate consultation has taken place. To ensure that First Nation and Métis communities have the ability to assess a project's potential to adversely affect their Aboriginal or treaty rights, Ontario requires proponents to undertake certain procedural aspects of consultation.

The proponent's responsibilities for procedural aspects of consultation include:

- Providing notice to the elected leadership of the First Nation and/or Métis communities (e.g., First Nation Chief) as early as possible regarding the project;

- Providing First Nation and/or Métis communities with information about the proposed project including anticipated impacts, information on timelines and your environmental assessment process;
- Following up with First Nation and/or Métis communities to ensure they received project information and that they are aware of the opportunity to express comments and concerns about the project. If you are unable to make the appropriate contacts (e.g. are unable to contact the Chief) please contact the Environmental Assessment and Planning Coordinator at the Ministry's appropriate regional office for further direction.
- Providing First Nation and/or Métis communities with opportunities to meet with appropriate proponent representatives to discuss the project;
- Gathering information about how the project may adversely impact the relevant Aboriginal and/or Treaty rights (for example, hunting, fishing) or sites of cultural significance (for example, burial grounds, archaeological sites);
- Considering the comments and concerns provided by First Nation and/or Métis communities and providing responses;
- Where appropriate, discussing potential mitigation strategies with First Nation and/or Métis communities;
- Bearing the reasonable costs associated with these procedural aspects of consultation, which may include providing support to help build communities' capacity to participate in consultation about the proposed project.
- Maintaining a Consultation Record to show evidence that you, the proponent, completed all the steps itemized above or at a minimum made meaningful attempts to do so.
- Upon request, providing copies of the Consultation Record to the Ministry. The Consultation Record should:
 - summarize the nature of any comments and questions received from First Nation and/or Métis communities
 - describe your response to those comments and how their concerns were considered
 - include a communications log indicating the dates and times of all communications; and
 - document activities in relation to consultation.

Successful consultation depends, in part, on early engagement by proponents with First Nation and Métis communities. Information shared with communities must be clear, accurate and complete, and in plain language where possible. The consultation process must maintain sufficient flexibility to respond to new information, and we trust you will make all reasonable efforts to build positive relationships with all First Nation and Métis communities contacted. If you need more specific guidance on Aboriginal consultation steps in relation to your proposed project, or if you feel consultation has reached an impasse, please contact the Environmental Assessment and Planning Coordinator at the Ministry's appropriate regional office.

Preliminary Assessment Checklist: First Nation and Métis Community Interests and Rights

In addition to other interests, some main concerns of First Nation and Métis communities may pertain to established or asserted rights to hunt, gather, trap, and fish – these activities generally occur on Crown land or water bodies. As such, projects related to Crown land or water bodies, or changes to how lands and water are accessed, may be of concern to Aboriginal communities.

Please answer the following questions and keep related notes as part of your consultation record. “Yes” responses will indicate a potential adverse impact on Aboriginal or treaty rights.


Where you have identified that your project may trigger rights-based consultation through the following questions, you should arrange for a meeting between you and the Environmental Assessment and Planning Coordinator at the Ministry's appropriate regional office to provide an early opportunity to confirm whether Ontario's duty to consult is triggered and to discuss roles and responsibilities in that event.

	YES	NO
<p>1. Are you aware of concerns from First Nation and Métis communities about your project or a similar project in the area?</p> <p>The types of concerns can range from interested inquiries to environmental complaints, and even to land use concerns. You should consider whether the interest represents on-going, acute and/or widespread concern.</p>		
<p>2. Is your project occurring on Crown land, or is it close to a water body? Might it change access to either?</p>		
<p>3. Is the project located in an open or forested area where hunting or trapping could take place?</p>		
<p>4. Does the project involve the clearing of forested land?</p>		
<p>5. Is the project located away from developed, urban areas?</p>		
<p>6. Is your project close to, or adjacent to, an existing reserve?</p> <p>Projects in areas near reserves may be of interest to the First Nation and Métis communities living there.</p>		
<p>7. Will the project affect First Nations and/or Métis ability to access areas of significance to them?</p>		
<p>8. Is the area subject to a land claim?</p> <p>Information about land claims filed in Ontario is available from the Ministry of Aboriginal Affairs; information about land claims filed with the federal government is available from Aboriginal Affairs and Northern Development Canada.</p>		
<p>9. Does the project have the potential to impact any archaeological sites?</p>		

Shari Page

9204

From: Ray Kirtz
Sent: Friday, January 08, 2016 4:05 PM
To: Shari Page
Subject: FW: NE Fergus Industrial Park Stormwater Management EA
Attachments: NE Fergus Industrial Park Stormwater- MTCS initial ltr Jan 6, 2016.pdf

contact list
updated
Jan 8/16


Fyi. For file.

From: Zirger, Rosi (MTCS) [<mailto:Rosi.Zirger@ontario.ca>]
Sent: January-06-16 11:38 AM
To: Ray Kirtz
Cc: cbaker@centrewellington.ca
Subject: NE Fergus Industrial Park Stormwater Management EA

The Ministry of Tourism, Culture and Sport (MTCS) received a Notice of Study Commencement for the project mentioned above. Attached please find MTCS comments and recommendations for this project.

Meanwhile, we would appreciate being kept informed of this project as it proceeds through the EA process. Please remove the name of Joseph Muller from your contact list and send future notices to Rosi Zirger Heritage Planner at rosi.zirger@ontario.ca or the address below.

Please feel free to email or telephone me as necessary. I would be pleased to have further discussion with you.

Sincerely

Rosi Zirger

Heritage Planner

Ministry of Tourism, Culture & Sport

Culture Division | Programs & Services Branch | Culture Services Unit

401 Bay Street, Suite 1700 Toronto, Ontario M7A 0A7

Tel. 416.314.7159 | Fax 416.314.7175 | E-mail rosi.zirger@ontario.ca ✓

**Ministry of Tourism,
Culture and Sport**

Culture Services Unit
Programs and Services Branch
401 Bay Street, Suite 1700
Toronto ON M7A 0A7
Tel: 416 314-7159
Fax: 416 212 1802

**Ministère du Tourisme,
de la Culture et du Sport**

Unité des services culturels
Direction des programmes et des services
401, rue Bay, Bureau 1700
Toronto ON M7A 0A7
Tél: 416 314-7159
Télé: 416 212 1802



January 6, 2016 (EMAIL ONLY)

Mr. Ray Kirtz, Project Manager
Triton Engineering Services Limited
14-105 Queen Street West
Fergus, ON N1M 1S6
E: rkirtz@tritoneng.ca

RE: MTCS file #: 0004055
Proponent: Township of Centre Wellington
Subject: Notice of Study Commencement – Municipal Class EA
Northeast Fergus Industrial Park Stormwater Management Strategy
Location: Township of Centre Wellington (Fergus), Ontario

Dear Mr. Kirtz

Thank you for providing the Ministry of Tourism, Culture and Sport (MTCS) with the Notice of Study Commencement for the above named project. MTCS's interest in this EA project relates to its mandate of conserving Ontario's cultural heritage, which includes:

- archaeological resources, including land-based 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.

Cultural Heritage Resources Considerations

While some cultural heritage resources may have already been formally identified, others may be identified through screening and evaluation. Aboriginal communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Aboriginal 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 you should screen the project with the MTCS [Criteria for Evaluating Archaeological Potential](#) to determine if an archaeological assessment is needed. MTCS archaeological sites data are available at archaeologicalsites@ontario.ca. If this 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 MTCS for review.

Built Heritage and Cultural Heritage Landscapes

The MTCS [Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes](#) should be completed to help determine whether your EA project may impact cultural heritage

resources. The Township's Clerk or heritage planning staff can provide information on property registered or designated under the *Ontario Heritage Act*. Municipal Heritage Planners can also provide information that will assist you in completing the checklist.

If potential or known heritage resources exist, MTCS 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 MTCS and municipal heritage staff for review, and make it available to local organizations or individuals who have expressed interest in heritage.

Environmental Assessment Reporting

All technical heritage studies and their recommendations are to be addressed and incorporated into EA projects. Please advise MTCS whether any technical heritage studies will be completed for this EA project, and provide them to MTCS before issuing a Notice of Study Completion. If your 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 MTCS on this project: please continue to do so through the EA process, and contact me for any questions or clarification.

Sincerely,

Rosi Zirger
Heritage Planner
rosi.zirger@ontario.ca

Copied to: Colin Baker, Managing Director of Infrastructure Services, Township of Centre Wellington

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. MTCS 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 MTCS 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 MTCS 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 Cemeteries Regulation Unit of the Ministry of Consumer Services must be contacted. In situations where human remains are associated with archaeological resources, MTCS 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.

Shari Page

Contact List
updated Jan 8/16



From: Ray Kirtz
Sent: Friday, January 08, 2016 4:05 PM
To: Shari Page
Subject: FW: Northeast Industrial Park - File No. G2014A

-----Original Message-----

From: hrmachine@bellnet.ca [<mailto:hrmachine@bellnet.ca>]
Sent: January-02-16 10:22 AM
To: Ray Kirtz
Subject: Northeast Industrial Park - File No. G2014A

Hello,

We are in receipt of your letter dated December 21, 2015. Please feel free to forward all future correspondence to the above email address.

Also, please update our mailing address to include our post office box and correct postal code. **201 Gregson Court, PO Box 274, Fergus, N1M 2W8**

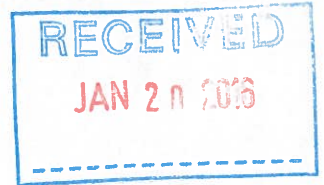
Thank you,

Jamie Hiller



400 Clyde Road, P.O. Box 729 Cambridge, ON N1R 5W6

Phone: 519.621.2761 Toll free: 866.900.4722 Fax: 519.621.4844 Online: www.grandriver.ca



January 12, 2016

Colin Baker, P.Eng.
Managing Director of Infrastructure
Township of Centre Wellington
7444 Wellington Road #21
Elora, ON, N0B 1S0

Ray Kirtz, P.Eng.
Project Manager
Triton Engineering Services Limited
14-105 Queen Street, West
Fergus, ON, N1M 1S6

Dear Mr. Baker and Ms. Furlong:

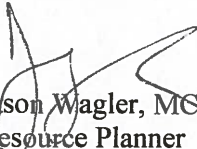
**Re: Township of Centre Wellington – SWM Strategy – Northeast Fergus Industrial Park
Schedule B Class Environmental Assessment
Notice of Study Commencement**

Thank-you for circulating our office the notice of study commencement for the Northeast Industrial Park SWM Strategy EA. We request that our office remains notified of any information pertaining to the EA as it becomes available.

The study area contains natural hazard and natural heritage features including the locally significant Irvine Creek Wetland Complex, floodplain, and the associated allowances to these features. These features and their allowances are regulated under Ontario Regulation 150/06. Any future development within the regulated areas may require the issuance of a Development, Interference with Wetlands and Alterations to Shorelines and Watercourses permit from GRCA. A copy of our resource mapping is attached for your reference.

Should you have any questions or require any information, please contact me at 519-621-2763 ext. 2320.

Yours truly,


Jason Wagler, MCIP, RPP
Resource Planner
Grand River Conservation Authority



Grand River Conservation Authority

Map created: January 12, 2016
Prepared by: J. Wagler

NE Fergus Industrial Park

LEGEND

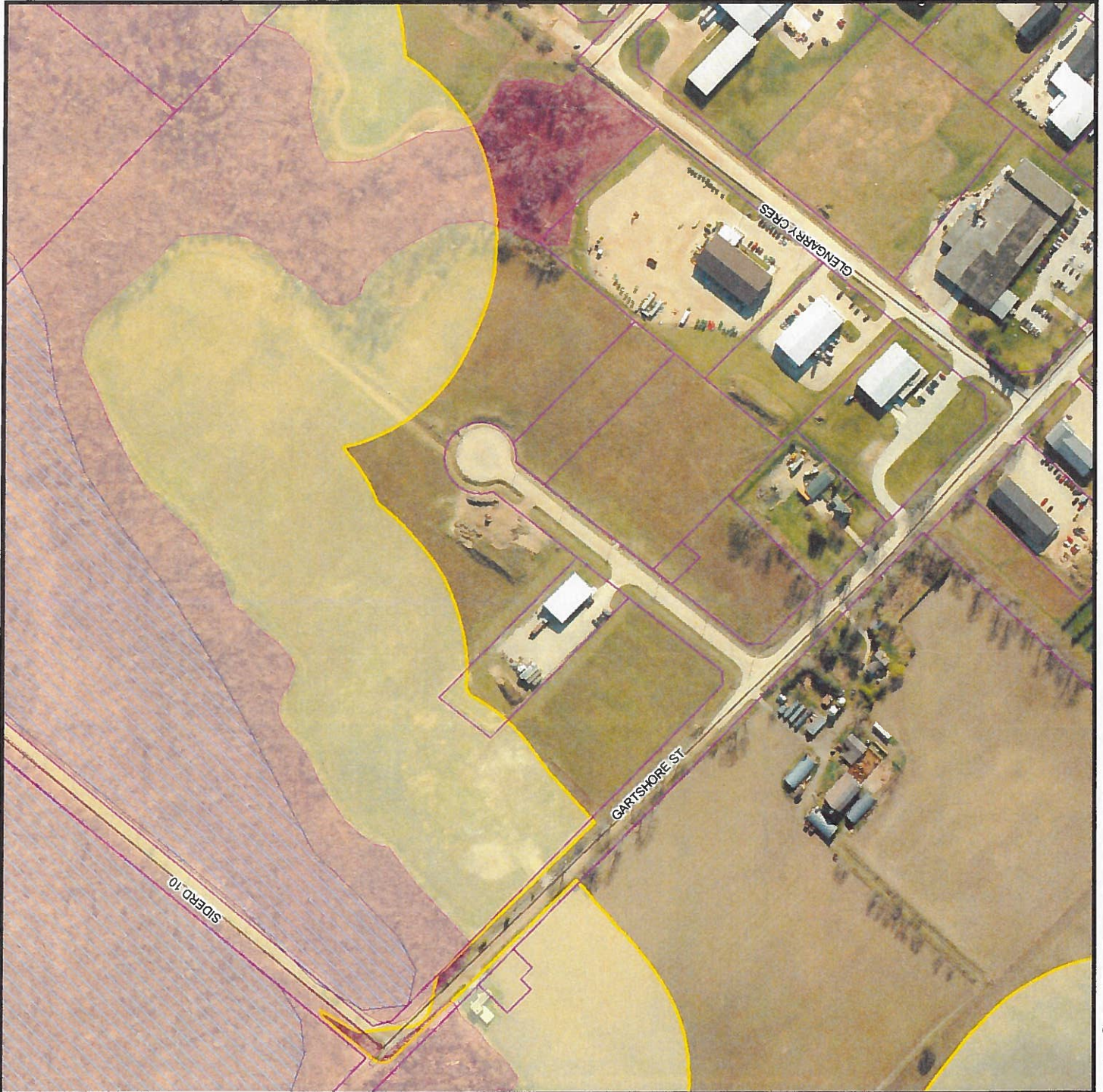
- WATERSHED BOUNDARY (GRCA)
- UTILITY LINE (NRVIS)
- ROADS-ADDRESSED (MNR)
- RAILWAY (NRVIS)
- PARCELS-ASSESSMENT (MPAC)
- FLOODPLAIN (GRCA)
- ENGINEERED
- APPROXIMATE
- ESTIMATED
- WETLAND (GRCA)
- SLOPE VALLEY (GRCA)
- STEEP
- OVERSTEEP
- SLOPE EROSION (GRCA)
- STEEP
- OVERSTEEP
- TOE
- PARKS (GRCA)
- REGULATION LIMIT 2014 (GRCA)
- 2010 ORTHO (ONT)

GRCA Disclaimer

This map is for illustrative purposes only. Information contained hereon is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user.

The source for each data layer is shown in parentheses in the map legend. For a complete listing of sources and citations go to:

<http://grims.grandriver.ca/docs/SourcesCitations1.htm>



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THIS MAP IS NOT TO BE USED FOR NAVIGATION

Shari Page

2014
Official
file

From: Thompson, Melinda (MNRF) <Melinda.Thompson@ontario.ca>
Sent: Wednesday, January 20, 2016 4:12 PM
To: Shari Page
Subject: RE: Township of Centre Wellington, Commencement of Schedule B, Class EA, SWM Strategy, Northeast Industrial Park (Gregson Court), Fergus
Attachments: Northeast Industrial Park.pdf

Please accept the attached response to your request.

Melinda

MELINDA J. THOMPSON * * * * *
MANAGEMENT BIOLOGIST | ONTARIO MINISTRY of NATURAL RESOURCES and FORESTRY | GUELPH DISTRICT OFFICE
1 Stone Road West, Guelph, Ontario, N1G 4Y2 | ☎ 519.826.6543 | ✉ melinda.thompson@ontario.ca
Learn more about [Ontario's Species at Risk](#)

From: Shari Page [<mailto:>]
Sent: December 21, 2015 12:01 PM
To: Marriott, David (MNRF)
Cc: Ray Kirtz
Subject: Township of Centre Wellington, Commencement of Schedule B, Class EA, SWM Strategy, Northeast Industrial Park (Gregson Court), Fergus

Good afternoon David,

On behalf of the Township of Centre Wellington, please find attached notification of a *Schedule B, Municipal Class Environmental Assessment, Stormwater Management Strategy for the Northeast Industrial Park (Gregson Court), Fergus, Ontario.*

A hard copy will follow by mail, however, we would like to know your preference for receiving future correspondence for this project whether it be email only, mail only or if you would prefer both. Kindly let us know.

Should you require further clarification to any of the attached, please do not hesitate to contact our office.

Kind regards,
Shari

Shari Page



Triton Engineering Services Limited
105 Queen Street West, Unit 14 Fergus, ON N1M 1S6
Tel - (519) 843-3920 • Fax - (519) 843-1943 • www.tritoneng.on.ca

This email message and any files transmitted with it are proprietary and confidential information of the sender and are intended only for the person(s) to whom this email is addressed. If you have received this email message in error, please notify the sender immediately by telephone or email and destroy the original message without making a copy.

January 13, 2016

Triton Engineering Services Limited
105 Queen Street West, Unit 14
Fergus, ON N1M 1S6
Tel - (519) 843-3920

Mr. Kirtz,

Thank you for your inquiry regarding the presence of species at risk and natural heritage features for Northeast Industrial Park, Stormwater Management Strategy in Fergus, Ontario.

Digital mapping for some natural heritage features is available from Land Information Ontario (LIO). MNRF recommends contacting LIO to obtain relevant feature mapping. Datasets of potential interest (and the corresponding LIO dataset) include – wetlands ('Wetland Unit' dataset), ANSI ('ANSI dataset), wooded areas ('Wooded Areas'), wintering areas ('Wintering Areas'), and fish spawning areas ('Spawning Areas').

The Ministry of Natural Resources and Forestry (MNRF) has had an opportunity to review the natural heritage records and information available at the Guelph District Office, for the above noted file. Please see below for the following information and comments to address your questions noted in the email correspondence.

Wetlands

The Ministry notes that the Locally Significant Irvine Creek Wetland Complex is currently identified within or directly adjacent to the identified land.

Digital mapping of wetlands can be obtained from Land Information Ontario (LIO). The Warehouse Dataset Name is 'Wetlands' within LIO. LIO manages key provincial datasets, and is responsible for housing most of the Ministry's digital natural heritage and resource data. The LIO Warehouse also includes spatial data from a variety of other sources and agencies, including federal ministries and conservation authorities. The LIO website provides instructions on how to request/obtain data, and a full listing of all data in the Warehouse. The link to the LIO website is as follows: <http://www.mnr.gov.on.ca/en/Business/LIO/index.html>. LIO staff can also be contacted at lio@ontario.ca or at (705) 755-1878 for assistance.

ANSI

The Ministry notes that no ANSI's are currently identified within or directly adjacent to the identified land.

Digital mapping of Areas of Natural and Scientific Interest can be obtained from Land Information Ontario (LIO). The Warehouse Dataset Name is 'ANSI' within LIO. LIO manages key provincial datasets, and is responsible for housing most of the Ministry's digital natural heritage and resource data. The LIO Warehouse also includes spatial data from a variety of other sources and agencies, including federal ministries and conservation authorities. The LIO website provides instructions on how to request/obtain data, and a full listing of all data in the Warehouse. The link to the LIO website is as follows: <http://www.mnr.gov.on.ca/en/Business/LIO/index.html>. LIO staff can also be contacted at lio@ontario.ca or at (705) 755-1878 for assistance.

Species at Risk

The Ministry notes that there are no species at risk (SAR) records for the area. There may be habitat for Species at Risk bats in the wooded area at the rear of the property. If the works propose altering the wooded area/swamp then MNRF will require additional information to assess the status of bats on the property.

Please note that because the province has not been surveyed comprehensively for the presence of species at risk (SAR), the absence in the NHIC database of an EO in a particular geographic area does not indicate the absence of the species in that area. Consequently, the presence of an EO is useful to flag the presence of the species in the area,

but is not an appropriate tool to determine whether a species is absent, or whether it should be surveyed for or not in a particular area.

Consequently, we provide the following advice with respect to determining the presence of species at risk on a property for which a land-use change or on-the-ground activity is being proposed (note that some of the following may not apply to a given type of proposed activity, or for a given study area):

I. Habitat Inventory

The District recommends undertaking a comprehensive botanical inventory of the entire area that may be subject to direct and indirect impacts from the proposed activity. The vegetation communities and aquatic habitats in the study area should be classified as per the "Ecological Land Classification (ELC) for Southern Ontario" system, to either the "Ecosite" or "Vegetation Type" level. With respect to aquatic habitats in the study area, we recommend you collect data on the physical characteristics of the waterbodies and inventory the riparian zone vegetation, so that these habitats can be classified as per the Aquatic Ecosites described in the ELC manual.

II. Potential SAR on the property

A list of species at risk that have the potential to occur in the area can be produced by cross-referencing the ecosites described during the habitat inventory with the habitat descriptions of species at risk known to occur in the county or regional municipality within which the area is located. The species-specific COSEWIC status reports (www.cosewic.gc.ca) are a good source of information on species at risk habitat needs and will be helpful in determining the suitability of the property's ecosites for a given species.

Please note that the Species at Risk in Ontario list (SARO) is a living document and is amended periodically as a result of species assessment and re-assessments conducted by the Committee on the Status of Species at Risk in Ontario (COSSARO). The SARO list can be accessed on the webpage <http://www.ontario.ca/environment-and-energy/species-risk-ontario-list>

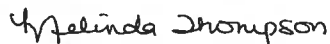
COSSARO also maintains a list of species to be assessed in the future. It is recommended to take COSSARO's list of anticipated assessments into consideration, especially when the proposed start date of the activity is more than 6 months away, or the project will be undertaken over a period greater than 6 months. The list can be viewed by going to <http://www.ontario.ca/page/how-comment-protecting-species-risk>.

III. SAR surveys

The District is of the opinion that each species at risk identified under Step II should be surveyed for, regardless of whether or not the species has been previously recorded in the area, or whether previous records are historical in nature. The survey report should describe how each species at risk was surveyed for, and provide a rationale for why, if any, certain species appearing on the county/ regional municipal list were not the subject of the survey. These rationales must be based on evidence demonstrating either that: suitable habitat for the species is not present on the property or; the project will not have any impacts -including indirect impacts- on the species. Some SAR surveys require an authorization under the *Endangered Species Act 2007* and/or a Scientific Collector's Permit; please contact the Guelph District office if you require further direction regarding these.

Guelph District additionally recommends contacting the municipal planning approval authority and the conservation authority to determine if they have any additional information or records of interest for the study area. Please contact our office if your investigations reveal the presence of species at risk on the subject property. MNR will be happy to provide further advice regarding the provisions of the *Endangered Species Act* at that time.

Sincerely,



MELINDA J. THOMPSON

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ARCHAEOLOGICAL ASSESSMENTS

Stage 1 and Stage 2 Reports

Stage 2 Approval

(Ontario Public Register of Archaeological Reports)

**Stage 1 Archaeological Assessment
Northeast Fergus Industrial Park, Stormwater Management Strategy
Part of Lot 10, Concession 1
(Former Township of West Garafraxa)
Town of Fergus, Township of Centre Wellington
County of Wellington, Ontario**

ORIGINAL REPORT

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3 June 2016



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**Stage 1 Archaeological Assessment
Northeast Fergus Industrial Park, Stormwater Management Strategy
Part of Lot 10, Concession 1
Town of Fergus, Township of Centre Wellington
County of Wellington, Ontario**

EXECUTIVE SUMMARY

ASI was contracted by Triton Engineering Services Limited, on behalf of the Township of Centre Wellington, to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Northeast Fergus Industrial Park Stormwater Management Strategy, Schedule B, Municipal Class Environmental Assessment (EA) in the Town of Fergus. This project involves reviewing the storm drainage requirements for the Northeast Industrial Park on Gregson Court in Fergus and providing a strategy to address the stormwater management needs for the area.

The background research determined that no previously registered archaeological sites are located within one kilometre of the study area. A review of the historical and archaeological contexts of the study area also suggested that it has potential for the identification of Aboriginal and Euro-Canadian archaeological resources, depending on the degree to which soils have been impacted.

The property inspection determined the study area possesses archaeological potential and requires further archaeological assessment.

In light of these results, the following recommendations are made:

1. The study area is considered to possess archaeological potential. These lands require Stage 2 archaeological assessment by pedestrian survey at a maximum 5 m transect interval prior to any proposed impacts to the property;
2. Should the proposed work extend beyond the current study area, further Stage 1 archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.



PROJECT PERSONNEL

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1.0 PROJECT CONTEXT

ASI was contracted by Triton Engineering Services Limited, on behalf of the Township of Centre Wellington, to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Northeast Fergus Industrial Park Stormwater Management Strategy, Schedule B, Municipal Class Environmental Assessment (EA) in the Town of Fergus (Figures 1 and 2). This project involves reviewing the storm drainage requirements for the Northeast Industrial Park on Gregson Court in Fergus and providing a strategy to address the stormwater management needs for the area.

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (2005), the 2011 *Standards and Guidelines for Consultant Archaeologists* (S & G), administered by the Ministry of Tourism, Culture and Sport (MTCS) and the Municipal Engineers' Association document *Municipal Class Environmental Assessment* (2000, as amended in 2007 and 2011).

In the S & G, Section 1, the objectives of a Stage 1 archaeological assessment are discussed as follows:

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

This report describes the Stage 1 archaeological assessment that was conducted for this project and is organized as follows: Section 1.0 summarizes the background study that was conducted to provide the historical and archaeological contexts for the project study area; Section 2.0 addresses the field methods used for the property inspection that was undertaken to document its general environment, current land use history and conditions of the study area; Section 3.0 analyses the characteristics of the project study area and evaluates its archaeological potential; Section 4.0 provides recommendations for the next assessment steps; and the remaining sections contain other report information that is required by the S & G, e.g., advice on compliance with legislation, works cited, mapping and photo-documentation.

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act*, RSO (1990) and regulations made under the Act, and are therefore subject to all associated legislation. This project is being conducted in accordance with the Municipal Class EA process.

Authorization to carry out the activities necessary for the completion of the Stage 1 archaeological assessment was granted to ASI by Triton Engineering Services Limited on March 8, 2016.



1.2 Historical Context

The purpose of this section, according to the S & G, Section 7.5.7, Standard 1, is to describe the past and present land use and the settlement history and any other relevant historical information pertaining to the study area. A summary is first presented of the current understanding of the Aboriginal land use of the study area. This is then followed by a review of the historical Euro-Canadian settlement history.

1.2.1 Aboriginal Land Use and Settlement

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier approximately 13,000 years before present (BP) (Ferris 2013: 13). Populations at this time were highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 BP, the climate had progressively warmed (Edwards and Fritz 1988) and populations now occupied less extensive territories (Ellis and Deller 1990: 62-63).

Between approximately 10,000-5,500 BP, the Great Lakes basins experienced low-water levels, and many sites which would have been located on those former shorelines were then submerged. This period produces the earliest evidence of heavy wood working tools and is indicative of greater investment of labour in felling trees for fuel, to build shelter, or to produce tools, and is ultimately indicative of prolonged seasonal residency at sites. By approximately 8,000 BP, evidence exists for polished stone implements and worked native copper. The source for the latter from the north shore of Lake Superior is evidence of extensive exchange networks. Early evidence exists at this time for the creation of communal cemeteries and ceremonial funerary customs. This evidence is significant for the establishment of band territories. These communal places indicate shared meaning across the community and are reflective of a people's cosmology (Brown 1995:13; Holloway and Hubbard 2001:74; Parker Pearson 1999:141). Between approximately 4,500-3,000 BP, there is evidence for construction of fishing weirs. These structures indicate not only the group sharing of resources, but also the organization of communal labour (Ellis *et al.* 1990; Ellis *et al.* 2009).

Settlement and subsistence systems between 3,000 BP and 2500 BP are not entirely understood. Populations continued a semi-permanent existence and exploited seasonally-available resources. The harvesting of spawning fish continued to be an important part of their subsistence practices. There continues to be evidence for extensive and complex exchange networks (Spence *et al.* 1990:136, 138). By approximately 2,000 BP, evidence exists for macro-band camps, focusing on the seasonal exploitation of resources such as spawning fish and wild rice (Spence *et al.* 1990:155, 164). It is also during this period that maize was first introduced into southern Ontario, though it would have only supplemented people's diet (Birch and Williamson 2013:13-15). Bands likely retreated to interior camps during the winter.

From approximately 1,000 BP until approximately 300 BP, evidence indicates that lifeways were similar to the historically-described Aboriginal groups. Populations in southern Ontario were Iroquoian-speaking, though full expression of Iroquoian culture is not recognized archaeologically until the fourteenth century AD. During the Early Iroquoian phase (AD 1000-1300), the communal site is replaced by the village focused on horticulture. Seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practiced (Williamson 1990:317). By the second quarter of the first millennium BP, during the Middle Iroquoian phase (AD 1300-1450), this episodic community disintegration was no longer practiced and populations now communally occupied sites throughout the year (Dodd *et al.* 1990:343). In the Late Iroquoian phase (AD 1450-1649), this process continued with the coalescence of these small villages into larger communities (Birch and Williamson 2013). Through this



process, the socio-political organization of the Aboriginal Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed.

Samuel de Champlain in 1615 reported that a group of Iroquoian-speaking people situated between the New York Iroquois and the Huron-Wendat were at peace and remained “la nation neutre.” In subsequent years, the French visited and traded among the Neutral, but the first documented visit was not until 1626, when the Recollet missionary Joseph de la Roche Daillon recorded his visit to the villages of the Attiwandaron, whose name in the Huron-Wendat language meant “those who speak a slightly different tongue” (the Neutral apparently referred to the Huron-Wendat by the same term). Like the Huron-Wendat, Petun, and New York Iroquois, the Neutral people were settled village agriculturalists. Several discrete settlement clusters have been identified in the lower Grand River, Fairchild-Big Creek, Upper Twenty Mile Creek, Spencer-Bronte Creek drainages, Milton, Grimsby, Eastern Niagara Escarpment and Onondaga Escarpment areas, which are attributed to Iroquoian populations. These settlement clusters are believed by some scholars to have been inhabited by populations of the Neutral Nation or pre- (or ancestral) Neutral Nation (Lennox and Fitzgerald 1990).

Between 1647 and 1651, the Neutral were decimated by epidemics and ultimately dispersed by the New York Iroquois, who subsequently settled along strategic trade routes on the north shore of Lake Ontario for a brief period during the mid seventeenth-century. Compared to settlements of the New York Iroquois, the “Iroquois du Nord” occupation of the landscape was less intensive. Only seven villages are identified by the early historic cartographers on the north shore, and they are documented as considerably smaller than those in New York State. The populations were agriculturalists, growing maize, pumpkins, and squash. These settlements also played the important alternate role of serving as stopovers and bases for New York Iroquois travelling to the north shore for the annual beaver hunt (Konrad 1974).

Beginning in the mid-late seventeenth century, the Mississaugas began to replace the Iroquois as the controlling Aboriginal group in the north shore since the Iroquois confederacy had overstretched their territory between the 1650s and 1670s (Williamson 2008). The Iroquois could not hold the region and agreed to form an alliance with the Mississaugas and share hunting territories with them. The Mississaugas traded with both the British and the French in order to have wider access to European materials at better prices and acted as trade intermediaries between the British and tribes in the north.

The eighteenth century saw the ethnogenesis in Ontario of the Métis. Métis people are of mixed First Nations and French ancestry, but also mixed Scottish and Irish ancestry as well. The Métis played a significant role in the economy and socio-political history of the Great Lakes during this time. Living in both Euro-Canadian and Aboriginal societies, the Métis acted as agents and sub-agents in the fur trade but also as surveyors and interpreters. Though Métis populations were predominantly located north and west of Lake Superior, they also lived throughout Ontario (Métis Nation of Canada [MNC] n.d.; Stone and Chaput 1978:607,608).

1.2.2 Historic Euro-Canadian Land Use: Township Survey and Settlement

Historically, the study area is located in the Former Township of West Garafraxa, Wellington County in part of Lot 10, Concession 1.

The S & G stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches, and early cemeteries are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads,



railways, portage routes), properties listed on a municipal register or designated under the *Ontario Heritage Act* or a federal, provincial, or municipal historic landmark or site are also considered to have archaeological potential.

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those that are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be located in proximity to water. The development of the network of concession roads and railroads through the course of the nineteenth century frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 m of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed Aboriginal pathways and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Aboriginal trails, both along the lakeshore and adjacent to various creeks and rivers (ASI 2006).

Wellington County and West Garafraxa Township

The District of Wellington, containing Wellington, Waterloo, Grey, and parts of Dufferin County was formed in 1838. In 1854, the County of Wellington was formed, containing Garafraxa Township (among other towns and townships). The first Euro-Canadian settler to Wellington arrived in 1816, founding the town of Elora. Fergus was incorporated as a village in 1858 and was serviced by the Wellington, Grey and Bruce railway. Fergus, situated on the banks of the Grand River, became a town in 1953. (Mika and Mika 1983:619-621).

The Township of West Garafraxa was first surveyed in 1821 and settlers followed quickly, using the Grand River as the major transportation route until the construction of the Garafraxa Road. The Township separated into East and West in 1869 (Mika and Mika 1983:627-628).

1.2.3 Historical Map Review

The 1879 *Map of the County of Wellington* shows no structures or other development on Lot 10. The 1881 *Illustrated Historical Atlas of Waterloo & Wellington Counties* was examined to determine the presence of historic features within the study area during the nineteenth century (Figure 3). It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases. According to the map, the owner of the west half of Lot 10, Concession 1 (100 acres) was Joseph Hamilton. The eastern half (100 acres) was owned by I. Mornington. No historical features within the study area are shown on the atlas. However, the study area is in close proximity to the Credit Valley Railway (to the south), Sideroad 10 (to the north), and Gartshore Drive (formerly a concession road) to the west.



Use of historical map sources to reconstruct/predict the location of former features within the modern landscape generally proceeds by using common reference points between the various sources. These sources are then geo-referenced in order to provide the most accurate determination of the location of any property on historic mapping sources. The results of such exercises are often imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance of such margins of error is dependent on the size of the feature one is attempting to plot, the constancy of reference points, the distances between them, and the consistency with which both they and the target feature are depicted on the period mapping.

1.2.4 *Twentieth-Century Mapping Review*

The 1904 *Standard Topographic Map, 1: 250,000* does not record any development on Lot 10. A review of the 1954 digital aerial photograph (Hunting Survey Corporation 2002) shows that the entire study area is undeveloped and in agricultural production. The tree line is similar to that present currently.

A review of available Google satellite imagery shows that the study area is in agricultural production from 2006 to 2009. Sometime between 2009 and 2012, Gregson Court was built, and a storage shed/parking area constructed near Gartshore Street. The study area remains undeveloped and in scrub or pasture. A large parking/staging area is present at the terminus of Gregson Court in the 2013 imagery.

1.2.5 *Summary of Historical Context*

The background research demonstrates that the study area has been occupied by Aboriginal peoples for thousands of years, largely due to the proximity of the Grand River which has a long and complex history of Aboriginal occupation.

The background research and historical mapping also demonstrates that the study area is located in the Former Township of Garafraxa West, County of Wellington, in part of Lot 10, Concession 1. The historical maps indicate that the study area is located in proximity to three historical transportation routes, including a railway line.

1.3 *Archaeological Context*

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



1.3.1 Current Land Use and Field Conditions

The study area is located in the northern portion of the Town of Fergus. The study area is bounded to the south by light density industrial areas and residential suburbs beyond. To the north, east, and west, the study area is surrounded by rural lands with agricultural land use and small forested tracts. There are pockets of disturbance outside of the study area, adjacent to Gregson Court. These consist of work yards, parking and storage areas, and structures. The study area remains undeveloped (Figure 2).

1.3.2 Geography

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

The S & G stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential.

Water has been identified as the major determinant of site selection and the presence of potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in Ontario since 5,000 BP (Karrow and Warner 1990: Figure 2.16), proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location.

Other geographic characteristics that can indicate archaeological potential include: elevated topography (eskers, drumlins, large knolls, and plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings. Resource areas, including; food or medicinal plants (migratory routes, spawning areas) are also considered characteristics that indicate archaeological potential (S & G, Section 1.3.1).

The study area is situated within the Guelph Drumlin Field physiographic region of southern Ontario in a former spillway (Chapman and Putnam 1984; Figure 4). The Guelph Drumlin Field physiographic region (Chapman and Putnam 1984:137-139) centres upon the City of Guelph and Guelph Township and occupies roughly 830 km². Within the Guelph Drumlin Field, there are approximately 300 drumlins of varying sizes. For the most part these hills are of the broad oval type with slopes less steep than those of the Peterborough drumlins and are not as closely grouped as those in some other areas. The till in these drumlins is loamy and calcareous, and was derived mostly from dolostone of the Amabel Formation which can be found exposed below the Niagara Escarpment.

Spillways are the former glacial meltwater channels. They are often found in association with moraines but in opposition are entrenched rather than elevated landforms. They are often, though not always,



occupied by stream courses, the fact of which raises the debate of their glacial origin. Spillways are typically broad troughs floored wholly or in part by gravel beds and are typically vegetated by cedar swamps in the lowest beds (Chapman and Putnam 1984:15).

Figure 5 depicts surficial geology for the study area. The surficial geology mapping demonstrates that the study area is underlain by deposits of sand, diamicton (poorly sorted sediments typically of glacial origin) and gravel. These sand deposits are glaciofluvial river deposits and delta topset facies. The diamicton deposits are stone-poor sandy silt to silty sand textured till on Paleozoic terrain. The gravel deposits are ice-contact stratified deposits and include deposits of sand/gravel and minor deposits of silt, clay and till (OGS 2010). Soils in the study area are well drained (Figure 6).

Soils within the study area consist of Harriston loam (Dept. of Agriculture 1962; Figure 7). Harriston loam occurs on moderately to gently rolling topography and are well drained. The soil parent material is a glacial till that has been derived from the soft yellowish brown limestones that form the underlying rock strata. Except for the occasional stone on the surface, the upper part of the soil profile is stonefree. The limestones weather and disintegrate rapidly and those that remain occur mainly in the lower subsoil and parent material. When rubbed between the fingers, the weathered surface of these stones crumbles to a soft floury material consisting mainly of particles of silt size. Harriston loam has been documented to possess the following profile (Hoffman *et al.* 1963:27, 28, and 58):

Horizon	Colour	Texture/structure	Profile depth
Ah	Very dark grayish brown (10YR 3/2)	Loam; medium granular; friable; slightly stony	0-13 cm
Ae1	Brown (7.5YR 5/4)	Loam; medium granular; friable; stonefree	13-28 cm
Ae2	Light yellowish brown (2.5Y 6/4)	Loam; weak, fine platy; soft, stonefree	28-48 cm
Bt	Olive brown (2.5Y 4/4)	Loam; medium subangular blocky; friable; stonefree	48-64 cm
C	Light yellowish brown (2.5Y 6/4)	Loam till; medium subangular blocky; hard; slightly stony; calcareous	64+ cm

1.3.3 Previous Archaeological Research

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

According to the OASD, no previously registered archaeological sites are located within one kilometre of the study area (MTCS 2016).



1.3.4 Summary of Archaeological Context

The review of archaeological work conducted in the area demonstrated that no previously registered archaeological sites are located within one kilometre of the study area. The study area is located adjacent to a wetland that is part of the Grand River drainage. The historical context demonstrates that the study area is located in proximity to three historical transportation routes, including a railway line. These criteria are indicative that the study area possesses potential for Aboriginal and Euro-Canadian archaeological resources, depending on soil conditions and the degree to which soils have been subject to deep disturbance.

2.0 FIELD METHODS: PROPERTY INSPECTION

A Stage 1 property inspection must adhere to the S & G, Section 1.2, Standards 1-6, which are discussed below. The entire property and its periphery must be inspected. The inspection may be either systematic or random. Coverage must be sufficient to identify the presence or absence of any features of archaeological potential. The inspection must be conducted when weather conditions permit good visibility of land features. Natural landforms and watercourses are to be confirmed if previously identified. Additional features such as elevated topography, relic water channels, glacial shorelines, well-drained soils within heavy soils and slightly elevated areas within low and wet areas should be identified and documented, if present. Features affecting assessment strategies should be identified and documented such as woodlots, bogs or other permanently wet areas, areas of steeper grade than indicated on topographic mapping, areas of overgrown vegetation, areas of heavy soil, and recent land disturbance such as grading, fill deposits and vegetation clearing. The inspection should also identify and document structures and built features that will affect assessment strategies, such as heritage structures or landscapes, cairns, monuments or plaques, and cemeteries.

The Stage 1 archaeological assessment property inspection was conducted under the field direction of Andrew Clish (P046) of ASI, on June 2, 2016, in order to gain first-hand knowledge of the geography, topography, and current conditions and to evaluate and map archaeological potential of the study area. It was a visual inspection only and did not include excavation or collection of archaeological resources. Weather conditions for the inspection were overcast with intermittent showers and a temperature of approximately 21 C. No fieldwork was conducted during a period of showers or inappropriate weather conditions. Previously identified features of archaeological potential were examined; additional features of archaeological potential not visible on mapping were identified and documented as well as any features that will affect assessment strategies. Field observations are compiled onto the existing conditions of the study area in Section 7.0 (Figure 7) and associated photographic plates are presented in Section 8.0 (Plates 1-18).

Following the completion of the field inspection, the field director noted the study area possessed archaeological potential, due to the slowly sloping terrain and the proximity to a large, resource-rich wetland to the north, east, and west.



3.0 ANALYSIS AND CONCLUSIONS

The historical and archaeological contexts have been analyzed to help determine the archaeological potential of the study area. These data are presented below in Section 3.1. Results of the analysis of the property inspection are then presented for the study area (Section 3.2).

3.1 Analysis of Archaeological Potential

The S & G, Section 1.3.1, list criteria that are indicative of archaeological potential. The Northeast Fergus Industrial park, Stormwater Management Strategy study area meets the following criteria indicative of archaeological potential:

- Water sources (wetland);
- Proximity to resource area (wetland);
- Early historical transportation routes (Credit Valley Railway, Sideroad 10, and Gartshore Drive).

These criteria are indicative of potential for the identification of Aboriginal and Euro-Canadian archaeological resources, depending on the soil conditions and the degree to which soils have been subject to disturbance.

3.2 Analysis of Property Inspection Results

The property inspection determined that the study area has not been subjected to deep soil disturbance events and possesses archaeological potential (Figure 8: areas highlighted in green). These areas will require Stage 2 archaeological assessment prior to any development.

3.3 Conclusions

The Stage 1 background study determined that no previously registered archaeological sites are located within one kilometre of the study area. However, the area does have a long and complex Aboriginal history due to the importance of the Grand River as a transportation route. A review of the geography of the study area suggested that the study area has potential for the identification of Aboriginal and Euro-Canadian archaeological resources, depending on the degree to which soils have been disturbed.

The property inspection determined that the study area does possess archaeological potential (Plates 1-5) and will require Stage 2 assessment.



4.0 RECOMMENDATIONS

In light of these results, the following recommendations are made:

1. The study area is considered to possess archaeological potential. These lands require Stage 2 archaeological assessment by pedestrian survey at a maximum 5 m transect interval prior to any proposed impacts to the property;
2. Should the proposed work extend beyond the current study area, further Stage 1 archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

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

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

5.0 ADVICE ON COMPLIANCE WITH LEGISLATION

ASI also advises compliance with the following legislation:

- This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, RSO 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations ensure the conservation, preservation and protection of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological field work on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.



- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the *Ontario Heritage Act*.
- The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.



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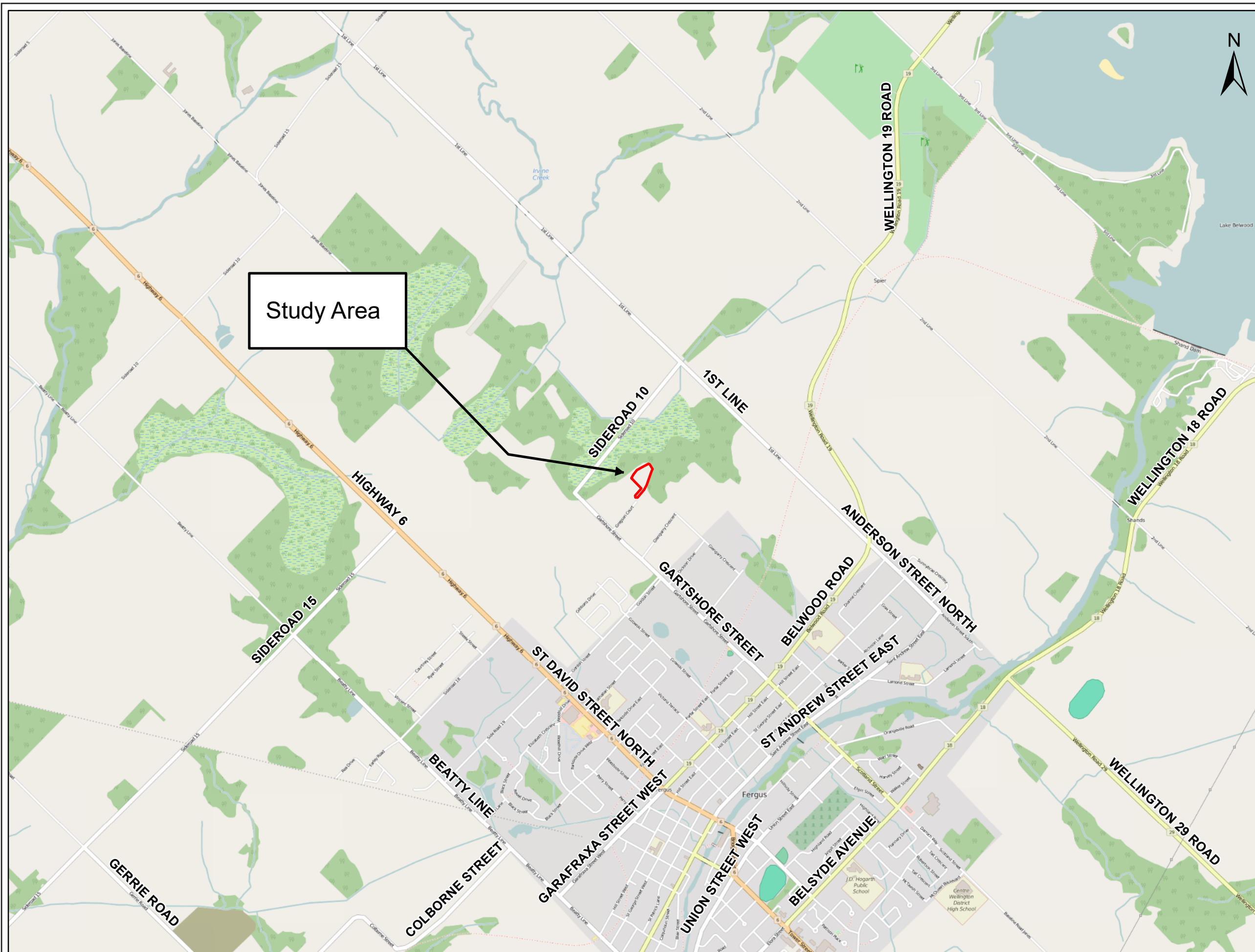
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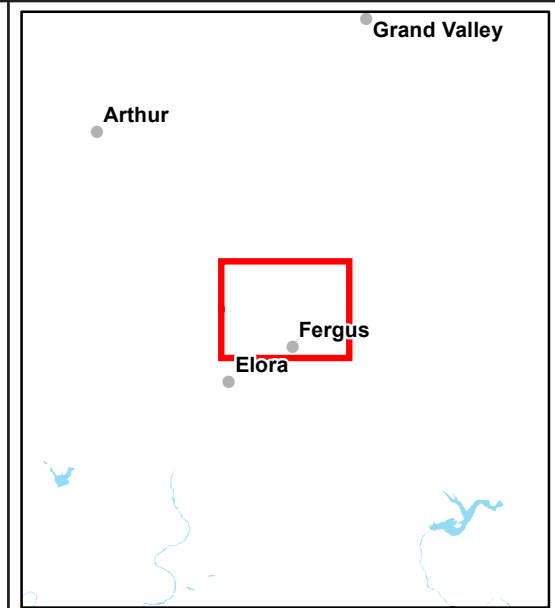



7.0 MAPS






Study Area



 Study Area

BASE:
 (c) OpenStreetMap and contributors,
 Creative Commons-Share Alike
 License (CC-BY-SA)

0  1.5
 Kilometres

ASI PROJECT NO.: 16EA-062 DRAWN BY: BW
 DATE: 22 Jun 2016 FILE: 16EA062_Fig1


 **Archaeological & Cultural Heritage Services**
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Figure 1: Location of the Northeast Fergus Industrial Park Stormwater Management Strategy Study Area





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- Study Area
- Water
- Existing Roads

BASE:
 Google Earth
 Apr 22 2016
 Captured Jun 1 2016

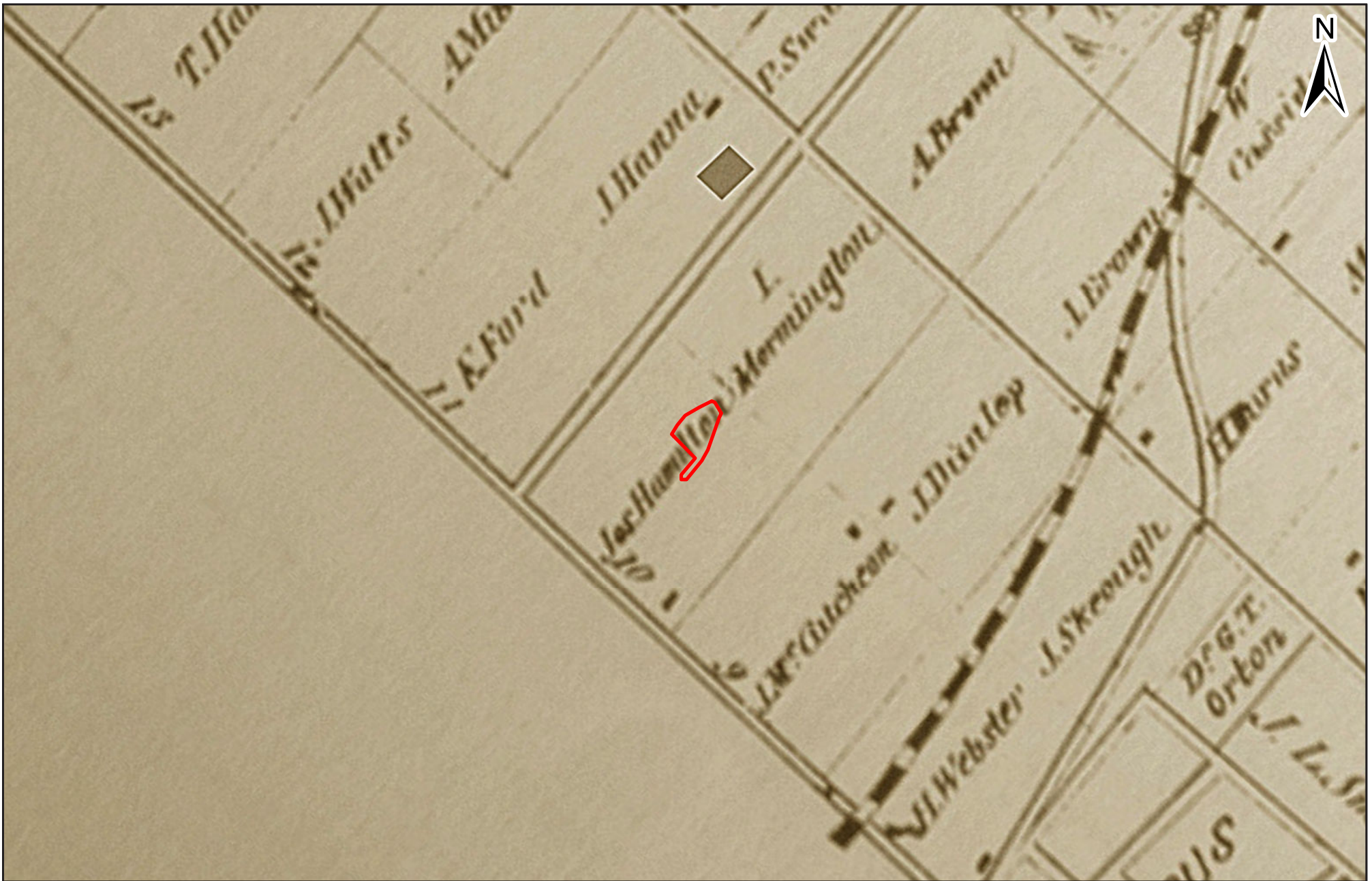
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Metres

ASI PROJECT NO.: 16EA-062 DRAWN BY: BW
 DATE: 22 Jun 2016 FILE: 16EA062_Fig2_Ortho


Figure 2: Existing Conditions of the Northeast Fergus Industrial Park, Stormwater Management Strategy Study Area



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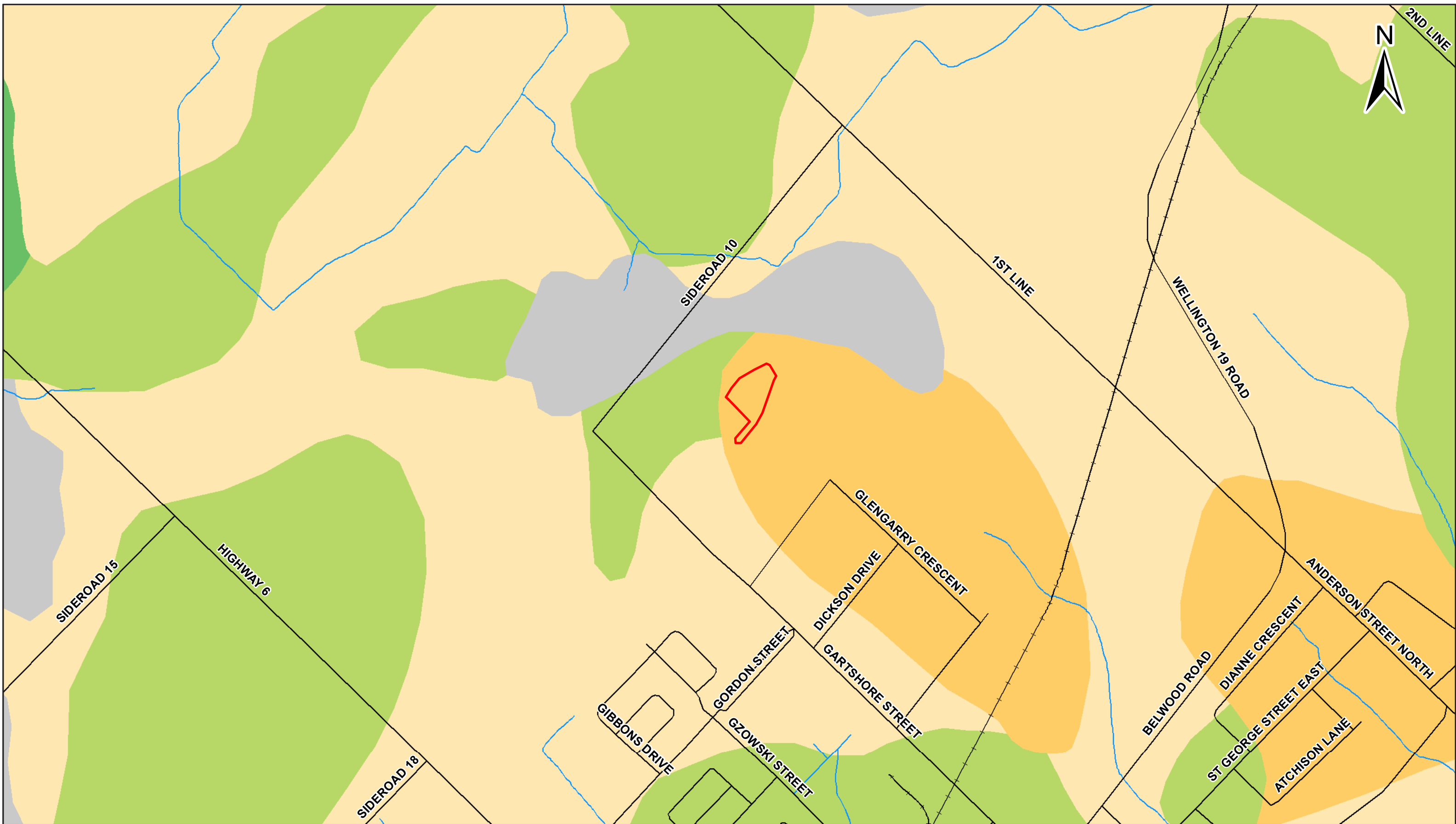
 Study Area












0 500

Metres

ASI PROJECT NO.: 16EA-062 DRAWN BY: BW
DATE: 22 Jun 2016 FILE: 16EA062_Fig3_1881

Figure 3: Location of the Northeast Fergus Industrial Park, Stormwater Management Strategy Study Area on the 1881 Illustrated Historical Atlas of Waterloo & Wellington Counties




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 Study Area	 Stone-poor, carbonate-derived silty to sandy till	 Sandy deposits
 Water	 Glaciolacustrine-derived silty to clayey till	 Gravelly deposits
 Existing Roads	 Ice-contact stratified deposits	 Organic deposits

BASE:


0  500
Metres
 ASI PROJECT NO.: 16EA-062 DRAWN BY: BW
 DATE: 22 Jun 2016 FILE: 16EA062_Fig4_Physio

Figure 4: Location of the Northeast Fergus Industrial Park, Stormwater Management Strategy Study Area on the Physiography of Southern Wellington

Path: X:\2016 Projects\EA\16EA-062 NE Fergus Industrial Park\View\16EA062_workspace.mxd

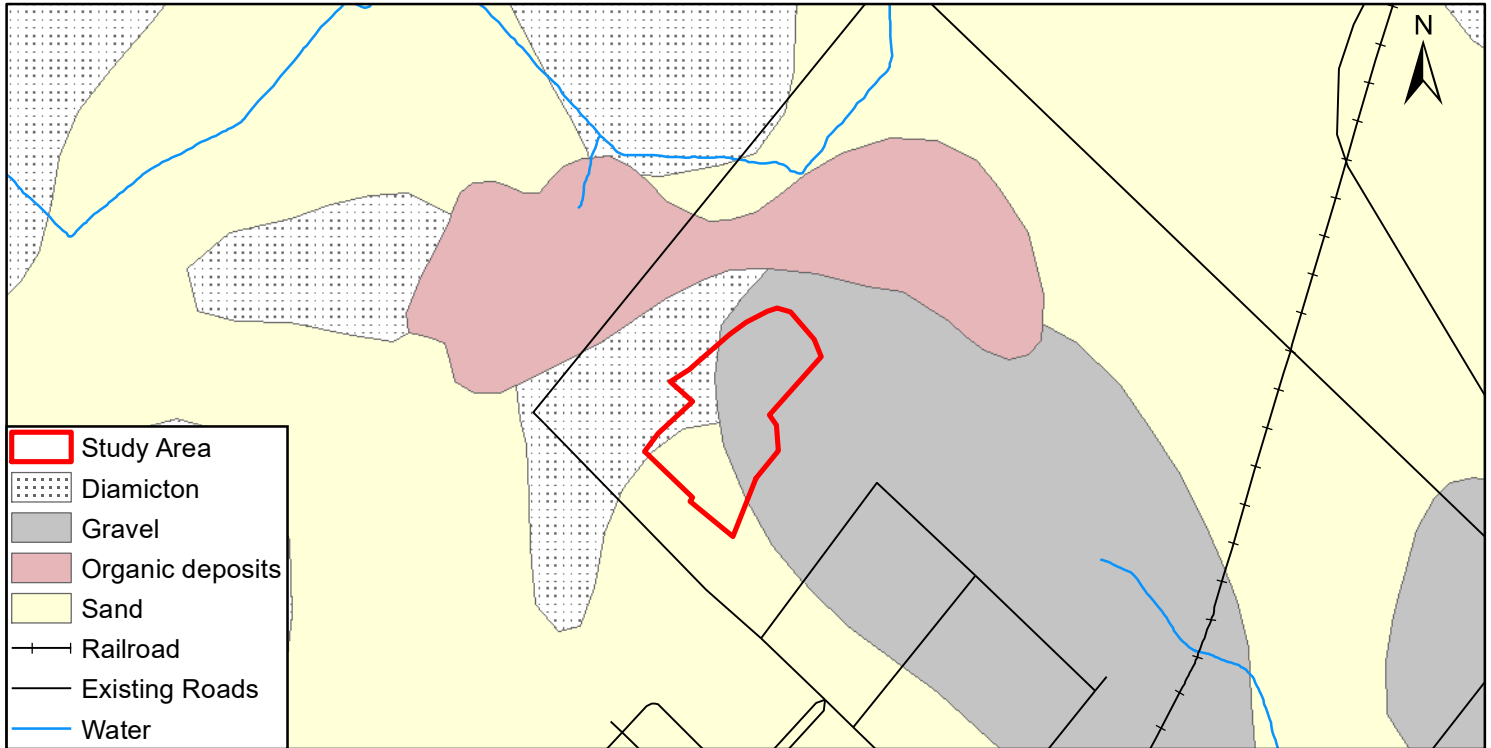


Figure 5: Surficial Geology, Northeast Fergus Industrial Park, Stormwater Management Strategy Study Area

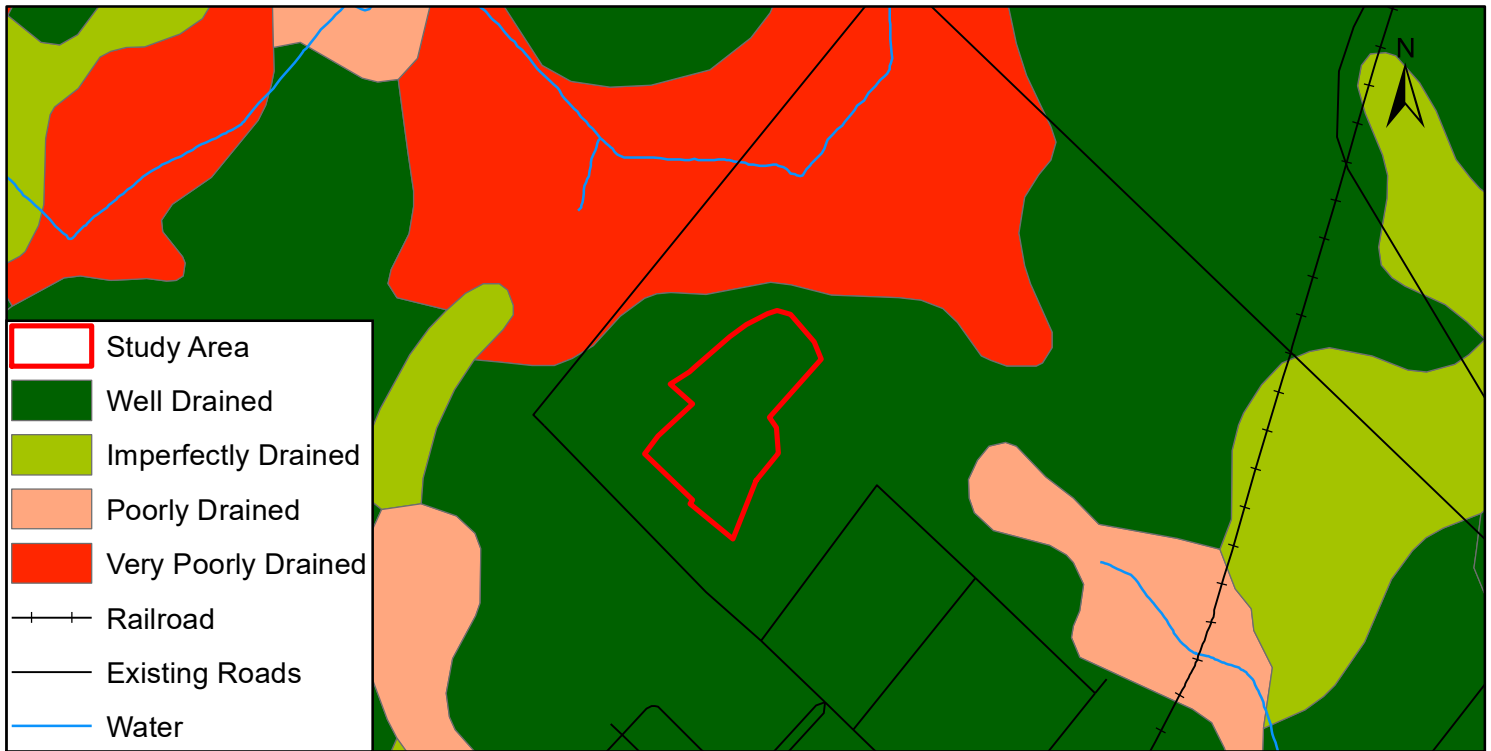
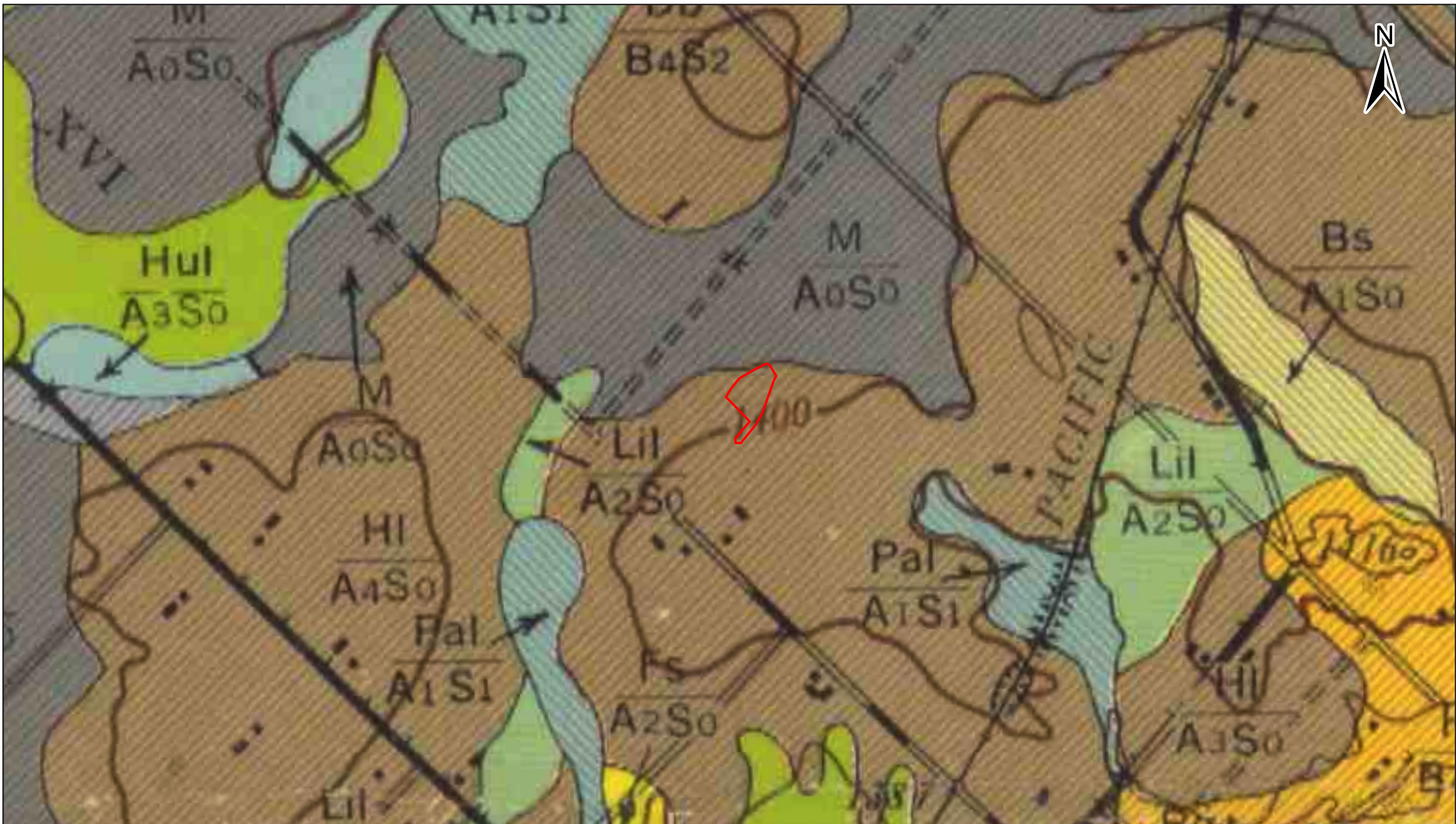



Figure 6: Soil Drainage, Northeast Fergus Industrial Park, Stormwater Management Strategy Study Area




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 Study Area

BASE:


0 500

Metres
ASI PROJECT NO.: 16EA-062 DRAWN BY: BW
 DATE: 22 Jun 2016 FILE: 16EA062_Fig7_Soil

Figure 7: Location of the Northeast Fergus Industrial Park, Stormwater Management Strategy Study Area on the 1962 Soil Survey of Wellington County, Ontario.



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Study Area



Water



Existing Roads



Photo Plate



Archaeological Potential: Pedestrian Survey Required

BASE:

Google Earth
 Apr 22 2016
 Captured Jun 1 2016

0

125



Metres

ASI PROJECT NO.: 16EA-062
 DATE: 22 Jun 2016

DRAWN BY: BW
 FILE: 16EA062_Fig8_Stg1

Figure 8: Stage 1 Assessment Results, Northeast Fergus Industrial Park, Stormwater Management Strategy Study Area

8.0 IMAGES



Plate 1: View north. Open green space. Area possesses archaeological potential and requires pedestrian survey.



Plate 2: View northeast. Open green space. Area possesses archaeological potential and requires pedestrian survey.



Plate 3: View east. Mixed-use area. Green area in foreground possesses archaeological potential and requires pedestrian survey. Raised area associated with construction trailer outside of the study area.



Plate 4: Looking northeast. Open green space. Area possesses archaeological potential and requires pedestrian survey.



Plate 5: Looking north, proposed area of the storm management pond. Area possesses archaeological potential and requires pedestrian survey.

**STAGE 2 ARCHAEOLOGICAL ASSESSMENT (PROPERTY ASSESSMENT)
NORTHEAST FERGUS INDUSTRIAL PARK, STORMWATER MANAGEMENT STRATEGY
PART OF LOT 10, CONCESSION 1
(FORMER TOWNSHIP OF WEST GARAFRAXA)
TOWN OF FERGUS, TOWNSHIP OF CENTRE WELLINGTON
COUNTY OF WELLINGTON, ONTARIO**

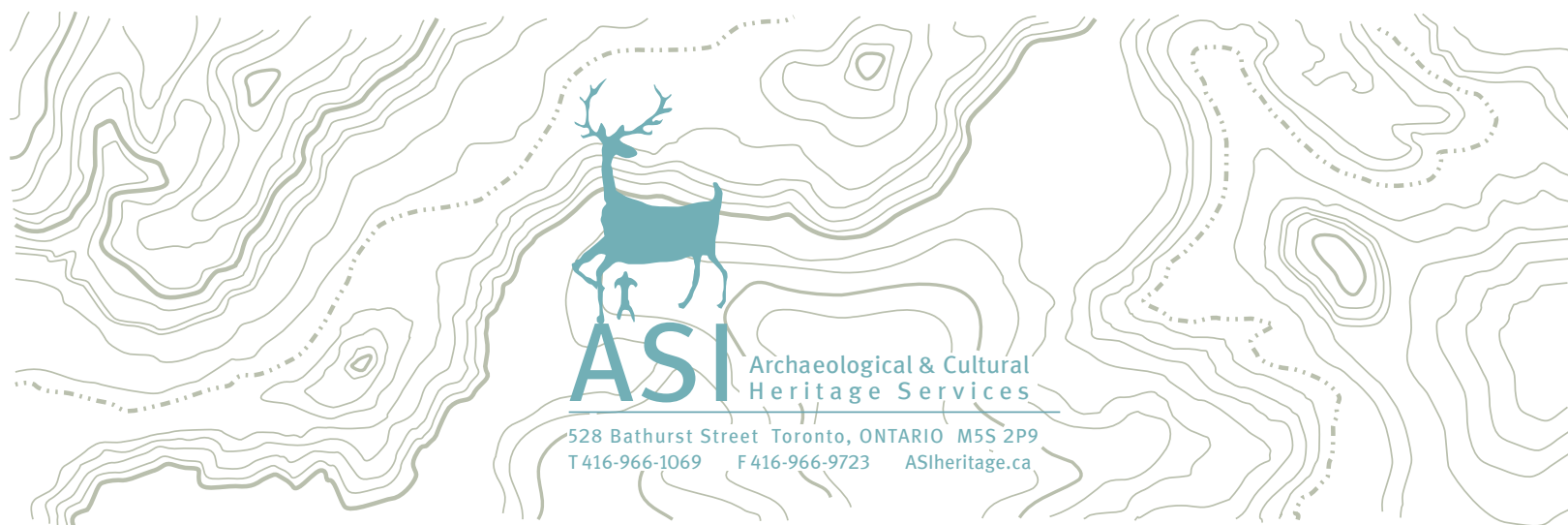
ORIGINAL REPORT

Prepared for:

Triton Engineering Services Ltd.
105 Queen Street West, Unit 14
Fergus, ON, N1M 1S6
T 519 843 3920

Archaeological Licence P128 (Hull)
Ministry of Tourism, Culture and Sport PIF# P128-0152-2016
ASI File: 16EA-181

26 October, 2016



STAGE 2 ARCHAEOLOGICAL ASSESSMENT (PROPERTY ASSESSMENT)
NORTHEAST FERGUS INDUSTRIAL PARK, STORMWATER MANAGEMENT STRATEGY
PART OF LOT 10, CONCESSION 1
(FORMER TOWNSHIP OF WEST GARAFRAXA)
TOWN OF FERGUS, TOWNSHIP OF CENTRE WELLINGTON
COUNTY OF WELLINGTON, ONTARIO

EXECUTIVE SUMMARY

ASI was contracted by Triton Engineering Services Ltd., on behalf of the Township of Centre Wellington, to conduct a Stage 2 Property Assessment as part of the Northeast Fergus Industrial Park Stormwater Management Strategy, Schedule B, Municipal Class Environmental Assessment (EA), located in part of Lot 10, Concession 1 (former Township of West Garafraxa), Town of Fergus, Township of Centre Wellington, County of Wellington, Ontario. Specifically, this assessment has been commissioned to assess an area of land approximately 1.8 ha in size that was recommended previously as requiring a Stage 2 assessment prior to any proposed impacts by the project.

A Stage 1 Archaeological Assessment was previously completed to review background research and assess archaeological potential for the project footprint. ASI completed this assessment for Triton Engineering Services Ltd. and the results were summarized in a report submitted to the Ministry of Tourism, Culture and Sport (MTCS). The Stage 1 assessment determined that the entire study area possesses potential for archaeological resources; a Stage 2 assessment was recommended prior to any ground-disturbing activities.

The Stage 2 Property Assessment was conducted on 20 September, 2016, in accordance with the *Ontario Heritage Act* and the *Standards and Guidelines for Consultant Archaeologists (S & G)*. The entire Stage 2 study area was subject to a field survey conducted by means of a pedestrian survey at 5 m intervals, and test pit survey at 5 m intervals. During the course of the survey, one pre-contact findspot was documented. Findspot P1 consisted of an undiagnostic biface fragment.

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

1. Given the isolated and non-diagnostic nature of pre-contact findspot P1, this location does not exhibit cultural heritage value or interest and may be considered free of archaeological concern;
2. The study area for the Fergus Industrial Park, Stormwater Management Strategy, has been fully documented and no further archaeological assessment is required on these lands; and,
3. Should the proposed work extend beyond the current study area, further archaeological assessment must be conducted to determine the archaeological potential of the surrounding lands.



PROJECT PERSONNEL

<i>Senior Project Manager:</i>	Andrew Riddle, PhD (P347) <i>Senior Archaeologist, Manager (Project West)</i> <i>Environmental Assessment Division</i>
<i>Project Coordinator:</i>	Sarah Jagelewski, Hon BA (R405) <i>Staff Archaeologist, Assistant Manager</i> <i>Environmental Assessment Division</i>
<i>Project Director (Licensee):</i>	Katie Hull, PhD (P128) <i>Senior Archaeologist, Manager of Historical Archaeology,</i> <i>Environmental Assessment Division</i>
<i>Field Director:</i>	Robb Bhardwaj, MA (P449)
<i>Field Archaeologists:</i>	Ella Boswell Alex Boyle Adam Burwell Marshall Vince
<i>Report Preparation:</i>	Michael Brand, PhD (P160) <i>Staff Archaeologist</i>
<i>Graphics:</i>	Blake Williams, MLitt (P383) <i>Staff Archaeologist & Geomatics Specialist</i>
<i>Report Reviewers:</i>	Jessica Lytle, MSc (P1066) <i>Staff Archaeologist</i> Andrew Riddle



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1.0 PROJECT CONTEXT

1.1 Development Context

ASI was contracted by Triton Engineering Services Ltd., on behalf of the Township of Centre Wellington, to conduct a Stage 2 Property Assessment as part of the Northeast Fergus Industrial Park Stormwater Management Strategy, Schedule B, Municipal Class Environmental Assessment (EA), located in part of Lot 10, Concession 1, Town of Fergus, Township of Centre Wellington, County of Wellington, Ontario (Figure 1). This project involves reviewing the storm drainage requirements for the Northeast Industrial Park on Gregson Court in Fergus and providing a strategy to address the stormwater management needs for the area. The Stage 1 report identified the entire subject property, approximately 1.8 ha in size, as having archaeological potential and requiring Stage 2 assessment (ASI 2016:10, Recommendation 1). The results of the Stage 2 Archaeological Assessment are the subject of this report.

This assessment was conducted under the senior project management of Andrew Riddle (P347) and project direction of Katie Hull (P128), both of ASI. All activities carried out during this assessment have been undertaken as required by the *Environmental Assessment Act*, RSO (1990) and regulations made under the Act, and are therefore subject to all associated legislation. This project is being conducted under the Municipal Class EA process. In addition, all activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (MTC 2005), and the S & G (MTC 2011).

Permission to carry out all activities necessary for the completion of the assessment was granted by Triton Engineering Ltd. on September 19, 2016.

The objectives of this report are:

- To document all archaeological resources in the study area;
- To determine whether the study area contains archaeological resources with cultural heritage value or interest that would require further assessment; and,
- To recommend appropriate Stage 3 assessment strategies for any archaeological sites identified.

This report describes the Stage 2 Property Assessment that was conducted for this project and is organized as follows: Section 1.0 describes the project context and summarizes the background study that was conducted to provide the historical and archaeological contexts for the project study area; Section 2.0 describes the field methods used during the archaeological assessment; Section 3.0 summarizes the results of the property assessment and describes any archaeological resources recovered during the property survey; Section 4.0 provides an analysis of the property assessment results, and evaluates the archaeological potential of the study area, and Section 5 provides recommendations; and the remaining sections contain other report information that is required by the *Standards and Guidelines for Consultant Archaeologists* (S & G) (Ministry of Tourism and Sport [MTC] 2011), as administered by the Ministry of Tourism, Culture and Sport (MTCS), e.g., advice on compliance with legislation, works cited, mapping and photo documentation.



1.2 Historical Context

A comprehensive summary of the pre-contact Aboriginal and Euro-Canadian occupations of the former Township of West Garafraxa is included in the Stage 1 report (ASI 2016, PIF P128-0134-2016). To summarize, background research indicates that the general vicinity of the study area has been attractive to human settlement for thousands of years, primarily by Aboriginal people, but more recently by Euro-Canadian settlers.

The study corridor is located in the Town of Fergus. Historically, the study corridor is located on part of Lot 10, Concession 1 in the former Township of West Garafraxa. The first township survey was undertaken in 1821 and settlers followed quickly, using the Grand River as the major transportation route until the construction of the Garafraxa Road. The Township separated into East and West in 1869 (Mika and Mika 1983:627-628). Fergus, situated on the banks of the Grand River, was incorporated as a village in 1858 and became a town in 1953 (Mika and Mika 1983:619-621).

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in proximity to the subject property, current land use and field conditions, and its environmental characteristics (including drainage, soils or surficial geology and topography, etc.).

1.3.1 Previous Archaeological Research

The previous Stage 1 archaeological assessment determined that no archaeological sites had been registered within the subject property or within one kilometre, and no previous archaeological assessments have been conducted within 50 metres of the subject property (ASI 2016). Since the completion of the Stage 1 report, no sites have been registered (MTCS 2016).

The previous Stage 1 archaeological assessment concluded the entire subject property possessed archaeological potential and should be subject to pedestrian survey at five metre transect intervals (ASI 2016:10).

1.3.2 Current Land Use and Field Conditions

The study area consists of approximately 1.8 ha of open and closed lands located in the northern portion of the Town of Fergus. Topography in the study area is comprised primarily of level to gently sloping terrain consisting of agricultural lands and scrub lands (Figure 2). The study area is bounded to the south by light density industrial areas and residential suburbs beyond. To the north, east, and west, the study area is surrounded by rural lands with agricultural land use and small forested tracts. There are pockets of disturbance outside of the study area, adjacent to Gregson Court. These consist of work yards, parking and storage areas, and structures. The study area remains undeveloped (Figure 2).



1.3.3 Physiography

The study area is situated within the Guelph Drumlin Field physiographic region of southern Ontario in a former spillway (Chapman and Putnam 1984). Within the Guelph Drumlin Field, there are approximately 300 drumlins of varying sizes. For the most part these hills are of the broad oval type with slopes less steep than those of the Peterborough drumlins and are not as closely grouped as those in some other areas. The till in these drumlins is loamy and calcareous, and was derived mostly from dolostone of the Amabel Formation, which can be found exposed below the Niagara Escarpment.

Spillways are former glacial meltwater channels that are typically broad troughs floored wholly or in part by gravel beds and are typically vegetated by cedar swamps in the lowest beds (Chapman and Putnam 1984:15). The surficial geology mapping demonstrates that the study area is underlain by deposits of sand, diamicton (poorly sorted sediments typically of glacial origin) and gravel. These sand deposits are glaciofluvial river deposits and delta topset facies. The diamicton deposits are stone-poor sandy silt to silty sand textured till on Paleozoic terrain. The gravel deposits are ice-contact stratified deposits and include deposits of sand/gravel and minor deposits of silt, clay and till (OGS 2010). Soils within the study area consist of Harriston loam (Dept. of Agriculture 1962), which occurs on moderately to gently rolling topography and are well drained.

1.3.4 Summary of Archaeological Context

The review of archaeological work conducted in the area demonstrated that no previously registered archaeological sites are located in the subject property, or within one kilometre of the study area. The study area is located adjacent to a wetland that is part of the Grand River drainage. The historical context demonstrates that the study area is located in proximity to three historical transportation routes, including a railway line.

2.0 FIELD METHODS

The Stage 2 Property Assessment was conducted on 20 September 2016 under the field direction of Robb Bhardwaj (P449) in accordance with the *Ontario Heritage Act* and the S & G (MTC 2011). Weather conditions for the assessment were appropriate for the completion of fieldwork, including ideal visibility and weather conditions.

The Stage 2 property assessment study area consists of approximately 1.8 ha located north of the end of Gregson Court, in the Town of Fergus (Figure 3). The study area is irregular in shape with a narrow projection off the southeast corner. Recommendation 1 of the Stage 1 report (ASI 2016:10; PIF 128-0134-2016), indicates that this area was considered to possess potential for archaeological resources.

2.1 Pedestrian Survey

Approximately 90% of the study area was assessed by pedestrian survey at 5 m intervals (Plate 1). All standards under section 2.1.1 Pedestrian Survey of the S & G were met. Ploughing was deep enough to provide total topsoil exposure, but not deeper than previous ploughing. Survey conditions were acceptable during all pedestrian survey. All ploughed lands were well weathered and ground surface visibility was



greater than 80% (Plates 2 and 3). When cultural material was encountered, a 20 metre by 20 metre area was walked at one metre intervals around the findspot to check for additional materials. Ploughzone soils were primarily brown (10YR 3/2) sandy loam, over a yellowish-brown (10YR 5/6), sandy loam subsoil.

2.2 Test Pit Survey

The remaining 10% of the study area was assessed by test pit survey at 5 m intervals (Plates 4 and 5). This area was not ploughed by the landowner due to its use as a grassed laneway. As its width is less than ten metres, it was subject to test pit survey at five metre intervals as per S & G Section 2.1.2, Standard 1f (Figure 3). All standards under section 2.1.2 Test Pit Survey of the S & G were met. Test pits were hand excavated at least 5 cm into subsoil and all topsoil was screened through 6 mm mesh to facilitate artifact recovery. Test pits were examined for stratigraphy, cultural features, and evidence of fill. All test pits were at least 30 cm in diameter. Upon completion, all of the test pits were backfilled. Intact profiles were found in all test pits (Plate 6), and typically consisted of approximately 52 cm of brown (10YR 3/2), sandy loam topsoil (Layer 1) over a yellowish-brown (10YR 5/6), clay loam subsoil (Layer 2).

Table 1: Master List of Layers

Layer	Composition	Munsell value	Interpretation
1	Brown silty loam	10YR 3/2	Undisturbed Topsoil
2	Yellowish brown clay loam	10YR 5/6	Subsoil

3.0 RECORD OF FINDS

During the course of the pedestrian survey, one pre-contact findspot was identified within the subject property.

3.1 Findspot P1

General Site Location: Findspot P1 is located east of Gartshore Street and north of Gregson Court, in the west half of the subject property. For detailed site location information, including GPS coordinates and detailed mapping see Table 2 and Figure 3.

Topography: The site is situated on level to gently sloping terrain within Guelph Drumlin Field physiographic region.

Features of Archaeological Potential: Adjacent to a wetland that is part of the Grand River drainage; located in proximity to three historical transportation routes, including a railway line.

Site Type: Pre-contact findspot of unknown cultural origin.

Field Conditions: Recently-ploughed agricultural field, greater than 80% surface visibility.

Site Size (approximate): 5 m (north-south) x 5 m (east-west).



Assessment Method: Pedestrian survey at 5 m intervals; this was reduced to 1 m transect intervals once the artifact was recovered, to a minimum of 20 metres beyond the limits of the findspot.

Density and Distribution: One biface fragment made of Onondaga chert (100% of artifacts were retained/collected).

Content Summary: Biface fragment was collected (Table 3).

General Collection Description: One non-diagnostic biface fragment made of Onondaga chert (Plate 7).

Site Interpretation: The presence of a non-diagnostic Onondaga biface fragment does not represent a pre-contact occupation.

Has CHVI been sufficiently assessed and documented in Stage 2: Yes

Recommendations: No further assessment is required.

Justification: Does not meet the requirements of Section 2.2, Standard 1 (a) of the S & G.

Table 2: Findspot P1 Location Information

GPS Model & Type:	Garmin Dakota 10		
UTM Grid Zone: 17T	Datum: NAD 83	Method of Correction: None	
Site	UTM Co-ordinates	Error (\pm x m)	Site Datum (Grid Co-ordinate) and/or Location information
P1	549617, 4841770	5	Findspot P1 – center
Off site datum	549590, 4841505	5	East end of Gregson Court.

Table 3: Findspot P1 Lithic Catalogue

Cat #	Qty	Provenience	Artifact Type	Material	Comments
L1	1	Surface	Biface	Onondaga	undiagnostic; refined; distal fragment

3.2 Documentary and Material Record

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

Table 2 provides an inventory and location of the documentary and material record for the project in accordance with the S & G, Sections 6.7 and 7.8.2.3.



Table 4: Inventory of Documentary and Material Record

Document/Material	Location	Comments
Written Field Notes, Annotated Field Maps, GPS Logs, etc.	ASI, 528 Bathurst Street, Toronto, ON M5S 2P9	Field notes hard copy, GPS data (digital)
Field Photography (Digital)	As above	Stored on ASI network servers and/or CD-ROM
Research/Analysis/Reporting Materials (Various Formats)	As above	Hard copy and/or digital files stored on ASI network servers and/or CD-ROM
Artifacts	As above	The artifact is stored in a 12.7 cm x 20.32 cm plastic bag.

4.0 ANALYSIS AND CONCLUSIONS

ASI was contracted by Triton Engineering Services Ltd. on behalf of the Township of Centre Wellington, to conduct a Stage 2 Property Assessment as part of the Municipal Class Environmental Assessment of Northeast Fergus Industrial Park, Stormwater Management Strategy, Part of lot 10, Concession 1 (former Township of West Garafraxa), Town of Fergus, Township of Centre Wellington, County of Wellington, Ontario (Figure 1). The study area is approximately 1.8 ha in size.

The Stage 1 background assessment determined that no archaeological sites had been recorded in the study area, or within one kilometre of the subject property. The Stage 1 report concluded that the subject property encompasses an area that exhibits potential for the presence of pre-contact Indigenous and Euro-Canadian archaeological resources based on its proximity to a wetland that is part of the Grand River drainage, and to three historical transportation routes.

The Stage 2 assessment was conducted by means of pedestrian survey at 5 m intervals and test pit survey at 5 m intervals. During the course of pedestrian survey, one pre-contact findspot was identified.

In evaluating the requirements for Stage 3 assessment of the pre-contact findspot documented during the Stage 2 assessment, Section 2.2 of the S & G states:

Artifacts, groups of artifacts or archaeological sites meeting the following criteria require Stage 3 assessment:

a. pre-contact diagnostic artifacts or a concentration of artifacts (or both):

i. within a 10 m by 10 m pedestrian survey area:

- (1) at least one diagnostic artifact or fire-cracked rock in addition to two or more non-diagnostic artifacts*
- (2) in area east or north of the Niagara Escarpment, at least five non-diagnostic artifacts*



(3) *in areas on or west of the Niagara Escarpment , at least 10 non-diagnostic artifacts*

Based on the above, findspot P1 does not exhibit cultural heritage value or interest, and does not meet the criteria for Stage 3 assessment.

5.0 RECOMMENDATIONS

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

1. Given the isolated and non-diagnostic nature of pre-contact findspot P1, this location does not exhibit cultural heritage value or interest and may be considered free of any further archaeological concern;
2. The study area has been fully documented and no further archaeological assessment is required on these lands; and,
3. Should the proposed work extend beyond the current study area, further archaeological assessment must be conducted to determine the archaeological potential of the surrounding lands.

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

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

In addition, the following advice on compliance is provided:

- This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, RSO 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations ensure the conservation, preservation and protection of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the MTCS, a letter will be issued by the Ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development;
- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological field work on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or



interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*;

- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the *Ontario Heritage Act*; and,
- The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the police or coroner.

7.0 BIBLIOGRAPHY

ASI (Archaeological Services Inc.)

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Mika, N. and H. Mika

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- 2011 *Standards and Guidelines for Consultant Archaeologists*. Cultural Programs Branch, Ontario Ministry of Tourism and Culture, Toronto.

Ministry of Tourism, Culture and Sport (MTCS)

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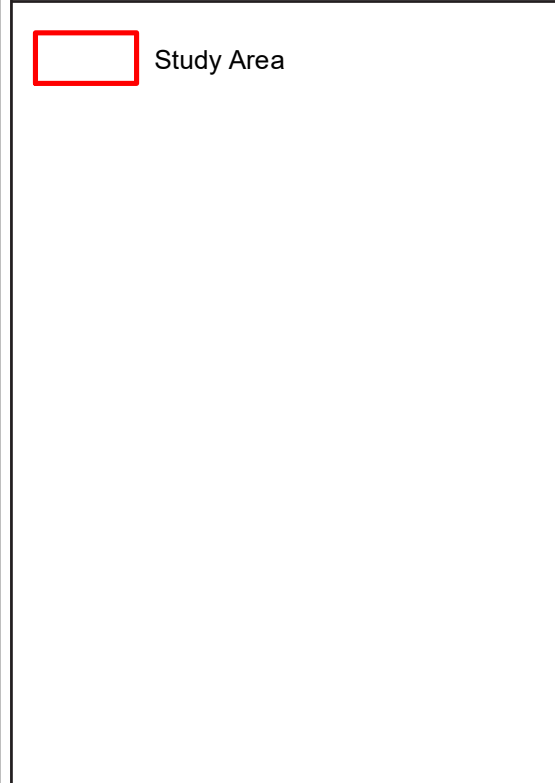
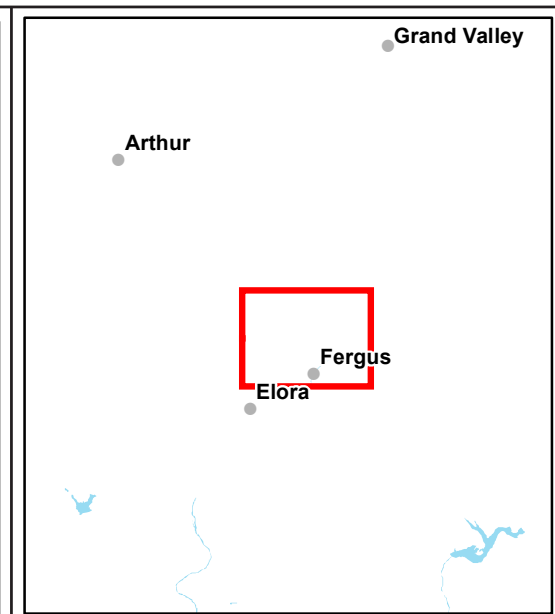
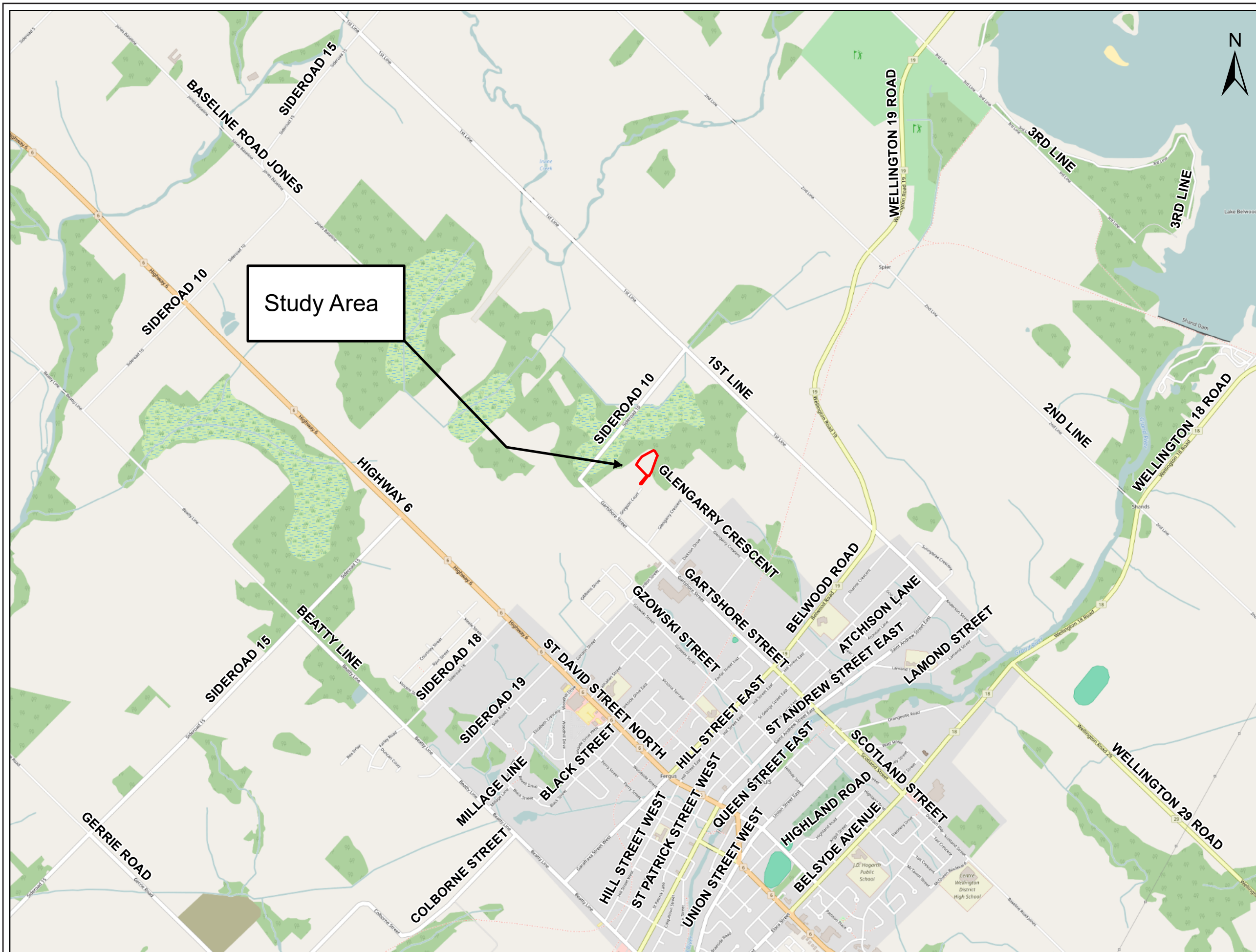
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8.0 MAPPING





BASE:
 (c) OpenStreetMap and contributors,
 Creative Commons-Share Alike
 License (CC-BY-SA)

0 1.5
 Kilometres

ASI PROJECT NO.: 16EA-181 DRAWN BY: BW
 DATE: 17 Oct 2016 FILE: 16EA181_Fig1

Archaeological & Cultural Heritage Services
 528 Bathurst Street Toronto, ONTARIO M5S 2P9
 416-966-1069 | F416-966-9723 | asiheritage.ca

Figure 1: Northeast Fergus Industrial Park, Stormwater Management Strategy Study Area Location.



Archaeological & Cultural Heritage Services
 528 Bathurst Street Toronto, ONTARIO M5S 2P9
 416-966-1069 | 416-966-9723 | asiheritage.ca



Study Area



Archaeological Potential

BASE:

Google Earth
 Apr 22 2016
 Captured Jun 1 2016

0 100

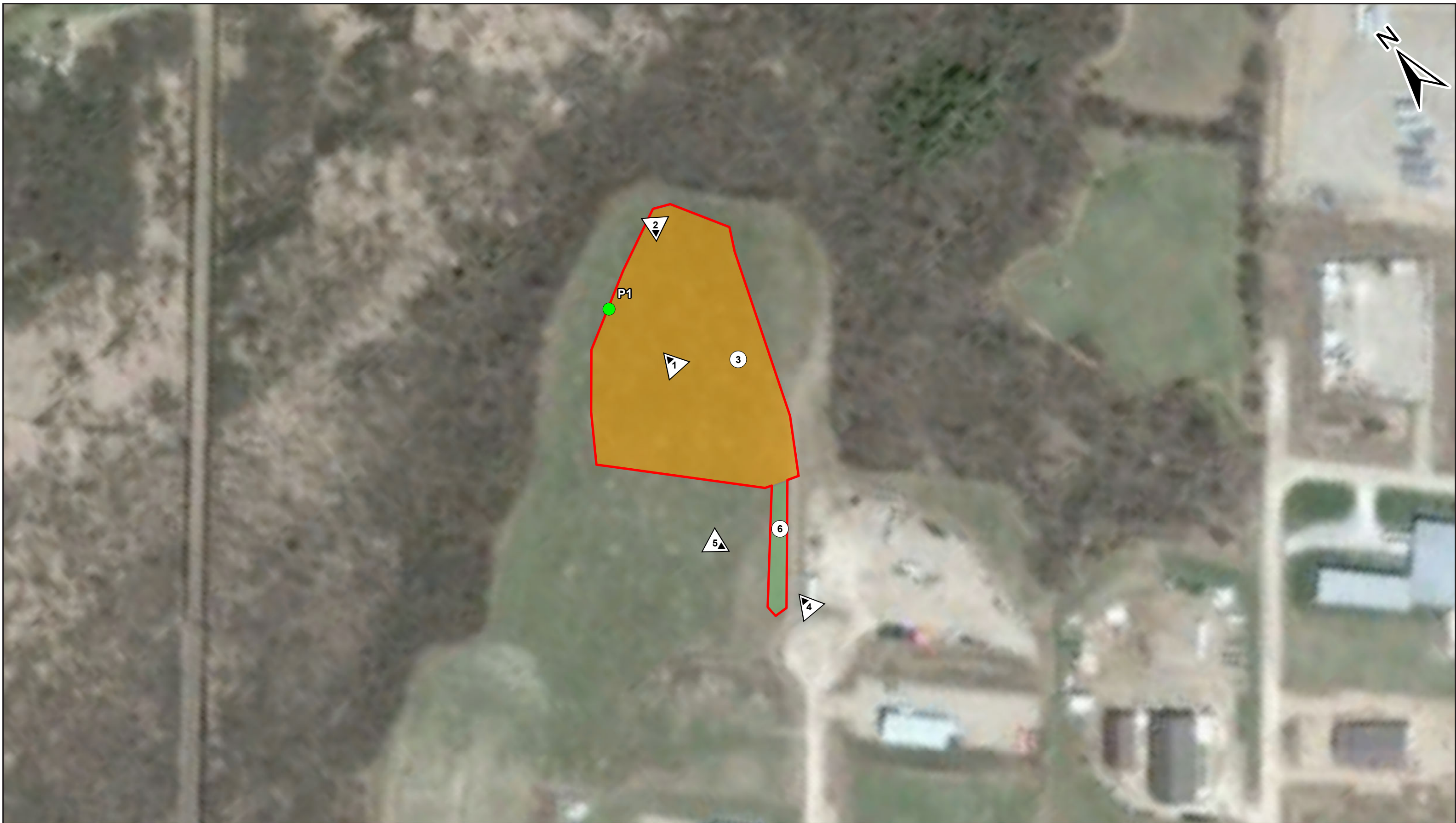


Metres







ASI PROJECT NO.: 16EA-181
 DATE: 17 Oct 2016

DRAWN BY: BW
 FILE: 16EA181_Fig2_Stg1


Figure 2: Stage 1 Archaeological Assessment Summary.




Archaeological & Cultural Heritage Services
 528 Bathurst Street Toronto, ONTARIO M5S 2P9
 416-966-1069 | 416-966-9723 | asiheritage.ca

 Study Area	 Photo of Soil/Test Pit	 Test pitted at 5 m Intervals
 Photo Plate and Orientation	 Pedestrian Survey at 5 m Intervals	 Archaeological Site

BASE:
 Google Earth
 Apr 22 2016
 Captured Jun 1 2016

0 100

Metres

ASI PROJECT NO.: 16EA-181 DRAWN BY: BW
 DATE: 25 Oct 2016 FILE: 16EA181_Fig3_Stg2

Figure 3: Stage 2 Property Assessment Results.

9.0 IMAGES



Plate 1: View northwest at pedestrian survey at 5 m intervals in the general direction of P1 findspot.



Plate 2: View South from north end of study area showing field conditions.



Plate 3: Close-up of weathering conditions in ploughed field.



Plate 4: View north showing crew undertaking test pit survey at 5 m intervals in grassed laneway.



Plate 5: View east showing crew undertaking test pit survey at a 5 m intervals.



Plate 6: View of undisturbed test pit showing layers 1 and 2.



Plate 7: Biface fragment from findspot P1.

NOTICE OF COMPLETION

Notice Circulation List

Sample Agencies and Stakeholders letters

Township of Centre Wellington
NORTHEAST FERGUS INDUSTRIAL PARK
STORMWATER MANAGEMENT STRATEGY
Class Environmental Assessment

OFFICIAL CONTACT LIST

	Agency	Contact Information
1	Ministry of Environment & Climate Change Environmental Assessment and Approvals Branch (EAAB) 135 St. Clair Avenue West, 1 st Floor Toronto, Ontario M4V 1P5	Director, Class EA's and Declaration Section
2	Ministry of Environment & Climate Change Hamilton Regional Office 12 th Floor, 119 King Street West Hamilton, Ontario L8P 4Y7	Ms. Barbara Slattery EA/Planning Co-Ordinator barbara.slattery@ontario.ca
3	Ministry of Environment & Climate Change Guelph District Office 1 Stone Road West Guelph, Ontario N1G 4Y2	Manpreet Dhesi, Water Inspector manpreet.dhesi@ontario.ca 519-826-4279 (direct line)
4	Ministry of Tourism, Culture & Sport Culture Division 401 Bay Street, Suite 1700 Toronto, Ontario M7A 0A7	Joseph Muller, Heritage Planner Joseph.Muller@ontario.ca Rosi Zirger, Heritage Planner Rosi.zirger@ontario.ca 416-314-7159
5	Ministry of Natural Resources and Forestry (MNRF) Guelph District Office 1 Stone Road West Guelph, Ontario N1G 4Y2	McKenna, Tara, District Planner Tara.McKenna@ontario.ca 519-826-4912 Thompson, Melinda (MNRF), Management Biologist Melinda.Thompson@ontario.ca 519-826-6543 David Marriott, District Planner david.marriott@ontario.ca 519-826-4926 (direct line)
6	Grand River Conservation Authority 400 Clyde Road Box 729 Cambridge, Ontario N1R 5W6	Jason Wagler, MCIP, RPP Resource Planner, Resource Management Division jwagler@grandriver.ca 519-621-2761
7	County of Wellington 74 Woolwich Street Guelph, Ontario N1H 3T9	Aldo Salis, Senior Planner aldos@wellington.ca 519-837-2600
8	Six Nations Land and Resources 2498 Chiefswood Road P.O. Box 5000 Ohsweken, Ontario N0A 1M0	Paul General, Manager E: pgeneral@sixnations.ca Joanne Thomas, Consultation Supervisor E: jthomas@sixnations.ca
9	Ministry of Aboriginal Affairs 4 th Floor, 160 Bloor Street East Toronto, Ontario M7A 2E6	Pauline Wakegijig, Policy Advisor Consultation Unit E: Pauline.wakegijig@ontario.ca

10	Township of Centre Wellington Planning & Development Department 1 MacDonald Square Elora, Ontario N0B 1S0	Mariana Iglesias, Planner miglesias@centrewellington.ca cc: Brett Salmon, Managing Director of Planning & Development
	Stakeholders	Contact
	H & R Machine, 201 Gregson Court, P.O. Box 274 Fergus, Ontario N1M 2W8	Attention: Jamie Hiller hrmachine@bellnet.ca Mr. Fred Hiller c/o 36 Stanley Crescent Elora, Ontario N0B 1S0 fhiller@hrmachine.ca
	Acorn Stair and Railing Company 131 Gregson Court, Fergus, Ontario N1M 2W4	Mr. Bob Vasey, Owner acornstairs@hotmail.com
	Wightman Telecom, (Re: 105 Gregson Court, Fergus) P.O. Box 70, 100 Elora Street North CLIFFORD, Ontario N0G 1M0	Mr. Paul Rhody, Manager, Access Network Design prhody@wightman.ca



**TRITON
ENGINEERING
SERVICES
LIMITED**

Consulting Engineers

105 Queen Street West, Unit 14
Fergus
Ontario N1M 1S6
Tel: (519) 843-3920
Fax: (519) 843-1943
e-mail: info@tritoneng.on.ca

ORANGEVILLE • FERGUS • GRAVENHURST

January 18, 2017

Ministry of Environment and Climate Change
Environmental Assessment and Approvals Branch (EAAB)
135 St. Clair Avenue West, 1st Floor
TORONTO, Ontario
M4V 1P5

ATTENTION: Director,
Class EA's and Declaration Section

RE: TOWNSHIP OF CENTRE WELLINGTON
NORTHEAST INDUSTRIAL PARK, FERGUS
STORMWATER MANAGEMENT STRATEGY
CLASS ENVIRONMENT ASSESSMENT
NOTICE OF COMPLETION
OUR FILE: G2014A

Dear Sir/Madam:

The Township of Centre Wellington has completed the evaluation of stormwater management options to service existing and future development within the Northeast Industrial Park (Park) in Fergus. This project was planned as a Schedule B, Class Environmental Assessment (Class EA) under Ontario's Municipal Class Environmental Assessment (October 2000 as amended in 2007 and 2011) process.

Attached is a summary of the Class EA process for reference. This summary outlines Problem/Opportunity Statement, background, investigations, options considered including evaluation highlights for each, and description of Recommended Option. The Township is proposing to proceed with the preferred solution as outlined in the attached Notice of Completion. This notice will also be advertised in the local newspaper for two consecutive weeks.

Please provide written comment by February 20, 2017. If concerns arise regarding this project, which cannot be resolved in discussion with the Township, a person or party may request the Ministry/Minister of the Environment and Climate Change to order a change in the project status and require a higher level of assessment (referred to as a Part II Order). Requests must be received by the Minister within 30 days of this Notice being first issued. A copy of the request must be sent to the Township's Managing Director of Infrastructure.



Should you have any questions or require additional information, please contact the undersigned.

Yours very truly,

TRITON ENGINEERING SERVICES LIMITED

Ray D. Kirtz, P. Eng.
Project Manager

RDK/sjp

Encl.: Notice of Project Completion, Summary of Class EA Process

cc: Colin Baker, Managing Director of Infrastructure, Township of Centre Wellington





**TRITON
ENGINEERING
SERVICES
LIMITED**

Consulting Engineers

105 Queen Street West, Unit 14
Fergus
Ontario N1M 1S6
Tel: (519) 843-3920
Fax: (519) 843-1943
e-mail: info@tritoneng.on.ca

ORANGEVILLE • FERGUS • GRAVENHURST

January 18, 2017

Mr. Bob Vasey
Acorn Stair & Railing Company
131 Gregson Court
Fergus, ON N1M 2W4
Email: acornstairs@hotmail.com

RE: TOWNSHIP OF CENTRE WELLINGTON
NORTHEAST INDUSTRIAL PARK, FERGUS
STORMWATER MANAGEMENT STRATEGY
CLASS ENVIRONMENTAL ASSESSMENT
NOTICE OF COMPLETION
OUR FILE: G2014A

Dear Mr. Vasey,

The Township of Centre Wellington has completed the evaluation of stormwater management options to service the existing and future development within the Northeast Industrial Park (Park) in Fergus. Based on this review, the Township is planning to proceed with the preferred solution as outlined in the enclosed the Notice of Completion, Schedule B, Class Environmental Assessment as planned under Ontario's Municipal Class Environmental Assessment (October 2000 as amended in 2007 and 2011). This Notice will also be advertised in the local newspaper for two (2) consecutive weeks.

We value your comments and input, please provide written comment by February 20, 2017. Should you have any questions, please contact the undersigned or the Township's Managing Director of Infrastructure.

Yours very truly,

TRITON ENGINEERING SERVICES LIMITED

Ray D. Kirtz, P.Eng.
Project Manager

RDK/sjp
Encl. Notice of Project Completion
cc: Colin Baker, Managing Director of Infrastructure, Township of Centre Wellington



NOTICE OF COMPLETION

The Wellington Advertiser Newspaper Notices

- ***To be published Friday, January 20, 2017***
- ***To be Published Friday, January 27, 2017***



Centre Wellington

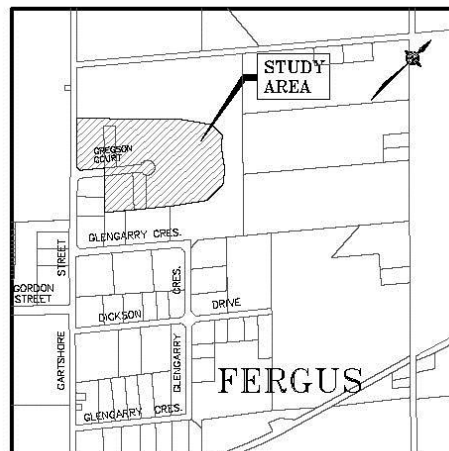
TOWNSHIP OF CENTRE WELLINGTON

CLASS ENVIRONMENTAL ASSESSMENT NORTHEAST FERGUS INDUSTRIAL PARK, STORMWATER MANAGEMENT STRATEGY NOTICE OF COMPLETION

The Township of Centre Wellington has completed a review of the storm drainage requirements for the Northeast Industrial Park on Gregson Court in Fergus. The review included delineation of drainage areas and consideration of stormwater management (SWM) options. Completion of the review has identified a preferred SWM strategy to address stormwater management needs for the Northeast Industrial Park.

The Process:

This project is being planned in accordance with the requirements of Schedule B of the Municipal Class Environmental Assessment (October 2000, as amended in 2007 and 2011) which is an approved process under the Ontario Environmental Assessment Act. The Class Environmental Assessment process includes public and approval agency consultation, identification and evaluation of alternatives to address the identified problem(s), an assessment of potential environmental effects and identification of reasonable measures to mitigate any adverse impacts that may result from the implementation of the project.



Preferred Alternative:

Subject to comments received as a result of this Notice, and the receipt of the necessary approvals, the Township of Centre Wellington intends to proceed with the implementation of Option C – Central SWM facility in conjunction with site specific SWM features. The Township is planning to construct a SWM facility at the northeast corner of the Northeast Industrial Park. Further, provisions for SWM will be included in the Site Plan Approval requirements for all future developments whose SWM needs have not been addressed by the Central SWM facility.

Project information can be found on the Township's website under the following link: www.centrewellington.ca/livehere/Pages/Environment/Environmental-Assessments.aspx and at the following location:

Township of Centre Wellington
Infrastructure Services Administration Office
7444 Wellington Road 21
Elora, ON N0B 1S0

Mon-Thurs: 8:00 am – 4:30 pm
Friday: 8:00 am – 11:00 am
Telephone: (519) 846-9691 ext. 905

Project Contacts:

Interested persons should provide written comment to both of the project team members listed below within 30 calendar days from the date that this Notice was first issued.

Colin Baker, P.Eng
Managing Director of Infrastructure Services
Township of Centre Wellington
7444 Wellington Road 21
Elora, ON N0B 1S0
T (519) 846-9691 ext. 357
E cbaker@centrewellington.ca

Ray Kirtz, P. Eng.
Project Manager
Triton Engineering Services Limited
105 Queen Street West, Unit 14
Fergus, ON N1M 1S6
T (519) 843-3920
E rkirtz@tritoneng.on.ca

Part II Orders:

If concerns arise regarding this project, which cannot be resolved in discussion with the Township, a person or party may request the Ministry/Minister of the Environment and Climate Change to order a change in the project status and require a higher level of assessment (referred to as a Part II Order). Requests must be received by the Minister within 30 days of this Notice being first issued. The Part II Order request must be sent to:

Township of Centre Wellington
Infrastructure Services
7444 Wellington Road 21
Elora, Ontario
N0B 1S0

and;

Ministry/Minister of the Environment and Climate Change
77 Wellesley Street West
11th Floor
Toronto, Ontario
M7A 2T5

and;

Director, Environmental Approvals Branch
Ministry of the Environment and Climate Change
135 St. Clair Ave West,
1st Floor
Toronto ON M4V 1P5

If there are no Part II Order requests received by February 20, 2017, the project is deemed approved under the Environmental Assessment Act and the Township may proceed with the design and construction of the project, subject to obtaining the necessary approvals for the work.

Please note, that all personal information included in a submission – such as name, address, telephone number, and property location – unless stated otherwise in the submission, will be collected and maintained by the Ministry of the Environment and Climate Change, under the authority of the Environmental Assessment Act, for consultative purposes and for the purpose of creating a public record that will be available for viewing to the general public. The collection, use and dissemination of this information are governed by the Freedom of Information and Protection of Privacy Act.

This Notice first issued January 20, 2017.