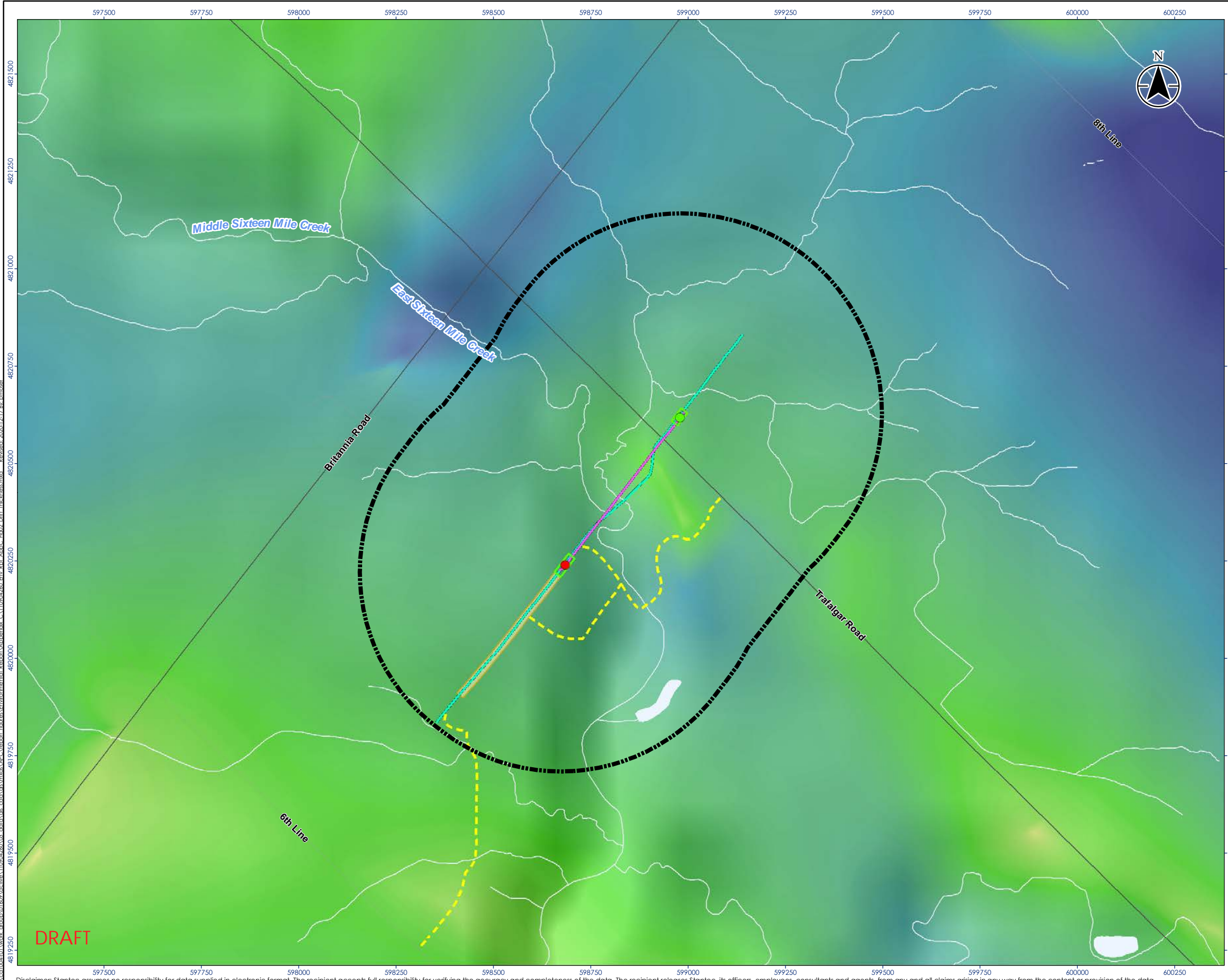


## **APPENDIX C: EXISTING CONDITIONS FIGURES**





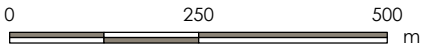


Legend

- Project Study Area
- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Expressway / Highway
- Major Road
- Minor Road
- Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area

Drift Thickness (m)

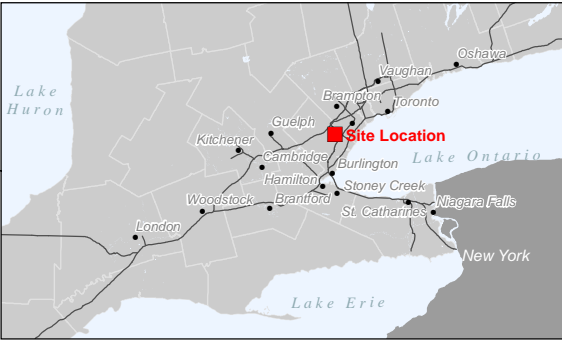
- High : 20
- Low : 5



1:10,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.
3. Drift thickness data source: Gao, C., Shiota, J., Kelly, R.J., Brunton, F.R. and van Haften, S. 2006. Bedrock topography and overburden thickness mapping, Southern Ontario; Ontario Geological Survey, Miscellaneous Release—Data 207.



Project Location: Town of Milton  
110904260 REVA  
Prepared by PRM on 2020-12-17  
Technical Review by MC on 2020-12-17

Client/Project:  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
SUN - E16M PIPE REPLACEMENT

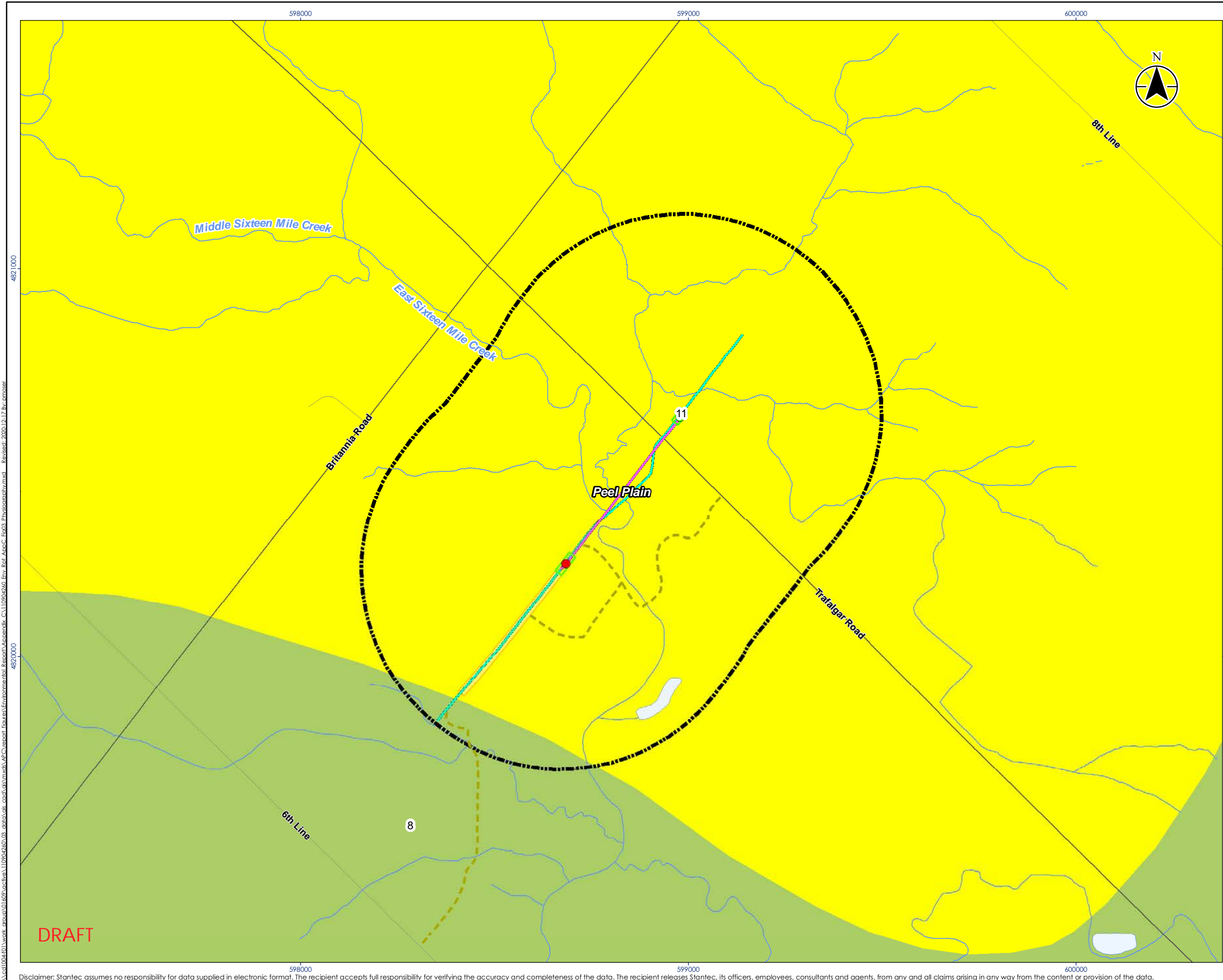
Figure No.: 2

DRAFT

Title:  
Drift Thickness

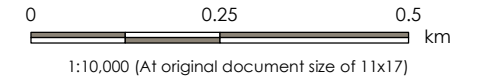
DRAFT



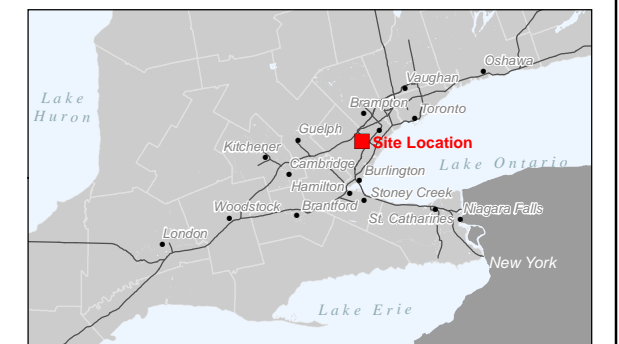


Legend

- Project Study Area
- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Major Road
- Minor Road
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Physiography
  - 8: Bevelled Till Plains
  - 11: Sand Plains



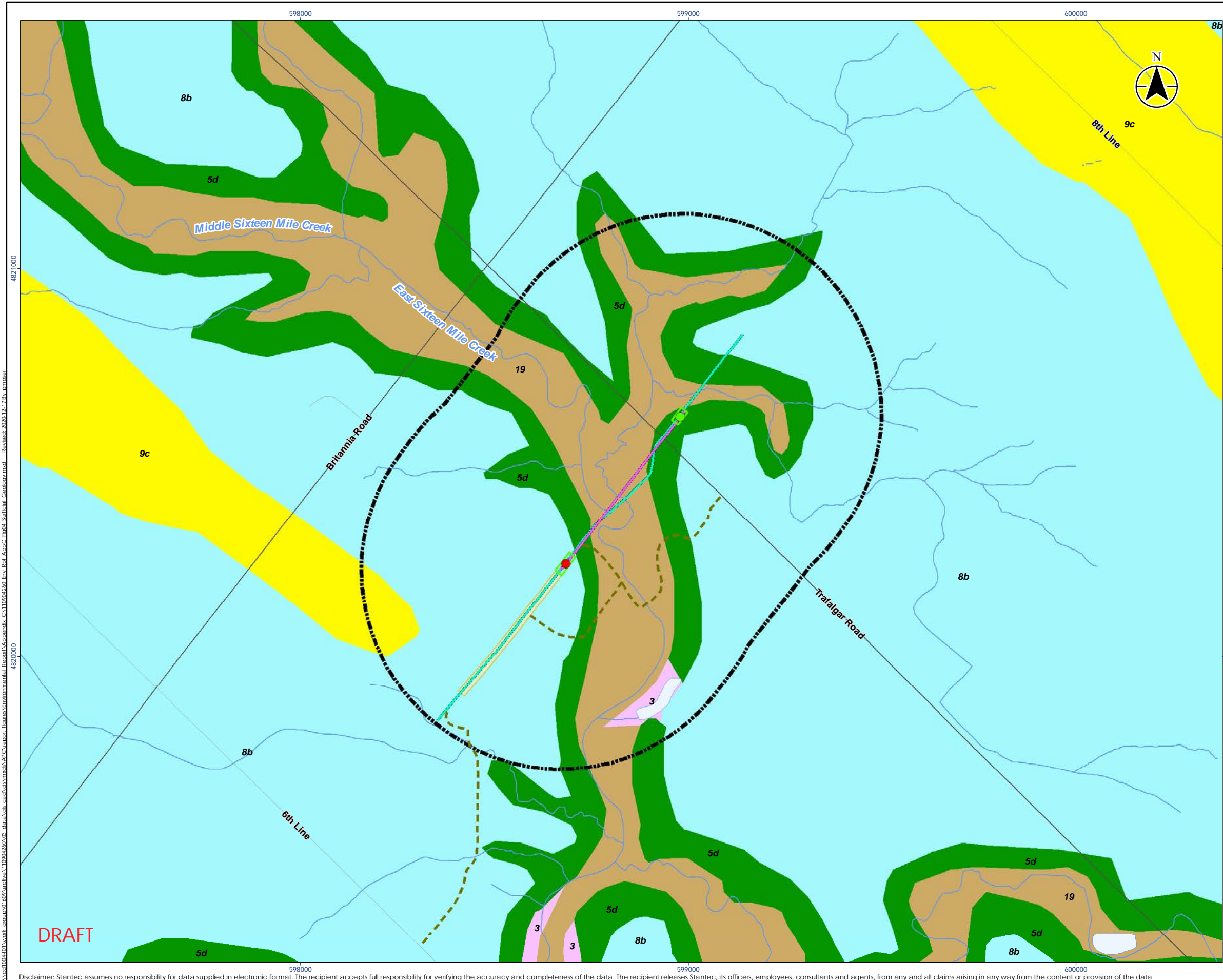
- Notes
- Coordinate System: NAD 1983 UTM Zone 17N
  - Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.
  - Physiography data source: Chapman, L.J. and Putnam, D.F. 2007. Physiography of southern Ontario; Ontario Geological Survey, Miscellaneous Release—Data 228.



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Technical Review by MC on 2020-12-27

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NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.: 3  
Title: Physiography  
**DRAFT**



Legend

- Project Study Area
- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Expressway / Highway
- Major Road
- Minor Road
- Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area

Surficial Geology

- 19: Modern alluvial deposits
- 9c: Coarse-textured glaciolacustrine deposits (Foresore-basinal deposits)
- 8b: Fine-textured glaciolacustrine deposits (Interbedded flow till, rainout deposits and silt and clay)
- 5d: Glaciolacustrine-derived silty to clayey till
- 3: Paleozoic bedrock

0 250 500 Meters

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Notes

- Coordinate System: NAD 1983 UTM Zone 17N
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- Surficial geology data source: Ontario Geological Survey 2010. Surficial geology of Southern Ontario: Ontario Geological Survey, Miscellaneous Release--Data 128-REV ISBN 978-1-4435-2483-4.

Project Location  
Town of Milton

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Technical Review by MC on 2020-12-17

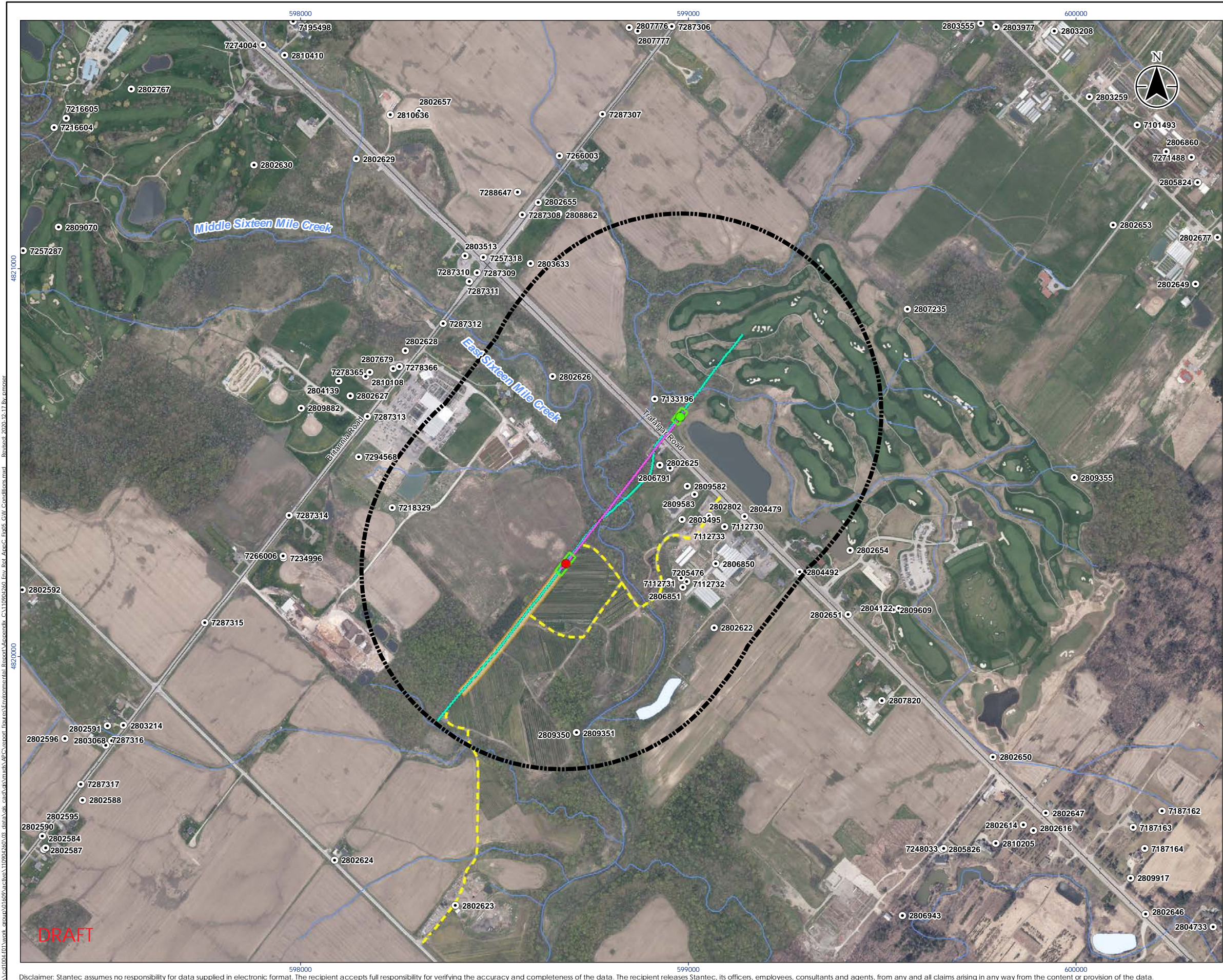
Client/Project  
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NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.  
4

Title  
Surficial Geology

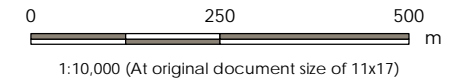
DRAFT





#### Legend

- Project Study Area
- HDD Entry Point
- HDD Exit Point
- Water Well Location
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Major Road
- Minor Road
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area



#### Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
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3. Orthoimagery © First Base Solutions, 2020. Imagery Date, 2019.
4. MECP water well record locations have been positioned based on published UTM coordinates and their locations should be considered approximate.



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Technical Review by MC on 2020-12-17

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NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

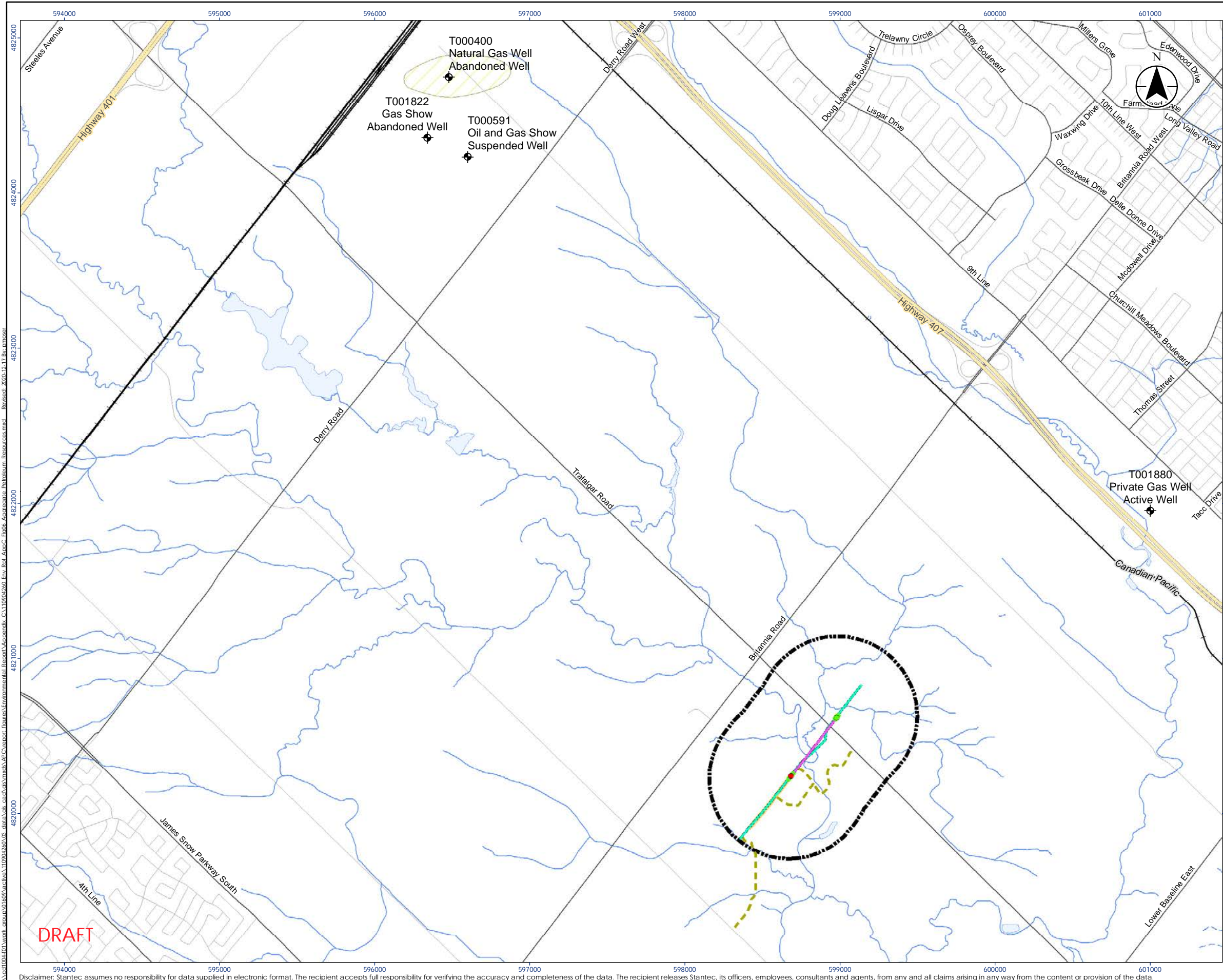
Figure No.: 5

Title: Groundwater Conditions

DRAFT

DRAFT



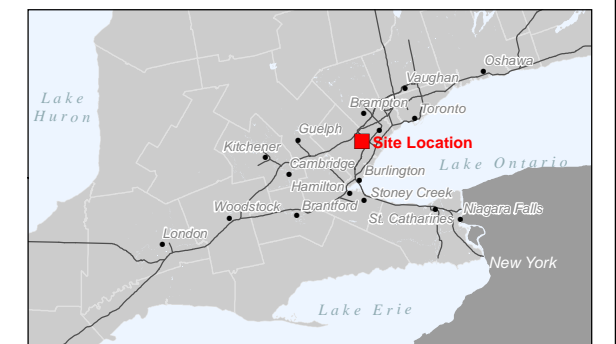


#### Legend

- Project Study Area
- HDD Entry Point
- HDD Exit Point
- Petroleum Well
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Expressway / Highway
- Major Road
- Minor Road
- Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Petroleum Pool
- Natural Gas Pool - Abandoned

0 500 1,000 m  
1:25,000 (At original document size of 11x17)

- Notes
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Technical Review by MC on 2020-12-17

Client/Project:  
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NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.: 6

Title: Aggregate and Petroleum Resources

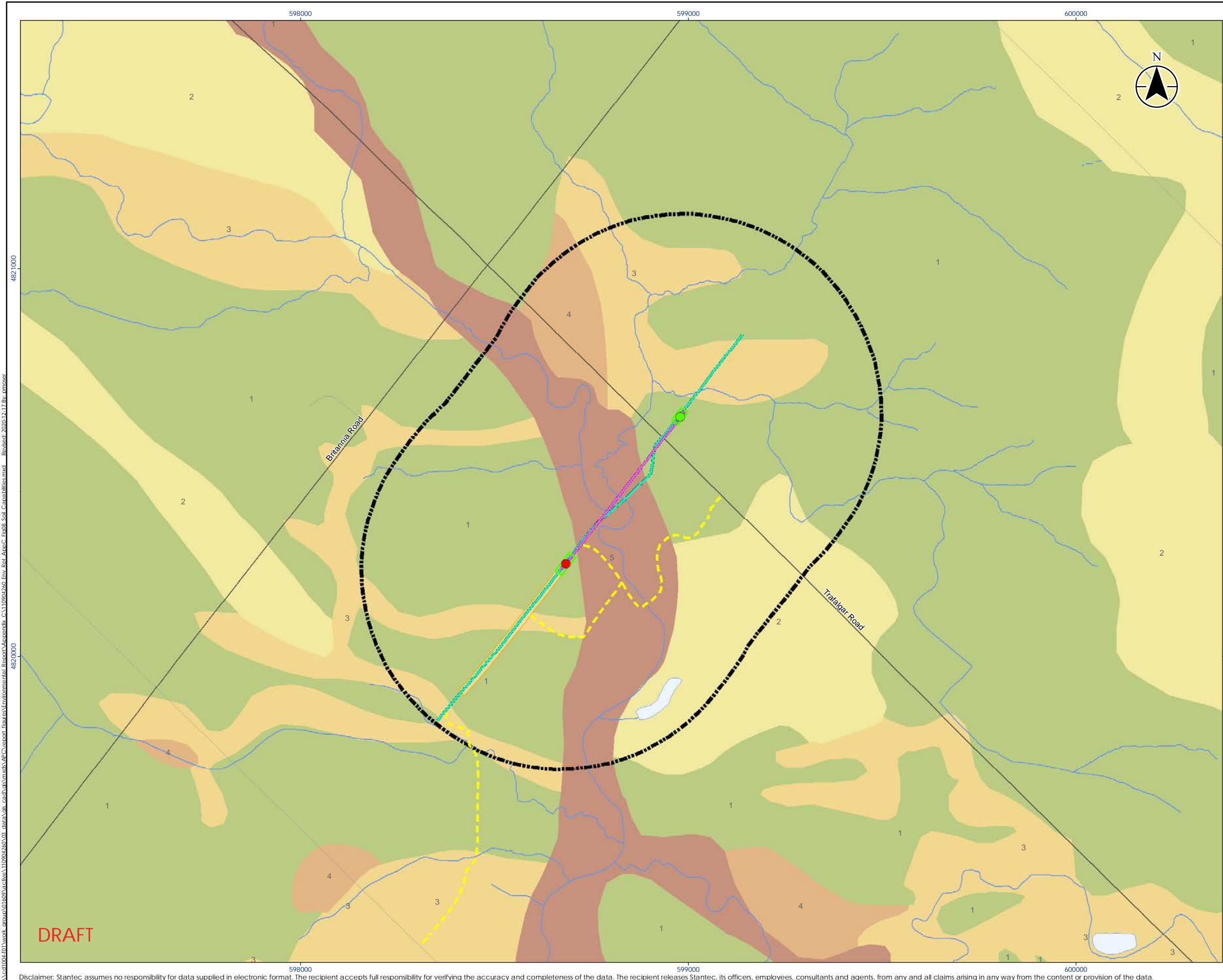
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DRAFT









Legend

- Project Study Area
- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area

Soil Capability Classification of Agriculture

- 1: Soils in this class have no significant limitations in use for crops
- 2: Soils in this class have moderate limitations that restrict the range of crops or require moderate conservation practices
- 3: Soils in this class have moderately severe limitations that restrict the range of crops or require special conservation practices
- 4: Soils in this class have severe limitations that restrict the range of crops or require special conservation practices
- 5: Soils in this class have very severe limitations that restrict their capability in producing perennial forage crops, and improvement practices are feasible

0 250 500 m

1:10,000 (At original document size of 11x17)

Notes

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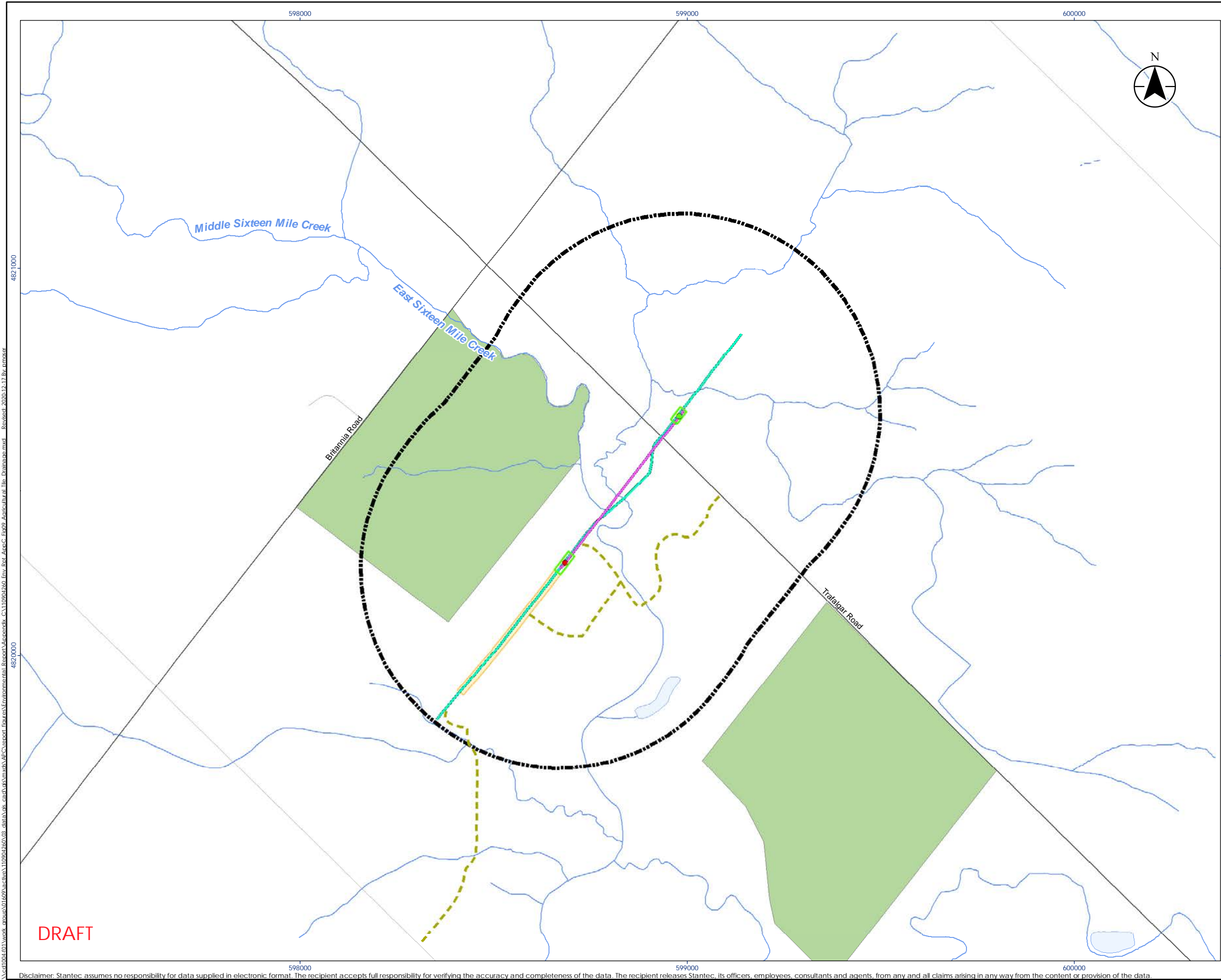
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110904260 REVA  
Prepared by PRM on 2020-12-17  
Technical Review by MC on 2020-12-17

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NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No. 8  
Title: Soil Capability

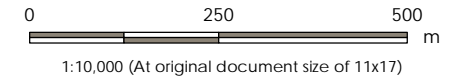
DRAFT





Legend

- Project Study Area
- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Major Road
- Minor Road
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Tile System Type**
  - Systematic



- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.



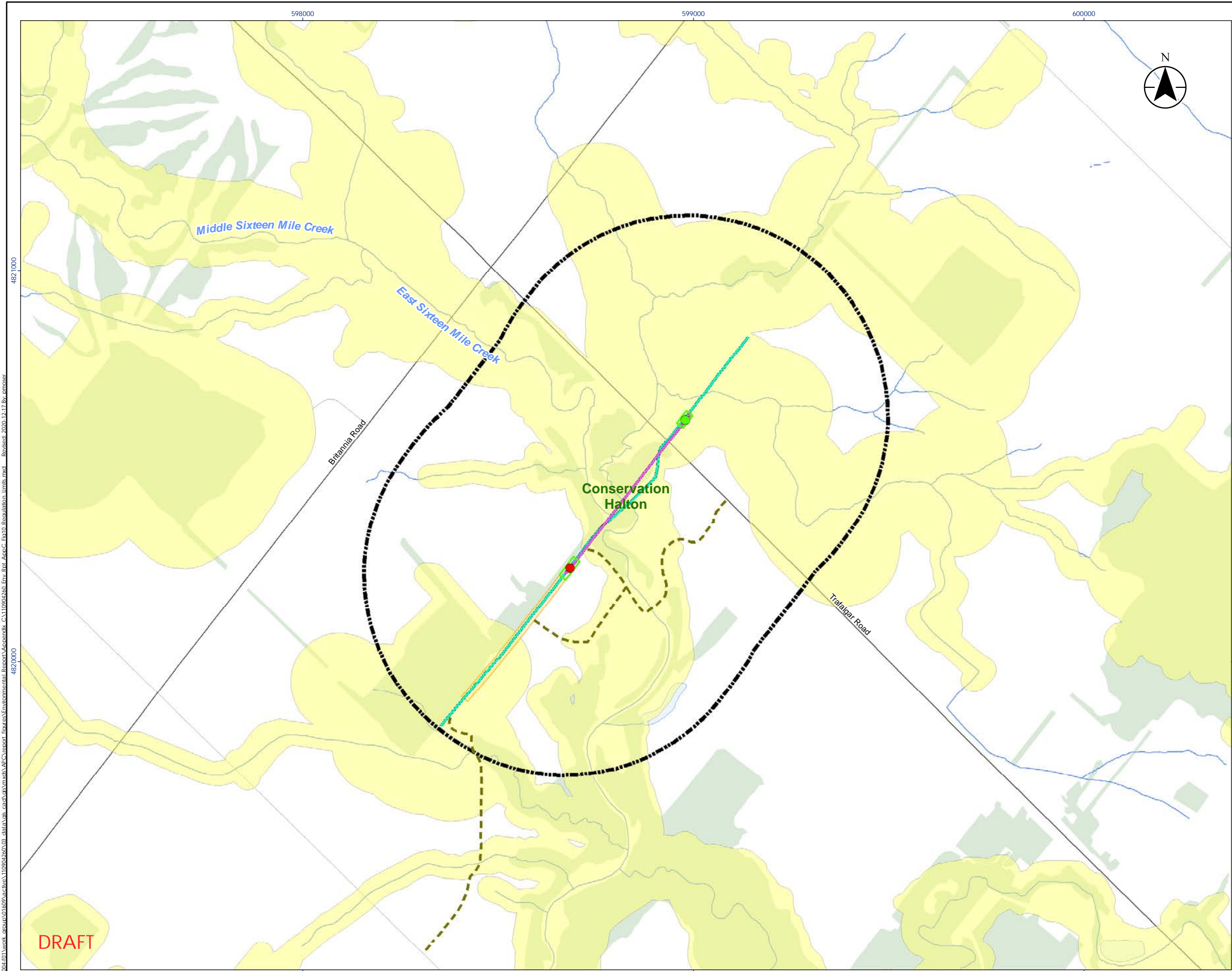
Project Location: Town of Milton  
110904260 REVA  
Prepared by PRM on 2020-12-17  
Technical Review by MC on 2020-12-17

Client/Project:  
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NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No. 9 **DRAFT**  
Title  
Agricultural Tile Drainage

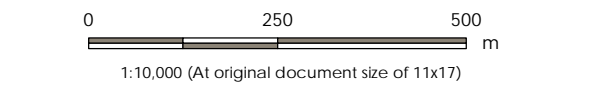
\\cd1004.f01\work\_group\01609\archive\110904260\03\_data\ok\_cad\st\msh\APC\report\_frares\Environmental Report\Appendix C\110904260\_Env\_Rpt\_Apoc\_E16M\_Creek\_Agricultural Tile Drainage.mxd - Revised: 2020-12-17 by amaser





**Legend**

- Study Area
- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Major Road
- Minor Road
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Wooded Area
- Regulated Area
- Drill Pad (Entry & Exit)
- Pipe Laydown Area



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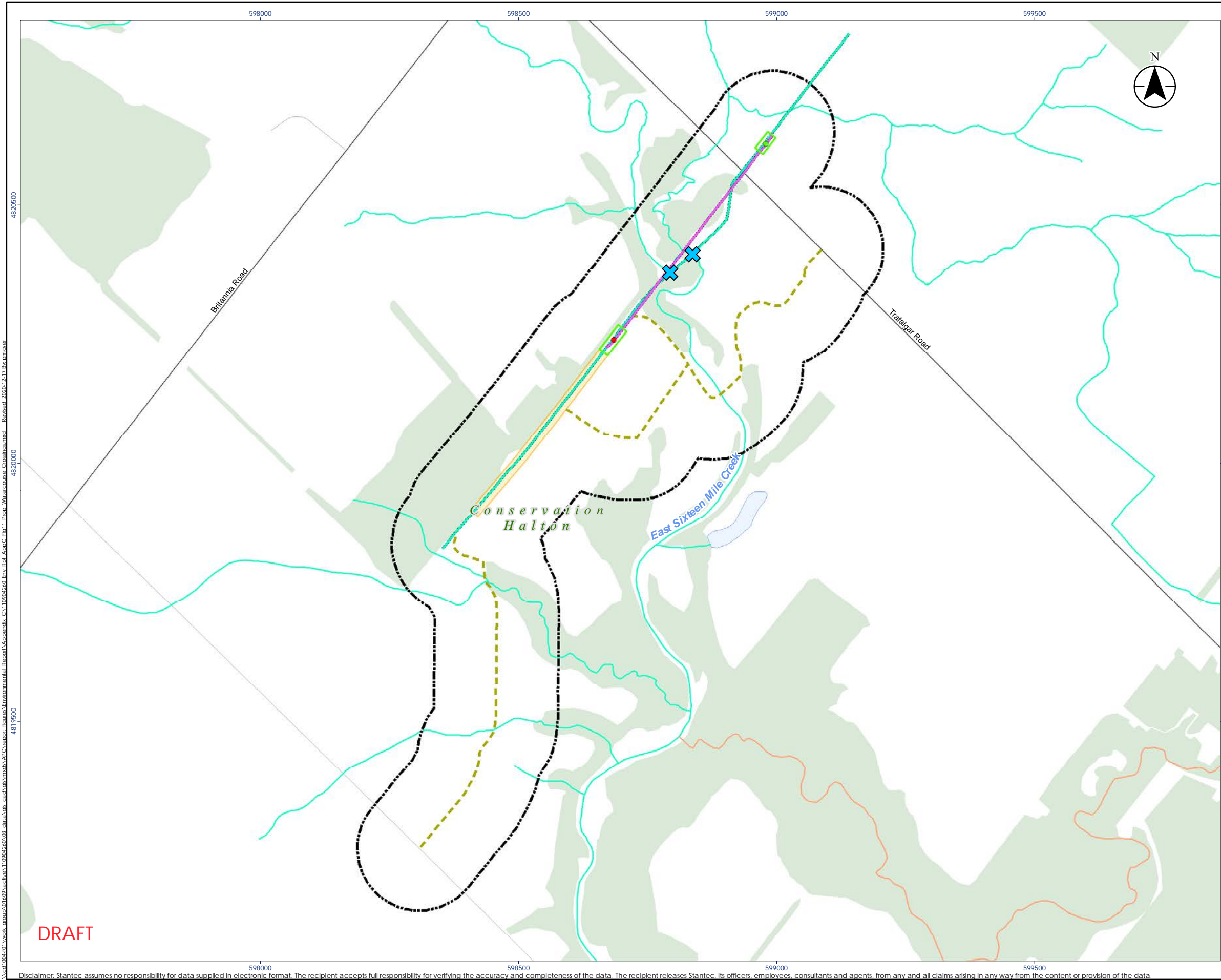
Client/Project  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.  
10

DRAFT

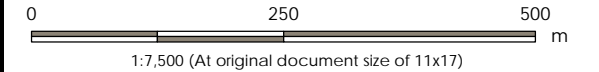
Title  
Regulation Limits





Legend

- Project Buffer (120 m)
- HDD Entry Point
- HDD Exit Point
- Watercourse Crossing
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Major Road
- Minor Road
- Thermal Regime, Cool
- Thermal Regime, Warm
- Watercourse (Permanent)
- Waterbody
- Wooded Area
- Conservation Area Administrative Boundary
- Drill Pad (Entry & Exit)
- Pipe Laydown Area



Notes

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Town of Milton

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Technical Review by MC on 2020-12-17

Client/Project

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NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.  
11

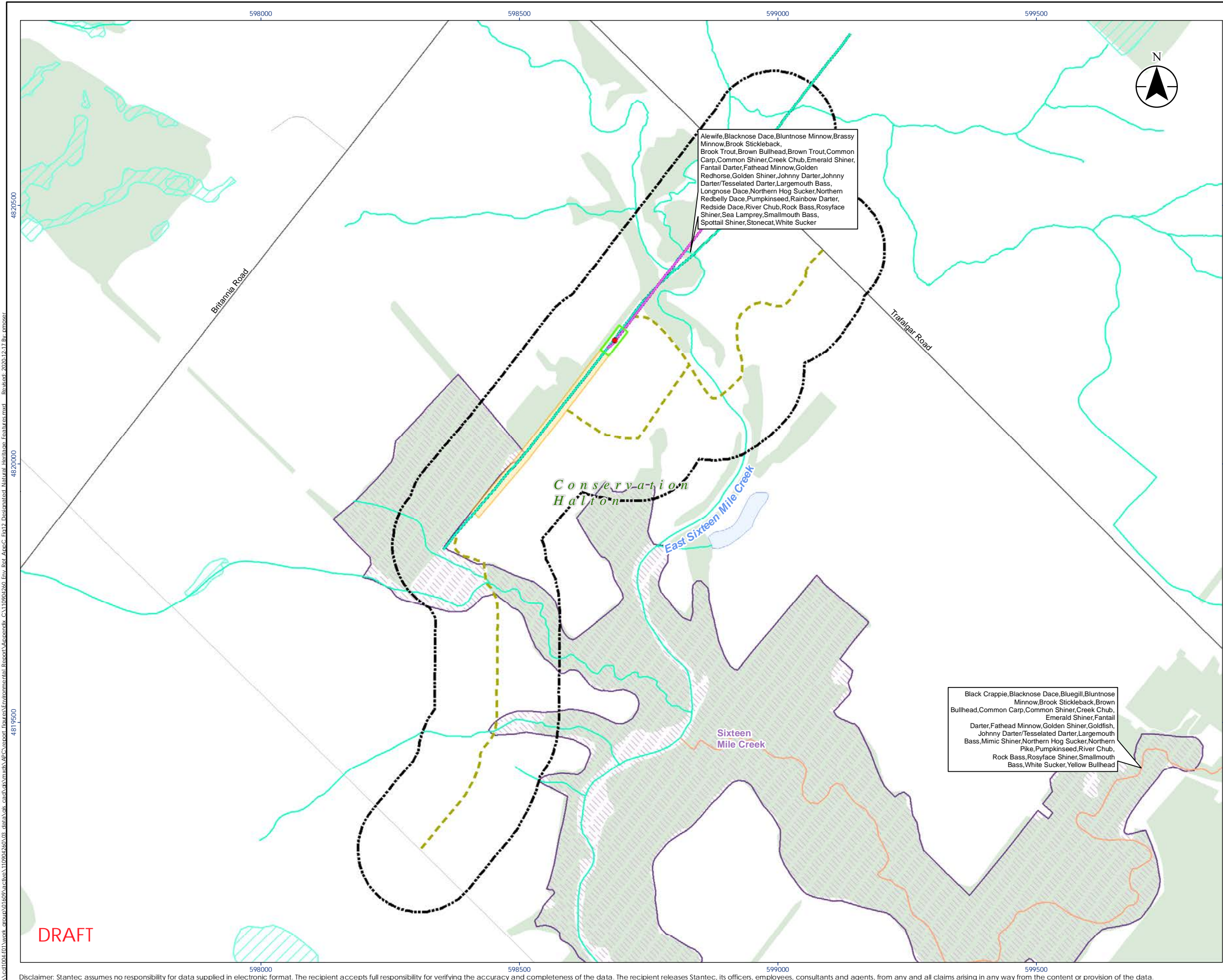
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Title  
Proposed Watercourse Crossings

\\cd1004.f01\work\_circue\010904260\03\_data\ok\_cad\45\mxd\AP\Conservation\Environmental Report\Appendix\_C\110904260\_Env\_Rpt\_Apoc\_E011\_Prop\_Watercourse\_Crossings.mxd - Revised: 2020-12-17 By: pmcser

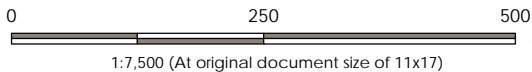
DRAFT





Legend

- Project Buffer (120 m)
- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Major Road
- Minor Road
- Thermal Regime, Cool
- Thermal Regime, Warm
- Watercourse (Permanent)
- Waterbody
- Wetland, Not evaluated per OWES
- Candidate ANSI, Life Science
- Wooded Area
- Conservation Area Administrative Boundary
- Drill Pad (Entry & Exit)
- Pipe Laydown Area



- Notes
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110904260 REVA  
Prepared by PRM on 2020-12-17  
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Client/Project:  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.:  
12

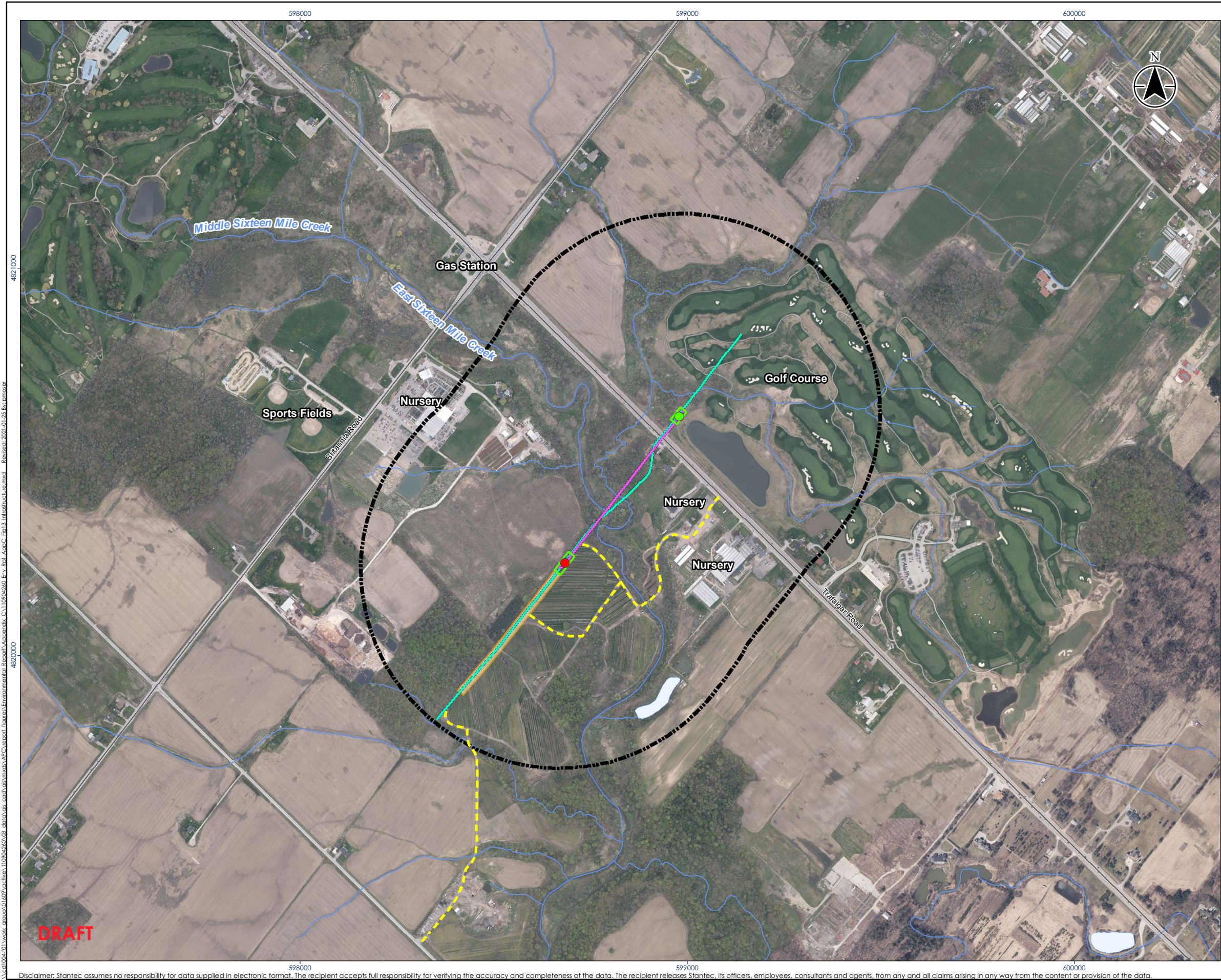
DRAFT

Title:  
Designated Natural Heritage Features

DRAFT

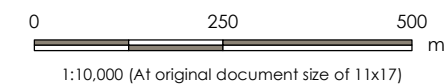


\\cd1004d401\work\_group\01\_029\active\110904260\03\_data\ok\_cad\stx\stx\APC\report\_Images\Environmental Report\Appendix C\110904260\_Env\_Rpt\_Apoc\_E013\_Infrastructure.mxd    Revised: 2021-01-25 By: amoser



#### Legend

- Project Study Area
- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Major Road
- Minor Road
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area



#### Notes

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Technical Review by MC on 2021-01-25

Client/Project:  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.: **13**  
Title: **Infrastructure and Socio-Economic Features**  
**DRAFT**