



# Clair-Maltby Secondary Plan

Master Environmental Servicing  
Plan and Community Plan

[guelph.ca/clair-maltby](http://guelph.ca/clair-maltby)





# Project Progress

August 11, 2015 – Open House

September 17, 2015 – Focus Group

October 23, 2015 – Draft TOR released

December 2015 – Council Approval of TOR

January-March 2016 – Retained Consultant Team





# Study Structure

Task A – CEIS

Task B – Water/Wastewater

Task C – Stormwater Management

Task D – Mobility Study

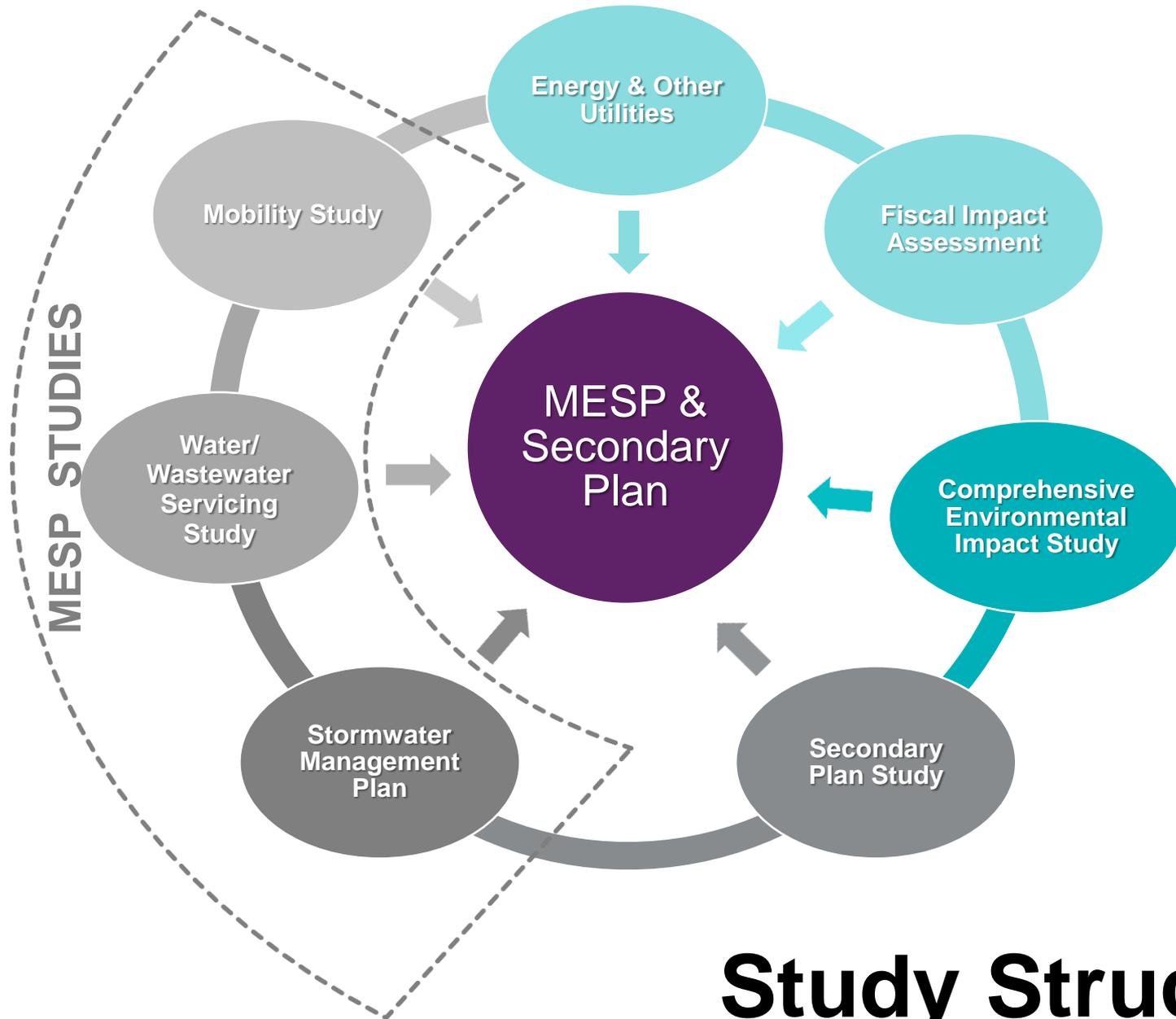
Task E – Energy & Other Utilities

Task F – Secondary Plan

Task G – Fiscal Impact Assessment

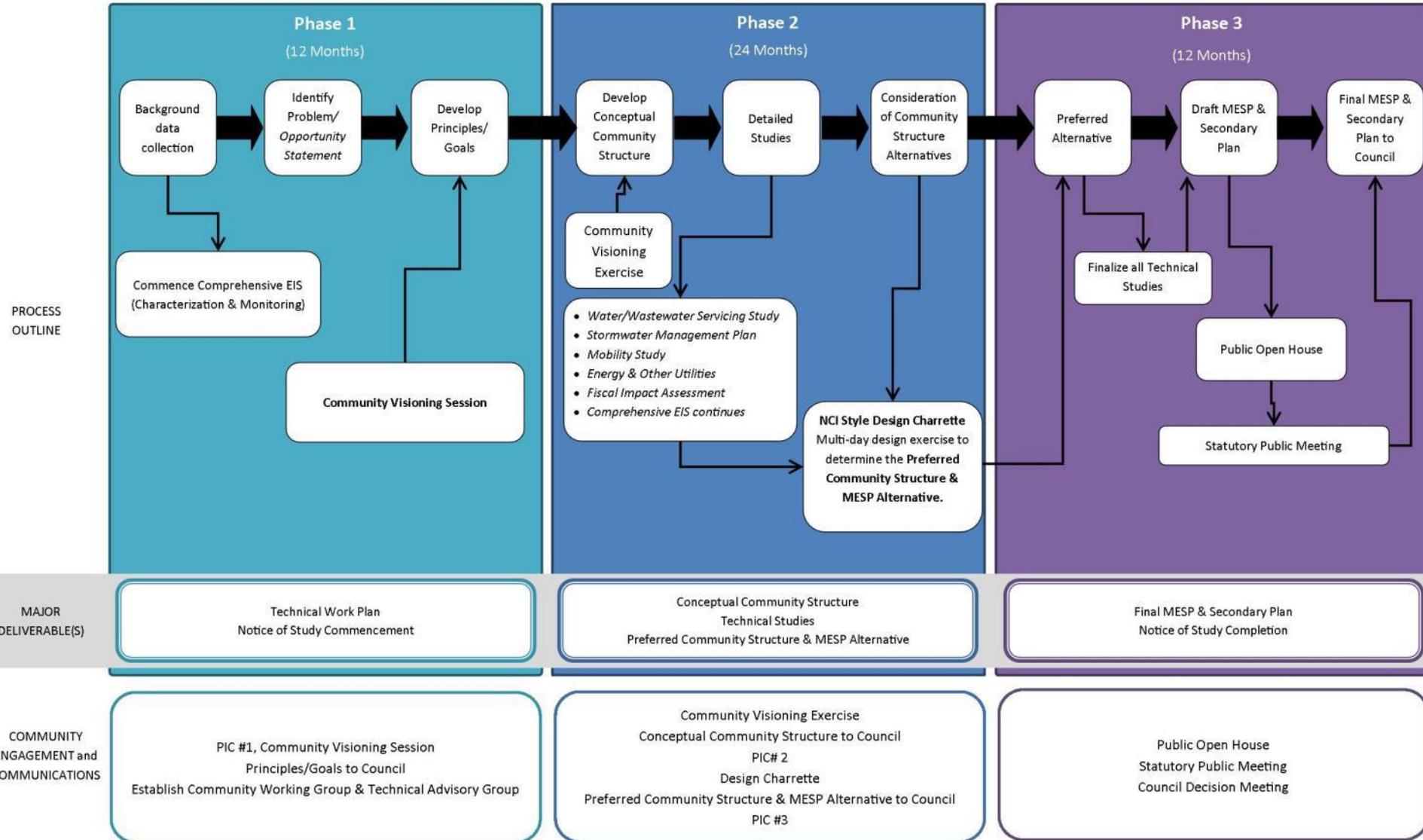
Task H – Community Engagement & Communications





# Study Structure

## Clair-Maltby Secondary Plan - Process Outline



# Clair-Maltby Secondary Plan

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## Consulting Team

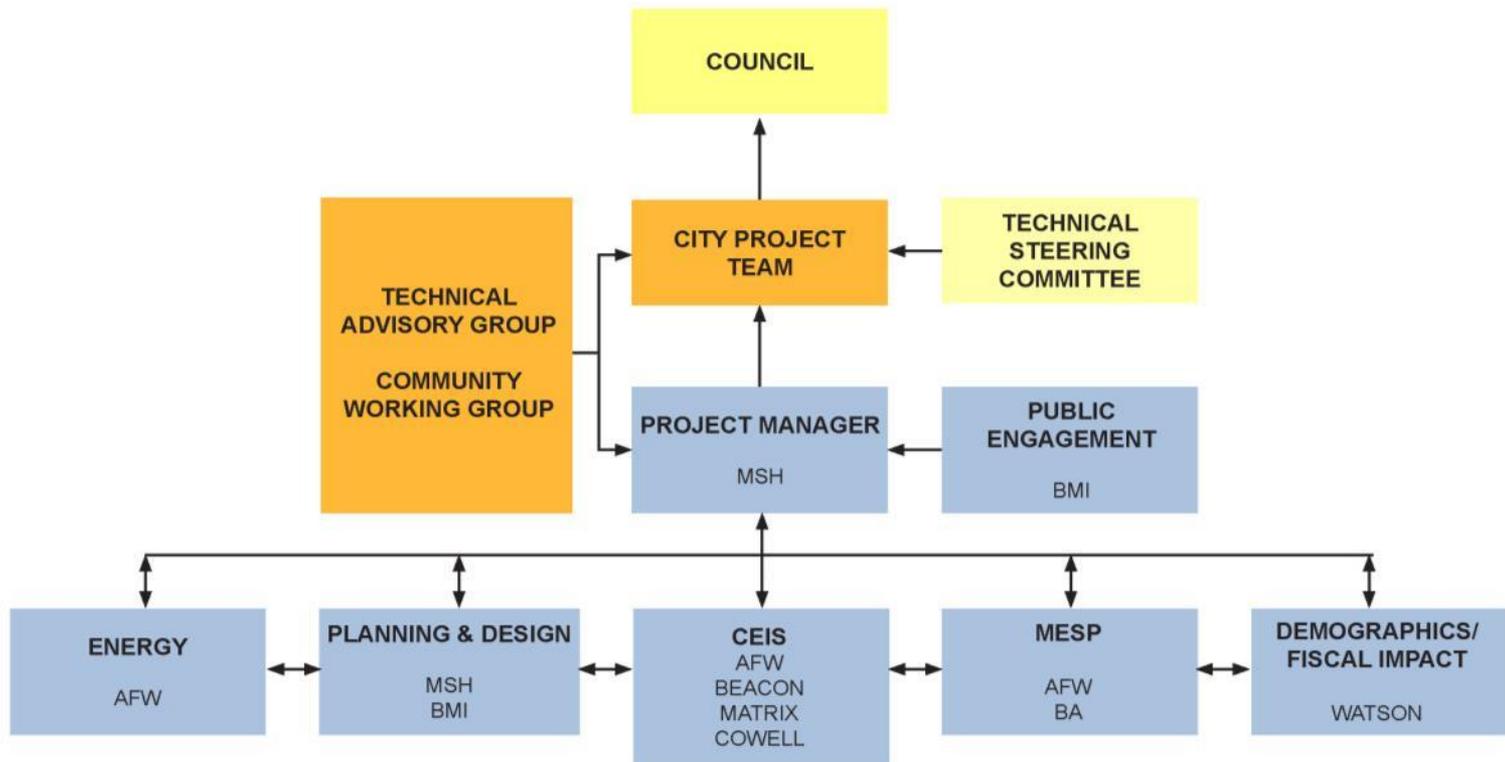
- Macaulay Shiomi Howson Ltd. (MSH) - *Project Management / Planning/Sustainable Development/Facilitation*
- Brook McIlroy Inc. - *Community Outreach / Urban Design*
- Amec Foster Wheeler (AFW) - *Water / Wastewater / Stormwater Management / Energy*
- Beacon Environmental Ltd. – *Natural Heritage*
- Daryl Cowell - *Landform*
- Matrix Solutions Inc. – *Hydrogeology*
- BA Group – *Mobility/Parking*
- Watson & Associates - *Fiscal Impact/Land Economics*
- ASI - *Archaeology, Cultural Heritage & Aboriginal Engagement*



# Clair-Maltby Secondary Plan

## Study Reporting Structure

CITY OF GUELPH  
CLAIR-MALTBY SECONDARY PLAN  
CONSULTANT TEAM ORGANIZATION



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## Comprehensive Environmental Impact Study (CEIS)

### What is the study about?

- examination and verification of environmental features and functions
- assessment of the role of water in the study area to support natural systems (groundwater/surface water)
- constraints and opportunities definition
- assessment of impacts associated with possible land use changes
- establishment of integrated management strategies



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## Comprehensive Environmental Impact Study (CEIS)

### How will this study be conducted?

- review of background information
- multi-year monitoring and field studies
- modelling of surface and groundwater
- agency and stakeholder consultation
- reporting



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## Comprehensive Environmental Impact Study (CEIS)

### Field Monitoring

- Surface Water
- Groundwater
- Ecological



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## Field Monitoring

### Surface Water (2016, 2017, 2018)

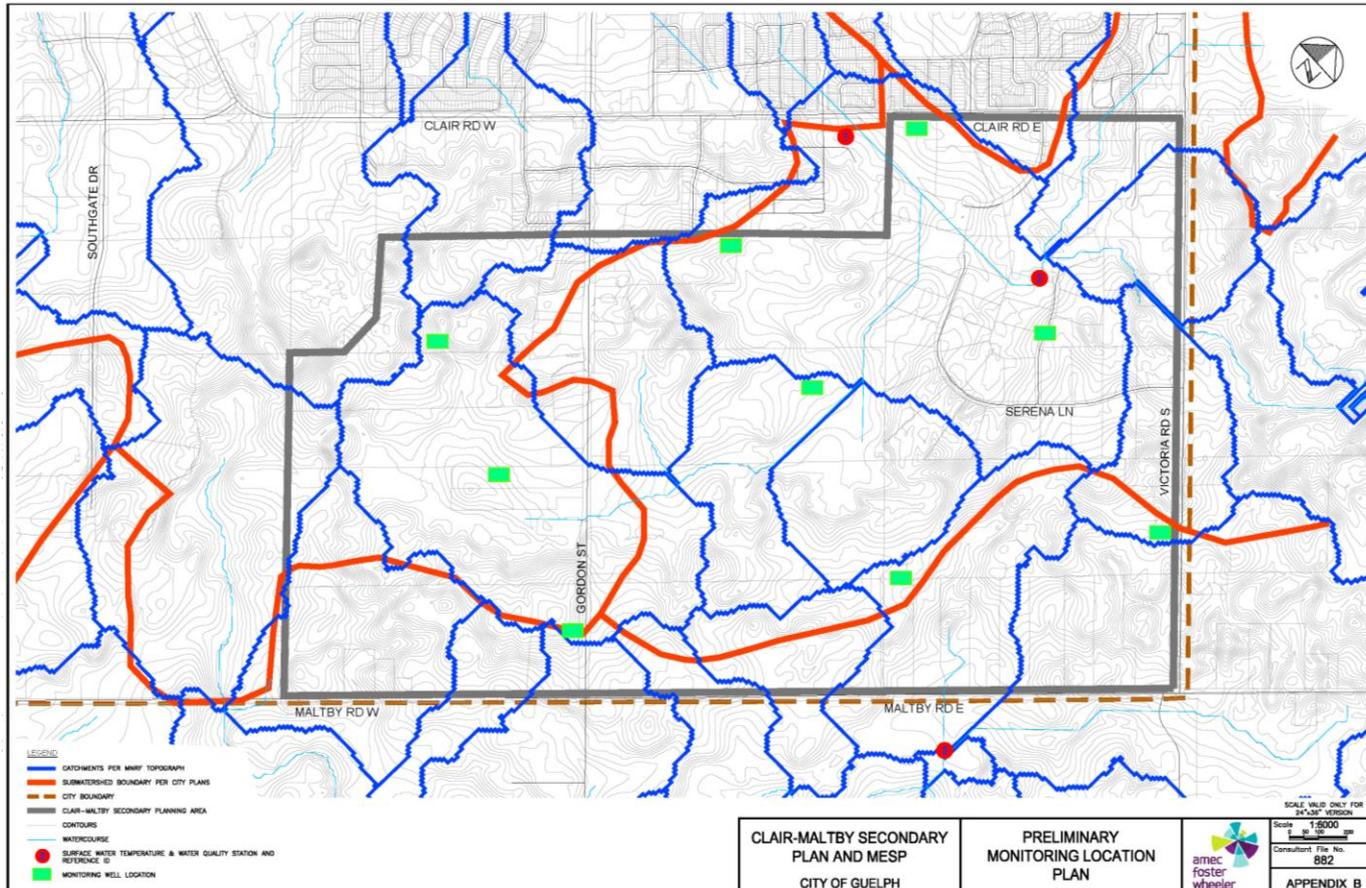
- Rainfall
- Water Levels
- Water Quality
- Temperature
- Velocity metering



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## Field Monitoring

### Surface Water





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## Field Monitoring

### Groundwater (2016, 2017, 2018)

- 18 monitoring wells at 9 locations across 3 transects
  - Dataloggers at 9 locations, monthly manual water level measurements
  - Water quality sampling twice / year for 3 years
  - Hydraulic testing of each well
- Ideally drill wells in 2016

Guelph permeameter testing across primary study area (3 days)





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## Field Monitoring

### Groundwater (2016, 2017, 2018)

- Drive point piezometer nests at 20 locations around wetlands in primary study area and along tributaries outside of primary study area
  - Monthly water level measurements





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## Field Monitoring

### Groundwater (2016, 2017, 2018)

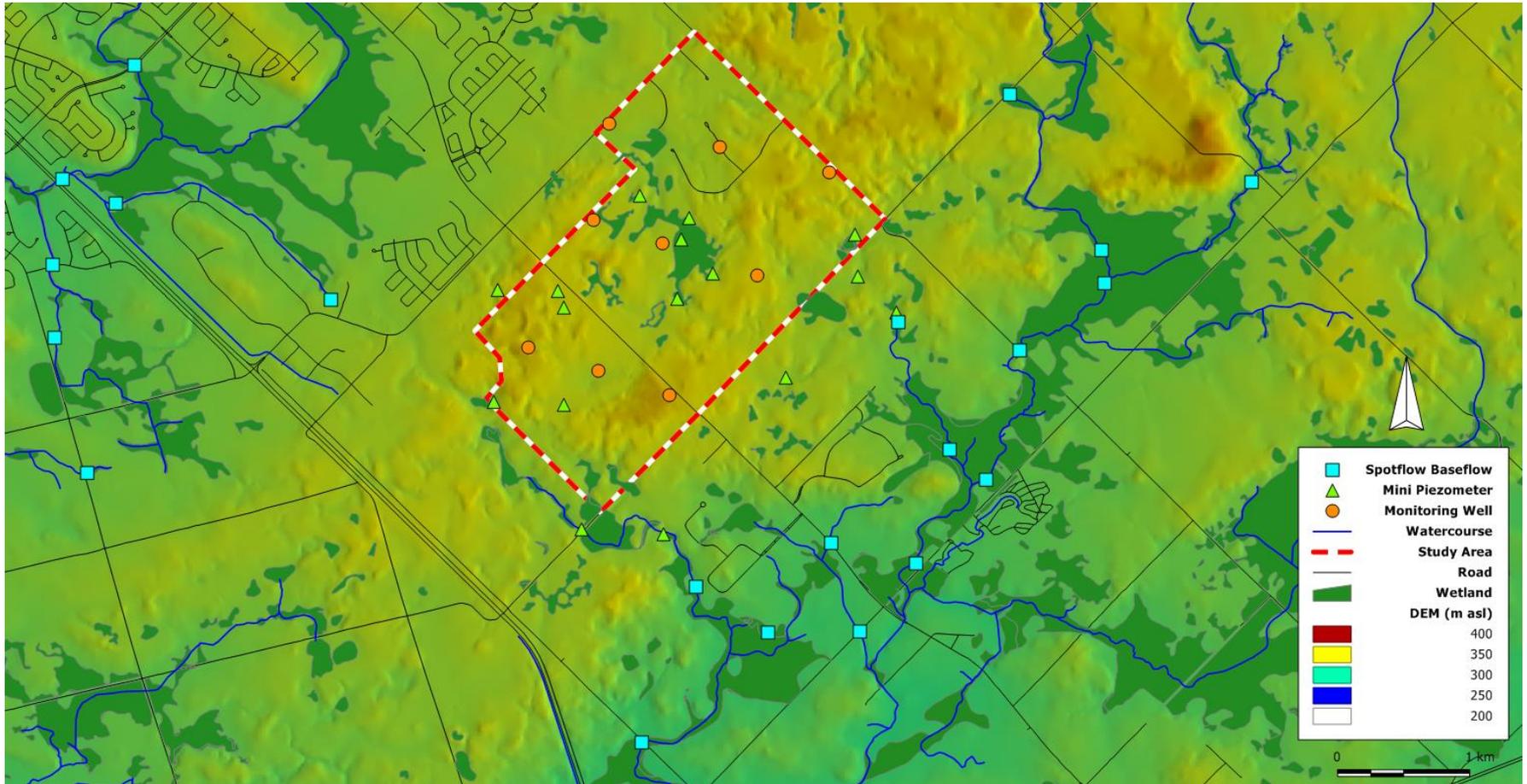
- Spotflow / baseflow measurements at 25 locations outside primary study area (Mill Creek, Hanlon Creek, Torrance Creek)
  - 3x / year for 3 years





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## Field Monitoring - Groundwater





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## Field Monitoring

### Ecology: General Approach

Build on work done to date and focus on functions best addressed at a landscape / Secondary Plan scale

- |               |   |
|---------------|---|
| 2016          | pull together base of existing information        |
| 2016          | start wetland water level and quality monitoring  |
| 2017          | bulk of field work (surveys for wildlife, plants) |
| 2017 and 2018 | wetland monitoring and wildlife movement          |
| 2018          | wetland water level and quality monitoring        |
| 2018          | targeted follow-up surveys TBD                    |

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## Field Monitoring

### Ecology: Preliminary Work Plan within the Primary Study Area

Plan to undertake surveys in representative locations across the primary study area

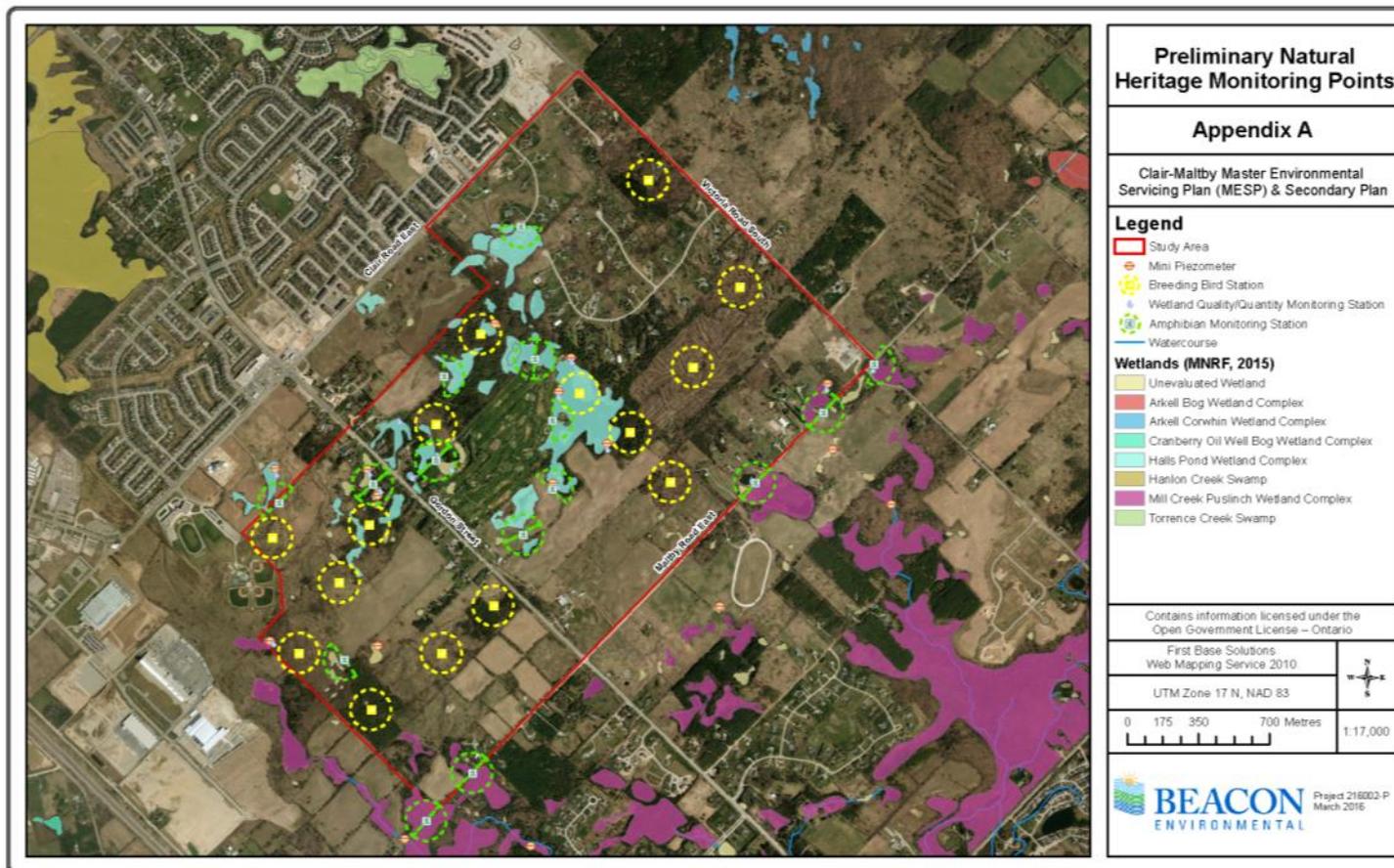
- Vegetation community classification / verification – up to 10 days
- Breeding amphibian surveys (frogs/roads) - about 20 stations
- Amphibian movement surveys (frogs/salamanders) – 3 or 4 locations
- Turtle surveys (basking) – about 5 locations
- Deer movement surveys – transects in selected areas (in winter)
- Bird surveys – about 15 stations



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## Field Monitoring

### Ecology





# Questions?



# Property Access Surface Water Gauges



Visual flow monitoring and surface water level gauges installed by hand; no drilling required



# Property Access Mini-piezometers



Installed by hand; no drilling required

# Property Access Groundwater Wells



Drilling is required

# Property Access Amphibian Surveys



In person visits three times between late March and late June in the evenings

# Property Access Bird Surveys



In person visits two to three times between mid-May and early July early in the morning

# Property Access Plant & Vegetation Community Surveys



In person visits two or three times between mid-May and late September during the day