

Howard/Bouffard Planning Area Master Drainage Study

Public Information Centre

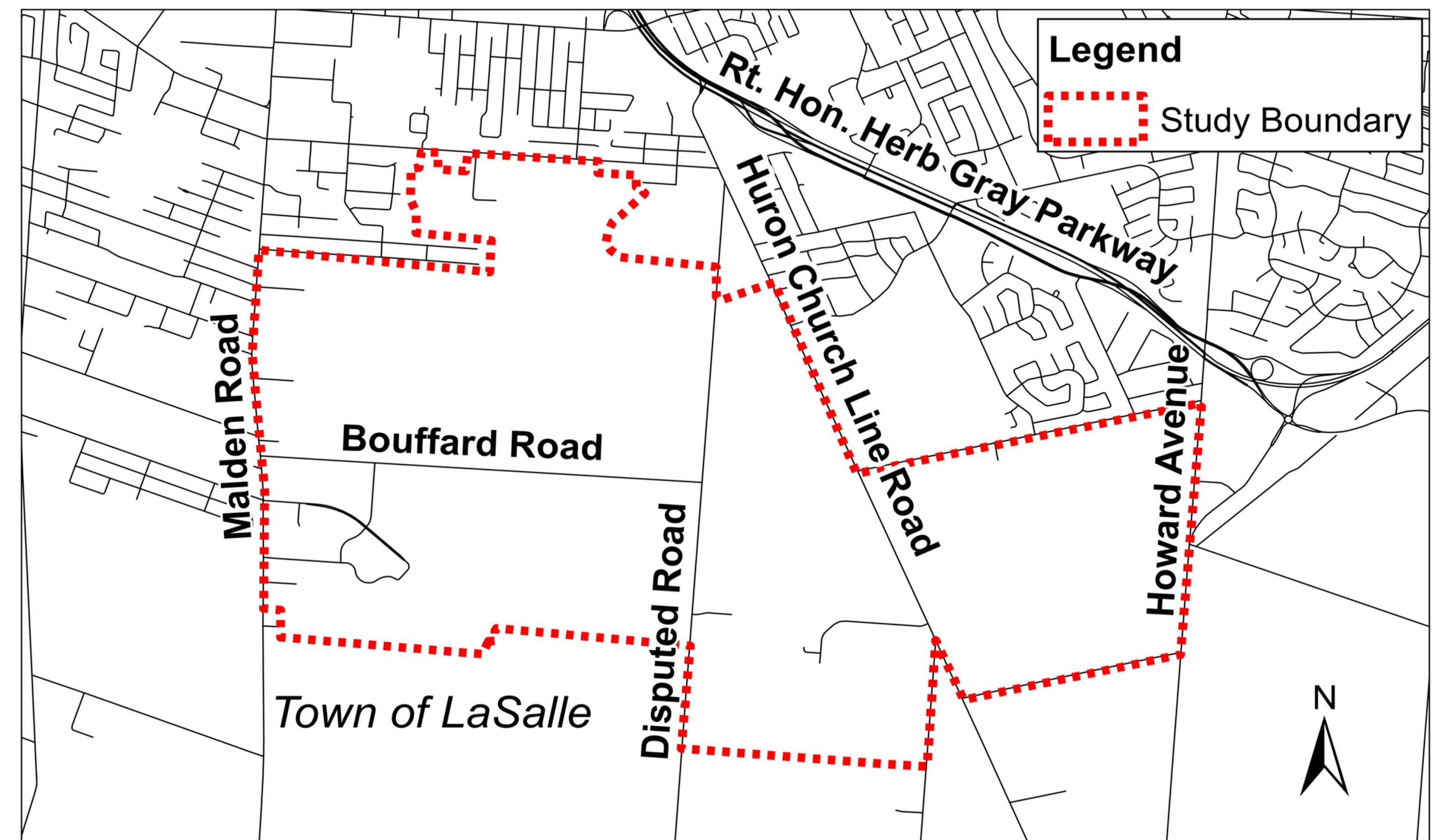
Town of LaSalle
June 26, 2019



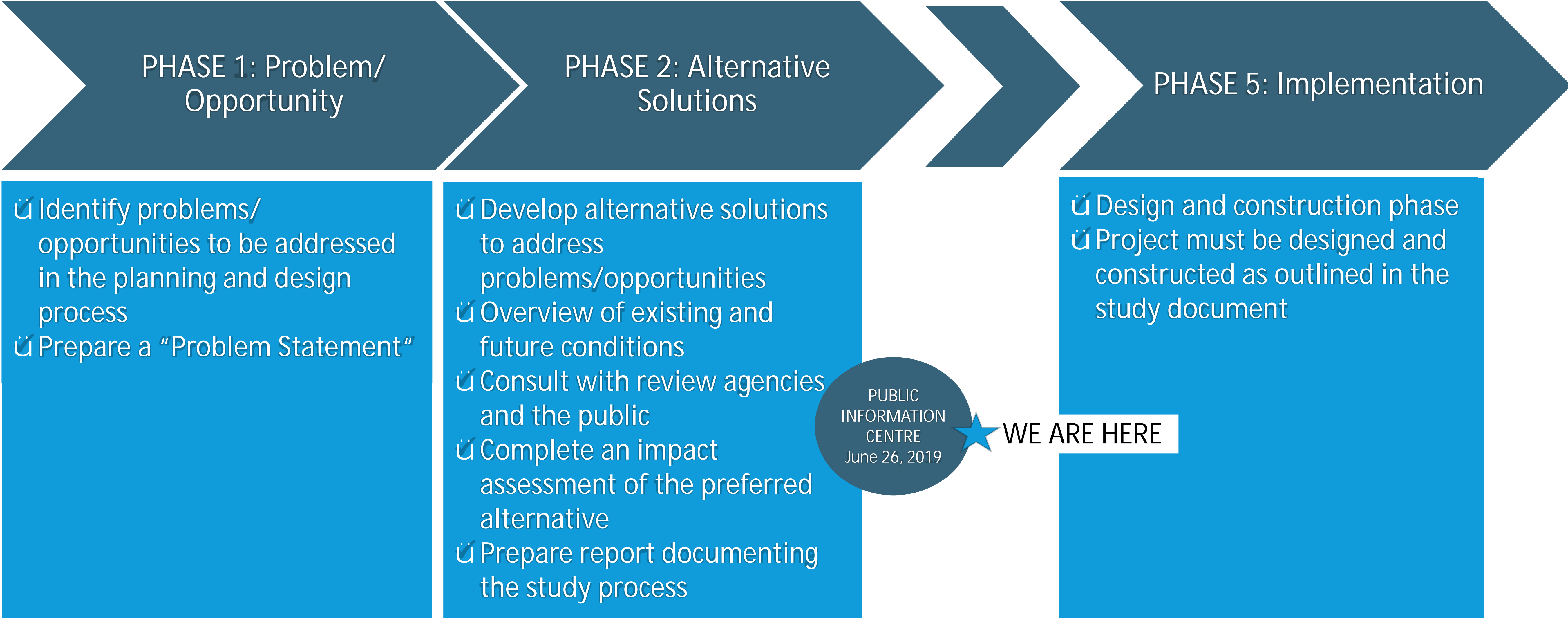
- Study Area is primarily designated residential and is planned to be developed over several years
- Several studies have been completed to plan for new infrastructure in the area:
 - Bouffard and Howard Planning Districts Functional Design Study (2005) and Addendum (2017)
 - Environmental Study Report for Laurier Parkway between Malden Road and Howard Avenue (2009)
 - Detailed design and construction of Laurier Parkway (2010)
 - Design and construction of the expansion of the Vollmer Complex and related stormwater management facility (2010).

- Previous studies addressed stormwater management (SWM) for minor and major events however, spill-over from adjacent drainage areas was not considered

- The Town of LaSalle and Essex Region Conservation Authority are only able to issue approvals for development areas outside of the flood inundation area.



Class Environmental Assessment Process



The Study is following the requirements of the *Municipal Class Environmental Assessment (EA) (2015)* for a Master Plan. The study is following Phases 1 and 2 of the process.

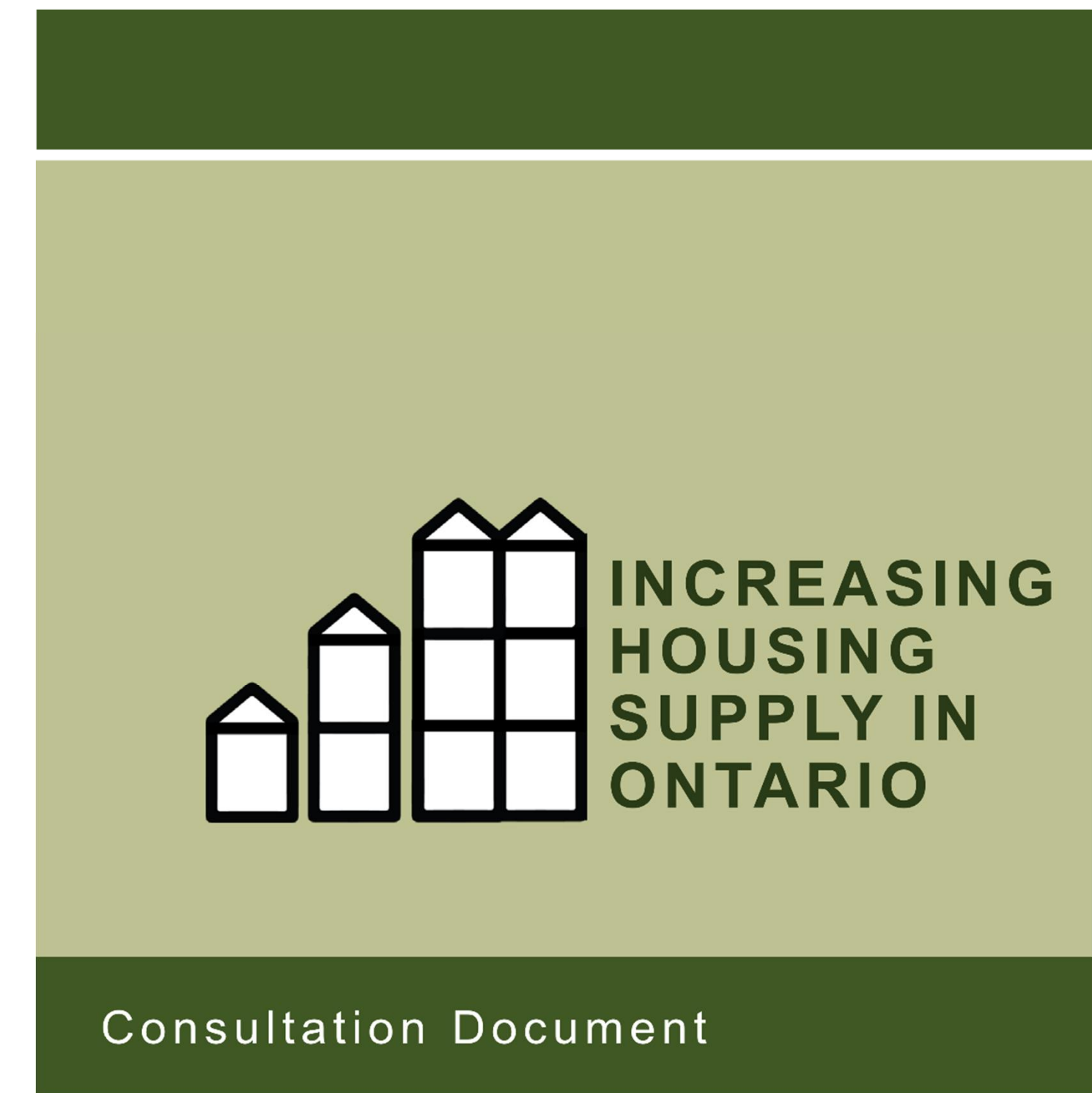
The study is a critical step for the Town and Essex Region Conservation Authority to allow development to proceed in the area. The objective is to prepare a comprehensive solution to address stormwater overflow into the Howard and Bouffard Planning Area during major storm events.

The Class EA process requires that:

- Relevant social, environmental and engineering factors are considered in the planning and design process
- Public and agency input is integrated into the decisions.

- Build on the solutions developed through the Bouffard Howard Planning Districts Class Environmental Assessment Addendum (March 2017)
- Define the flood mapping for existing conditions
- Establish build-out conditions and develop an implementation strategy to mitigate flooding in the area
- Estimate costs for identified solutions as well as cost recovery mechanisms
- Establish property requirements to facilitate the improvements.

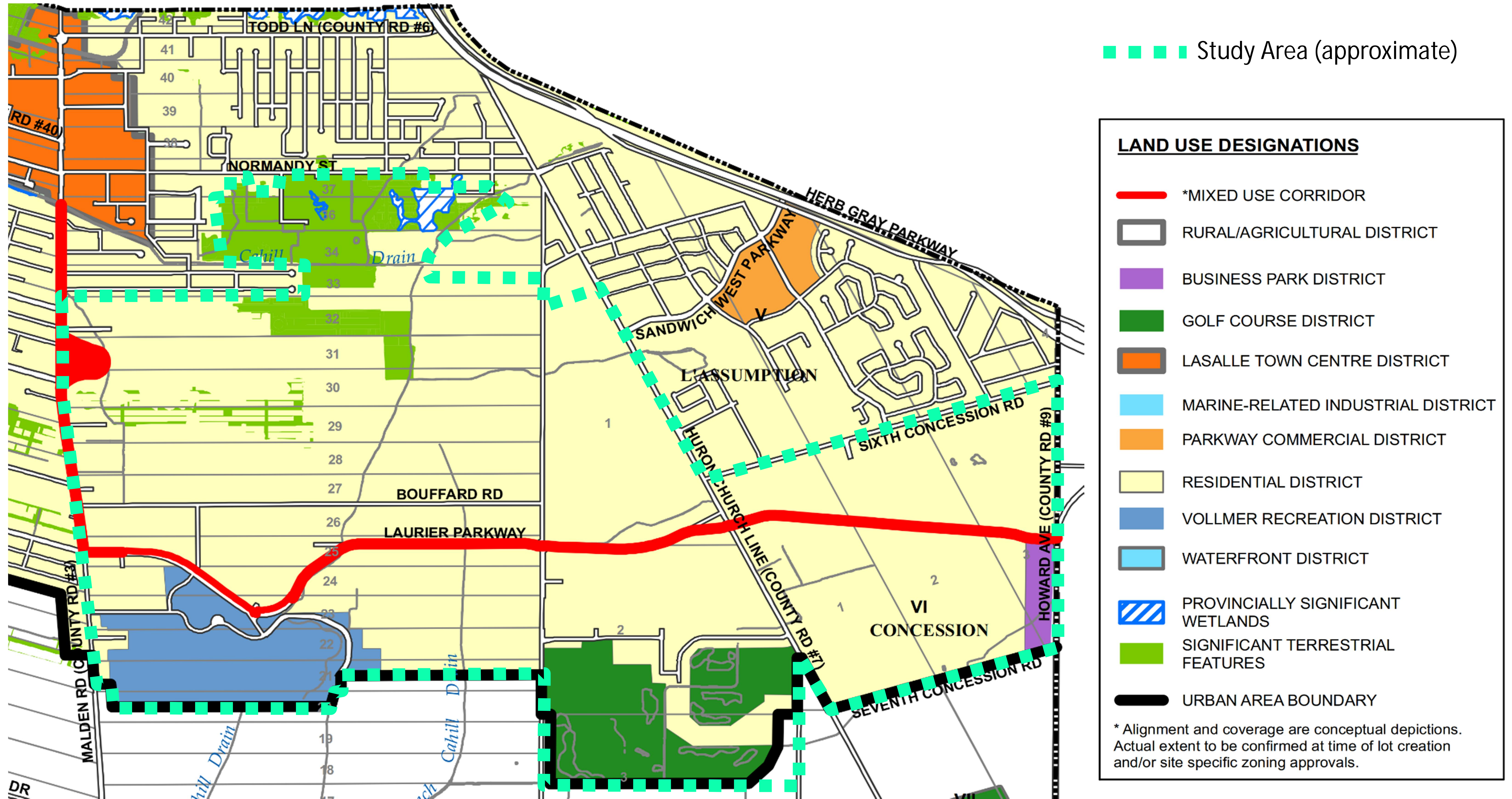
- LaSalle currently has a limited supply of land ready for development
- Benefits for growth to the general public include:
 - Better municipal services. Increased tax base from development helps to pay for needed municipal services such as infrastructure and social services.
 - New amenities. Development in the Howard/Bouffard area will include amenities that serve the broader area, such as parks and community facilities.
- Benefits to homebuyers include:
 - Increased availability. Ontario currently has an undersupply of housing relative to demand. Increased housing supply will help to offset this imbalance.
 - Improved affordability. Affordability is a major issue in Ontario's housing market. Increased housing supply can help to lower prices and address this issue.



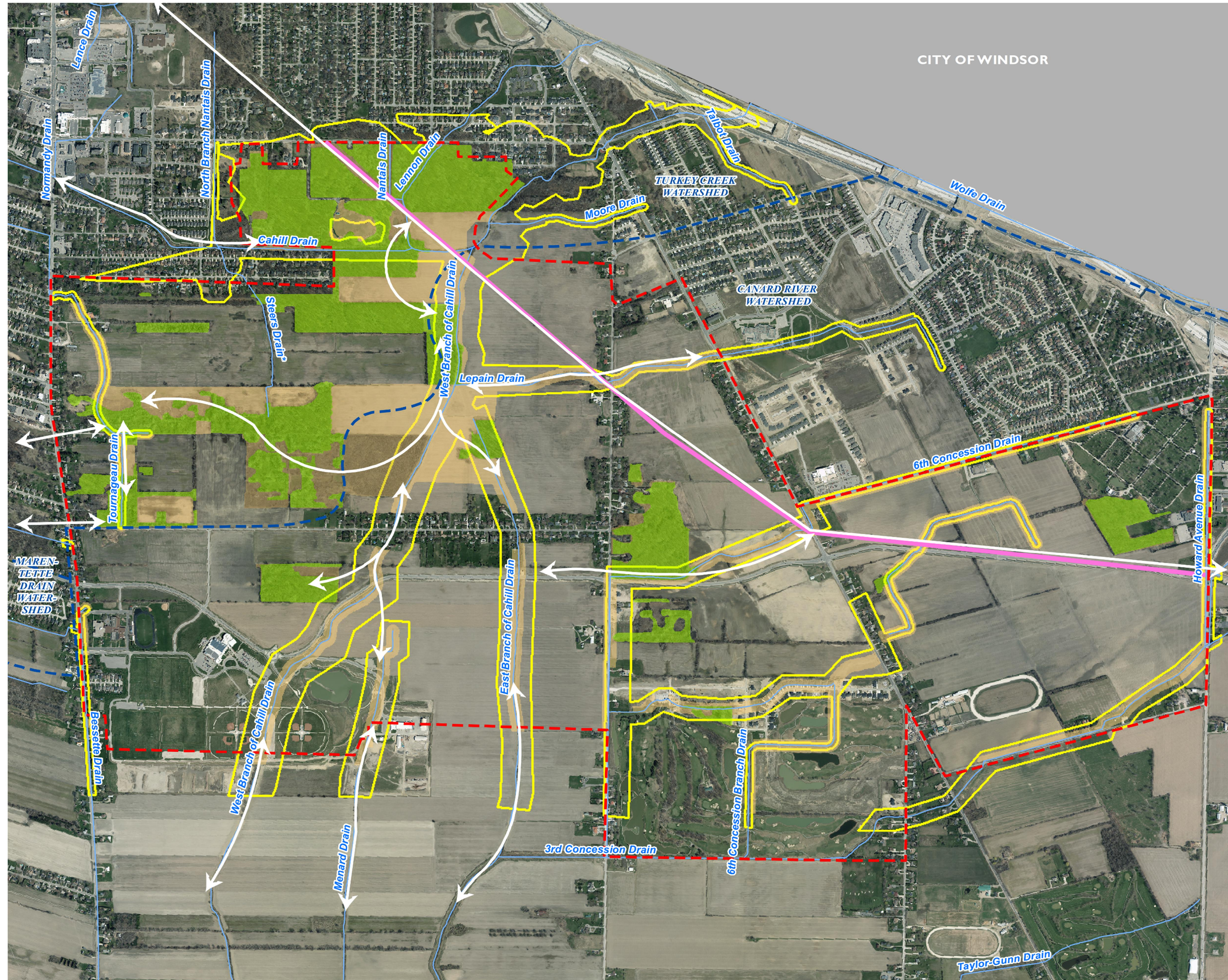
Benefits to home buyers based on *Consultation Document: Increased Housing Supply in Ontario* (Ministry of Municipal Affairs and Housing, 2018). To learn more, visit www.ontario.ca/housingsupply

Existing Conditions – Land Use

Town of LaSalle Official Plan Schedule "B" – Land Use Plan



Existing Conditions – Natural Heritage



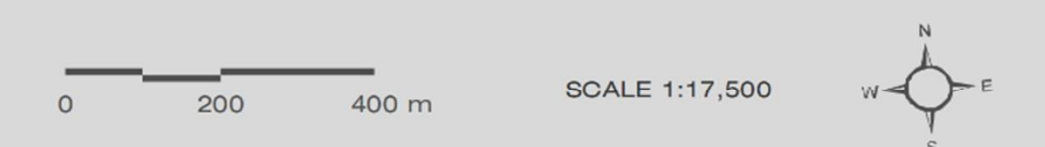
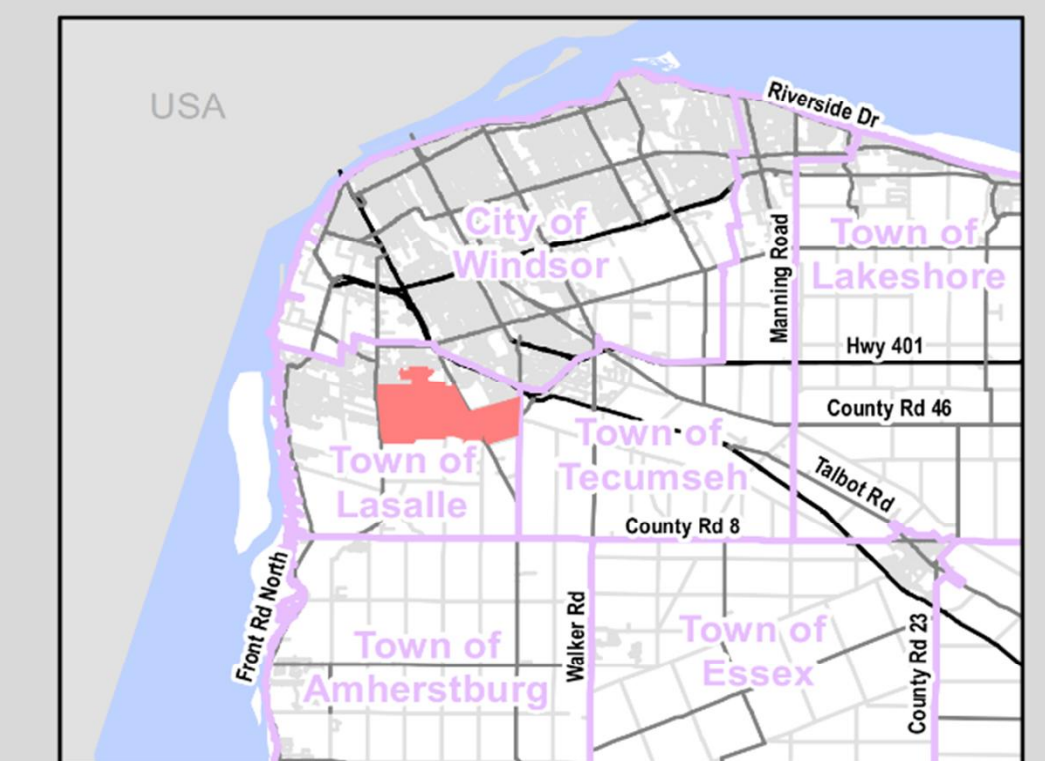
HOWARD BOUFFARD PLANNING AREA

Master Drainage Study

ESSEX REGION NATURAL HERITAGE SYSTEM STRATEGY (ERNHSS) NATURAL HERITAGE FEATURES

FIGURE #1

- Bouffard and Howard Planning District
- Watercourse/Drain (MNRF)
- Forest (Essex Region Natural Heritage System Strategy - Essex Region Conservation Authority)
- Other Terrestrial Natural Feature (Essex Region Natural Heritage System Strategy - Essex Region Conservation Authority)
- Restoration Opportunities (Essex Region Conservation Authority)
- Proposed Natural Area Linkages
- Hydro Corridor Alignment
- Watershed (Essex Region Conservation Authority)
- Regulation Limit (Essex Region Conservation Authority)

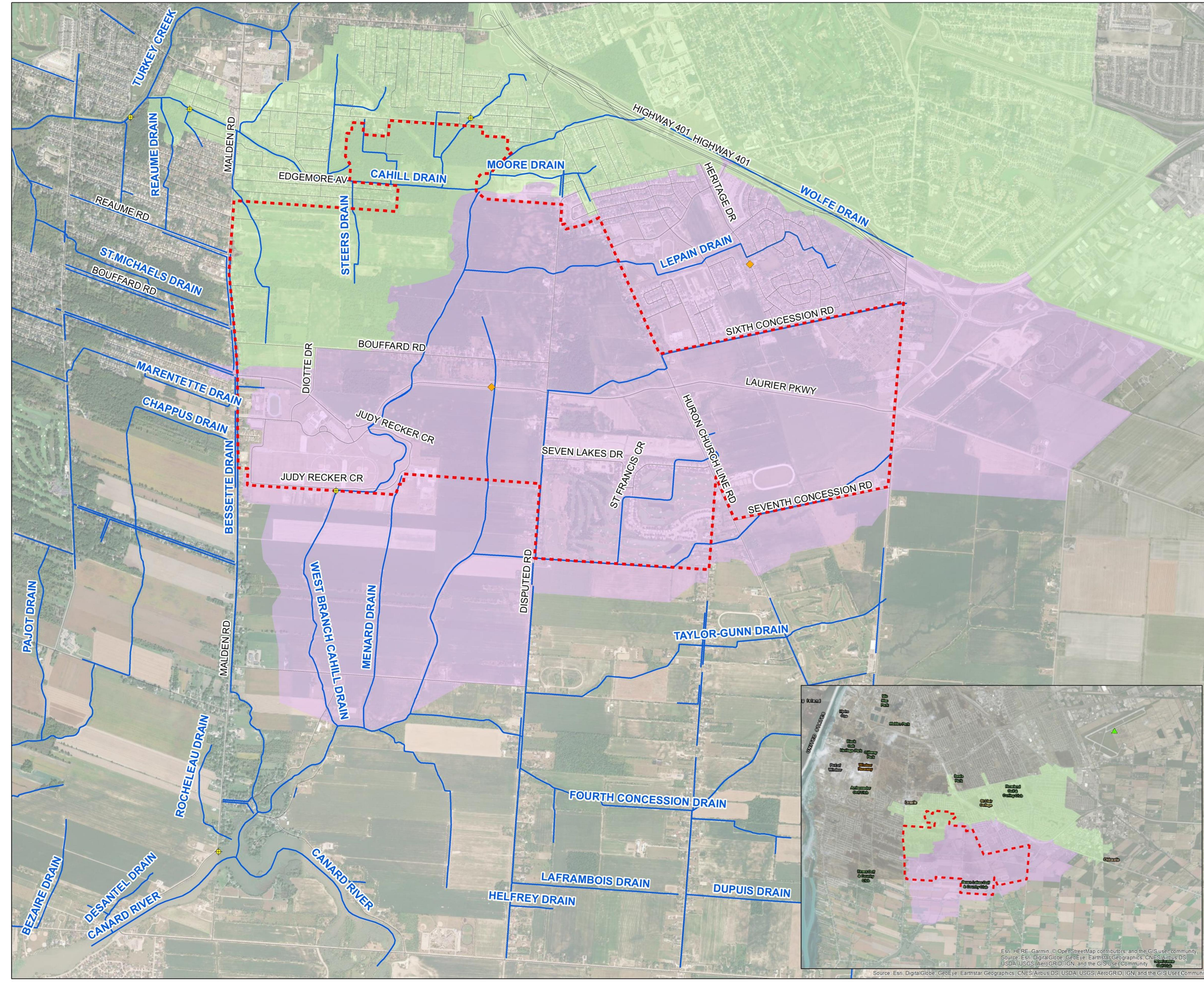


MAP DRAWING INFORMATION: MNRF, ESSEX REGION CONSERVATION AUTHORITY, TOWN OF LASALLE (2015 IMAGERY)

MAP CREATED BY: SFG
 MAP CHECKED BY: MDP
 MAP PROJECTION: NAD 1983 UTM Zone 17N

FILE LOCATION:
 G:\cad\GIS\175719\Mapping

Existing Conditions – Municipal Drains and Drainage Areas



TOWN OF LASALLE
HOWARD BOUFFARD MASTER DRAINAGE STUDY

DRAINAGE SCHEMATIC
FIGURE 1

- Windsor A Climate Station (ID #6139527)
- Town of LaSalle Climate Station
- Water Level Monitoring Station
- Study Area
- Street Centerline
- Existing Drain or Waterway
- Drainage Area Discharging Northwest
- Drainage Area Discharging South

0 200 400 1000 m SCALE 1:15,000

MAP DRAWING INFORMATION:
DATA PROVIDED BY TOWN OF LASALLE AND PC88MM

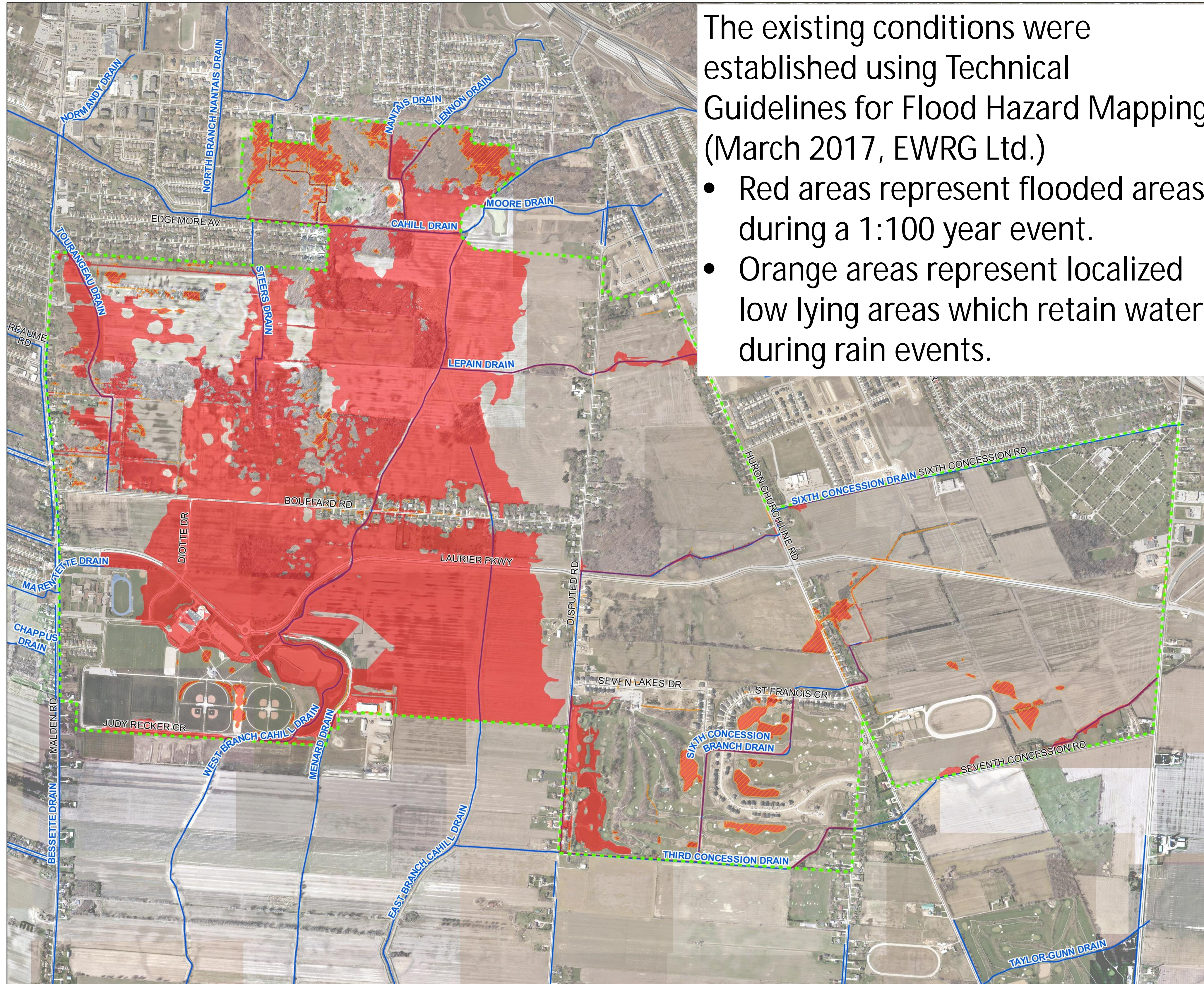
MAP CREATED BY: JAB
MAP CHECKED BY: GJC
MAP PROJECTION: NAD_1983_CSRS_North_American_1983

FILE LOCATION: X:\PROJECTS\DRIFTM MODEL\HOWARD BOUFFARD\GEM\H18\H18_FIG1_DRAINAGE_20181120.MXD



PROJECT 18-088
STATUS DRAFT
DATE 11/30/2018

Existing Conditions - Flood Extents



The existing conditions were established using Technical Guidelines for Flood Hazard Mapping (March 2017, EWRG Ltd.)

- Red areas represent flooded areas during a 1:100 year event.
- Orange areas represent localized low lying areas which retain water during rain events.

TOWN OF LASALLE
HOWARD BOUFFARD MASTER DRAINAGE STUDY

EXISTING 1:100 YEAR FLOOD EXTENTS
FIGURE 3

- STUDY AREA
- DEPRESSION STORAGE AREA
- FLOOD EXTENT*
- EXISTING DRAIN OR WATERWAY
- STREET CENTRELINE

*NOTE: FLOOD EXTENTS HAVE ONLY BEEN ILLUSTRATED WITHIN THE STUDY AREA. FLOODING DOES EXTEND BEYOND THE STUDY LIMITS.

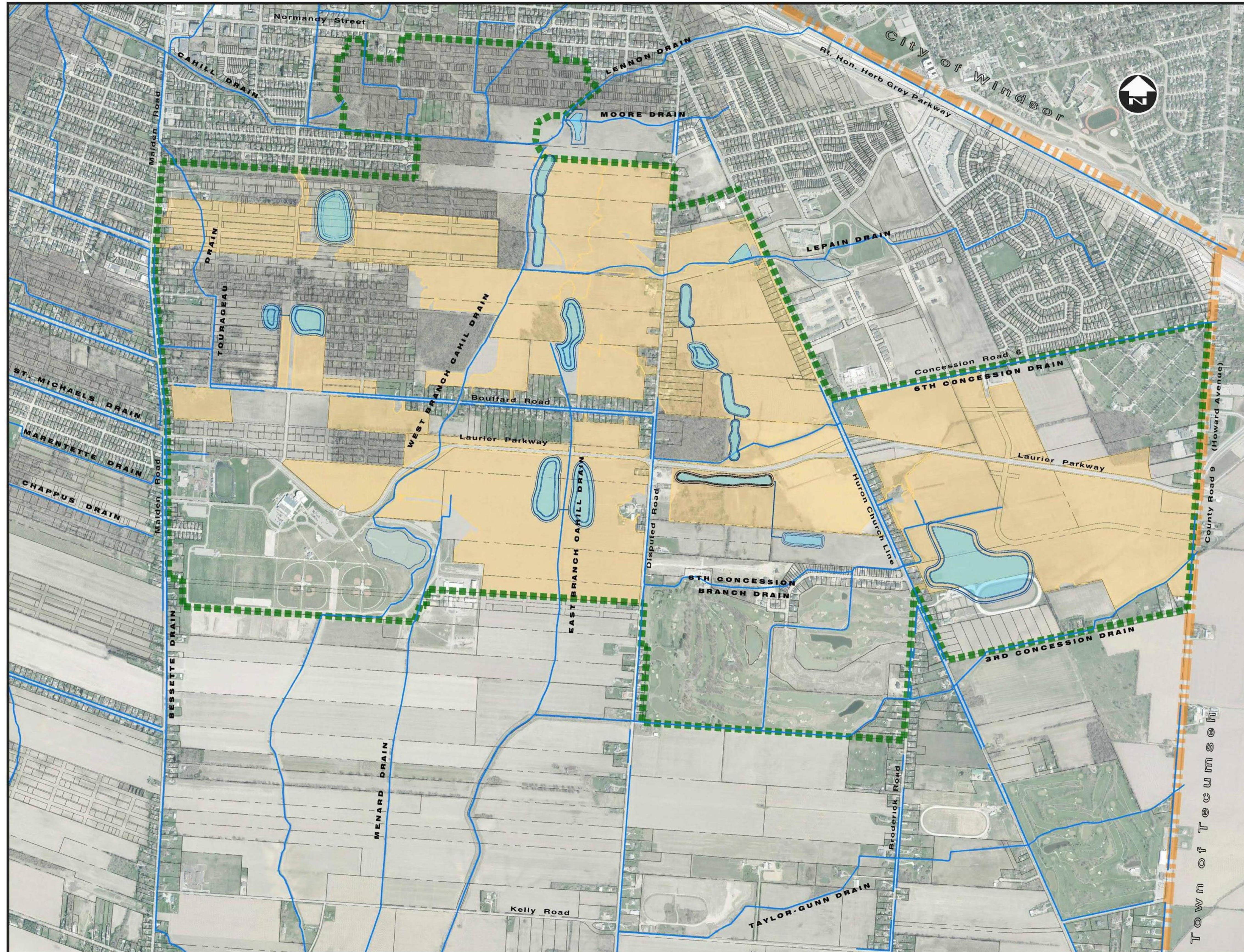
SCALE 1:9,000

MAP DRAWING INFORMATION:
DATA PROVIDED BY THE TOWN OF LASALLE
SERVICE LAYER CREDITS: ESRI, HERE, CARNAL, INTERMAP, INCIDENT
FINDER, CHECK POINT, AND HERE. SOURCE: GOOGLE, ORIGINATOR:
ORIGINATOR: SURVEY EQUIPMENT, METEOROLOGICAL DATA, SOURCE:
TOWN OF LASALLE/CONTRIBUTORS, AND THE USER COMMUNITY

MAP CREATED BY: JAB
MAP CHECKED BY: JAB
MAP PROJECTOR: NAD 1983 UTM ZONE 17 N

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Development Potential



HOWARD BOUFFARD PLANNING AREA

Master Drainage Study

LEGEND

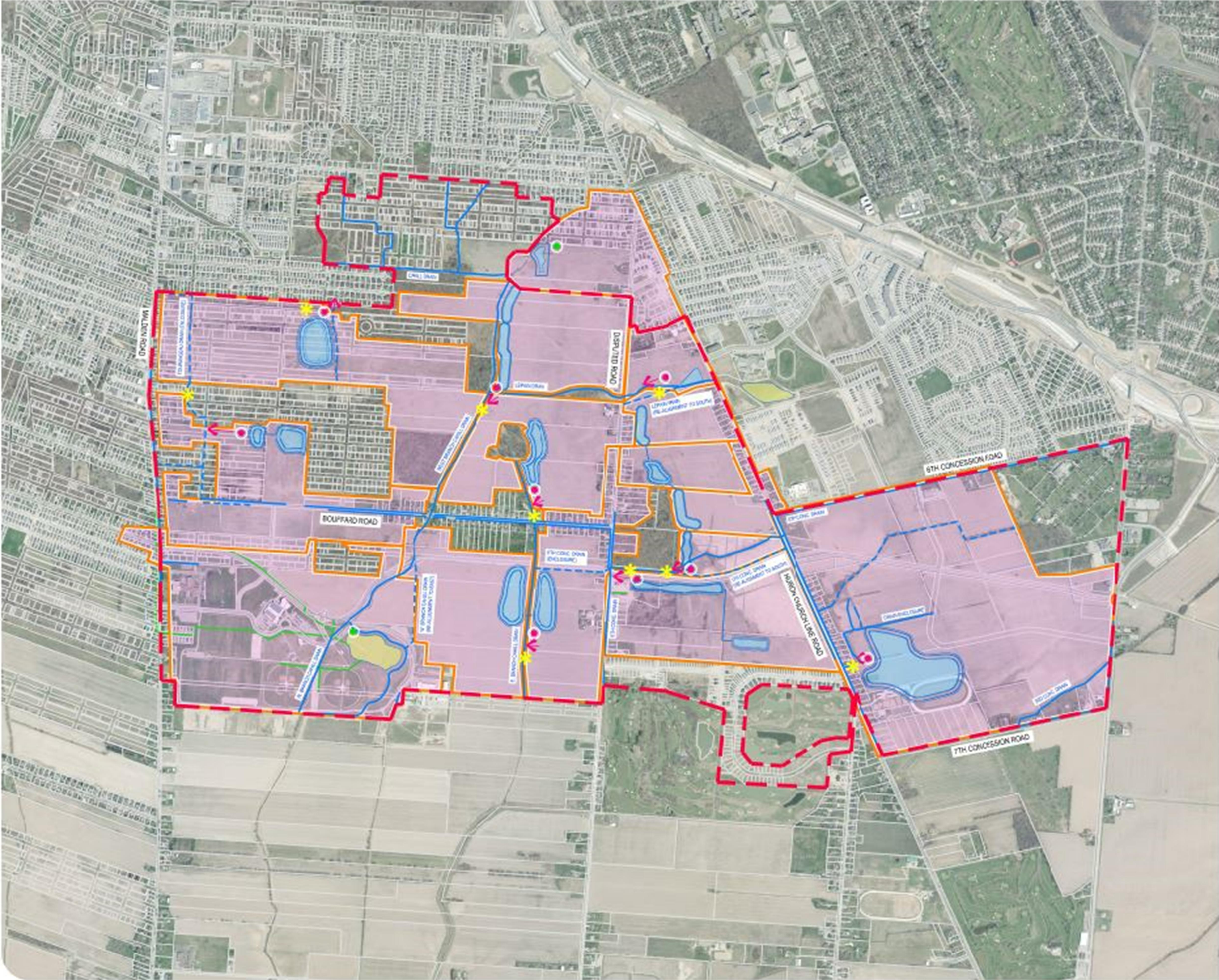
- MUNICIPAL BOUNDARY
- HOWARD BOUFFARD STUDY AREA
- KNOWN AREAS OF ACTIVE DEVELOPMENT WITHIN THE HOWARD BOUFFARD AREA
- Pond Locations Identified in 2017 E.A. Addendum
- Existing Municipal Drains

SCALE: N.T.S.

HOWARD BOUFFARD DEVELOPMENT AREAS

DATE: JUNE 2019
Dillon Proj.No. 18-8169-1000

Stormwater Solution – 2017 EA Addendum

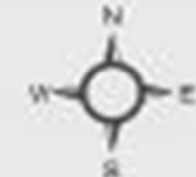


CLASS ENVIRONMENTAL ASSESSMENT ADDENDUM
TOWN OF LASALLE, ONTARIO

PREFERRED SOLUTION: STORMWATER MANAGEMENT
FIGURE 6.0

- STUDY AREA
- MUNICIPAL DRAIN ALIGNMENT
- PREFERRED DRAIN ALIGNMENT
- EXISTING STORM SEWER
- DRAINAGE BOUNDARY
- EXISTING POND
- PREFERRED POND
- PREFERRED LINEAR FACILITY
- EXISTING PUMP STATION
- PREFERRED PUMP STATION
- PREFERRED POND OUTLET
- OUTLET CAPACITY ANALYSIS REQUIRED

SCALE 1:2,000 (11"x17")
0 200 400 800m



MAP/DRAWING INFORMATION
THIS DRAWING IS FOR INFORMATION PURPOSES ONLY. ALL DIMENSIONS AND BOUNDARY INFORMATION SHOULD BE VERIFIED BY AN O.L.S. PRIOR TO CONSTRUCTION.
CREATED BY:
CHECKED BY:
DESIGNED BY:
File Location:
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January 27, 2017 3:10 PM



PROJECT: 16-0470
STATUS: FINAL
DATE: 01/27/2017