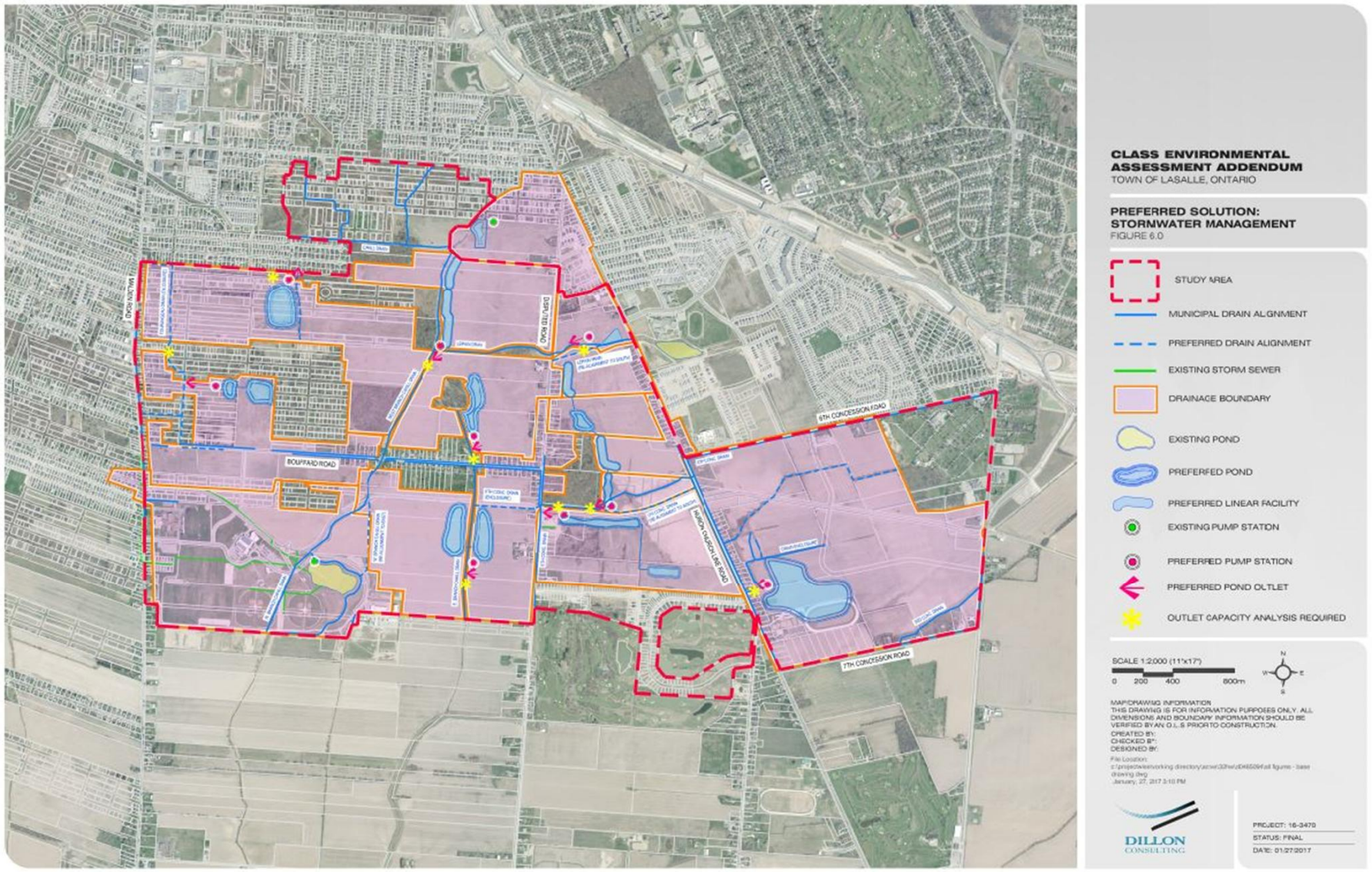
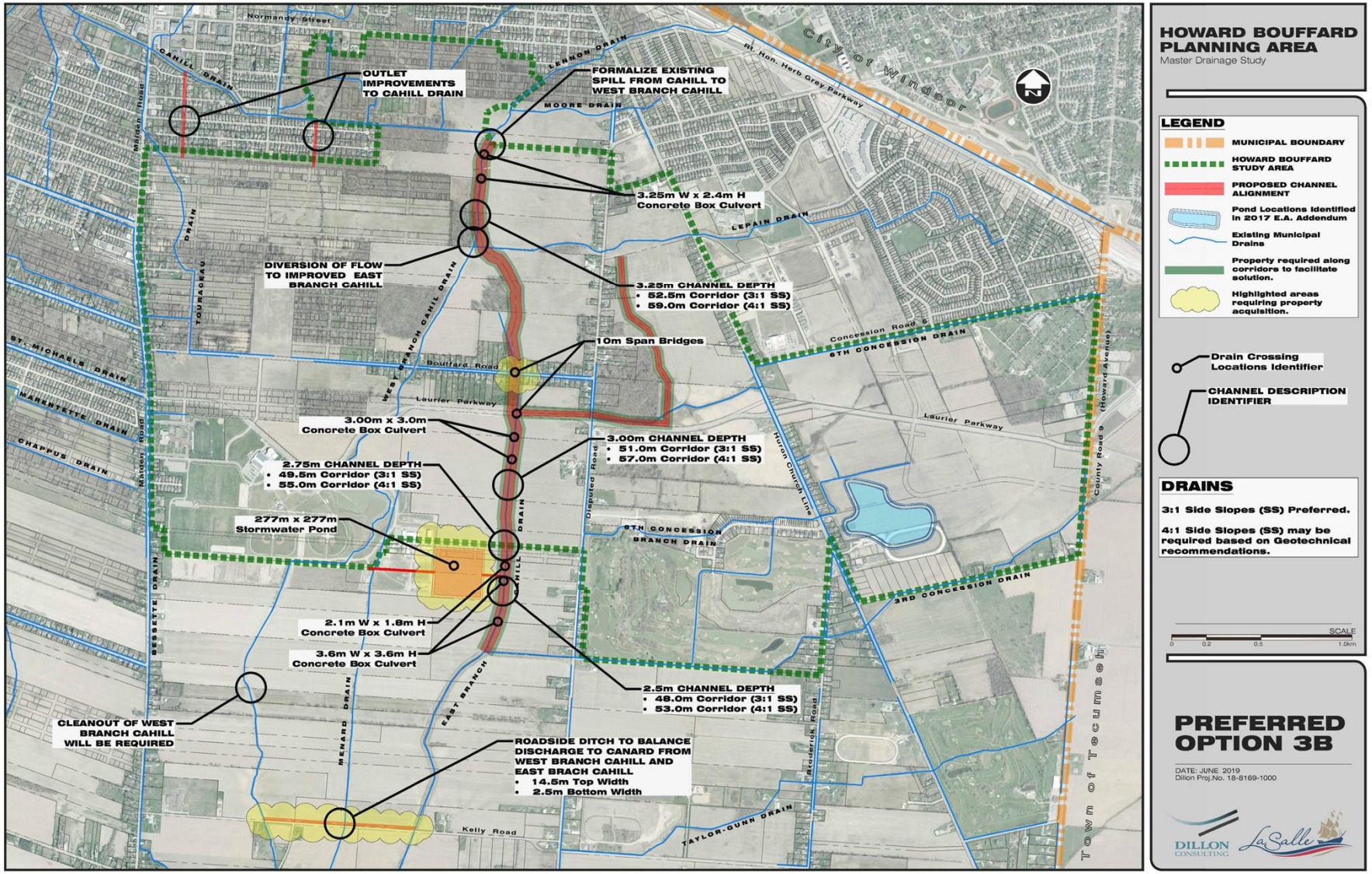
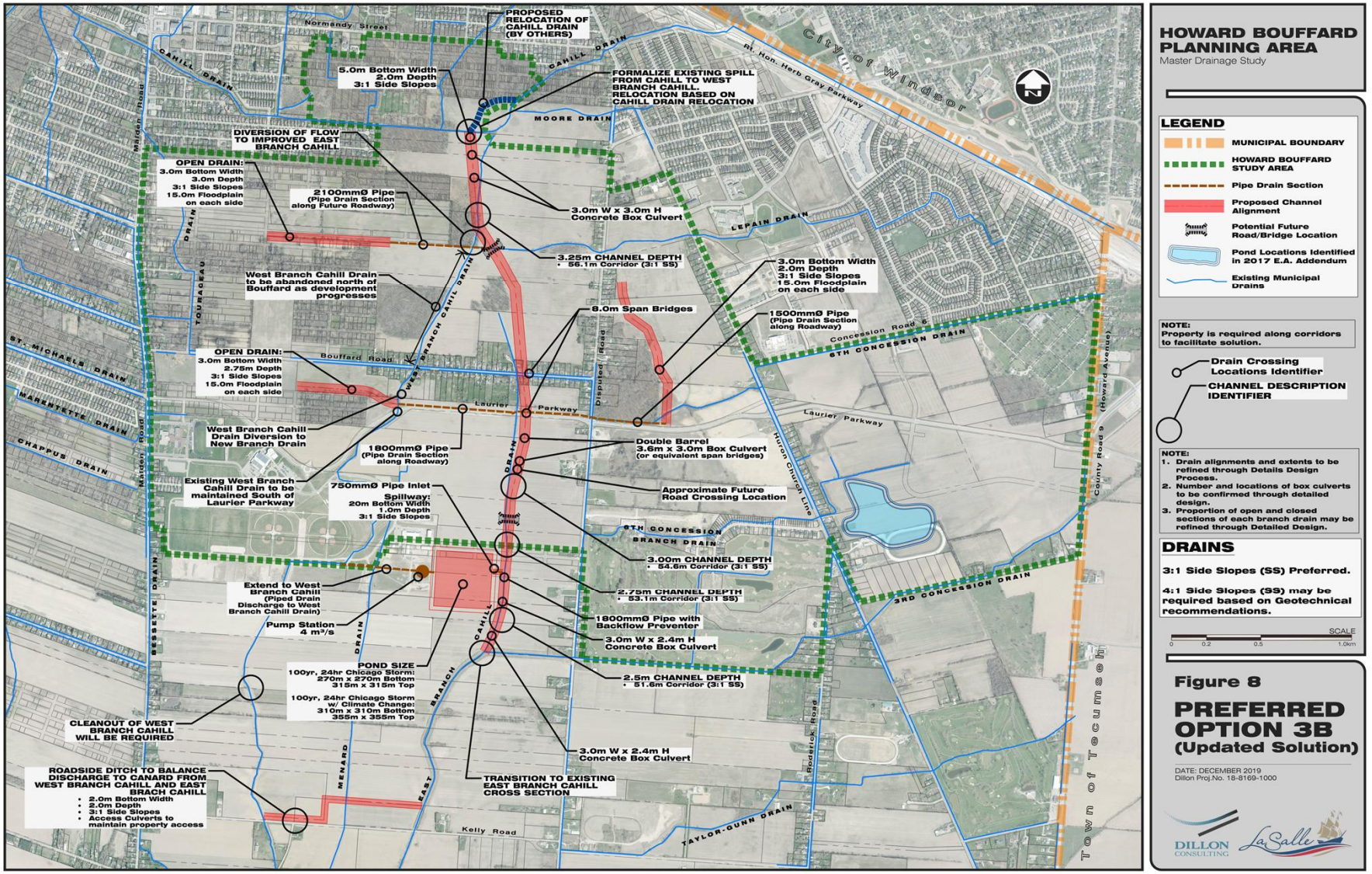
Stormwater Solution – 2017 EA Addendum



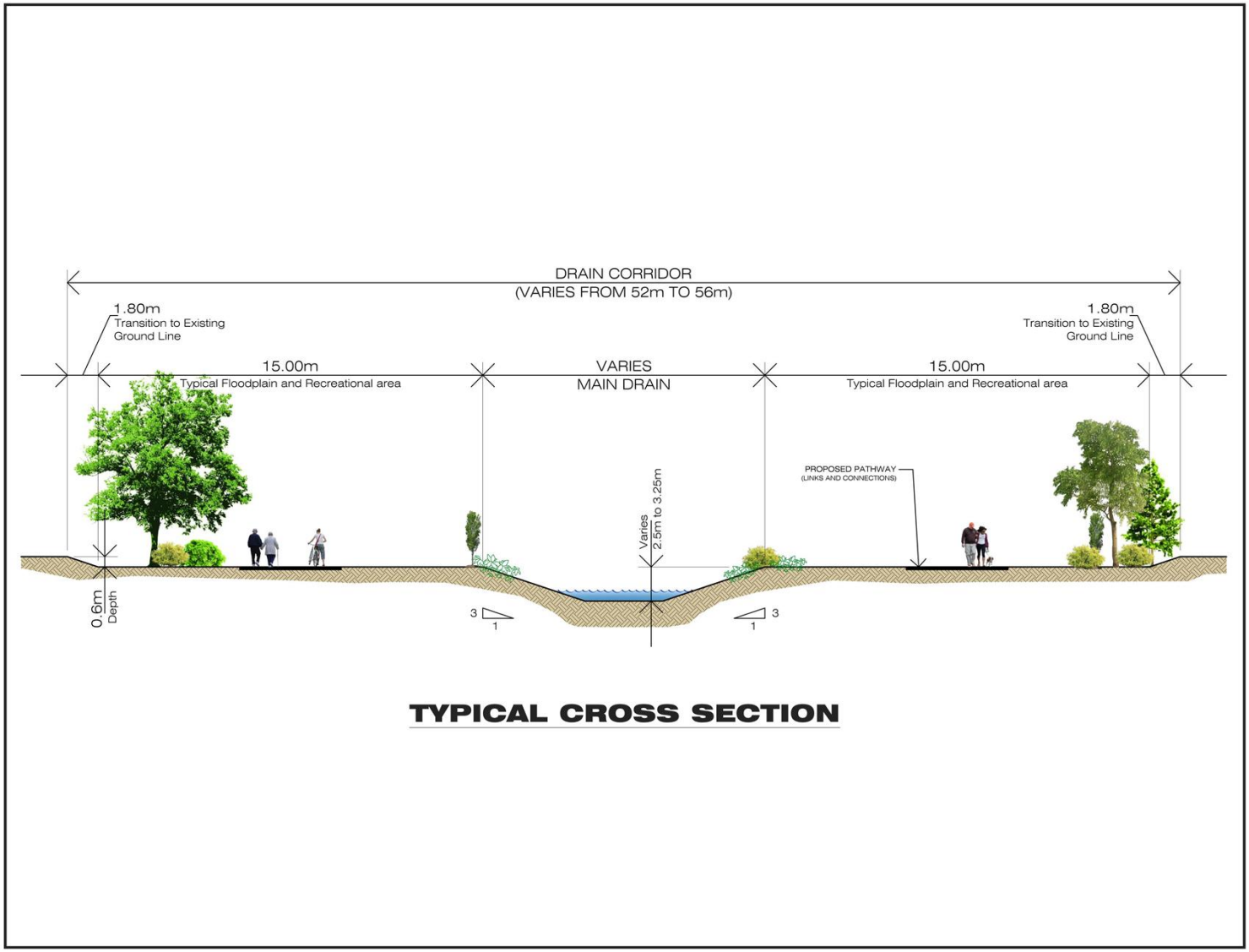
Recommended Solution (From PIC#1)



Revised Recommended Solution



Recommended Cross Section



HOWARD BOUFFARD PLANNING AREA
Master Drainage Study

Maximum Ponding Depths in Floodplain is 0.3m for 100yr, 24hr. Chicago Storm.

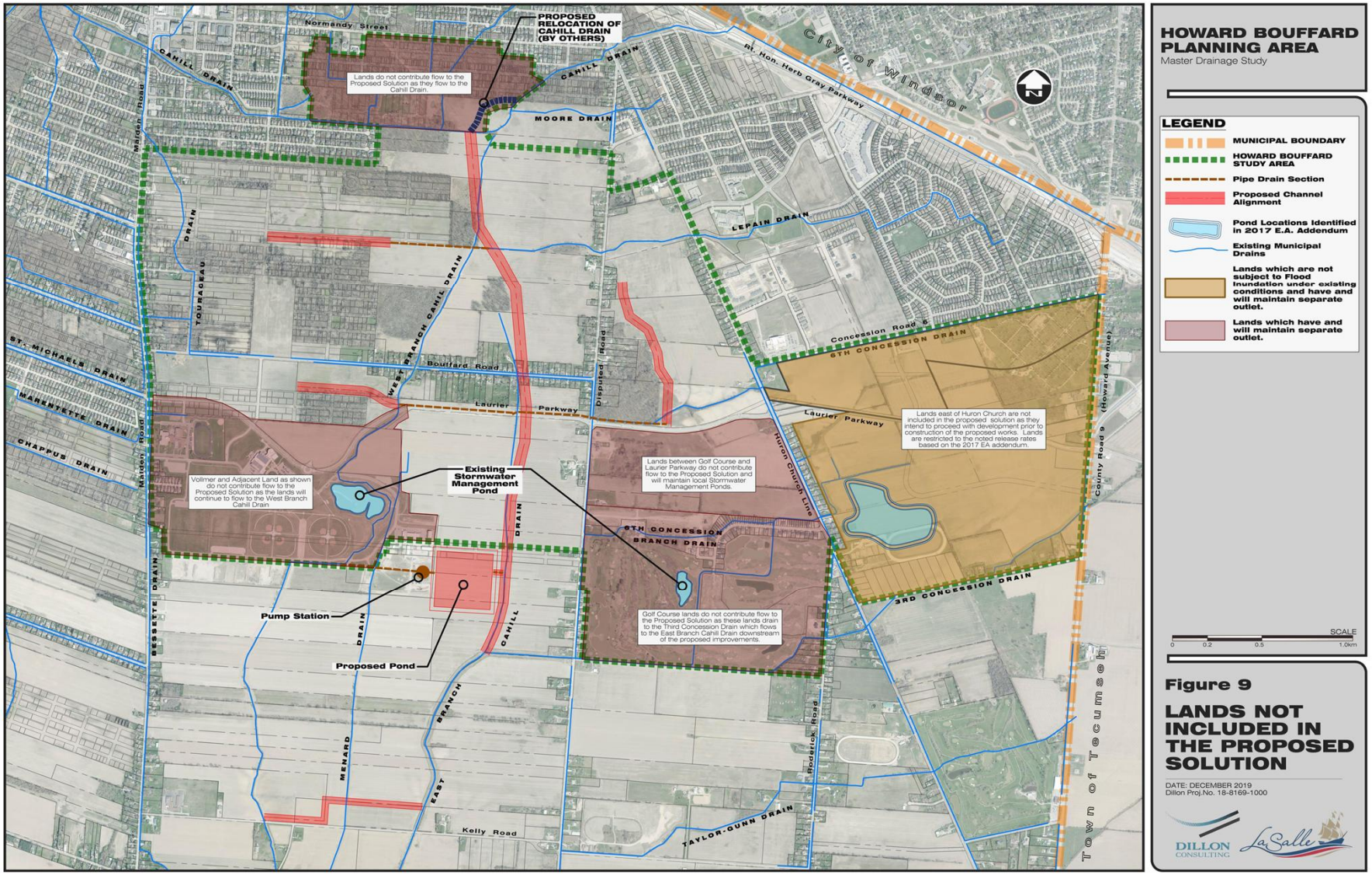
SCALE: N.T.S.

Figure 11

TYPICAL DRAIN CROSS SECTION

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

Lands Not Included in Proposed Solution



Property Acquisition Requirements – Bouffard Rd.

Climate Change Impacts

- Alternatives were subject to an Urban Stress Test
  - Additional 42mm of rain over 24hrs

- Results in approximately 50% increase to storage requirements
  - Additional volume of approximately 157,000m^3 for the recommended solution

  - Can also be addressed through depressing park lands and other green space
    - Ideal to locate parks along the drainage corridor
    - Stormwater benefits and connectivity to recreational areas along the corridor

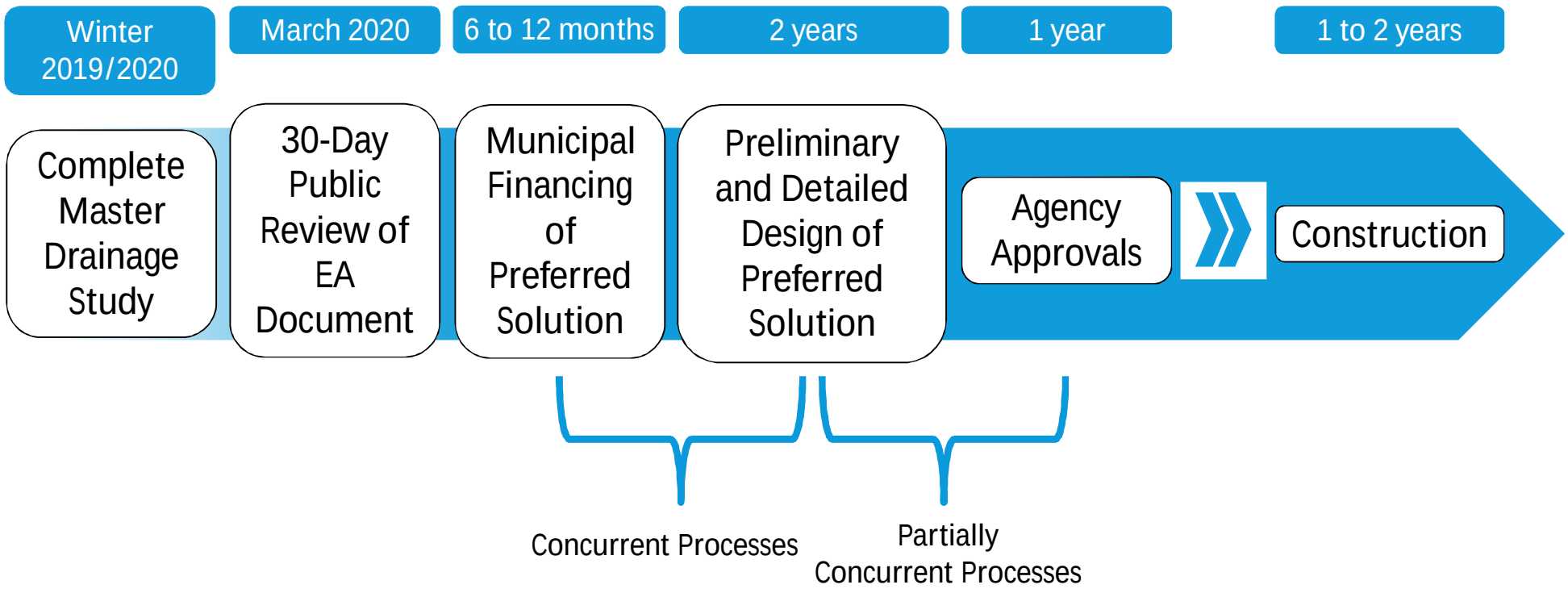
  - The more park land and other green space which can be used to provide storage will decrease the size of the Stormwater Pond accordingly.

Regional Pond Sizing Comparison

Option	Pond Footprint (m) Top of Bank	Storage Volume Required – 100yr24hr Chicago (m^3)	Pond Depth (m)	Peak Water Depth (m)
Preferred Option #3B (From PIC #1) Excluding Climate Change	277 x 277	212,000	3.72	3.22
Preferred Option #3B (From PIC #1) Including Climate Change	310 x 310	324,000	4.0	3.87
Recommended Solution Excluding Climate Change	315 x 315	342,000	4.5	4.03
Recommended Solution Including Climate Change	355 x 355	499,000	4.5	4.49

§ 5:1 Side Slopes for Pond Banks (All Options)

Anticipated Project Timeline



* Steps beyond completion of the preliminary design require Council approval.

Estimated Construction Costs

	CAPITAL COSTS (Millions)				BENEFITS	
	Construction	Engineering	Contingency	Total	# Ponds Eliminated	# Pump Stations Eliminated
Option 3B (PIC #1)	$25.4	$3.8	$7.3	$36.5	14	8
Recommended Solution	$36.3	$4.5	$8.2	$49.0	12	7

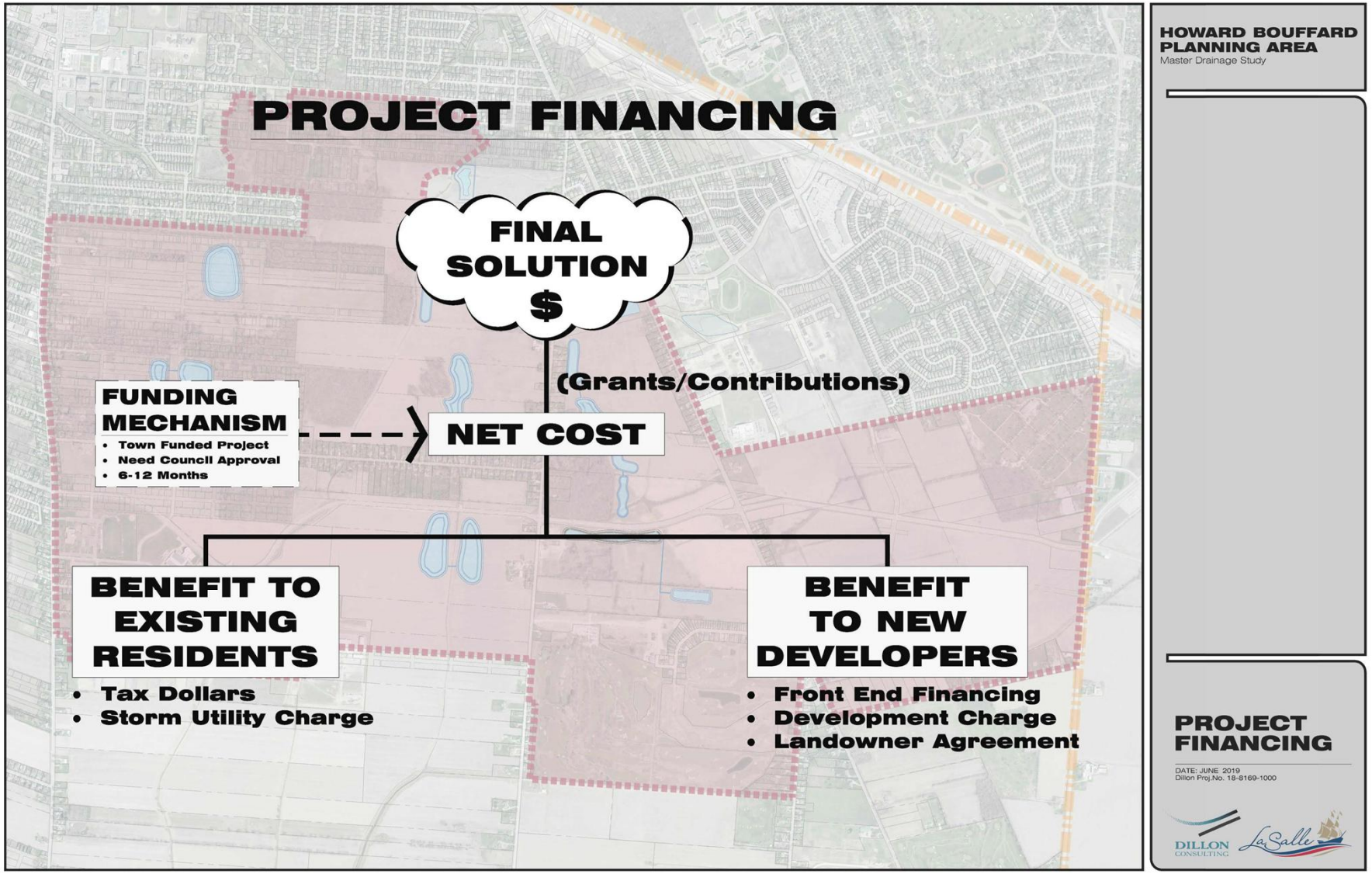
- Excludes land acquisition costs
- Excludes park land and green areas utilized for climate change resiliency
- Excludes future bridge crossings
- There may be an opportunity to reduce the estimated cost by keeping the excavated material onsite. This will be reviewed further through the design phases of the project.

Estimated Construction Cost for Proposed Improvements reduced by:

→ LESS Costs for Construction of Local Stormwater Ponds

→ LESS Costs for Local Pump Stations

Project Financing



We Need Your Participation

Feedback from the public and the development community is vital as it will directly influence the recommended solution.

- Comment forms have been provided and can be submitted at or following this PIC
- Stakeholders may contact the project leads via mail, email or phone

Please provide us with your comments by:

January 31, 2019

Next Steps

	2019	2020	
	Winter	Spring	Summer
Receive Feedback From this Meeting (PIC)	→		
Complete EA Report and Make Available for Public Review	→		
Preliminary Design of Recommended Solution	→	→	
Council Consideration of Next Steps			→

Thank you for attending.

If you have any questions about this project, please fill out the comment sheets or contact either of the individuals listed below.

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http://www.lasalle.ca/hbmds

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