

# Meadowlily Road Environmental Assessment (EA)



Source: City of London, 2021

## Public Information Centre



# Study Area

- The Meadowlily Road Area (Study Area) has gained interest for future development opportunities within the City of London. Currently, the Study Area has limited municipal servicing, and existing properties are serviced through private systems.
- In addition, consistent with the Cycling Master Plan, there is a need to address the gap in the recreational pathway system between the Meadowlily Bridge and the Citywide Sports Park on Commissioners Road East within the Right of Ways (ROWs) that meets all City design standards for the Thames Valley Parkway, multi-use pathway.



Figure 1: Meadowlily Road Area (City of London)



# Problem Statement

- The City of London has initiated a Class Environmental Assessment Study for a new municipal sanitary pumping station to facilitate the servicing of future developments within the Study Area and determine the most appropriate means of establishing primary recreational pathway linkages between Meadowlily Bridge and the Citywide Sports Park within the Meadowlily Road South and Commissioners Road East, ROWs.
- A review of design alternatives has been conducted to determine a preferred alternative for servicing and providing a recreational pathway system within the Study Area, while maintaining the objectives of:
  - Protection of the environment, including cultural heritage resources;
  - Minimal disruption to residents and surrounding areas;
  - Optimizing costs;
  - Engaging a broad range of stakeholders; and
  - Documenting the study process in compliance with the Municipal Class Environmental Assessment Schedule “B” process.



Figure 2: Meadowlily Road South



# Municipal Class Schedule B EA Planning and Design Process

- 1 Background Studies
- 2 Develop Preferred Alternatives – Sanitary Servicing and Multi-Use Pathway
- 3 PIC – Present Design Alternatives
- 4 Address PIC comments
- 5 Prepare Project File Report
- 6 Project File Report Review Period
- 7 Notice of Study Completion





# Sanitary Servicing Requirements

- Sanitary Pump Station (SPS) rated to approximately 30 L/s based on proposed development applications.
- SPS requires a wet-well, and potentially a building for a stand-by generator and electrical equipment. The SPS will be made to fit the surrounding environment.
- Alternatives will minimize impact to the existing Meadowlily Woods Environmentally Significant Areas (ESA) boundary.



Figure 3: Sanitary Pump Station Wet Well and Building (Example)



# Preliminary Evaluation Criteria for Sanitary Alternatives

Criteria	Description
<b>Natural Environment</b>	<ul style="list-style-type: none"><li>• Effects on vegetation, water quality, wildlife and aquatic habitat, wetlands, terrestrial resources, woodlands, species at risk.</li><li>• Induced impacts of each alternative.</li><li>• Impact of spills or overflows for each alternative.</li></ul>
<b>Social Environment</b>	<ul style="list-style-type: none"><li>• Impact on local community.</li><li>• Anticipated impacts during construction.</li><li>• Contribution/detraction from the community aesthetic.</li></ul>
<b>Heritage/Cultural Impacts</b>	<ul style="list-style-type: none"><li>• Potential impacts on cultural heritage resources, including built heritage resources, cultural heritage landscapes, and archaeological resources.</li></ul>
<b>City Operations</b>	<ul style="list-style-type: none"><li>• Operation of the sanitary pump station (i.e., safety, maintenance, emergency response, etc.).</li></ul>
<b>Technical</b>	<ul style="list-style-type: none"><li>• Construction feasibility.</li><li>• Sanitary system operation (capacity constraints, operation).</li></ul>
<b>Servicing Potential</b>	<ul style="list-style-type: none"><li>• Serviceability of developable areas within the study area.</li></ul>
<b>Costs</b>	<ul style="list-style-type: none"><li>• Anticipated capital, operating, and maintenance costs.</li></ul>



# Sanitary Servicing Alternative 1

Description: SPS on Meadowlily Road North, with Siphon Under River or Gravity Sewer Strapped to Existing Bridge to Convey Wastewater from Meadowlily Road South to North		
Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Sanitary forcemain and gravity sewer avoids Meadowlily ESA.</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction on Meadowlily Road North and South required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li></ul>
Social Environment	<ul style="list-style-type: none"><li>Future developments can be serviced.</li><li>Opportunity for existing properties currently being serviced privately, to be serviced by the City.</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction is required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li><li>Aesthetic impact of a sanitary pump station along Meadowlily Road North.</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Location of pump station is not within archaeological sensitivity areas of concern (i.e., Meadowlily Woods ESA).</li></ul>	<ul style="list-style-type: none"><li>Sanitary pump station in close proximity to the Mills Ruins and may require some vibration monitoring during construction.</li><li>River crossing through strapping a gravity sewer to the existing bridge will require an individual heritage impact assessment and mitigations for the bridge.</li><li>Road work near designated and archaeological sensitive areas along right of way.</li></ul>
City Operations	<ul style="list-style-type: none"><li>Only requires the operation of one sanitary pumping station to service Meadowlily Road North and South.</li></ul>	<ul style="list-style-type: none"><li>Additional maintenance of conveyance infrastructure under river or strapped to bridge.</li></ul>
Technical	<ul style="list-style-type: none"><li>Requires a single sanitary pump station</li><li>Lower head requirements needed by the pumps.</li></ul>	<ul style="list-style-type: none"><li>If a siphon is selected, directional drilling under the river will require additional on-site investigations, and construction measures.</li></ul>
Servicing Potential	<ul style="list-style-type: none"><li>Serves both Meadowlily Road North and South.</li></ul>	<ul style="list-style-type: none"><li>Use capacity of Feren Avenue gravity sewer, which may impact development upstream and downstream of gravity sewer.</li></ul>
Costs	<ul style="list-style-type: none"><li>Avoids requirement of a second sanitary pump station.</li></ul>	<ul style="list-style-type: none"><li>Cost of directional drilling under river, or strapping gravity sewer to existing bridge.</li><li>May require structural upgrades to existing bridge to support additional load.</li></ul>

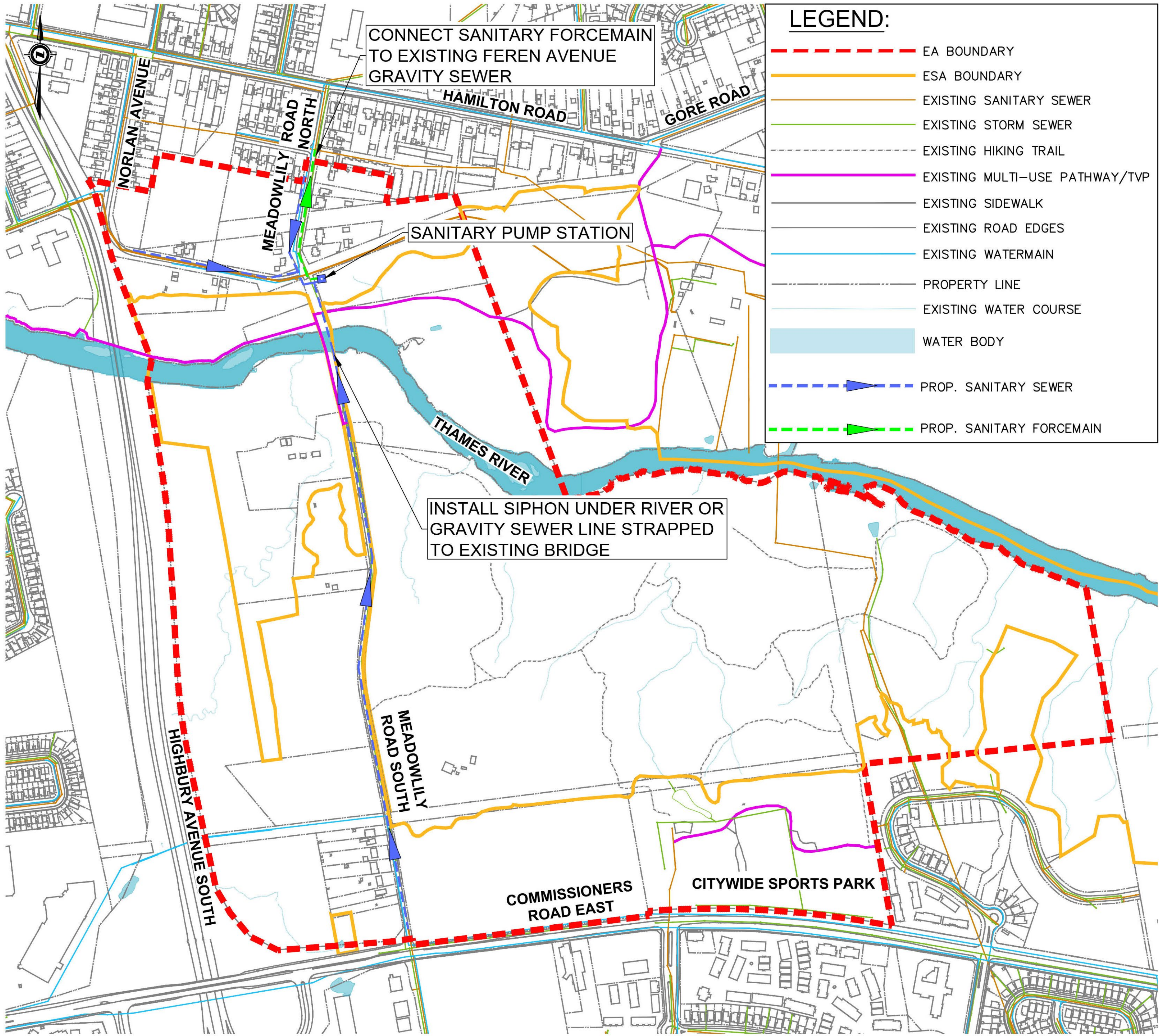
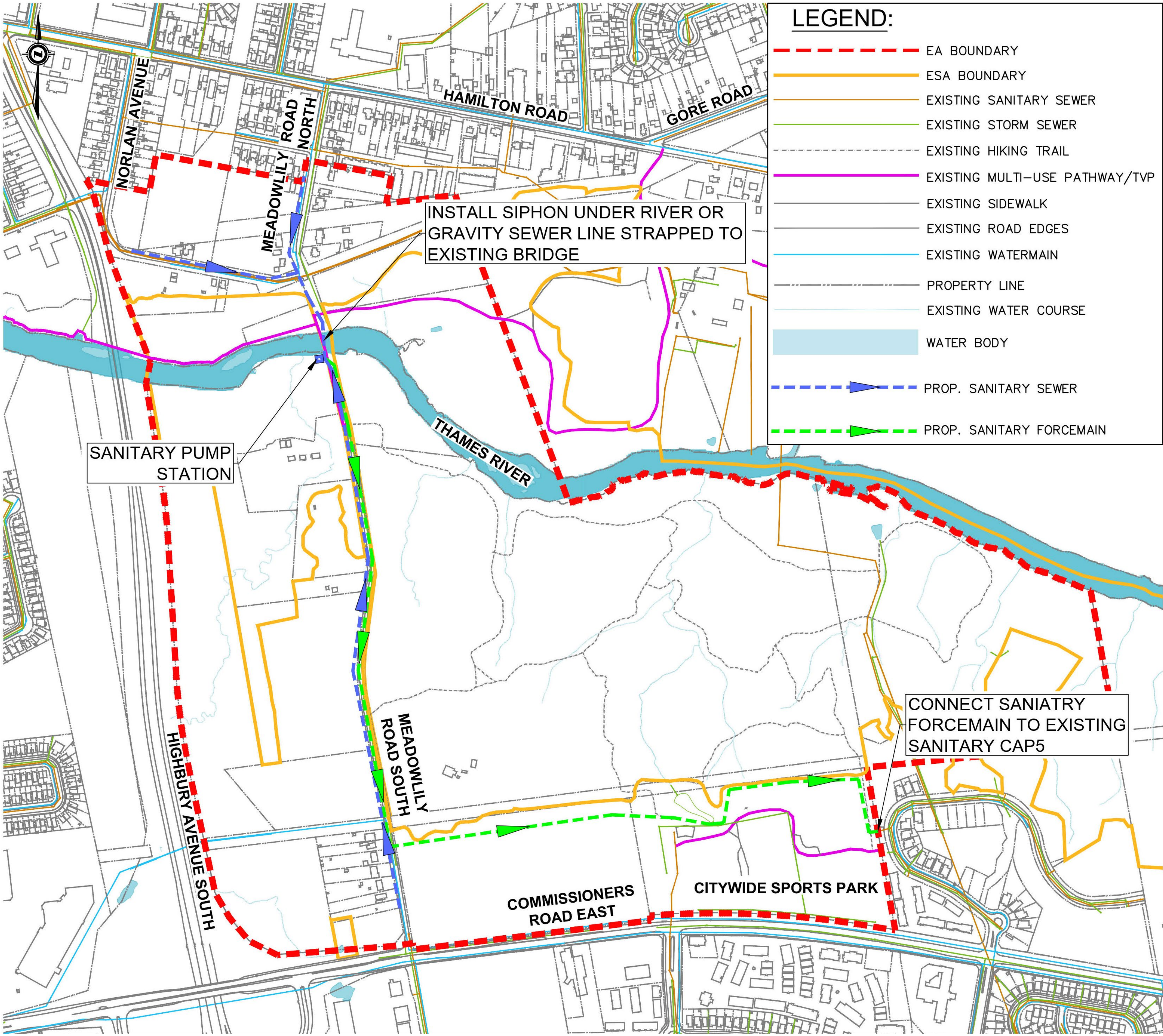


Figure 4: Gravity Sewer Strapped to Structure (Example)  
Source: structurae.net



# Sanitary Servicing Alternative 2

Description: SPS on Meadowlily Road South, with Siphon Under River or Gravity Sewer Strapped to Existing Bridge to Convey Wastewater from Meadowlily Road North to South		
Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Sanitary forcemain and gravity sewer avoids Meadowlily ESA.</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction is required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li></ul>
Social Environment	<ul style="list-style-type: none"><li>Future developments can be serviced.</li><li>Opportunity for existing properties currently being serviced privately, to be serviced by the City.</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction is required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li><li>Aesthetic impact of a sanitary pump station along Meadowlily Road South.</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Location of pump station is not within archaeological sensitivity areas of concern (i.e., Meadowlily Woods ESA).</li></ul>	<ul style="list-style-type: none"><li>River crossing through strapping a gravity sewer to the existing bridge will require an individual heritage impact assessment and mitigations for the bridge.</li><li>Road work near designated and archaeological sensitive areas along right of way.</li></ul>
City Operations	<ul style="list-style-type: none"><li>Only requires the operation of one sanitary pumping station to service Meadowlily Road North and South.</li></ul>	<ul style="list-style-type: none"><li>Additional maintenance of conveyance infrastructure under river or strapped to bridge.</li></ul>
Technical	<ul style="list-style-type: none"><li>Requires a single sanitary pump station.</li></ul>	<ul style="list-style-type: none"><li>If a siphon is selected, directional drilling under the river will require additional on-site investigations, and construction measures.</li></ul>
Servicing Potential	<ul style="list-style-type: none"><li>Serves both Meadowlily Road North and South.</li></ul>	<ul style="list-style-type: none"><li>May impact future development along Commissioners Road East due to capacity of existing gravity sewer.</li></ul>
Costs	<ul style="list-style-type: none"><li>Avoids requirement of a second sanitary pump station.</li></ul>	<ul style="list-style-type: none"><li>Cost of directional drilling under river, or strapping gravity sewer to existing bridge.</li><li>May require structural upgrades to existing bridge to support additional load.</li></ul>



**Figure 5: Meadowlily Bridge**  
Source: Meadowlily Woods Environmentally Sensitive Area Facebook Group, August 13, 2022



# Sanitary Servicing Alternative 3A

Description: SPS on Meadowlily Road South only (Sanitary Forcemain Connection to CAP 5)		
Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Minimizes road reconstruction in Meadowlily Road North.</li><li>Avoids Meadowlily Woods ESA.</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction on Meadowlily Road South required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li></ul>
Social Environment	<ul style="list-style-type: none"><li>Minimizes road reconstruction in Meadowlily Road North.</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction is required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li><li>Aesthetic impact of a sanitary pump station along Meadowlily Road South.</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Does not require a river crossing (either through bridge or under river), which are existing conditions that introduce cultural heritage considerations.</li><li>Location of pump station and sanitary forcemain are not within archaeological sensitivity areas of concern (i.e., Meadowlily Woods ESA).</li></ul>	<ul style="list-style-type: none"><li>Close proximity to recognized Cultural Heritage areas. Proposed infrastructure will need to be compatible with existing landscape conditions of the area.</li><li>Road work near designated and archaeological sensitive areas along right of way.</li></ul>
City Operations	<ul style="list-style-type: none"><li>No maintenance costs associated with sanitary conveyance crossing under the river or strapped to bridge.</li><li>Only requires the operation of one sanitary pumping station.</li></ul>	<ul style="list-style-type: none"><li>Sanitary forcemain requires access through Citywide Sports Park.</li></ul>
Technical	<ul style="list-style-type: none"><li>Does not require additional river crossings.</li></ul>	<ul style="list-style-type: none"><li>Requires coordination of connection to sanitary sewer through Citywide sports park.</li><li>Some capacity constraints within the Meadowlark Ridge Subdivision sanitary conveyance system, which could limit development allocation (i.e., population density) in some properties.</li></ul>
Servicing Potential	<ul style="list-style-type: none"><li>Allows for servicing of planned development along Meadowlily Road South.</li></ul>	<ul style="list-style-type: none"><li>Most of Meadowlily Road South can be serviced.</li><li>May impact future development along Commissioners Road East due to capacity of existing gravity sewer.</li></ul>
Costs	<ul style="list-style-type: none"><li>Avoids upgrades to existing bridge to compensate for additional loads.</li></ul>	<ul style="list-style-type: none"><li>Costs associated with property acquisition requirements.</li><li>Costs associated for potential future upgrades required for the Meadowlark Ridge sanitary conveyance system.</li></ul>

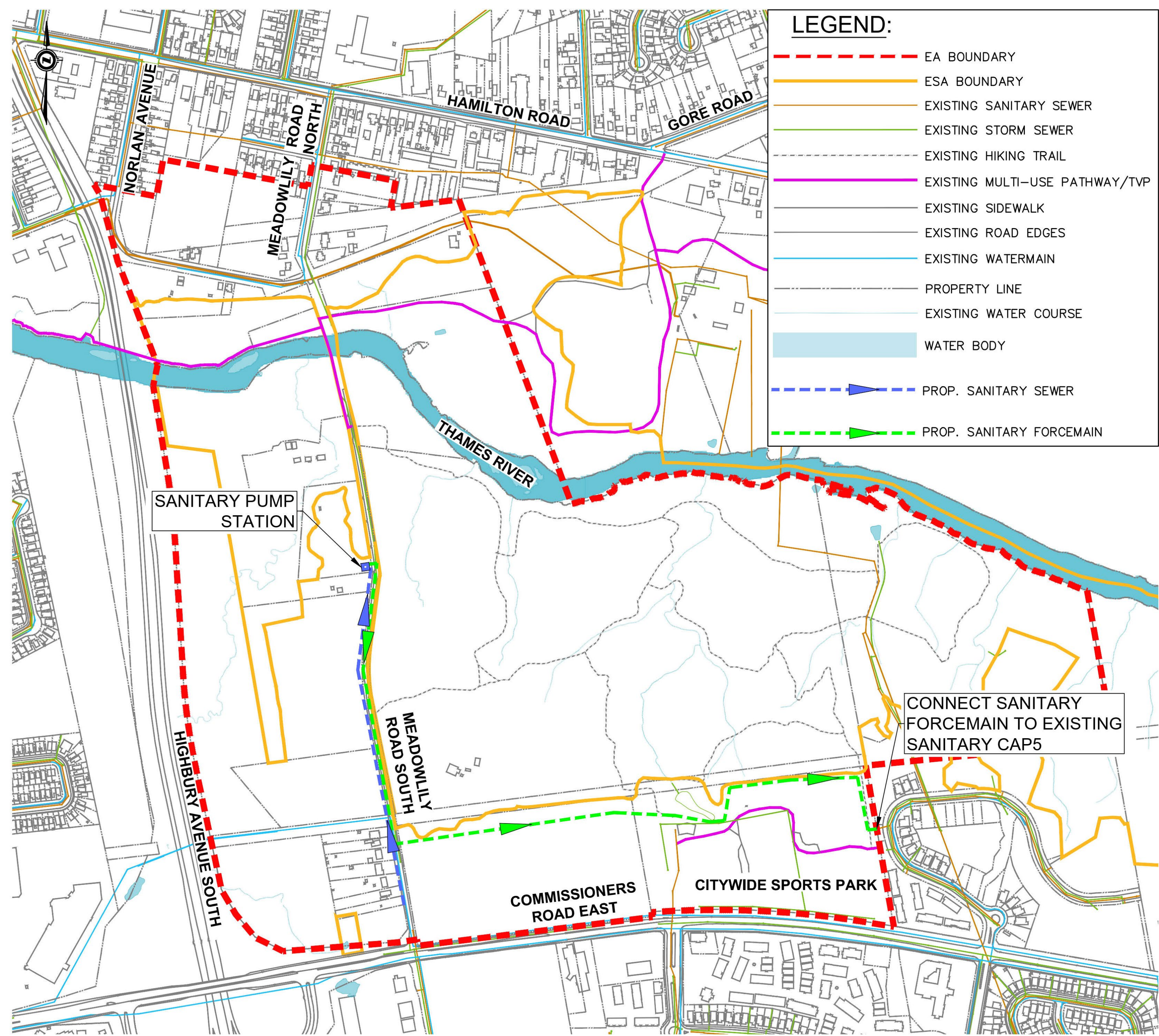


Figure 6: Meadowlily Road South



# Sanitary Servicing Alternative 3B

Description: SPS on Meadowlily Road South only (Sanitary Forcemain Connection to MHS20)

Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Minimizes road reconstruction in Meadowlily Road North.</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction on Meadowlily Road South required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li><li>Sanitary forcemain installed via horizontal directional drilling through ESA north of Meadowlark Ridge.</li></ul>
Social Environment	<ul style="list-style-type: none"><li>Minimizes road reconstruction in Meadowlily Road North.</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction is required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li><li>Aesthetic impact of a sanitary pump station along Meadowlily Road South.</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Does not require a river crossing (either through bridge or under river), which are existing conditions that introduce cultural heritage considerations.</li><li>Location of pump station is not within archaeological sensitivity areas of concern (i.e., Meadowlily Woods ESA).</li></ul>	<ul style="list-style-type: none"><li>Close proximity to recognized Cultural Heritage areas. Proposed infrastructure will need to be compatible with existing landscape conditions of the area.</li><li>Sanitary forcemain installed and connected behind Meadowlark Ridge via horizontal directional drilling through part of ESA, which may require additional archaeological investigations.</li></ul>
City Operations	<ul style="list-style-type: none"><li>No maintenance costs associated with sanitary conveyance crossing under the river or strapped to bridge.</li><li>Only requires the operation of one sanitary pumping station.</li></ul>	<ul style="list-style-type: none"><li>Sanitary forcemain requires access partially through Citywide Sports Park.</li></ul>
Technical	<ul style="list-style-type: none"><li>Does not require additional river crossings.</li><li>Sufficient capacity in sanitary sewer downstream of Meadowlark Ridge.</li></ul>	<ul style="list-style-type: none"><li>Requires coordination of connection to sanitary sewer behind Meadowlark Ridge.</li></ul>
Servicing Potential	<ul style="list-style-type: none"><li>Allows for servicing of all planned development along Meadowlily Road South.</li></ul>	<ul style="list-style-type: none"><li>Only Meadowlily Road South can be serviced.</li><li>May impact future development along Commissioners Road East due to capacity of existing gravity sewer.</li></ul>
Costs	<ul style="list-style-type: none"><li>Avoids upgrades to existing bridge to compensate for additional loads.</li></ul>	<ul style="list-style-type: none"><li>Costs associated with property acquisition requirements.</li></ul>

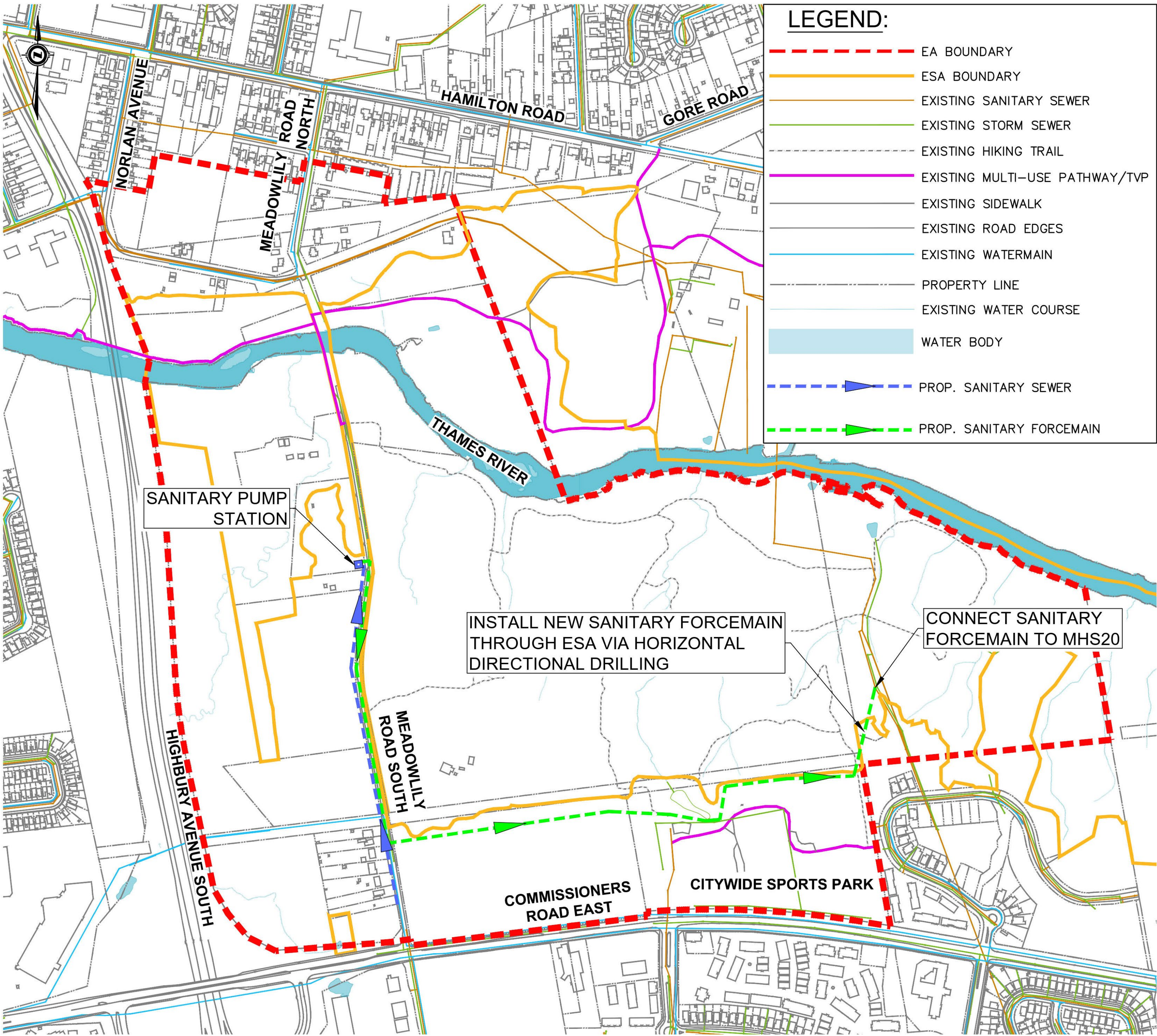


Figure 7: Meadowlily Road South



# Sanitary Servicing Alternative 3C

Description: SPS on Meadowlily Road South only (Sanitary Forcemain Connection to MHS20 via City-Owned Corridor)

Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Minimizes road reconstruction in Meadowlily Road North.</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction on Meadowlily Road South required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li><li>Sanitary forcemain east-west connection to Meadowlark Ridge is installed through ESA via City-Owned corridor.</li></ul>
Social Environment	<ul style="list-style-type: none"><li>Minimizes road reconstruction in Meadowlily Road North.</li><li>Reduces property impact by utilizing City owned corridor</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction is required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li><li>Aesthetic impact of a sanitary pump station along Meadowlily Road South.</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Does not require a river crossing (either through bridge or under river), which are existing conditions that introduce cultural heritage considerations.</li><li>Location of pump station is not within archaeological sensitivity areas of concern (i.e., Meadowlily Woods ESA).</li></ul>	<ul style="list-style-type: none"><li>Sanitary forcemain east-west connection near recognized Cultural Heritage areas. Proposed infrastructure will need to be compatible with existing landscape conditions of the area.</li><li>Sanitary forcemain east-west connection installed through ESA, which requires additional archaeological investigations.</li></ul>
City Operations	<ul style="list-style-type: none"><li>No maintenance costs associated with sanitary conveyance crossing under the river or strapped to bridge.</li><li>Only requires the operation of one sanitary pumping station.</li><li>Sanitary forcemain east-west connection is within City-Owned corridor.</li></ul>	
Technical	<ul style="list-style-type: none"><li>Does not require additional river crossings.</li><li>Sufficient capacity in sanitary sewer downstream of Meadowlark Ridge.</li></ul>	<ul style="list-style-type: none"><li>Requires coordination of connection to sanitary sewer behind Meadowlark Ridge.</li></ul>
Servicing Potential	<ul style="list-style-type: none"><li>Allows for servicing of all planned development along Meadowlily Road South.</li></ul>	<ul style="list-style-type: none"><li>Only Meadowlily Road South can be serviced.</li><li>May impact future development along Commissioners Road East due to capacity of existing gravity sewer.</li></ul>
Costs	<ul style="list-style-type: none"><li>Avoids upgrades to existing bridge to compensate for additional loads.</li><li>Avoids property acquisition for sanitary forcemain east-west connection.</li><li>Reduces land acquisition cost</li></ul>	<ul style="list-style-type: none"><li>Costs associated with environmental protection measures, cultural and archaeological requirements.</li></ul>

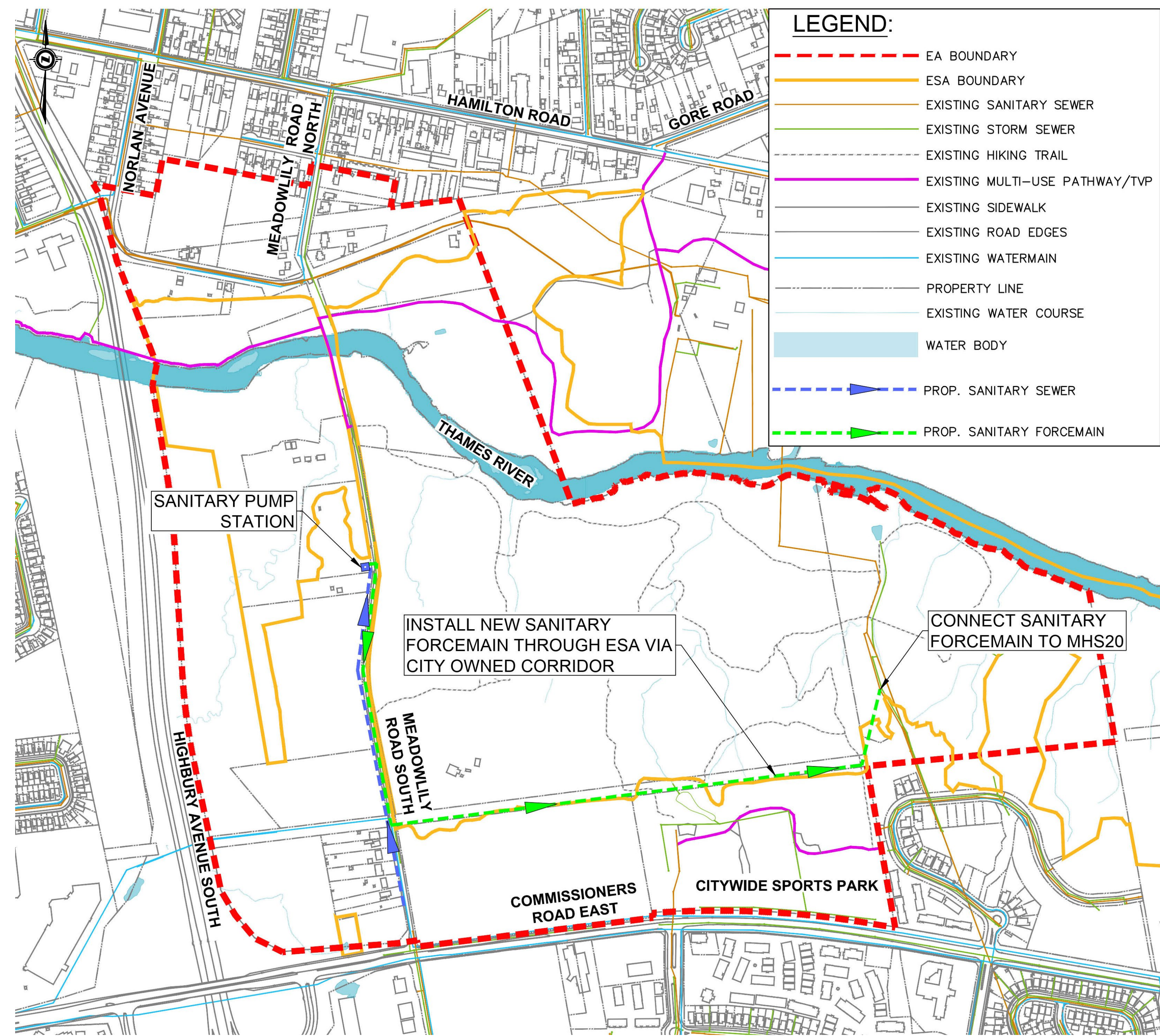


Figure 8: Meadowlily Road South



# Sanitary Servicing Alternative 4

Description: SPS on Meadowlily Road South, with Sanitary Forcemain Strapped to Existing Bridge to Convey Wastewater from Meadowlily Road South to North		
Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Avoids Meadowlily Woods ESA.</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction is required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li></ul>
Social Environment	<ul style="list-style-type: none"><li>Future developments can be serviced.</li><li>Opportunity for existing properties currently being serviced privately, to be serviced by the City.</li></ul>	<ul style="list-style-type: none"><li>Road reconstruction is required to install new sanitary servicing, water servicing, storm water servicing and other utilities.</li><li>Aesthetic impact of a sanitary pump station along Meadowlily Road.</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Location of pump station is not within archaeological sensitivity areas of concern (i.e., Meadowlily Woods ESA).</li></ul>	<ul style="list-style-type: none"><li>River crossing through strapping a sanitary forcemain to the existing bridge will require an individual heritage impact assessment and mitigations for the bridge.</li><li>Close proximity to recognized Cultural Heritage areas. Proposed infrastructure will need to be compatible with existing landscape conditions of the area.</li></ul>
City Operations	<ul style="list-style-type: none"><li>Only requires the operation of one sanitary pumping station.</li></ul>	<ul style="list-style-type: none"><li>Additional maintenance of conveyance infrastructure strapped to bridge.</li></ul>
Technical	<ul style="list-style-type: none"><li>Requires smaller sanitary conveyance system on river crossing (i.e., sanitary forcemain).</li></ul>	<ul style="list-style-type: none"><li>Assess feasibility of sanitary forcemain strapped to existing bridge.</li></ul>
Servicing Potential	<ul style="list-style-type: none"><li>Allows for servicing of planned development along Meadowlily Road South.</li></ul>	<ul style="list-style-type: none"><li>Does not service Meadowlily Road North.</li></ul>
Costs	<ul style="list-style-type: none"><li>Minimizes costs as no directional drilling under river is required.</li></ul>	<ul style="list-style-type: none"><li>May require bridge structural reinforcement to allow for the sanitary forcemain install.</li><li>Costs associated with property acquisition requirements.</li></ul>

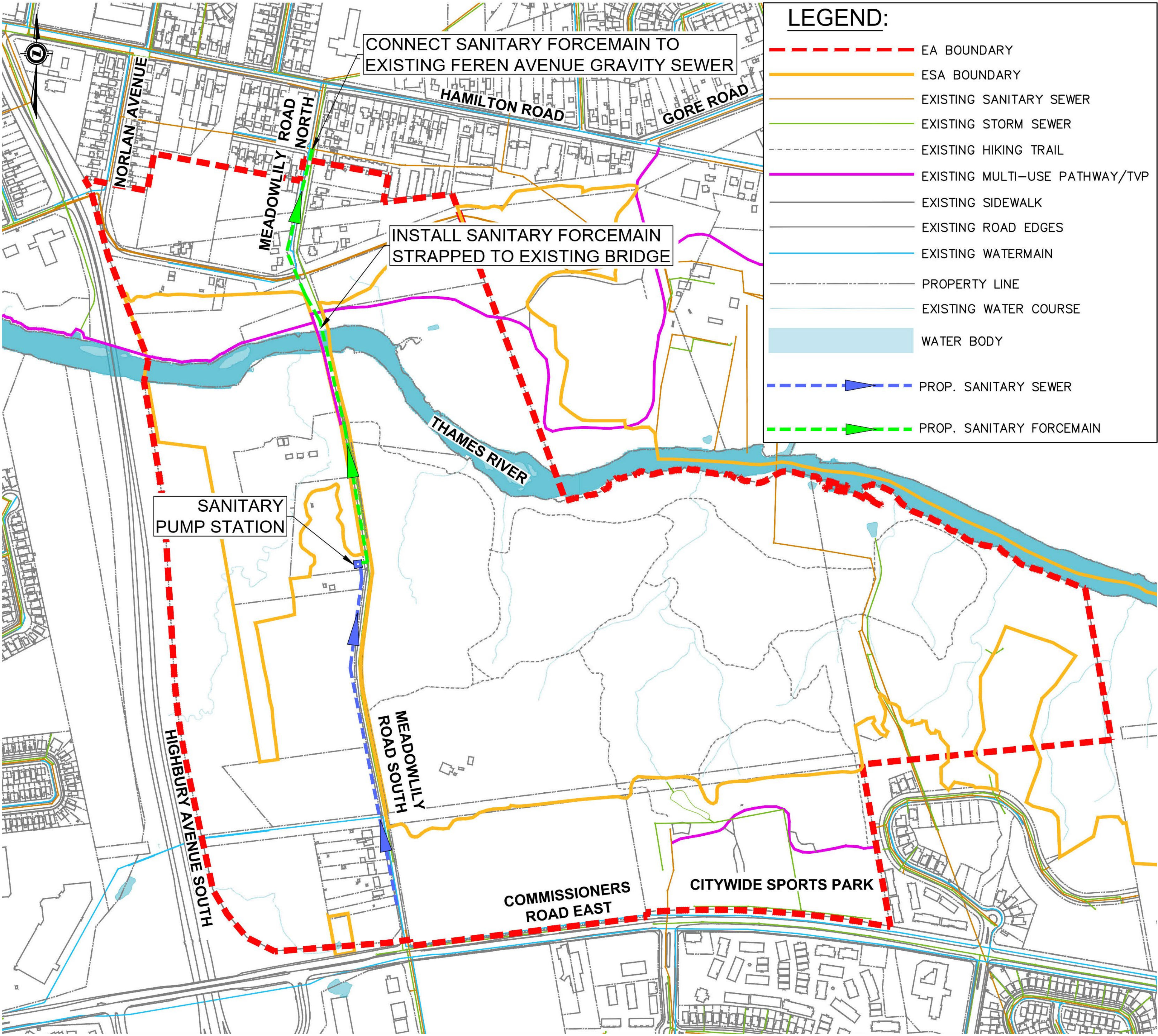
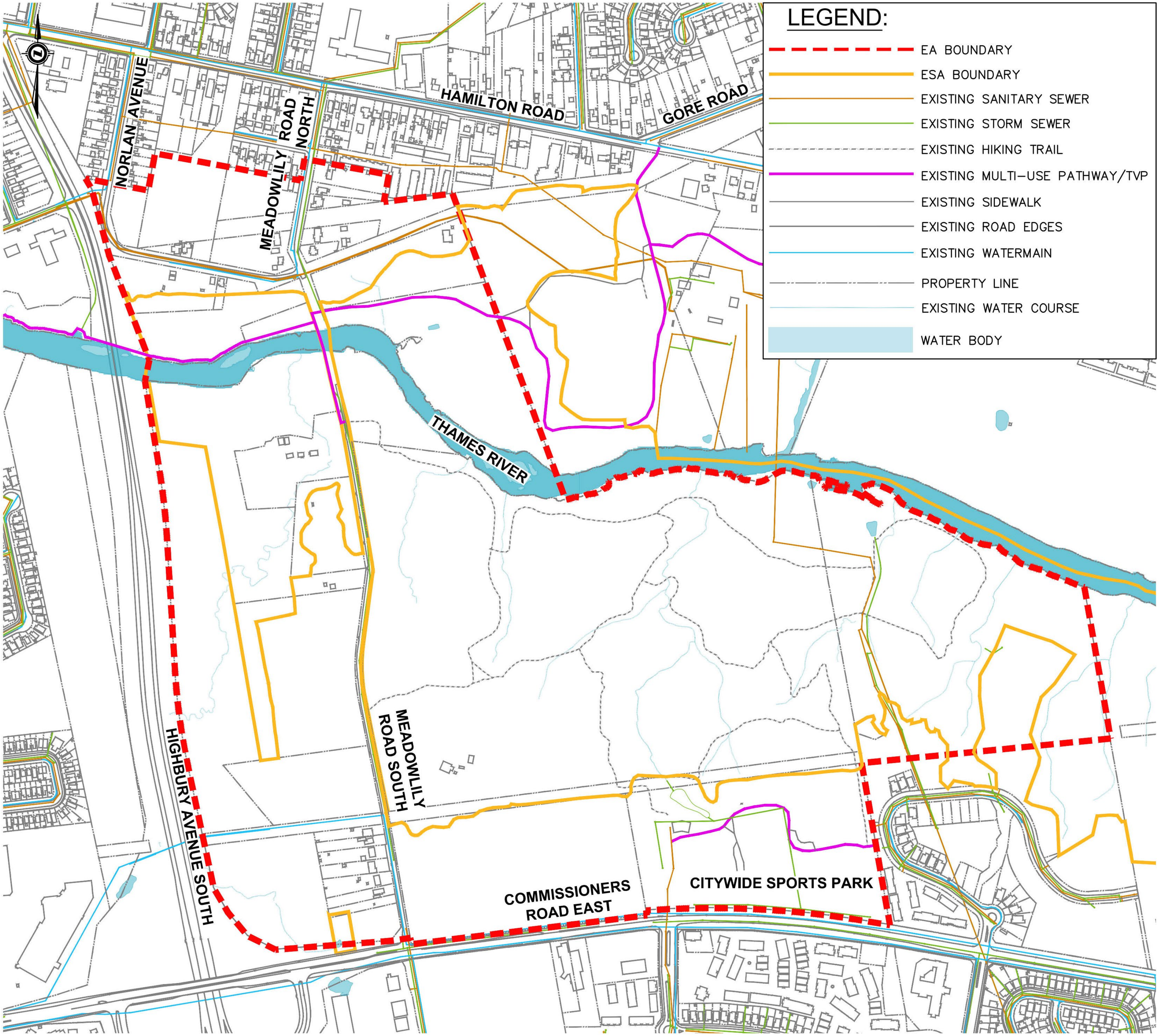


Figure 9: Meadowlily Bridge



# Sanitary Servicing Alternative 5

Description: Do Nothing		
Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Least impact to terrestrial and aquatic environment.</li></ul>	
Social Environment	<ul style="list-style-type: none"><li>Low impact to construction and community aesthetic.</li></ul>	<ul style="list-style-type: none"><li>Lost opportunity for communal sanitary service for new and existing developments.</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Low impact to heritage features outside of City's right of way</li></ul>	
City Operations		<ul style="list-style-type: none"><li>Additional individual measures required for sanitary servicing for new developments (i.e., holding tanks, private pump station).</li></ul>
Technical		<ul style="list-style-type: none"><li>Non-consolidated solution for proposed and future developments.</li></ul>
Servicing Potential		<ul style="list-style-type: none"><li>Existing and developable lands not being serviced by communal sanitary system.</li></ul>
Costs	<ul style="list-style-type: none"><li>No initial capital cost impacts.</li></ul>	<ul style="list-style-type: none"><li>Future capital, operational and maintenance costs risks if new developments/properties require sanitary servicing.</li></ul>





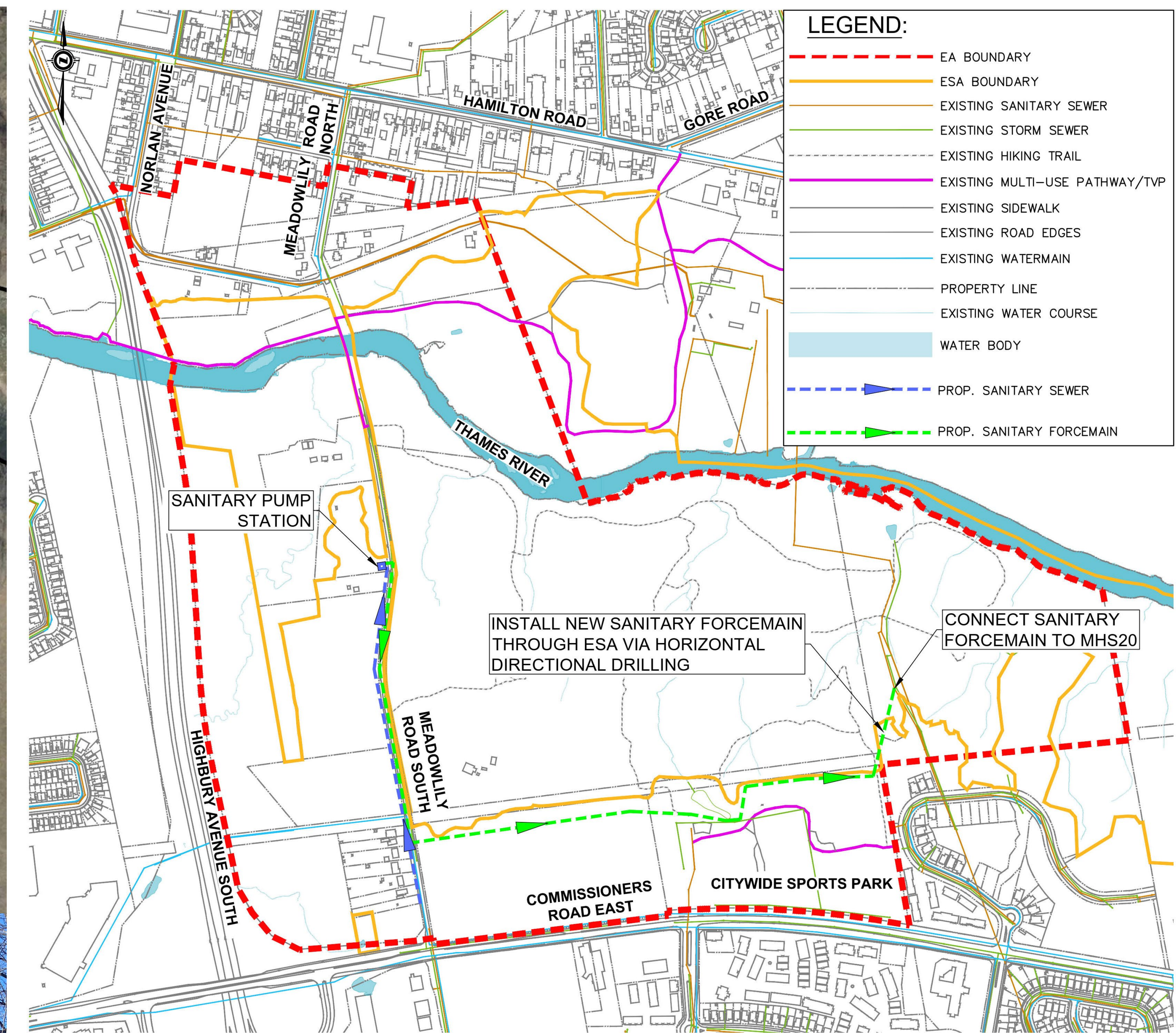
# Sanitary Servicing Evaluation Summary

Evaluation Criteria	Alternative Solutions						
	1	2	3A	3B	3C	4	5
	SPS on Meadowlily Rd N - Siphon/Gravity Sewer Across River to Service Meadowlily Rd S	SPS on Meadowlily Rd S - Siphon/Gravity Sewer Across River to Service Meadowlily Rd N	SPS on Meadowlily Rd S - Only Services Meadowlily Rd S (Sanitary Forcemain Connection to CAP 5)	SPS on Meadowlily Rd S - Only Services Meadowlily Rd S (Sanitary Forcemain Connection to MHS20)	SPS on Meadowlily Rd S - Only Services Meadowlily Rd S (Sanitary Forcemain Connection to MHS20 via City-Owned Corridor)	SPS on Meadowlily Rd S – Sanitary Forcemain Across River - Only Services Meadowlily Rd S	Do Nothing
Natural Environment							
Social Environment							
Heritage/Culture Impacts							
City Operations							
Technical							
Servicing Potential							
Costs							
Preferred	6	7	2	1	5	4	3





# Preferred Sanitary Servicing Alternative (3B)



## Notes:

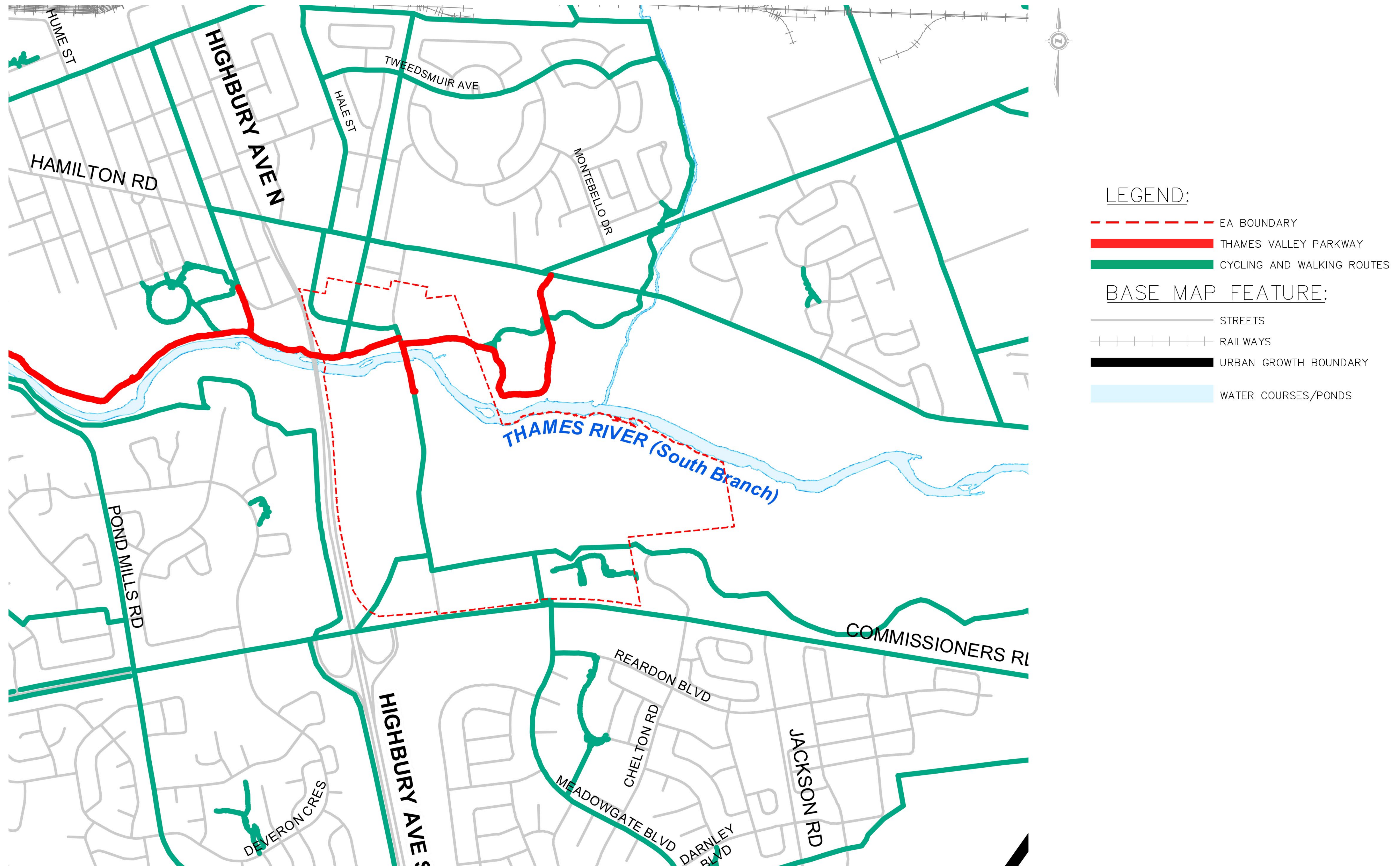
- One property impacted ( $\approx 0.06$  hectares), approximately 20m x 30 m SPS footprint.
- Approximately 0.47 hectares (assuming a 4.8 m easement) impacted by the east-west sanitary forcemain alignment.
- Overall reduction in project impacts when combined with Multi-Use Pathway alternative 3 or 4.
- Road reconstruction on Meadowlily Road South required to install new sanitary servicing, water servicing, storm water servicing and other utilities.

Figure 10: Approximate Sanitary Pump Station Location



# London Plan

## Map 4 – Active Mobility Network



Source: The London Plan Map 4 – Activity Mobility Network (2022)



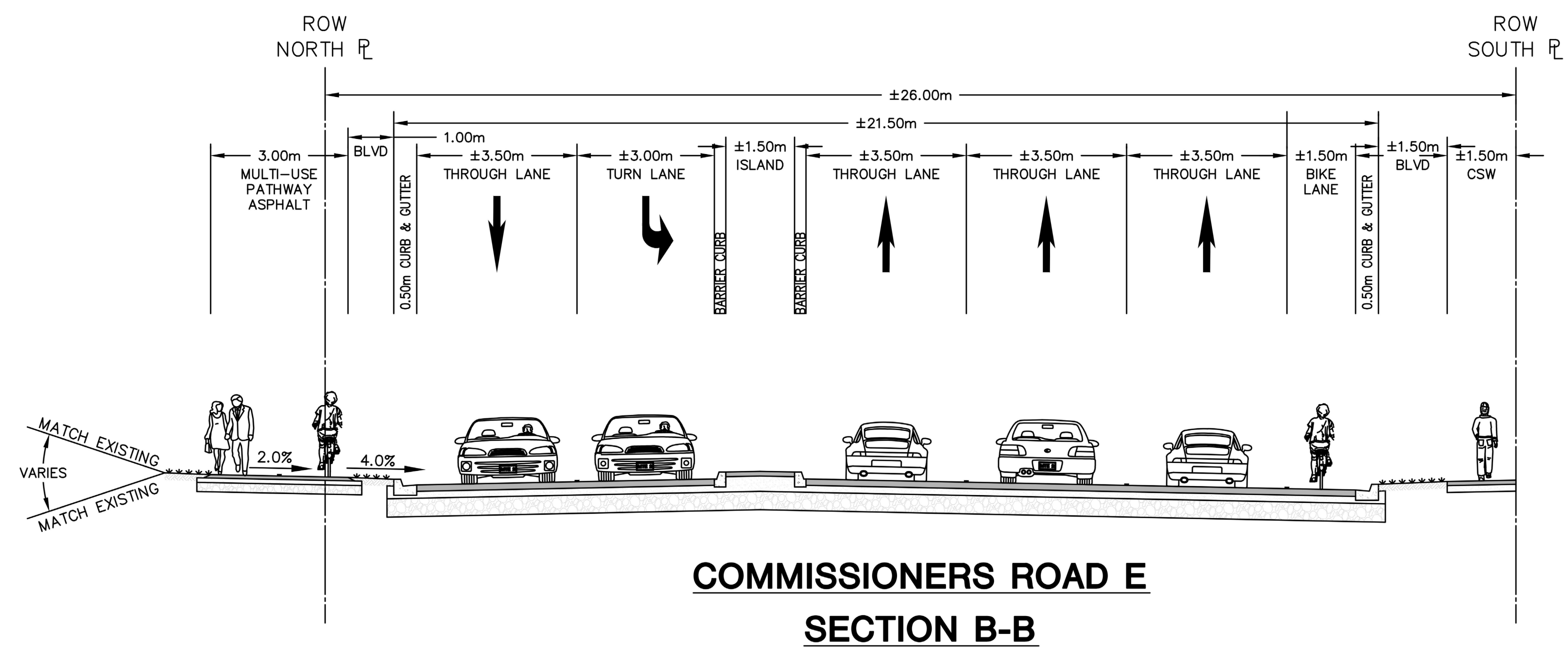
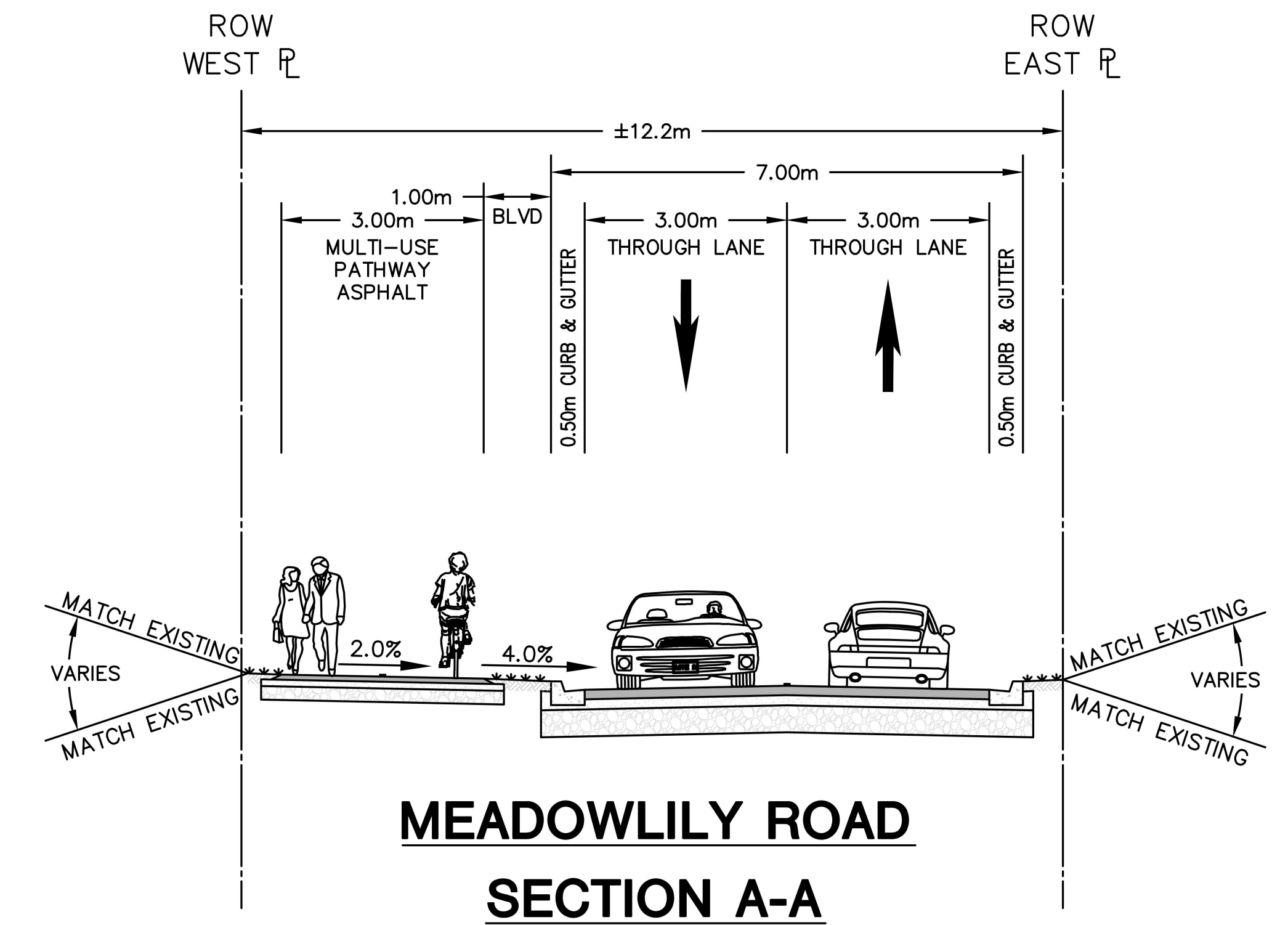
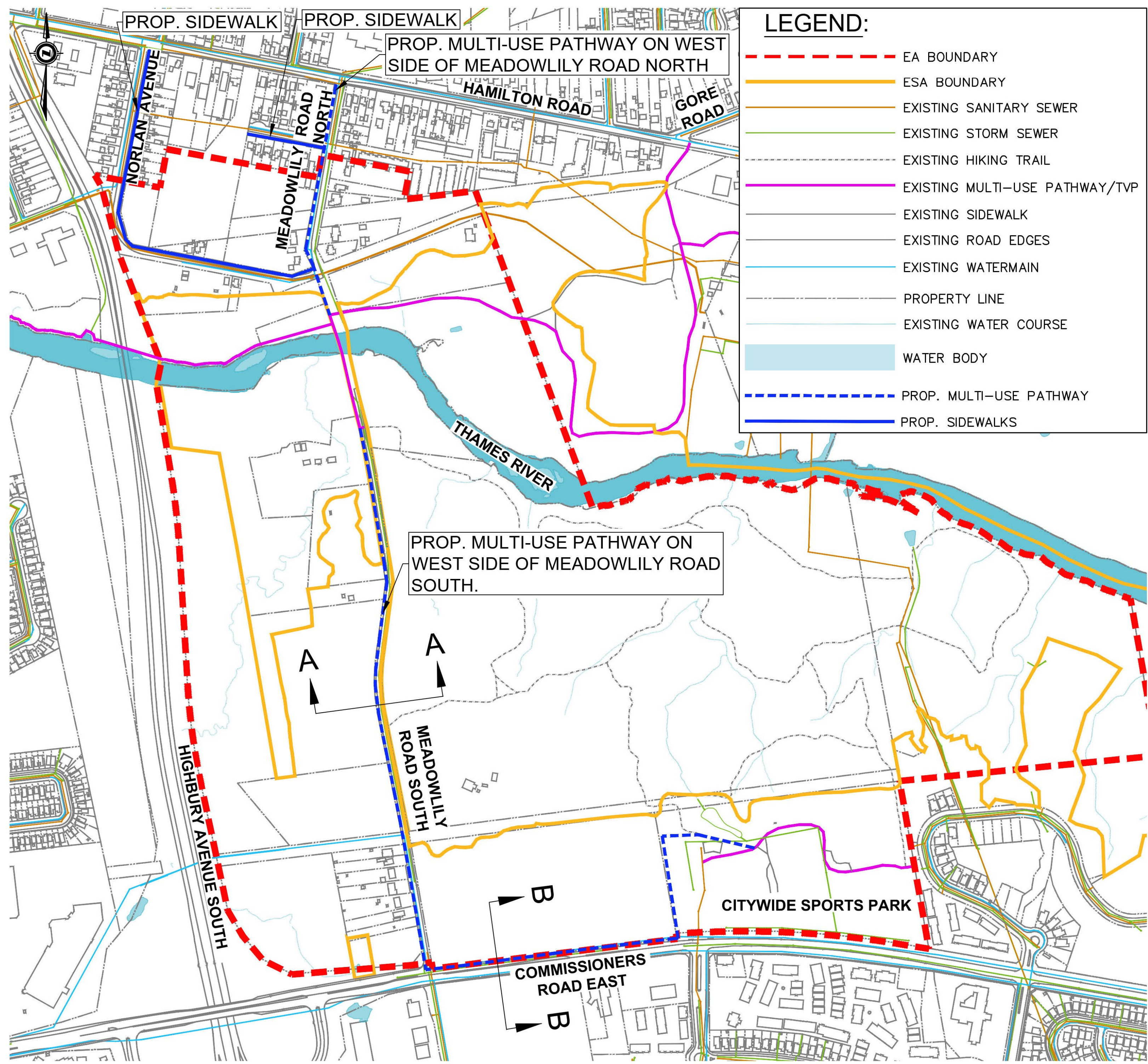
# Preliminary Evaluation Criteria for Multi-Use Pathway Alternatives

Criteria	Description
<b>Natural Environment</b>	<ul style="list-style-type: none"> <li>• Effects on vegetation, water quality, wildlife and aquatic habitat, wetlands, terrestrial resources, woodlands, species at risk.</li> </ul>
<b>Social Environment</b>	<ul style="list-style-type: none"> <li>• Impact on local community.</li> <li>• Anticipated impacts during construction.</li> <li>• Active transportation, accessibility and equity impacts.</li> </ul>
<b>Heritage/ Cultural Impacts</b>	<ul style="list-style-type: none"> <li>• Potential impacts on cultural heritage resources, including built heritage resources, cultural heritage landscapes, and archaeological resources.</li> </ul>
<b>Disruption to Existing Land Uses</b>	<ul style="list-style-type: none"> <li>• Potential disruption to existing land uses.</li> </ul>
<b>Technical/ City Standards</b>	<ul style="list-style-type: none"> <li>• Technical feasibility during construction.</li> <li>• Relocation of existing infrastructure (i.e., hydro poles).</li> <li>• Space and property acquisition considerations.</li> <li>• Deviation from City Standards.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li>• Anticipated capital and maintenance costs.</li> </ul>
<b>Climate Change</b>	<ul style="list-style-type: none"> <li>• Lower Greenhouse Gas Emissions.</li> </ul>



# Multi-Use Pathway Alternative 1

Description: Multi-Use Pathway on West Side of Meadowlily Road North and South		
Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Avoids impact to Meadowlily ESA as pathway is generally within existing right of way.</li></ul>	
Social Environment	<ul style="list-style-type: none"><li>A community Multi-use Pathway that provides accessible and equitable connections.</li><li>Provides direct access to Commissioners Road East, new developments and TVP.</li><li>Meets AODA standards to provide safe transportation for vulnerable populations.</li></ul>	<ul style="list-style-type: none"><li>Connection requires crossing of Meadowlily Road South on Commissioners Road East intersection.</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Separation from the archaeological sensitivity areas (i.e., Meadowlily Woods ESA)</li><li>Easier to tie into existing conditions of the area, including existing infrastructure along Commissioners Road East and Meadowlily Road South.</li></ul>	
Disruption to Existing Land Uses	<ul style="list-style-type: none"><li>Minimizes disruption to Meadowlily ESA.</li><li>Integrating the pathway now minimizes potential future disruption.</li></ul>	<ul style="list-style-type: none"><li>Potential for minor grading impacts to some private properties.</li><li>Potential relocation of some hydro-poles.</li></ul>
Technical/ City Standards	<ul style="list-style-type: none"><li>Follows typical City Standards.</li><li>Facility for walking aligns with London Plan and Complete Streets.</li></ul>	
Costs	<ul style="list-style-type: none"><li>Potential cost saving if pathway implemented concurrently with road reconstruction.</li></ul>	<ul style="list-style-type: none"><li>Costs for land acquisition for pathway in Commissioners Road East right of way.</li><li>Cost to relocate streetlights on north side of Commissioners Road East.</li></ul>
Climate Change	<ul style="list-style-type: none"><li>Decrease in greenhouse emissions (i.e., promote biking for commuters).</li></ul>	

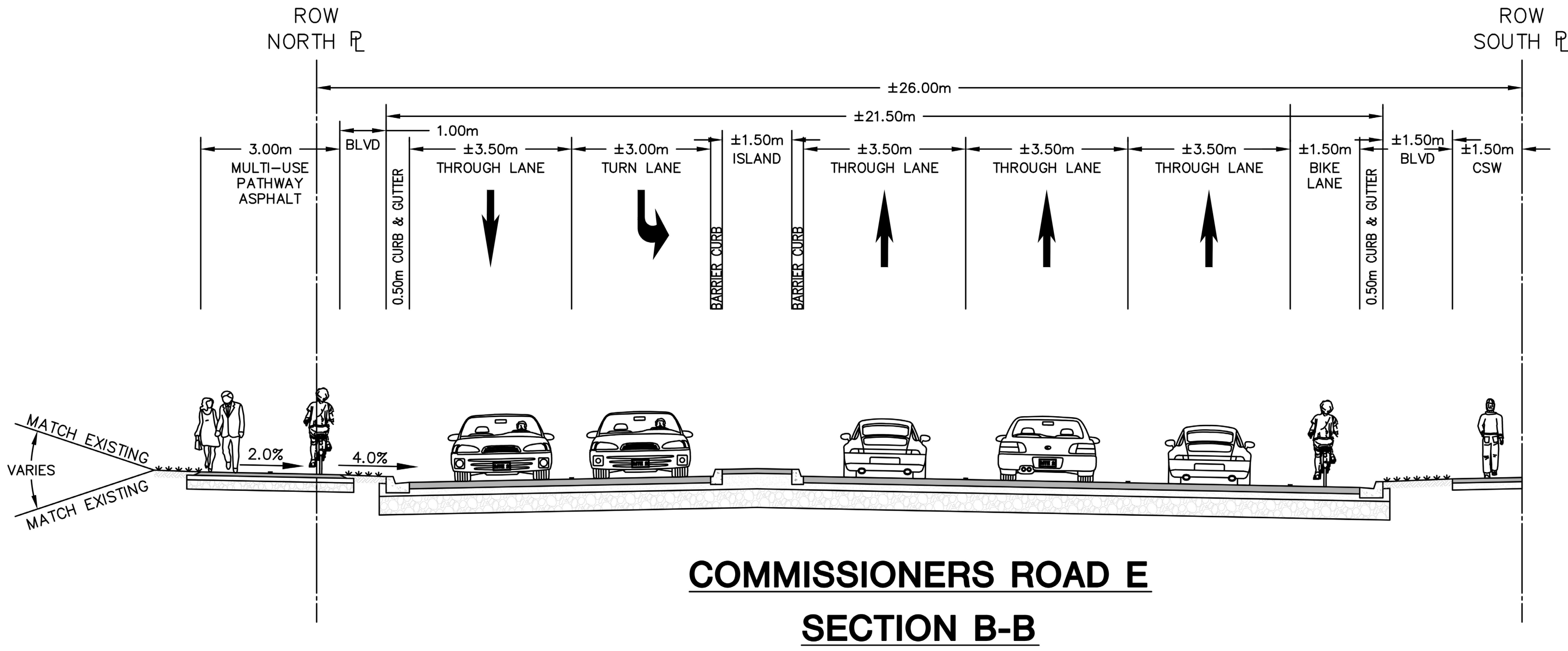
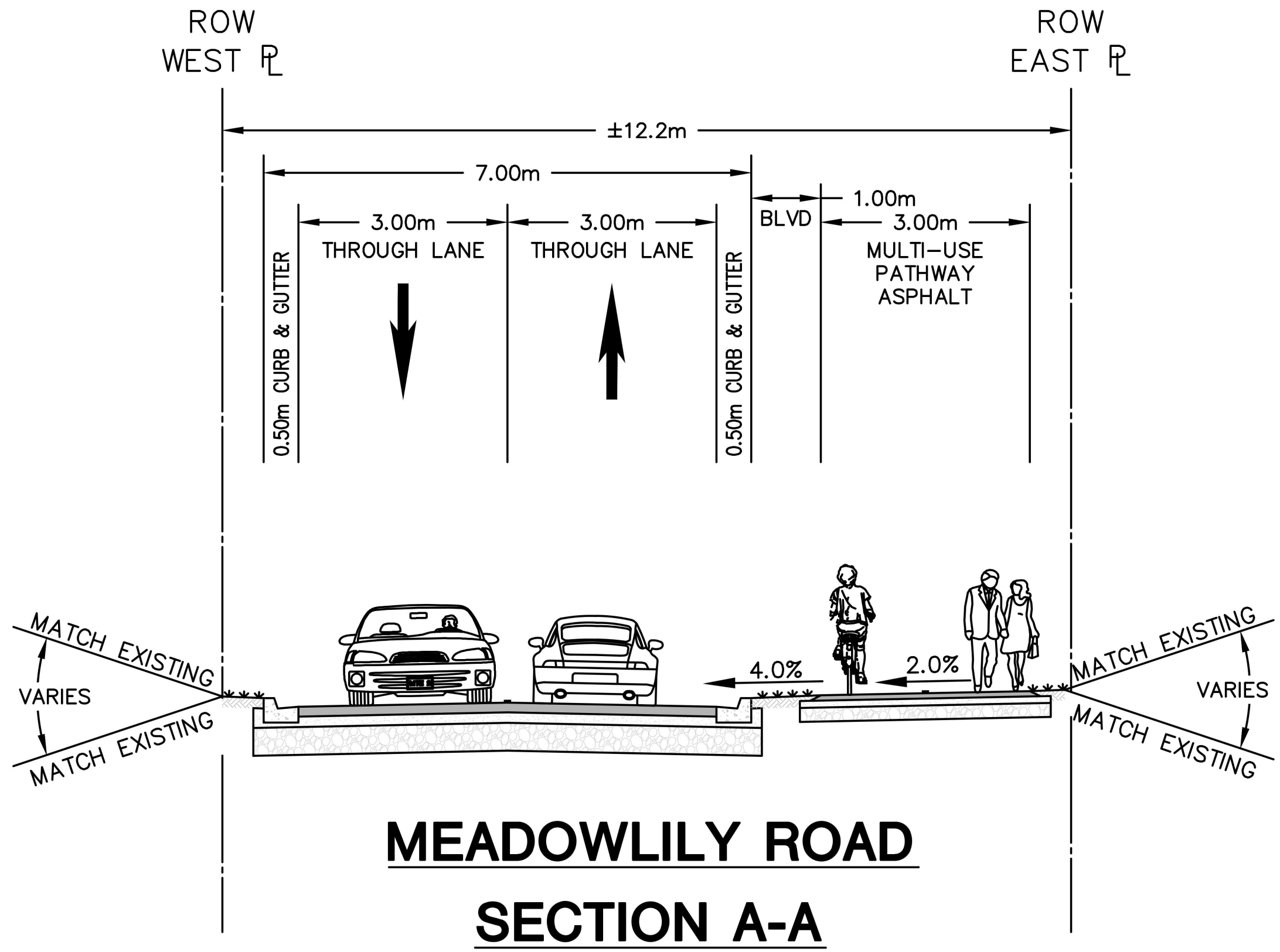
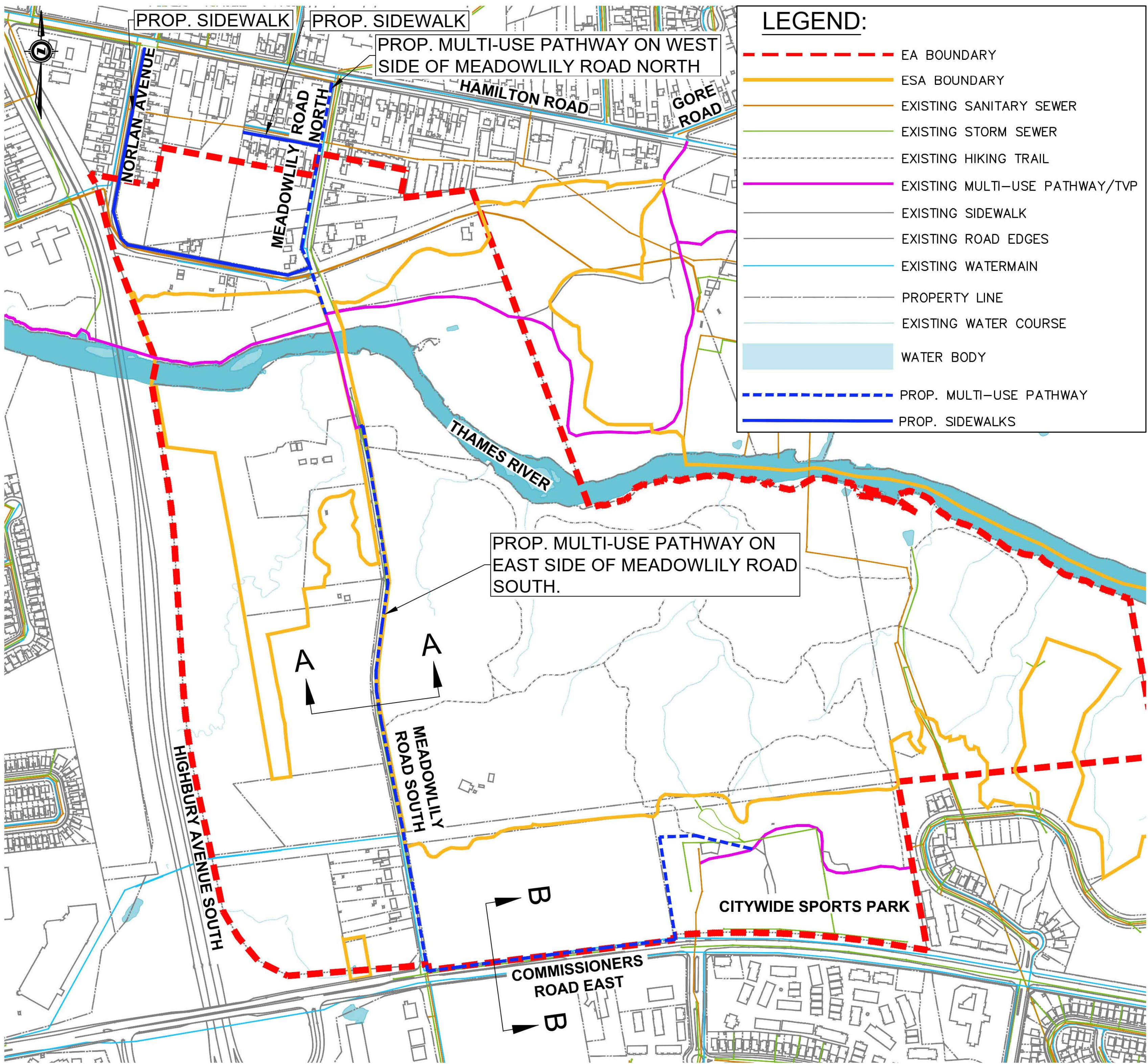




# Multi-Use Pathway Alternative 2

Description: Multi-Use Pathway on West Side of Meadowlily Road North and East Side of Meadowlily Road South

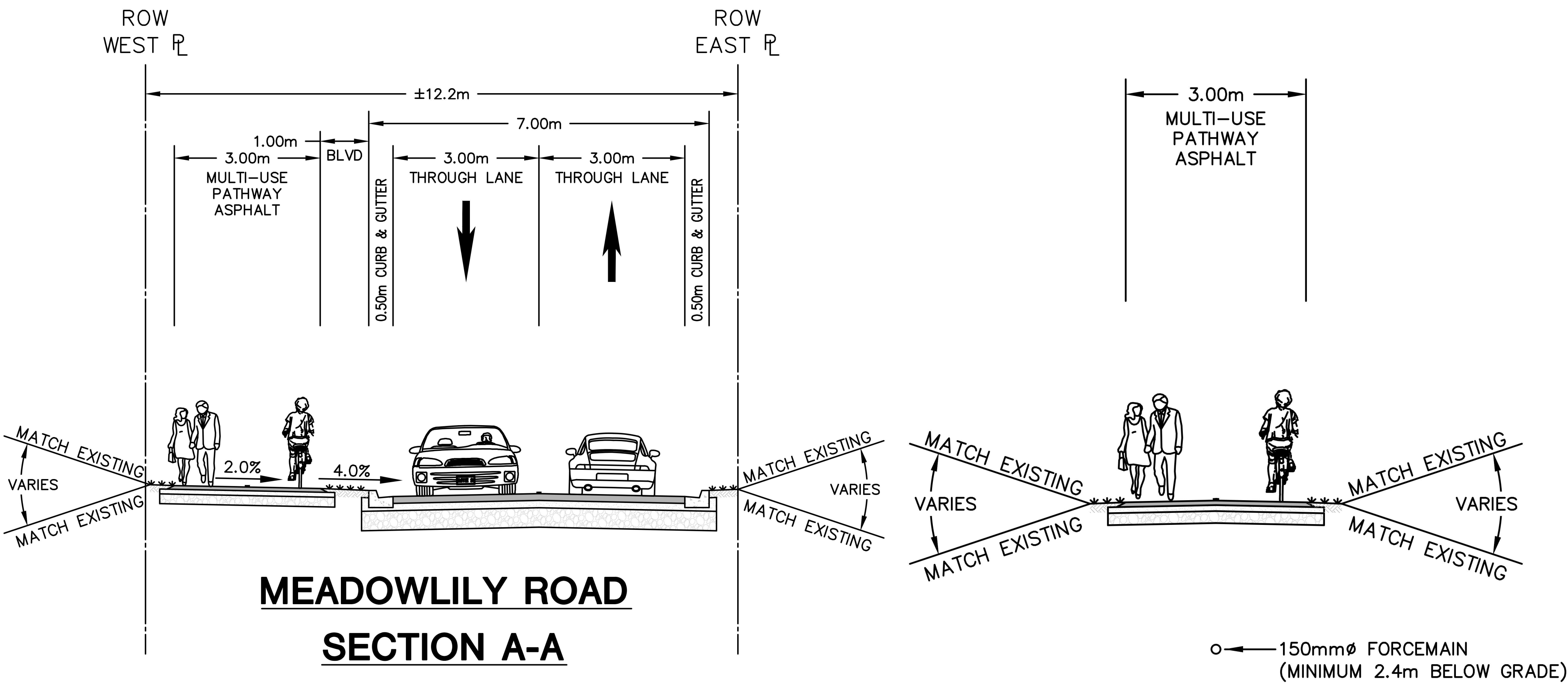
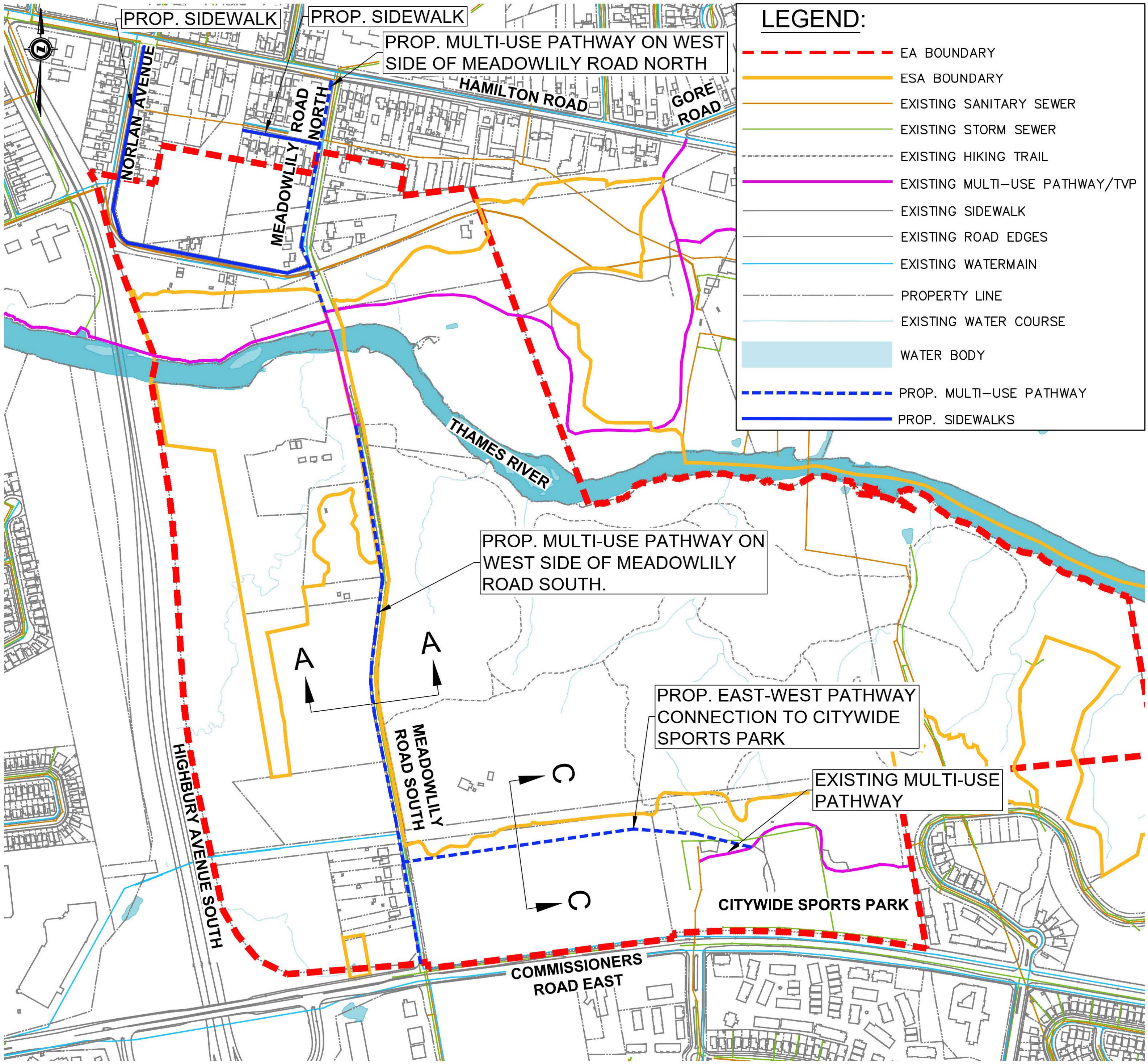
Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Avoids impact to Meadowlily ESA as pathway is generally within existing right of way.</li></ul>	
Social Environment	<ul style="list-style-type: none"><li>A community Multi-use Pathway that provides accessible and equitable connections.</li><li>Provides direct access to Commissioners Road East, new developments and TVP.</li><li>Meets AODA standards to provide safe transportation for vulnerable populations.</li></ul>	
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Uses existing infrastructure along Commissioners Road East.</li></ul>	
Disruption to Existing Land Uses	<ul style="list-style-type: none"><li>Integrating the pathway now minimizes potential future disruption.</li></ul>	<ul style="list-style-type: none"><li>Potential for minor grading impacts to some private properties.</li><li>Potential relocation of some hydro-poles.</li></ul>
Technical/ City Standards	<ul style="list-style-type: none"><li>Follows typical City Standards.</li><li>Facility for walking aligns with London Plan and Complete Streets.</li></ul>	
Costs	<ul style="list-style-type: none"><li>Potential cost saving if pathway implemented concurrently with road reconstruction.</li></ul>	<ul style="list-style-type: none"><li>Costs for land acquisition for pathway in Commissioners Road East right of way.</li><li>Cost to relocate streetlights on north side of Commissioners Road East.</li></ul>
Climate Change	<ul style="list-style-type: none"><li>Decrease in greenhouse emissions (i.e., promote biking for commuters).</li></ul>	





# Multi-Use Pathway Alternative 3A

Description: Multi-Use Pathway on West Side of Meadowlily Road North and South, with an East-West Pathway Connection to Citywide Sports Park		
Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Avoids impact to Meadowlily ESA as pathway is generally within existing right of way.</li></ul>	
Social Environment	<ul style="list-style-type: none"><li>A community Multi-use Pathway that provides accessible and equitable connections.</li><li>Provides direct access to the Citywide Sports Park, new developments and TVP.</li><li>Meets AODA standards to provide safe transportation for vulnerable populations.</li></ul>	<ul style="list-style-type: none"><li>Would require a mid block crossing on Meadowlily Road South.</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Separation from the archaeological sensitivity areas (i.e., Meadowlily Woods ESA).</li><li>Easier to tie into existing conditions and landscape of the area, including existing infrastructure along Meadowlily Road South.</li></ul>	
Disruption to Existing Land Uses	<ul style="list-style-type: none"><li>Minimizes disruption to Meadowlily ESA.</li><li>Integrating the pathway now minimizes potential future disruption.</li></ul>	<ul style="list-style-type: none"><li>Potential for minor grading impacts to some private properties.</li><li>Potential relocation of some hydro-poles.</li></ul>
Technical/ City Standards	<ul style="list-style-type: none"><li>Follows typical City Standards.</li><li>Facility for walking aligns with London Plan and Complete Streets.</li></ul>	
Costs	<ul style="list-style-type: none"><li>Potential cost savings if pathway implemented concurrently with road reconstruction, and east-west sanitary forcemain connection to City Wide Sports Park.</li></ul>	<ul style="list-style-type: none"><li>Requires property acquisition for east – west pathway connection, could be combined with east-west sanitary forcemain connection to City Wide Sports Park.</li></ul>
Climate Change	<ul style="list-style-type: none"><li>Decrease in greenhouse emissions (i.e., promote biking for commuters).</li></ul>	

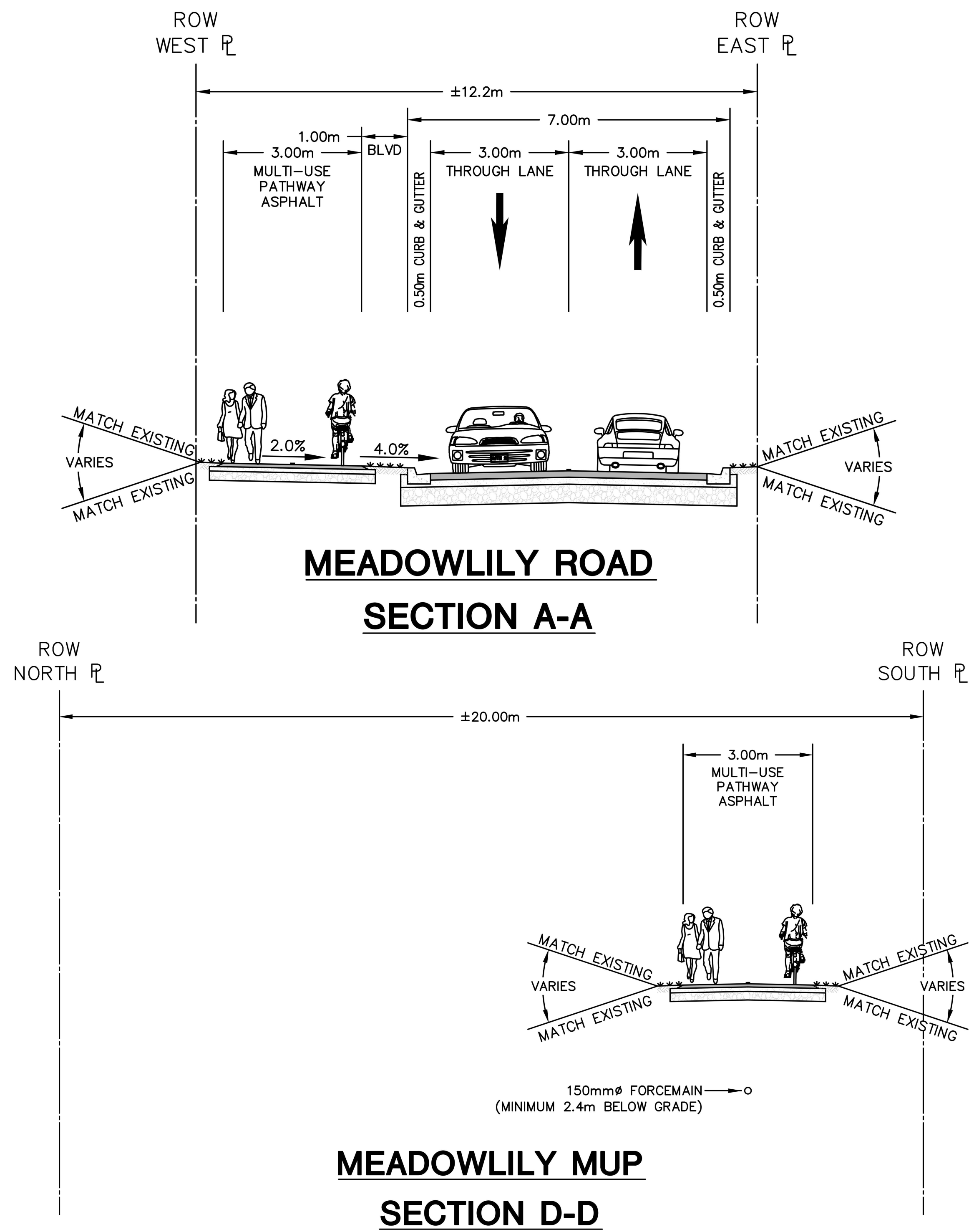
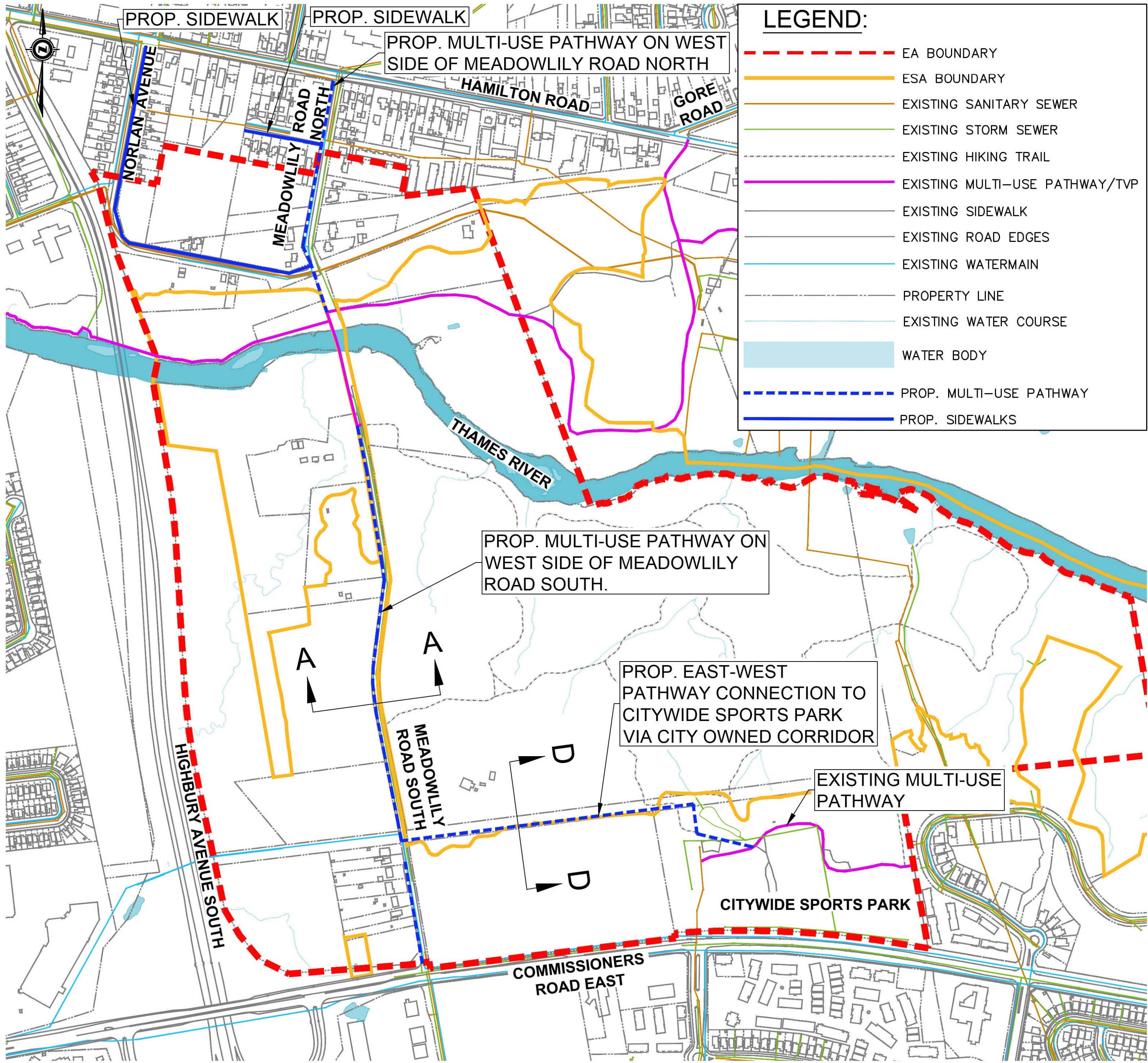


**MEADOWLILY MUP**  
**SECTION C-C**



# Multi-Use Pathway Alternative 3B

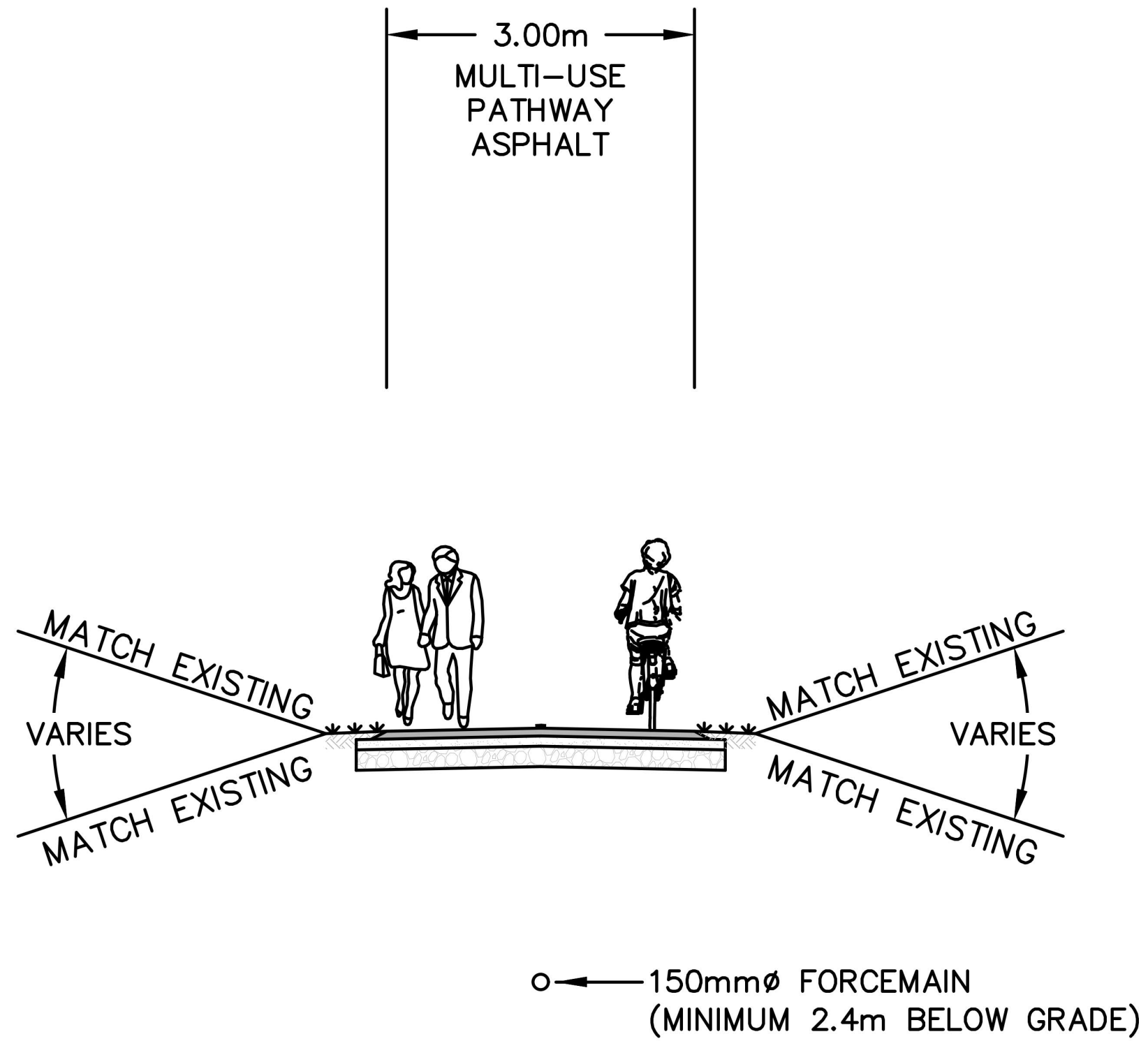
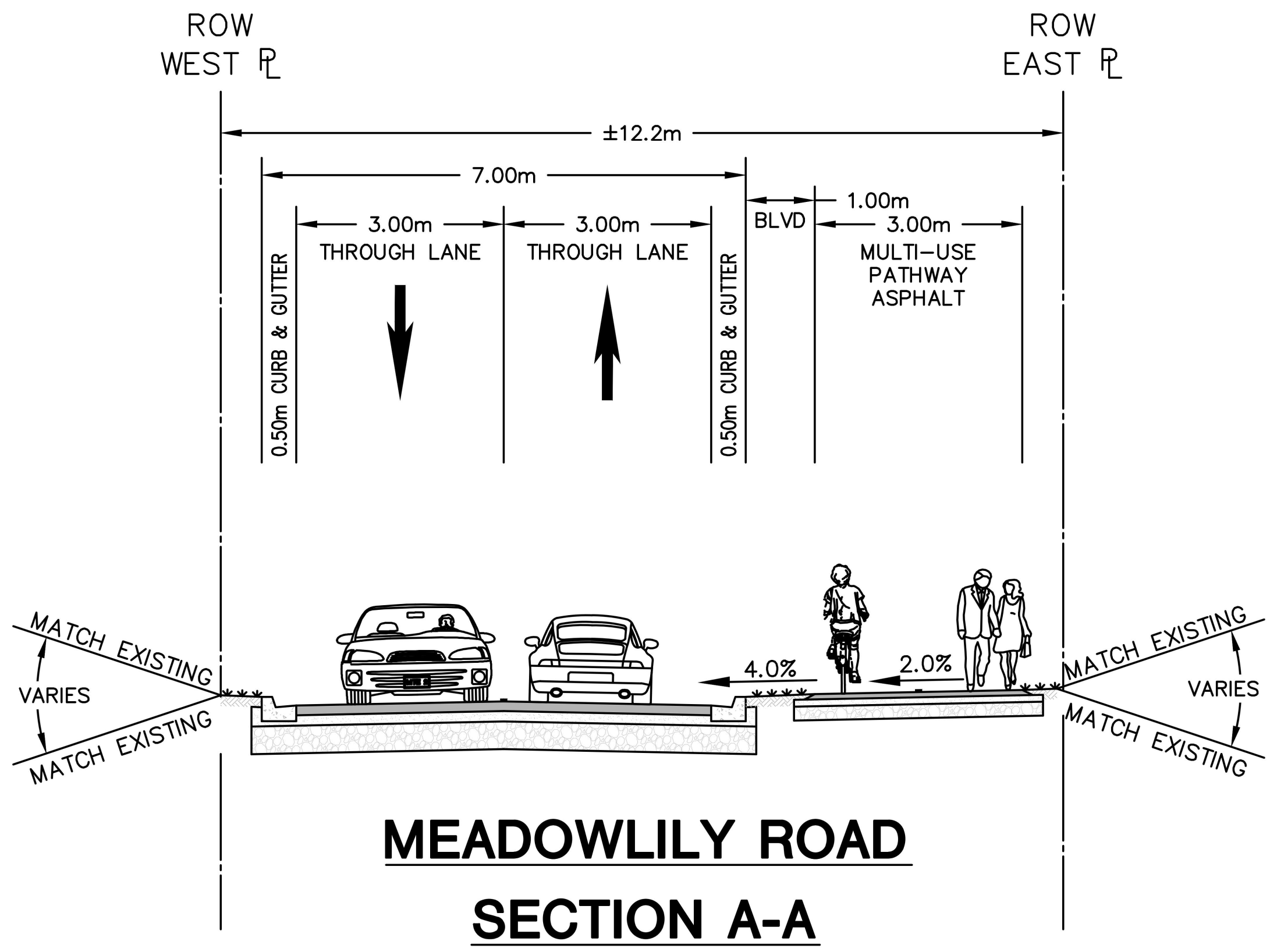
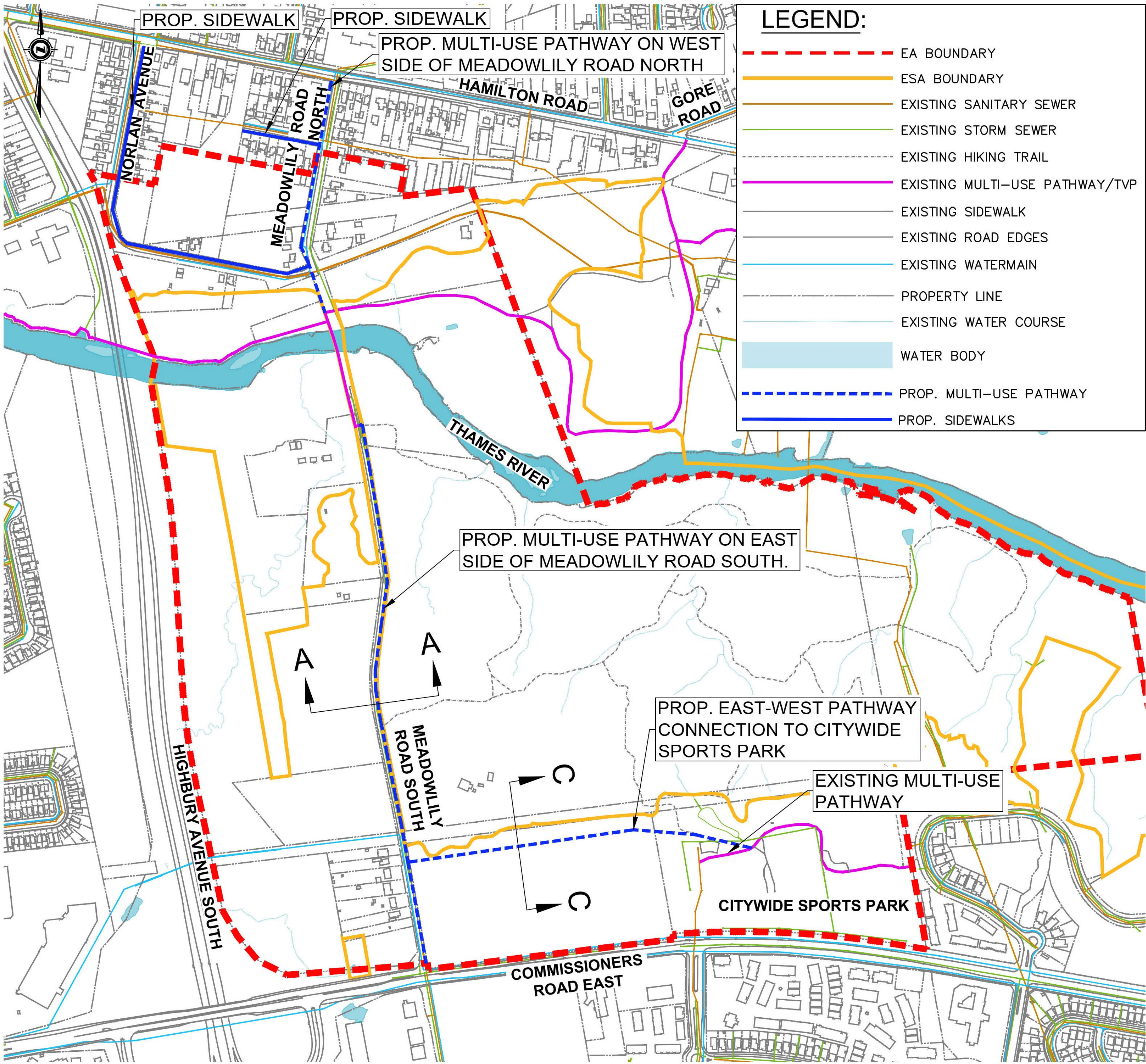
Description: Multi-Use Pathway on West Side of Meadowlily Road North and South, with an East-West Pathway Connection to Citywide Sports Park via City-Owned Corridor		
Evaluation Criteria	Advantages	Disadvantages
Natural Environment		<ul style="list-style-type: none"><li>High impact to Meadowlily environment as pathway is within ESA boundary for east-west connection.</li></ul>
Social Environment	<ul style="list-style-type: none"><li>A community Multi-use Pathway that provides accessible and equitable connections.</li><li>Provides direct access to the Citywide Sports Park, new developments and TVP.</li><li>Meets AODA standards to provide safe transportation for vulnerable populations.</li></ul>	<ul style="list-style-type: none"><li>Would require a mid block crossing on Meadowlily Road South.</li><li>Potential impact to existing trails and users within ESA during construction.</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Easier to tie into existing conditions and landscape of the area, including existing infrastructure along Meadowlily Road South.</li></ul>	<ul style="list-style-type: none"><li>Impact to cultural heritage and archaeological sensitivity areas (i.e., Meadowlily Woods ESA).</li></ul>
Disruption to Existing Land Uses	<ul style="list-style-type: none"><li>Integrating the pathway now minimizes potential future disruption.</li><li>Minimizes impact to private property for east-west connection via City-Owned corridor.</li></ul>	<ul style="list-style-type: none"><li>Potential for minor grading impacts to some private properties.</li><li>Potential relocation of some hydro-poles.</li></ul>
Technical/ City Standards	<ul style="list-style-type: none"><li>Follows typical City Standards.</li><li>Facility for walking aligns with London Plan and Complete Streets.</li></ul>	
Costs	<ul style="list-style-type: none"><li>Potential cost savings if pathway implemented concurrently with road reconstruction, and east-west sanitary forccmain connection to City Wide Sports Park via City-Owned corridor.</li><li>Reduced land acquisition costs</li></ul>	<ul style="list-style-type: none"><li>Costs associated with environmental protection measures, cultural and archaeological requirements.</li></ul>
Climate Change	<ul style="list-style-type: none"><li>Decrease in greenhouse emissions (i.e., promote biking for commuters).</li></ul>	





# Multi-Use Pathway Alternative 4

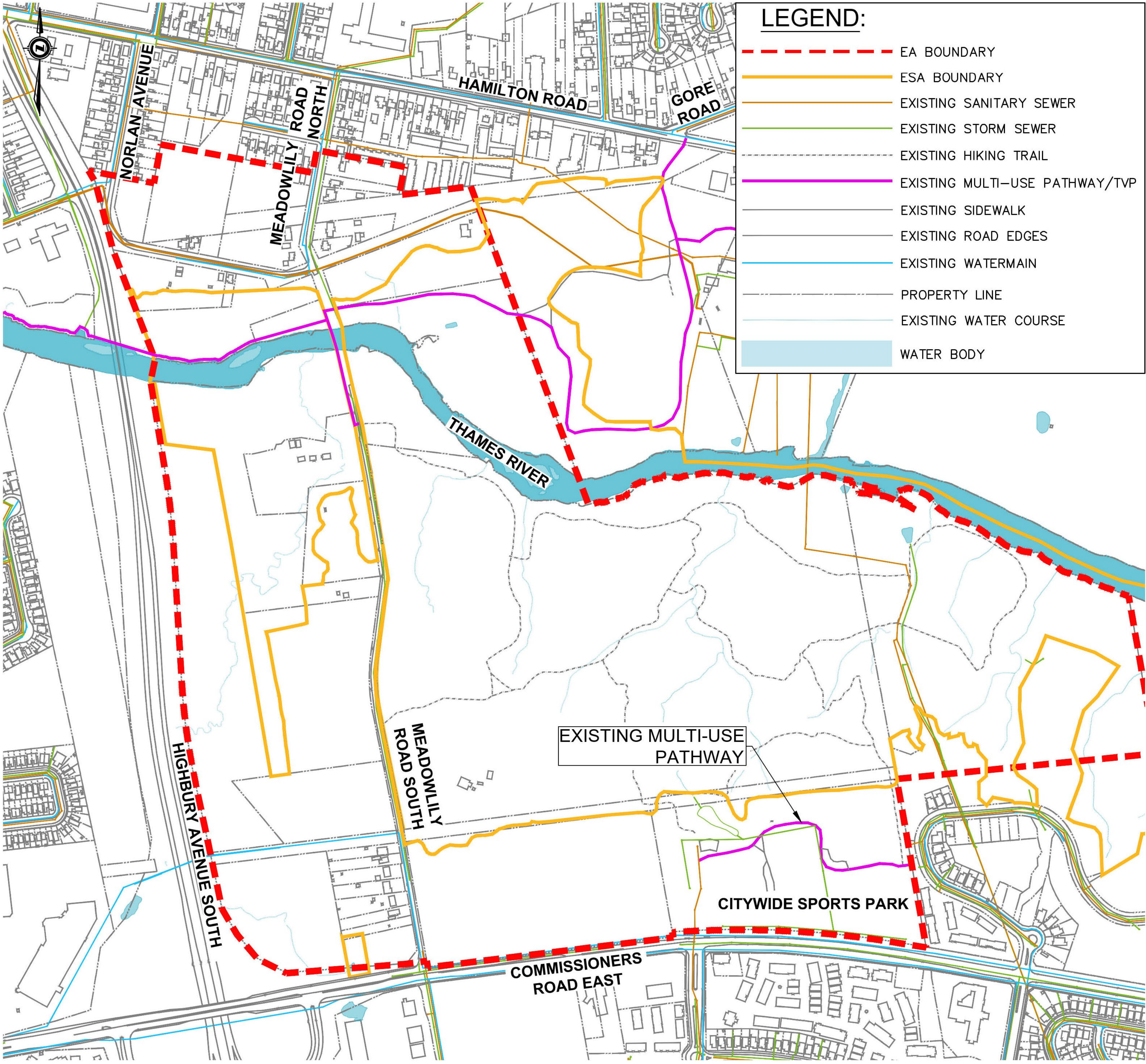
Description: Multi-Use Pathway on West Side of Meadowlily Road North and East Side of Meadowlily Road South, with an East-West Pathway Connection to Citywide Sports Park		
Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Avoids impact to Meadowlily ESA as pathway is generally within existing right of way.</li></ul>	
Social Environment	<ul style="list-style-type: none"><li>A community Multi-use Pathway that provides accessible and equitable connections.</li><li>Provides direct access to the Citywide Sports Park, new developments and TVP.</li><li>Meets AODA standards to provide safe transportation for vulnerable populations.</li></ul>	<ul style="list-style-type: none"><li>Property impact resulting in property acquisition</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>Outside ESA boundary.</li></ul>	
Disruption to Existing Land Uses	<ul style="list-style-type: none"><li>Integrating the pathway now minimizes potential future disruption.</li></ul>	<ul style="list-style-type: none"><li>Potential for minor grading impacts to some private properties.</li><li>Potential relocation of some hydro-poles.</li></ul>
Technical/ City Standards	<ul style="list-style-type: none"><li>Follows typical City Standards.</li><li>Facility for walking aligns with London Plan and Complete Streets.</li></ul>	
Costs	<ul style="list-style-type: none"><li>Potential cost savings if pathway implemented concurrently with road reconstruction, and east-west sanitary forcemain connection to City Wide Sports Park.</li></ul>	<ul style="list-style-type: none"><li>Requires property acquisition for east – west pathway connection, could be combined with east-west sanitary forcemain connection to City Wide Sports Park.</li></ul>
Climate Change	<ul style="list-style-type: none"><li>Decrease in greenhouse emissions (i.e., promote biking for commuters).</li></ul>	





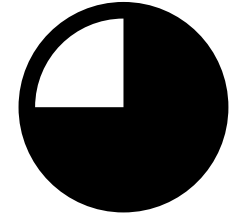
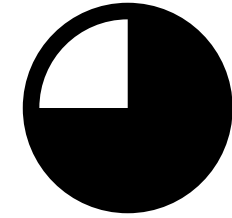
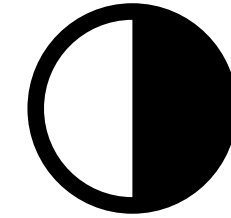
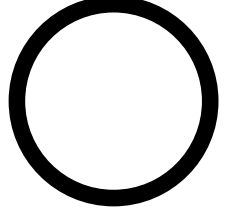
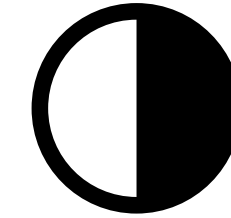
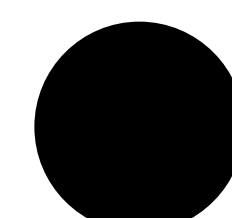
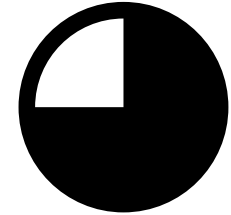
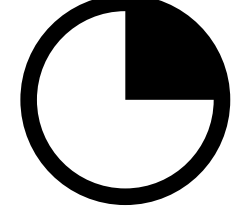
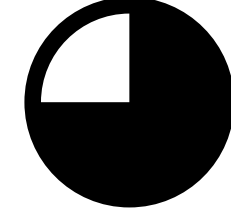
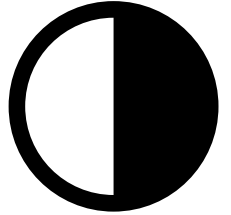
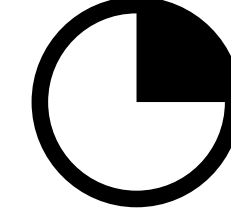
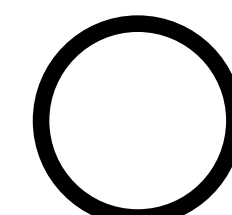
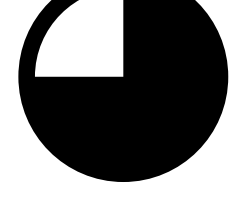
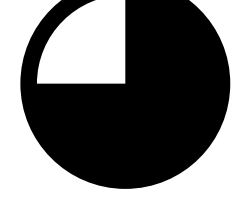
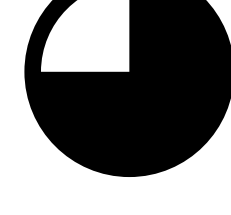
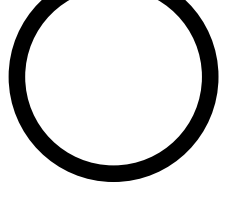
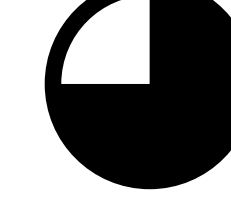
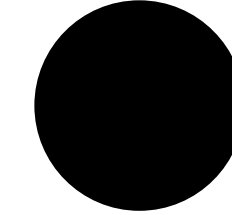
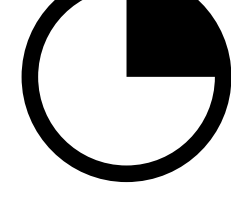
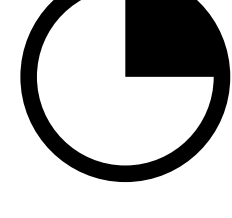
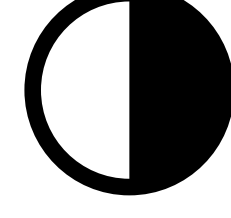
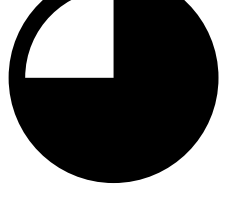
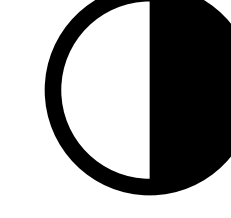
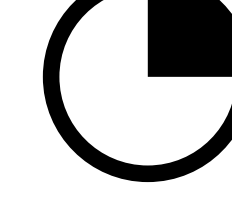
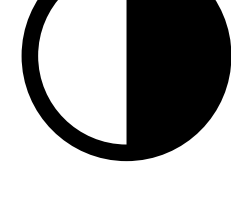
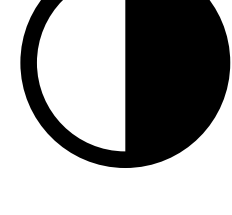
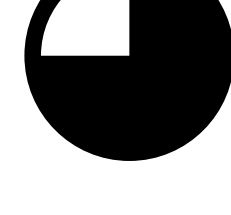
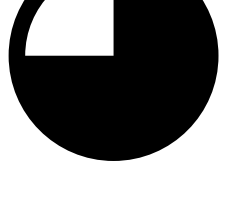
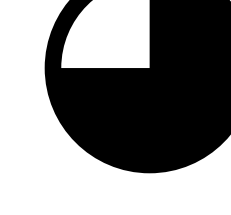
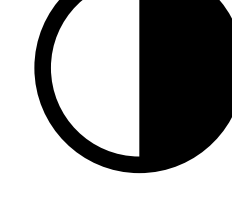
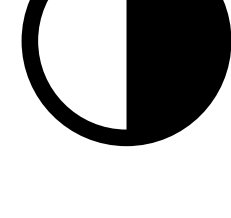
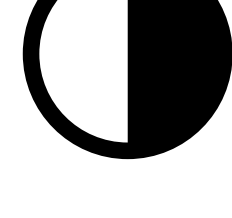
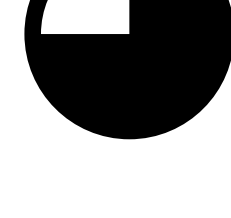
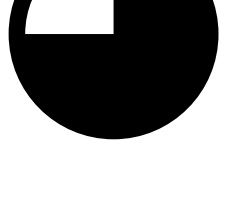

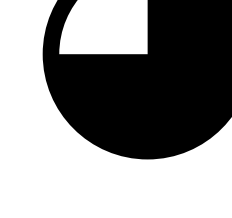
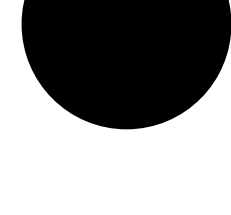
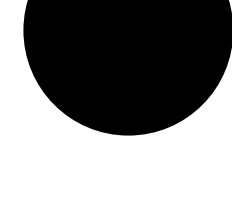
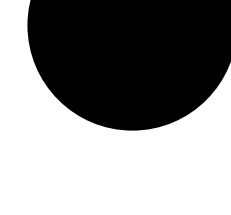
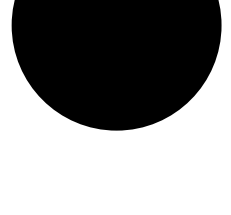
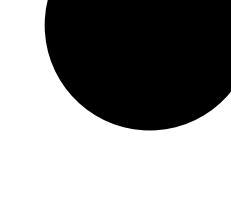
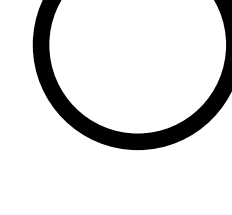






# Multi-Use Pathway Alternative 5

Description: Do Nothing		
Evaluation Criteria	Advantages	Disadvantages
Natural Environment	<ul style="list-style-type: none"><li>Lowest risk of environmental impacts.</li></ul>	
Social Environment	<ul style="list-style-type: none"><li>Retains rural feel of Meadowlily Road.</li></ul>	<ul style="list-style-type: none"><li>Does not provide the community a connection to the TVP, existing dwellings or proposed developments.</li><li>Will not meet AODA or provide safe active transportation for vulnerable populations.</li></ul>
Heritage/Cultural Impacts	<ul style="list-style-type: none"><li>No heritage/cultural impacts.</li></ul>	
Disruption to Existing Land Uses	<ul style="list-style-type: none"><li>No disruption to existing land uses.</li></ul>	<ul style="list-style-type: none"><li>Potential future disruption to land uses if pathway is delayed instead of integrated with servicing construction in right of way.</li></ul>
Technical/ City Standards	<ul style="list-style-type: none"><li>No impact to property acquisitions, existing hydro-pole relocations, or grading.</li></ul>	<ul style="list-style-type: none"><li>Does not meet City Standards for multi-use pathway requirements.</li></ul>
Costs	<ul style="list-style-type: none"><li>No initial capital costs.</li></ul>	<ul style="list-style-type: none"><li>Potential impact if pathway connection occurs in the future, missing out of the opportunity to implement as part of servicing work in the right of way.</li></ul>
Climate Change		<ul style="list-style-type: none"><li>Does not decrease greenhouse gas emissions (i.e. promote active transportation).</li></ul>





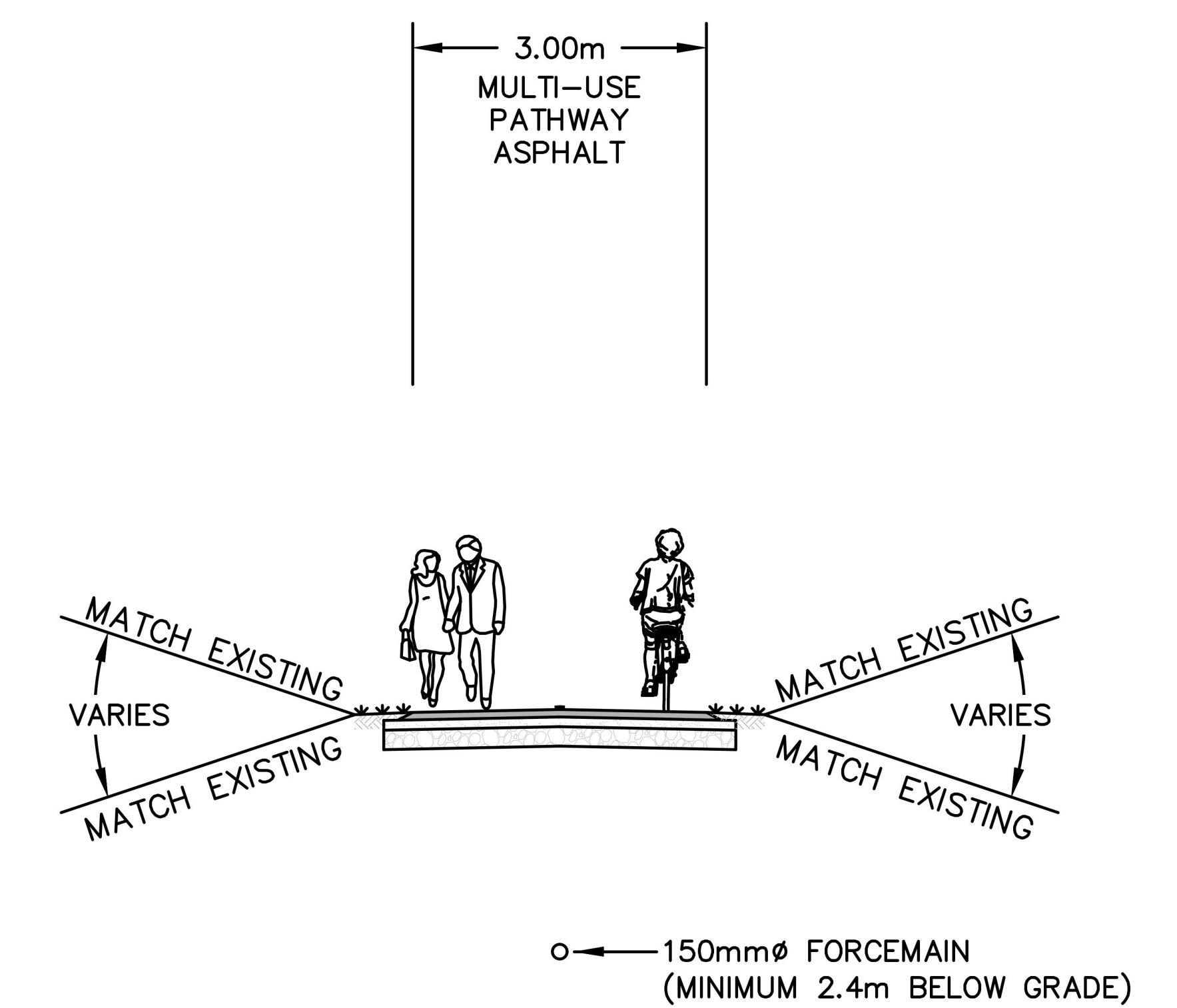
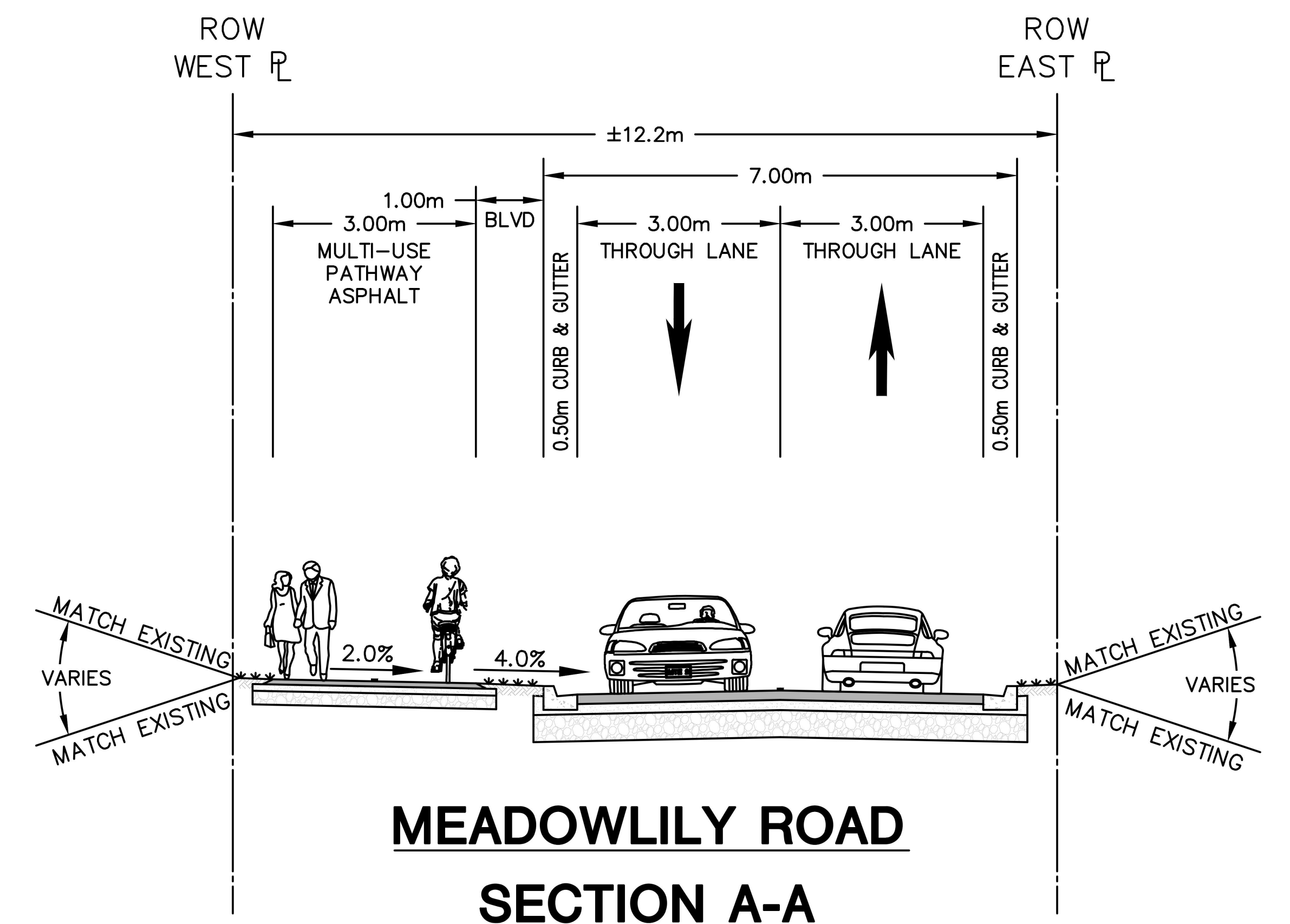
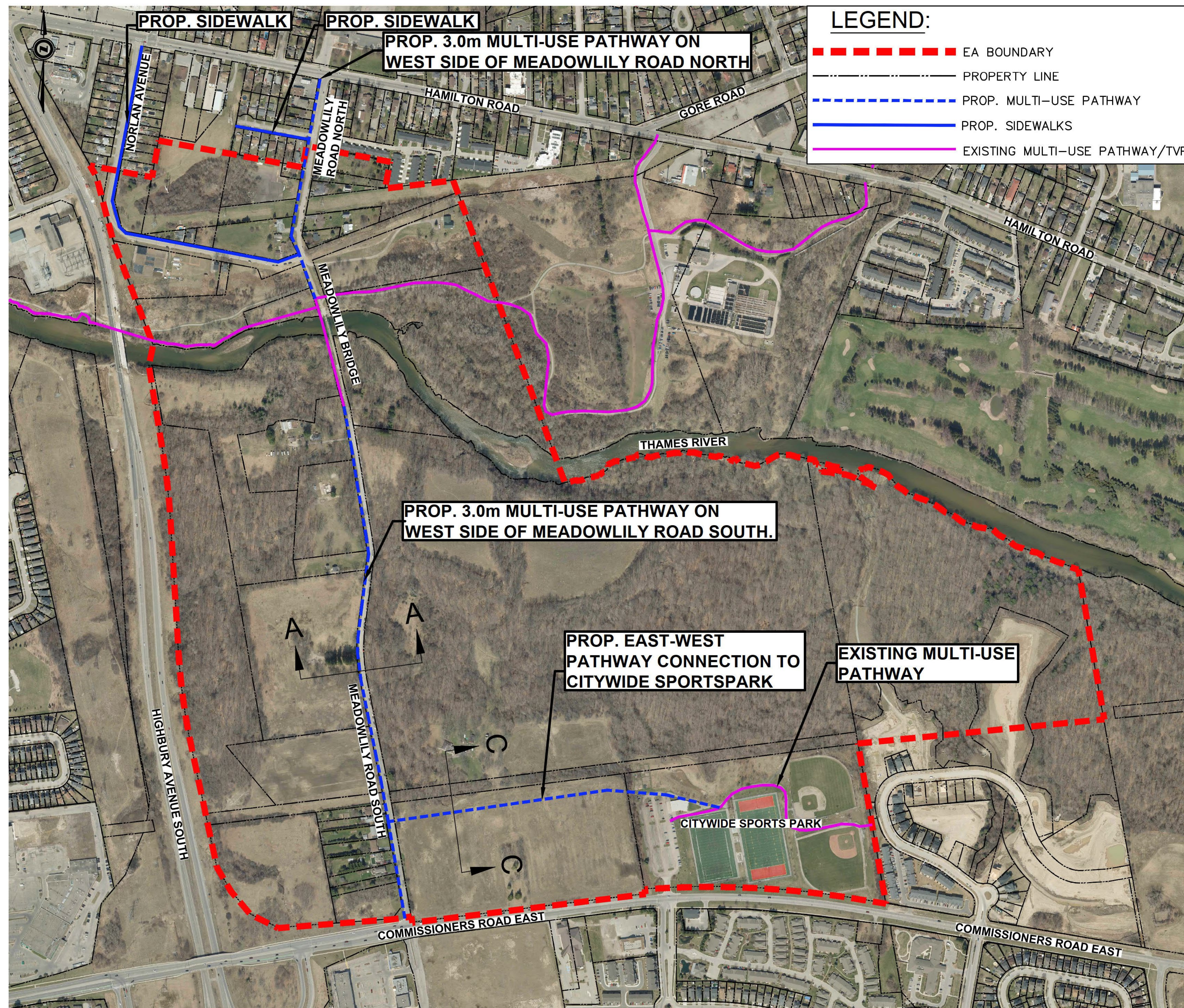
# Multi-Use Pathway Evaluation Summary

Evaluation Criteria	Alternative Solutions					
	1	2	3A	3B	4	5
	MUP on West Side of Meadowlily Rd N and S	MUP on West Side of Meadowlily Rd N and East Side of Meadowlily Rd S	MUP on West Side of Meadowlily Rd N and S with East-West Connection to Citywide Sports Park	MUP on West Side of Meadowlily Rd N and S with East-West Connection to Citywide Sports Park via City-Owned Corridor	MUP on West Side of Meadowlily Rd N and East Side of Meadowlily Rd S with East-West Connection to Citywide Sports Park	Do Nothing
Natural Environment						
Social Environment						
Heritage/Culture Impacts						
Disruption to Existing Land Uses						
Technical/City Standards						
Costs						
Climate Change						
Preferred	 2	 4	 1	 5	 3	 6





# Preferred Multi-Use Pathway Alternative (3A)

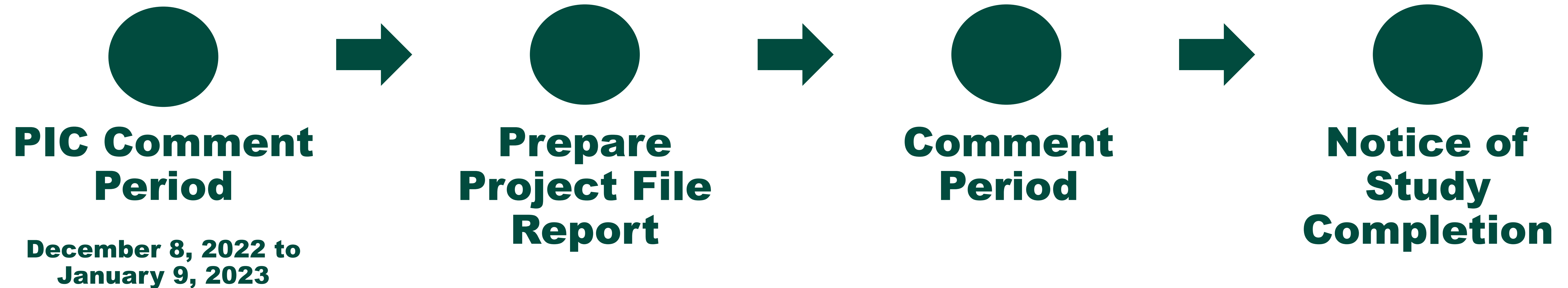


## Notes:

- Approximately one property (≈ 0.12 hectares) impacted.
- Overall reduction in project impacts and improved efficiency when combined with Sanitary Servicing alternative 2 or 3.
- Road reconstruction on Meadowlily Road South is required to install new sanitary servicing, water servicing, storm water servicing and other utilities. Pathway will be implemented concurrently with road reconstruction, generally within the existing Right-of-Way to minimize impacts.



# Next Steps



## Comments/Questions

Kevin Graham, GDPA, P.Eng.  
Environmental Services  
Engineer

Vince Pugliese, P.Eng., MBA, PMP  
Consultant Project Manager



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Figure 11: Meadowlily Rd