

APPENDIX A

Transportation – Technical Memorandum



Memorandum



2023-08-31

Project: (220436) Township of South Stormont Master Servicing Study

To

Jamie Witherspoon, P. Eng., LEED AP,
ENV SP
President & CEO
WT Infrastructure Solutions Inc.

From

Joshua de Boer, M. Eng., P. Eng., PTOE
Senior Project Manager, Associate
Paradigm Transportation Solutions Limited

RE: **MASTER SERVICING STUDY, TECHNICAL MEMORADUM 1 – SUMMARY OF TRANSPORTATION CONDITIONS, TOWNSHIP OF SOUTH STORMONT**

The Township of South Stormont is one of the six local municipalities in the United Counties of Stormont, Dundas and Glengarry (SD&G). Located an hour south of Ottawa, an hour west of Montreal, and minutes north of the United States of America (USA) border, it is strategically located for trade, economic activity and tourism. The community has a mix of rural and urban residents and a population of approximately 14,000. The Township is currently experiencing unprecedented residential and industrial, commercial, and institutional (ICI) growth. The Township is therefore undertaking a Master Servicing Study (MSS) that will encompass water, sanitary linear infrastructure, and stormwater infrastructure needs. An analysis of the transportation network is needed in support of planned growth and intensification.

This memorandum focuses on the transportation aspect of the MSS and addresses the current and future transportation needs based on changes in land use and growth forecasts within the study area. The communities of Long Sault and Ingleside are present along County Road 2 in the southwest part of the Township. The study area for the transportation analysis is focused on the settlement boundaries of Long Sault and Ingleside within the Township.

The purpose of this memorandum is to provide a transportation review to support the Township on transportation-related matters, consistent with the ongoing MSS. The transportation analysis is being undertaken within the following framework:

- ▶ A review of existing conditions;
- ▶ A review of future conditions; and
- ▶ Recommendations for the future transportation network.

Background

The Township of South Stormont is located in United Counties of Stormont, Dundas and Glengarry in eastern Ontario. The Township has a land area of 447.71 square kilometres and 13,570 permanent residents, based on the 2021 Canadian census. This represents a 3.5% increase in Township population from 2016. The Township features two main settlement areas, Ingleside and Long Sault, and a significant amount of waterfront and rural area.

The Township is expected to attract significant residential growth in Long Sault, especially at the northern terminus of Mille Roches Road just south of the CN rail corridor. Around 500 residential dwellings, consisting of single-family homes and townhouses, are proposed to be constructed in phases in Long Sault. In addition to this, Long Sault is emerging as a major industrial and logistics hub. Its close proximity to multiple US border crossings

and Highway 401 makes it a strategic location for regional intermodal business between Kingston, the Ottawa Valley and Western Quebec to Montreal. A 680-acre logistics village with a 100-acre rail yard is proposed directly south of Highway 401 along Moulinette Road in Long Sault. Ingleside is also experiencing industrial growth and development. Lactalis Canada is planning to expand their warehouse and production facility located on the east side of Dickinson Drive, south of Highway 401. It is evident that most of the residential and industrial growth is along south side of Highway 401 in both Long Sault and Ingleside.

The Township is currently working with commercial and residential developers on a number of development projects including:

- ▶ A 680+/- acre logistics development (employment lands) with the potential for a railyard;
- ▶ Multiple one million square feet warehouses; and
- ▶ Residential projects that could lead to more than 400 and 100 serviced lots in the Long Sault and Ingleside communities, respectively.

Long Sault Logistics Village and Chase Meadows Subdivision Development are two of the major development projects planned in the Township. C.F. Crozier & Associates Inc. undertook a Traffic Impact Study (TIS) for Long Sault Logistics Village and provided their report in February 2023. GHD undertook a TIS for Chase Meadows Subdivision Development and provided their report in April 2023. Both developments are located south of Highway 401 within the two main settlement areas.

The extensive planned growth has identified a need to have a transportation study that can assist the Township meet design guidelines without conflicting with the *2021 Township of South Stormont 2021 Community Strategic Plan*. The Township carried out a road needs study in 2021 to update the current road inventory and assess the road condition within the Township’s jurisdiction. Based on the *2021 Township of South Stormont Road Needs Study Report*, the Township’s road network spans a total of 310 kilometres. The roads primarily exist within a rural setting, with small areas of urban and semi-urban development around the communities of Ingleside and Long Sault. The majority of the roads (98%) are local roads, with the remaining 2% being collector roads. There are no arterial roads or freeways under the Township’s jurisdiction.

Table 1 shows the road classification and length, based on the *2021 Road Needs Study Report*. Of the 310 kilometres of roads inventoried, a total of 31 kilometres was found to be critically deficient, requiring reconstruction within the next five years.

TABLE 1: ROAD CLASSIFICATION AND LENGTH

Road Class	Road Length (km)
Arterial	0
Collector	6
Local	304
TOTAL	310

Existing Transportation System

The Township is nestled along the St Lawrence River and attracts a large number of tourists, especially during the summer months. The post-COVID-19 pandemic conditions may have also contributed to the increase in number of visitors and residents. Based on the *2013 South Stormont Economic Development Strategic Plan*, the Township intends to enhance traffic operations, safety, and active transportation and provide quality user experience to tourists, visitors, and Township residents.

Traffic Operations

The Township recognizes the importance of an efficient and well managed road system to sustain its business, agriculture and industry. Based on the *2021 Road Needs Study Report*, the Township strives to operate and manage its road network efficiently through comprehensive strategies, technology adoption, and collaboration with stakeholders.

Long Sault Logistics Village and Chase Meadows Subdivision Development are two of the major development projects planned in the Township. Transportation Impact Studies (TISs) for both developments indicate that the road network is operating acceptably under the existing 2023 conditions. The study Measures of Effectiveness (MOEs) do not indicate any notable operational concerns at any of the study intersections. The majority of the study network roads are currently operating at Level of Service B (LOS B) or better, meaning they can adequately service current traffic needs without any requirements for road improvements. The traffic counts obtained from both TISs indicate that the majority of Township roads are operating with significant excess capacity during both the weekday AM and PM peak hours. This signifies that the existing road network can accommodate increased traffic volumes before capacity is exceeded. Given the consistent road network conditions found throughout the Township, it is likely that traffic conditions are operating at acceptable levels on the roads outside of the study area network.

Road Safety

The Township strives to promote road safety for all road users, including pedestrians, cyclists, and motorists. This is evident from the safety measures observed at some of the main intersections within the Township. Clear and visible signage, including stop signs, yield signs, and advance warning signs are present at the main intersections. Access management techniques, including dedicated turn lanes, raised medians and pedestrian islands, can also be observed at intersections.

The *Ontario Road Safety Annual Report (ORSAR)* contains insights about long term and emerging collision trends throughout the Province of Ontario, including the Township of South Stormont. A review of five years of ORSAR data between 2015 and 2019 (inclusive) was reviewed to better understand road safety conditions on the Township's network.

Table 2 illustrates the vehicle collisions observed in the Township between 2015 and 2019, based on the *Ontario Road Safety Annual Reports*.

TABLE 2: VEHICLE COLLISIONS IN SOUTH STORMONT BETWEEN 2015 AND 2019

Year	Percent Change	Total Collisions	Class of Collision		
			Fatal	Personal Injury	Property Damage
2015	-	120	0	21	99
2016	7.5%	129	1	23	105
2017	-17.8%	106	0	16	90
2018	-13.2%	92	0	17	75
2019	35.9%	125	0	10	115

It is evident from **Table 2** that the total number of collisions in the Township has remained fairly consistent. The data suggests that the Township is experiencing a decrease in personal injury collisions, but an increase in collisions involving property damage. Fatal collisions are almost non-existent in the Township. Given the continued increase in both population and automobile usage, the consistent total number of collisions is a positive



indication for the Township. Moreover, the decreasing number of personal injury collisions and continued lack of fatal collisions is evidence of improving road safety. This is similar to the Vision Zero initiative's goal of reducing killed or seriously injured (KSI) collisions. The Township would be well served to continue their efforts to reduce vehicle collisions through mitigative efforts where possible.

It should be noted that while reviewing safety conditions in the Township, it was found that a sign on the Long Sault Parkway indicates a posted speed limit of "55". The Canadian Highway Traffic Act (HTA) recommends speed limits in increments of 10 kilometres per hour. It is recommended that this sign be updated, along with any other similar signs in the Township.

Active Transportation

A review of the of the pedestrian network indicates that the majority of existing sidewalks are concentrated in the communities of Long Sault and Ingleside. Sidewalks are provided on at least one side of the majority of the study roads. However, there are sections of roads where the sidewalks are not continuous, which is especially notable near the plazas that attract greater pedestrian footfall.

The communities of Long Sault and Ingleside each have one major shopping plaza. The plaza in Long Sault is bounded by Simcoe Street to the north, Long Sault Drive to the south, residential houses to the east and Plaza Street to the west. There are no sidewalks along Plaza Street. In addition, there is no sidewalk link along Long Sault Drive, between Plaza Street and Moulinette Road. The Ingleside shopping plaza is bounded by Maple Street to the north, Thorold Lane to the south, Dickinson Drive to the east and Bank Street to the west. The sidewalk along Bank Street is disconnected at the Maple Street intersection. There also is no crosswalk or any linked sidewalk for pedestrians at the Bank Street and Maple Street intersection.

The Township currently has a few crosswalks, especially near schools and health centres, that provide safe passage for pedestrians to cross roads. However, signage, pavement markings, tactile walk surface indicators, and other features such as illuminated overhead lights and pedestrian push buttons are not frequently present. There is an opportunity to enhance active transportation by providing clearly marked and designated spaces for vulnerable road users to cross the road by alerting motorists of their presence.

The Township currently maintains the South Stormont Recreation Trail as well as a portion of the Great Lakes Waterfront Trail. Most of the trails through the Township follow off-road designated paths. However, there are parts of Great Lakes Waterfront Trail that follow the Long Sault Parkway across islands. In these sections, the route is typically an on-road space shared with motorists. Long Sault Parkway is a paved road with a narrow shoulder that circulates users in an area away from the primary settlement areas of Ingleside and Long Sault. From Long Sault to Cornwall, the Great Lakes Waterfront Trail is an off-road multi-use trail (MUT). Currently, the Great Lakes Waterfront Trail crosses the public right-of-way at some locations without OTM-recommended signage or pavement markings.

Dedicated cycling facilities are not observed on the study roads within Ingleside and Long Sault, with motorists and cyclists required to share the road. There are narrow, unpaved shoulders along the shared on-road routes that can pose risks to cyclists. The *2020 Township of South Stormont Parks and Recreation Master Plan* identifies the need to improve signage and pavement design to help cyclists safely navigate through the recreational trail system.

Future Transportation Systems

Based on the *2022 Township of South Stormont Development Charges Background Study*, the Township forecasts its population to reach approximately 15,560 by mid-2032 and 16,380 by mid-2036, resulting in a population growth of approximately 15% and 21% from 2021, respectively. The *2021 Township of South Stormont Budget Context* highlights the importance of meeting the needs of a growing aging population. The Township currently has approximately 23% of the population aged 65 years and above, which is already more than the national average of 19%. The proportion of the senior population is expected to rise in future. This can be



attributed to the seasonal residents who retire to this area and continue to stay as they age. The Township strives to create a more sustainable, healthy, and livable environment that prioritizes the needs and safety of all transportation users.

Traffic Operations

The Township is experiencing substantial residential and ICI growth with several large-scale projects planned in the area, including the following:

- ▶ Long Sault Logistics Village is a major development planned in the Township. The proposed development consists of 15 industrial buildings with a combined GFA of approximately 450,000 m², and an intermodal rail yard. The planned development is expected to generate 734 and 877 two-way vehicle trips in the AM peak hour and PM peak hour, respectively.
- ▶ Chase Meadows Subdivision Development is a major residential development planned in Long Sault. This project is planned to be located east of Mille Roches Road and consists of 459 residential dwellings. It is projected to generate about 285 new trips in the AM peak hour and approximately 385 new trips in the PM peak hour. The development is planned to be constructed in phases and includes single-family homes and townhouses.

TISs for both Long Sault Logistics Village and Chase Meadows Subdivision developments indicate that their surrounding road networks can accommodate increased traffic volumes with some recommended road improvements. The TIS prepared for Long Sault Logistics Village recommends installing three traffic signals, all at County intersections. The TIS prepared for Chase Meadows Subdivision Development identifies the extension of McNiff Avenue east of Moulinette Road (County Road 35) to connect with Mille Roches Road. This planned extension of McNiff Avenue will help provide an alternate route to Highway 401, in addition to Simcoe Street, at the east end of the Long Sault community.

Road Safety

As previously discussed, the Township is expecting an increase in residential and commercial development in the near future. Long Sault Logistics Village and Chase Meadows Subdivision Development are among the major developments planned in the Township that are expected to increase traffic volumes. Safety of all transportation users remains a paramount concern as the traffic generated by these sites increases vehicle volumes throughout the Township's transportation network.

As evidenced through the reduction of serious injury collisions between 2015 and 2019, safety continues to improve on the Township's road network. It is anticipated that the Township will continue its efforts at key intersections and roads. The aforementioned aspects of signage, pavement markings, paved shoulders, and access management techniques, including dedicated turn lanes and raised medians, are simple yet effective measures that can continue to be considered for the Township going forward. Guidance from the Ontario Traffic Manual (OTM) and Transportation Association of Canada (TAC) guidance, including the TAC Canadian Guide to Traffic Calming, can help the Township achieve their road safety goals.

Active Transportation

It is anticipated that the Township will continue to incorporate sidewalk construction into its capital works program. While some roads already have sidewalk construction planned, a review of current plans do not include routes near the main commercial plazas in Long Sault and Ingleside, including Plaza Street, Long Sault Drive, Mille Roches Road, and St Lawrence Drive.

The Township desires to boost tourism cycling as well as local cycling by developing a well-connected trail network. The Township conducted the *Bicycle Friendly Communities Workshop* in June 2019 that identified the need for an interactive mapping tool of the facilities, parks and trails available in the Township. The Workshop also recognized the importance of an annual signature cycling event, which is a car-free event that in support of



active transportation. The Township strives to become a *Bicycle Friendly Community* through the implementation of such infrastructure projects and initiatives.

The *2020 South Stormont Parks and Recreation Master Plan* identifies some of the routes planned for active transportation within the Township that include:

- ▶ A dedicated multi-use pathway along the south side of County Road 2, between Ingleside and Long Sault;
- ▶ A trail along the New York Central (NYC) Rail Line providing regional linkage into northern areas of the Township through Newington and connecting with the Russell Township; and
- ▶ Potential development of a mountain bike park within the Township.

The Township recognizes the waterfront, extending along its southern boundary, as an important asset. The *2021 Township of South Stormont Waterfront Master Plan* identifies plans for future trails with consideration of the Township's 10-year capital works plans and *Recreation Master Plan*. The County Road 2 Multi-Use Trail project has been envisioned as an important east-west active transportation corridor, with an objective to improve linkage to existing and new waterfront facilities. The Township will need to consider how their active transportation network connects to this route. The implementation of sidewalks, crossings and cycling facilities can help to improve mobility, reduce congestion, enhance safety, promote sustainability, and support economic development in the Township.

As the Township continues to build out its cycling transportation network, routes can be identified along its existing public road network. Routes are typically identified through the process detailed in Ontario Traffic Manual (OTM) Book 18. Based on annual average daily traffic (AADT) values (typical two-way vehicle volumes for a specific road), the OTM process identifies preferable routes and facility types. These routes are then reviewed against site conditions to ensure there is available right-of-way to implement such facilities. In some cases, municipalities begin their cycling network implementation efforts by identifying secondary vehicle routes that have space for facilities, are close to origins and destinations, and have lower vehicle volumes. Potential cycling network roads in South Stormont include Farran Drive, St Lawrence Drive, Santa Cruz Drive, Manning Road, Simcoe Street and Dale Street.

Transportation Service Strategies

The Township strives for safer, vibrant and more liveable neighbourhoods. Transportation service strategies are vital for informed, sustainable, and responsible development of the Township. It ensures that transportation needs are met, resources are used efficiently, and the long-term well-being of the community and the environment are prioritized.

The following strategic measures have been directly or indirectly referenced throughout this memo. The section first discusses the measures that are then lists them in Table 3.

Strategic Measures

The Township can consider the following measures to enhance traffic, road safety and active transportation operations on their public right-of-way:

- ▶ Address the 31 kilometres of road identified as critically deficient in the *2021 Township of South Stormont Road Needs Study*.
- ▶ Confirm the recommendations contained in relevant development TISs, including:
 - Extending McNiff Avenue east of Moulinette Road (County Road 35), connecting to Mille Roaches Road. This provides an alternate route to Highway 401.



- Installing three traffic signals identified in the Long Sault Logistics Village TIS. These signals are all located at County intersections.
- ▶ Continue to improve traffic operations and road geometry at critical intersections and roads, especially along the roads next to schools, hospitals, and commercial plazas.
- ▶ Ensure all posted speed limits are in increments of 10 kilometres per hour and signed in accordance with OTM guidance. Notably, the Township may wish to consider replacing any speed limit signs posted at “55”.
- ▶ Identify missing sidewalk links and provide a network of continuous sidewalks and crossings. Specific locations may include:
 - Sidewalk on Plaza Street, between Long Sault Plaza and Simcoe Street.
 - Sidewalk on Long Sault Drive, between Long Sault Plaza and Moulinette Road.
 - Sidewalk on both sides of Mille Roches Road. Mille Roches Road is expected to provide a vital link to the future developments planned in the Township.
 - A crosswalk at the north approach of the Bank Street and Maple Street intersection, west of Ingleside Plaza.
 - Sidewalk on Bank Street, between Maple Street and St Lawrence Drive
 - Sidewalk on St Lawrence Drive, between Bank Street and Dickinson Drive.
- ▶ Continue to install dedicated cycling facilities, notably where they connect to the more frequently used recreational trails, such as the South Stormont Recreation Trail.
- ▶ Move forward with all recommendations from noted transportation-related plans including the following Township studies:
 - 2020 Parks and Recreation Master Plan
 - 2021 Waterfront Master Plan
 - 2021 Community Strategic Plan
 - 2021 Road Needs Study
 - 2022 Development Charges Background Study

Identifying key routes and traffic elements for vehicular traffic and active transportation complements the strategic measures and can ensure the long-term viability of future projects. **Table 3** details key routes and traffic elements already planned for the Township. Suggested priorities are provided for each route based on their progress within the Township’s existing plans.

TABLE 3: KEY TRANSPORTATION ROUTES AND ELEMENTS IN SOUTH STORMONT

Name	Type	Source	Suggested Priority		
			Short Term	Medium Term	Long Term
Duffys Road Reconstruction	Road	Public Works Roads Department	✓		
Myers Road Reconstruction	Road	Public Works Roads Department	✓		



Mille Roches Road Extension	Road	Chase Meadows Subdivision Development		✓	
McNiff Road Extension	Road	Chase Meadows Subdivision Development		✓	
Avonmore Road and Highway 401 Intersection Construction	Intersection	Long Sault Logistics Village			✓
Moulinette Road and Highway 401 Intersection Upgrade	Intersection	Long Sault Logistics Village		✓	
St Andrews Road Sidewalk Reconstruction	Sidewalk	Public Works Roads Department	✓		
County Road 2 Upgrades	Multi-Use Path	Waterfront Development Plan		✓	

Traffic Calming Best Practices

The Township of South Stormont is realizing a slight increase in vehicle collisions involving property damage, but a slight decrease in collisions involving personal injuries. Fatalities are almost non-existent. Given increases in population and traffic volumes, these trends are generally positive for the Township. Nevertheless, it is still important to focus on improving road safety and take proactive measures where possible. The Transportation Association of Canada (TAC) has prepared the *Canadian Guide to Traffic Calming* to support the effective implementation of traffic calming measures. Table 4 has been developed below based on this TAC guide and the local context of South Stormont.

TABLE 4: TRAFFIC CALMING MEASURES AND BEST PRACTICES

Traffic Calming Measure	Type	Benefits to the Township	Potential Installation Location
Raised Crosswalk	Vertical Deflection	A raised crosswalk can help reduce speed and avoid collisions. It also increases visibility of pedestrians and highlights pedestrian priority at intersections.	Raised crosswalks can be installed at high-pedestrian crossings near schools and shopping centers.
Speed Hump	Vertical Deflection	A speed hump is typically beneficial for reducing vehicle speeds. It increases safety for pedestrians and cyclists by slowing the speed of approaching vehicles.	Speed humps can be effective on local streets in residential areas and commercial activity centers.
Chicane	Horizontal Deflection	A chicane can help reduce speed and manage traffic flow. Their design	Chicane can be installed on long and straight residential streets to prevent excessive speeding.



		flexibility can help create safer and more livable streetscapes.	
Vertical Centreline Treatment	Roadway Narrowing	A flexible post-mounted delineator or raised pavement markers that act as a median can help direct traffic, increase visibility, and enhance safety on roads.	Vertical centreline treatments can be installed in residential areas and school zones. It can also be used to define and separate cycle lanes.
Speed Display Devices	Enforcement and Education	Speed display devices can help encourage responsible driving behavior, enhance road safety, and raise awareness about the importance of adhering to speed limits.	Speed display devices can be installed wherever there is a long straight stretch of free-flowing traffic. It should especially be considered near existing and upcoming industrial areas that attract heavy vehicle movements.
Right-In/Right-Out Island	Access Restrictions	A right-in/right-out island can help enhance safety by reducing conflict points at intersections.	A right-in/right-out island can be installed at private accesses for major industrial or commercial activity center.

The traffic calming measures listed in Table 4 are a small set of options that can be fairly cost-effective and viable for road networks that currently do not already contain substantial traffic calming provisions. The Township can select the most appropriate measures to address specific traffic issues. It is important to note that not all traffic calming measures are appropriate under all circumstances. The selection of suitable measures depends on the specific issue being addressed and careful consideration of site-specific conditions, supplemented by public feedback and data.

Data Requirements

The implementation of successful traffic operations, road safety and active transportation initiatives requires a robust set of documentation and data to indicate critical issues and locations. The Township of South Stormont has done well to collect and to produce and make available all documentation required to develop a master servicing study. Further efforts towards collecting and managing traffic data could help to further identify key issues and locations.

Annual average daily traffic (AADT) volumes can be used to form the initial basis for traffic data in the Township of South Stormont. Having robust and up to date AADT is a crucial element in road network management. Beyond AADT data, the Township could endeavour to collect vehicle speed and collision data, where not doing so already, to identify potential road safety issues and subsequent traffic calming needs.

The Township could also initiate data collection efforts with respect to active transportation users. Collecting semi-annual or permanent counts along key pedestrian and cyclist corridors and intersections can indicate facility and crossing type needs, respectively. A comprehensive and functional data management system is vital to being able to continue to manage traffic data effectively and at low costs. Once fundamental data is consistently available and able to be managed both on site and through a data management system, efforts could expand to include additional location or data types.

Ultimately, the Township has the opportunity to use transportation data to manage growth in a manner that will lead to the continued prosperity of their communities and the residents that live and work in them.



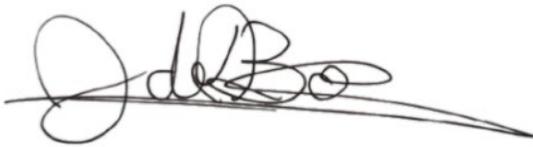
Conclusion

The Township of South Stormont is a vibrant and growing community. The Township currently has a complete road network that services all of its residents. This network is supplemented with safety and active transportation initiatives that help make the Township a more livable and healthier place. In anticipation of expected growth, the Township can build upon its existing assets to manage the future needs of its community. A number of recommendations are provided in this document that can be considered by the Township to address these needs as they become prevalent. Once implemented, the Township should include mechanisms to monitor and evaluate the performance of their transportation system. This allows for adjustments and improvements based on changing conditions and emerging needs.

We trust that this memorandum sufficiently outlines the transportation conditions for the Township of South Stormont as they pertain to the Master Servicing Study and helps the Township manage its transportation system going forward.

Yours truly,

PARADIGM TRANSPORTATION SOLUTIONS LIMITED



Joshua de Boer
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Senior Project Manager, Associate



Gene Chartier
M.A.Sc., P.Eng., FITE
Vice President and Chief Development Officer



APPENDIX B

AGENCY CONTACT LIST

Available by Request from The Township of South Stormont



APPENDIX C

NOTICE OF COMMENCEMENT



NOTICE OF COMMENCEMENT

Long Sault and Ingleside Master Servicing Study



Project Overview

The Township of South Stormont (Township) has and is experiencing significant growth in the communities of Long Sault and Ingleside. The Township Official Plan allows for additional development within these areas that may exceed the capacity of the existing water wastewater, stormwater and transportation infrastructure. Additionally, due to the unique history of the communities The Township has initiated a Master Servicing Plan to evaluate and develop a coordinated and sustainable approach to providing municipal infrastructure for both existing and growth areas within the community. The plan will consider the need, capacity, location and configuration for transportation, water supply, wastewater collection and stormwater management within the study area.



INGLESIDE AND COLONIAL DRIVE STUDY AREA



LONG SAULT, MANNING ROAD AND LAKEVIEW HEIGHTS STUDY AREA

The proposed solutions will be evaluated and prioritized considering natural, cultural, technical and economic environment, and the preferred solutions will be selected in consultation with regulatory agencies and the public. Input from the public, agencies and other stakeholders will be sought throughout the study to identify options to address the study findings and optimize the evaluation process.

The background components of the project and problem identification stages of the project are currently underway and the preliminary list of recommendations will be presented at a **Public Information Centre in June 2023**. The project is scheduled for completion during the summer of 2023.

For further information on the project or the process, please contact Jamie Witherspoon at WT Infrastructure Solutions Inc.

<p>Jamie Witherspoon, P.Eng. Project Manager</p>	<p>Mohammed Alsharqawi, Ph.D., PMP Deputy Director of Public Works</p>
<p>WT Infrastructure Solutions Inc Phone: (833) 984-6372 jamie.witherspoon@wtinfrastructure.ca</p>	<p>Township of South Stormont Phone: (613) 534-8889 ext. 241 mohammed@southstormont.ca</p>

APPENDIX D

PUBLIC INFORMATION CENTRE #1 PRESENTATION MATERIALS AND REPORT





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WT Infrastructure Solutions Inc.
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Long Sault and Ingleside Master Servicing Plan

Public Information Centre No. 1 October 17th, 2023



Mohammed Alsharqawi, Ph.D., PMP
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Township of South Stormont
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WELCOME!

The Township of South Stormont welcomes you to this Public Information Centre (PIC) so that we can share study objectives, findings to date, alternative solutions and next steps.

What is the purpose of this Public Information Centre?



To present an overview of the Long Sault and Ingleside Master Servicing Plan



To provide information regarding the project scope, identified needs, project opportunities and potential alternatives.



To collect your feedback on the proposed alternatives, assessment process and next steps of this project

Please review the material and provide us with any comments you may have. Staff are available to answer your questions and receive your comments.

We Want to Hear from You! Provide your comments

Submit comments to a member of the project team.

More information including copies of project notices and PIC materials can be found at:

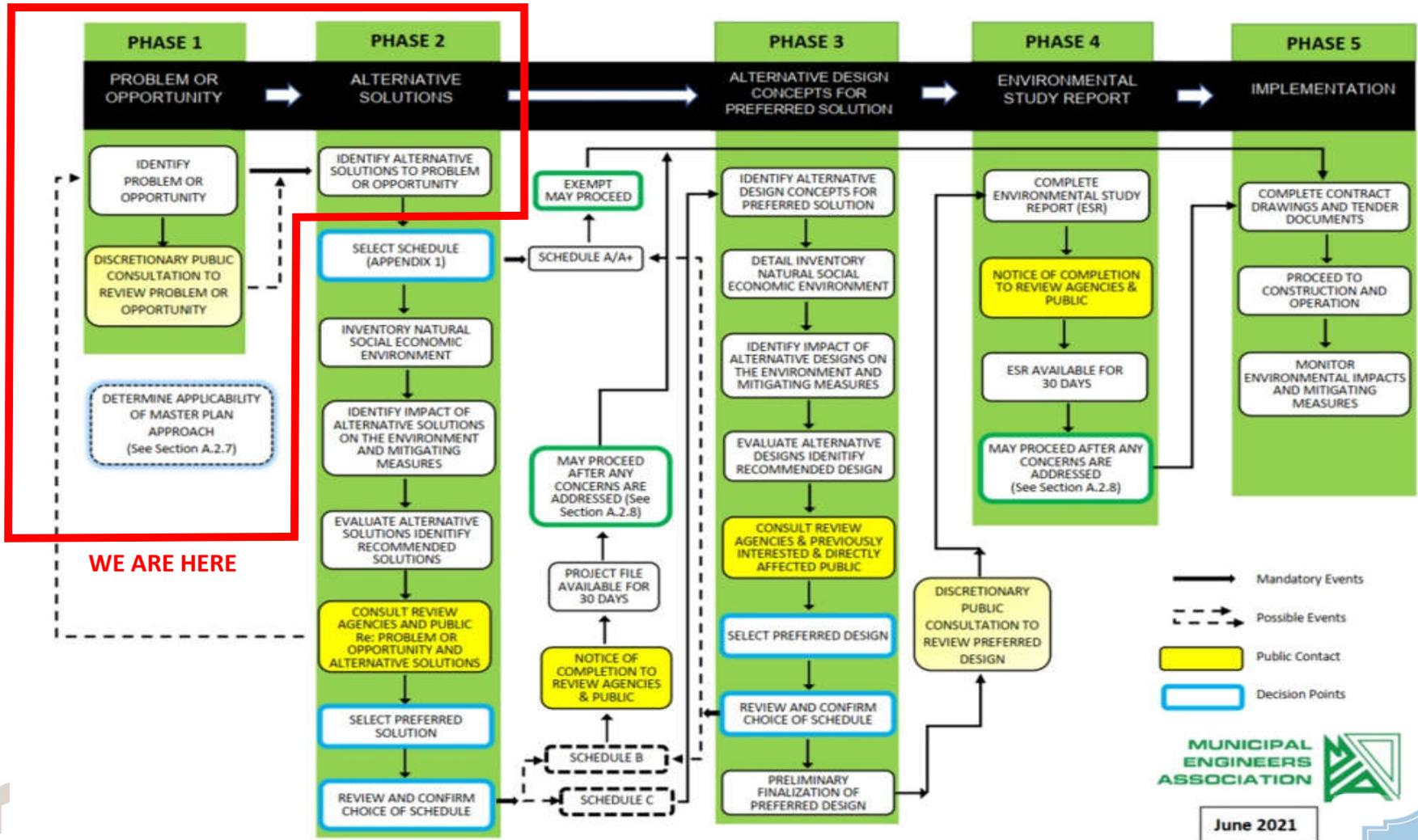
<https://www.southstormont.ca/en/index.aspx>



Thank you for attending this Public Information Centre!

MUNICIPAL CLASS EA PROCESS

The Township has initiated this Master Servicing Plan to evaluate and develop a coordinated and sustainable approach to providing municipal infrastructure for both existing and growth areas within the community. The plan will complete Phase 1 and a portion of Phase 2 of the environmental assessment process. Any Schedule B or C projects resulting from this Master Servicing Study will require additional investigations or study to fulfill Class EA requirements.



WE ARE HERE

PROJECT OBJECTIVES

This study is intended to support the forecasted growth will consider the need, capacity, location and configuration for transportation, water supply, wastewater collection and stormwater management within the study area of Long Sault. The project will be based on the following objectives:

TRANSPORTATION SYSTEM



- Address transportation impacts of future population and employment growth
- Develop design standards considering current and future development areas and needs
- Integration of active transportation and improvement of pedestrian

WATER AND WASTEWATER SYSTEM



- Determine the impacts of future growth and requirements to maintain/improve current level of service (pressure, flow, quality)
- Develop integrated system upgrades to meet current and future water and wastewater demands.
- Provide guidance for infrastructure renewal such that future water and sanitary infrastructure can be planned.

STORMWATER SYSTEM



- Protect existing and growth areas from flooding and sewer back-ups.
- Improve the quality of stormwater being discharged to local watercourses and the St. Lawrence River.
- Establish updated stormwater management requirements and watercourse improvements to support long term growth and intensification, as defined by the urban structure framework and policy

The overall goal will be to identify the preferred servicing solutions and associated infrastructure needs to support projected growth while looking at the land available within the project area, examine how the land is distributed and establish the overall pattern of the development in order to sustain the expected growth

PROJECT NEEDS

The Township has recently seen significant residential and Industrial, Commercial, and Institutional growth within the water and wastewater service areas of Ingleside and Long Sault. Population growth and an aging infrastructure in both communities has placed the existing infrastructure under stress.

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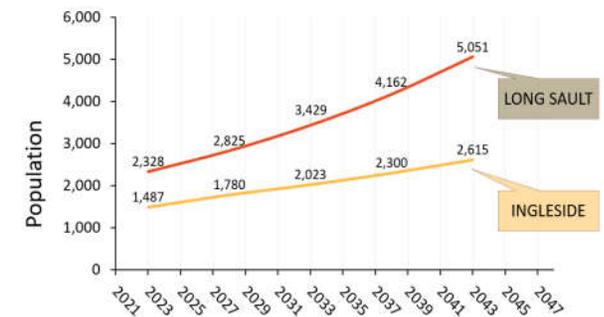


AGE OF INFRASTRUCTURE

Infrastructure were built in the late fifties, and they were not originally designed for significant growth. The unexpected growth has placed the existing infrastructure under stress.

COMMUNITY GROWTH

The Township of South Stormont has experienced population growth since 2001. Population within the Township boundaries is growing faster than expected and it is expected to continue to grow over the long term.



2023

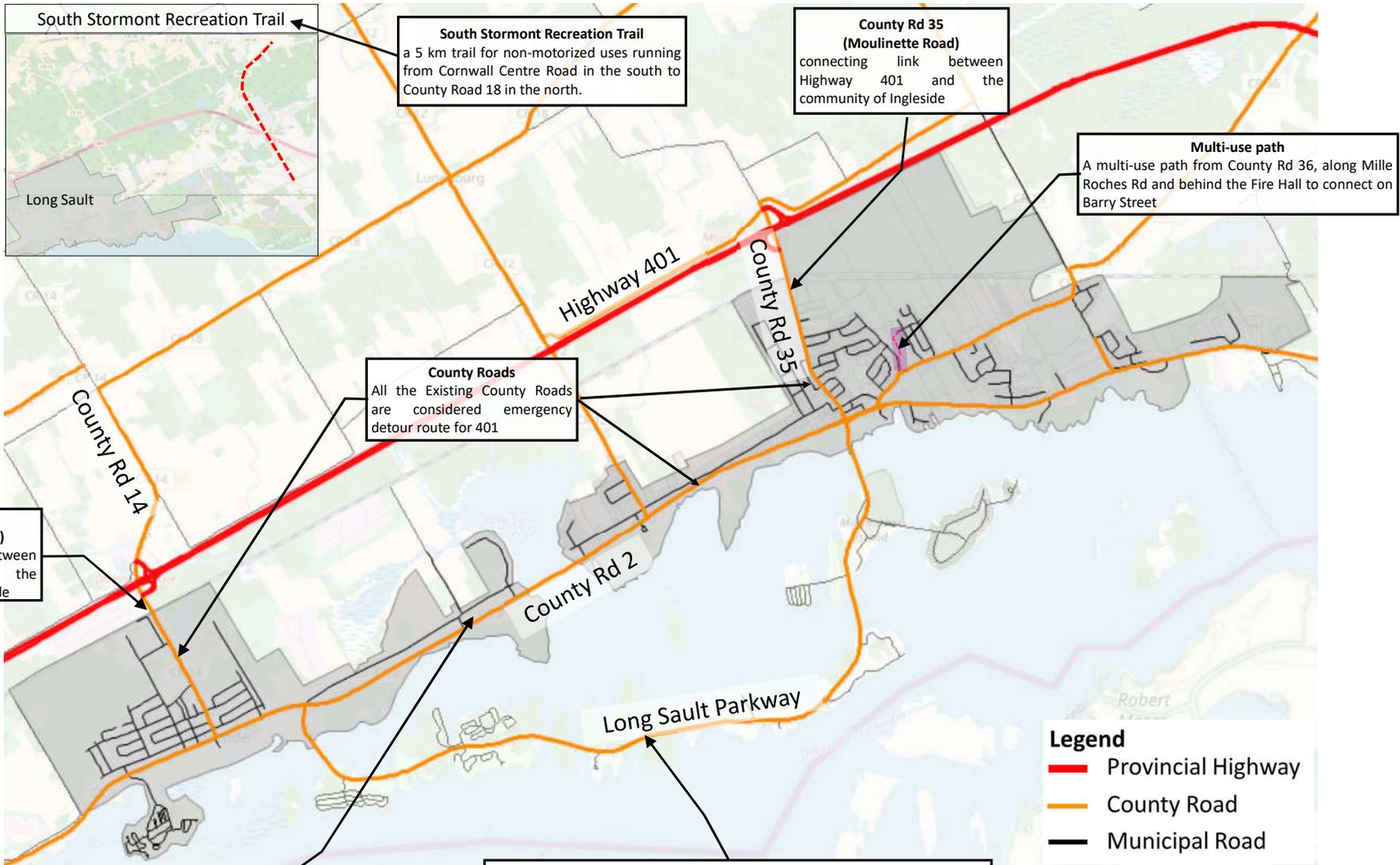


GOOD FISCAL MANAGEMENT

Understanding infrastructure needs allows the Township to better prioritize, fund and budget projects proactively rather than responding to immediate needs of individual system events (water issue, wastewater issue, etc.)



TRANSPORTATION – EXISTING CONDITIONS



South Stormont Recreation Trail
a 5 km trail for non-motorized uses running from Cornwall Centre Road in the south to County Road 18 in the north.

County Rd 35 (Moulinette Road)
connecting link between Highway 401 and the community of Ingleside

Multi-use path
A multi-use path from County Rd 36, along Mille Roches Rd and behind the Fire Hall to connect on Barry Street

County Roads
All the Existing County Roads are considered emergency detour route for 401

County Rd 14 (Dickinson Drive)
connecting link between Highway 401 and the community of Ingleside

County Rd 2
primary waterfront arterial route between the communities allowing for conveyance to the west to South Dundas and to the east into Cornwall.

Great Lakes Waterfront Trail (along Long Sault Parkway)
Part of the 3,000 km province-wide trail network that runs along the shores of the Great Lakes. The trail runs separately on a dedicated 3 m wide path from Morrisburg to Cornwall, except for the Long Sault Parkway where it is an on-road trail shared with cars (no paved shoulder)

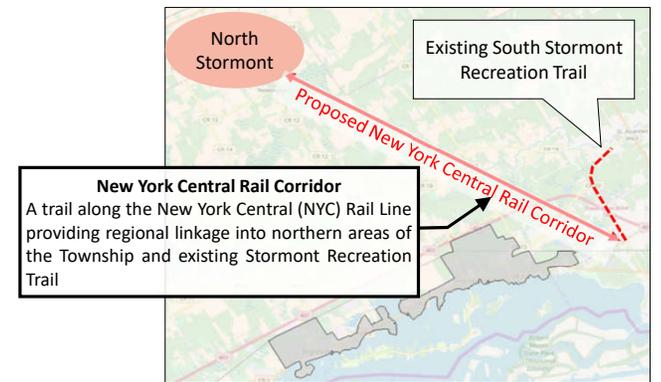
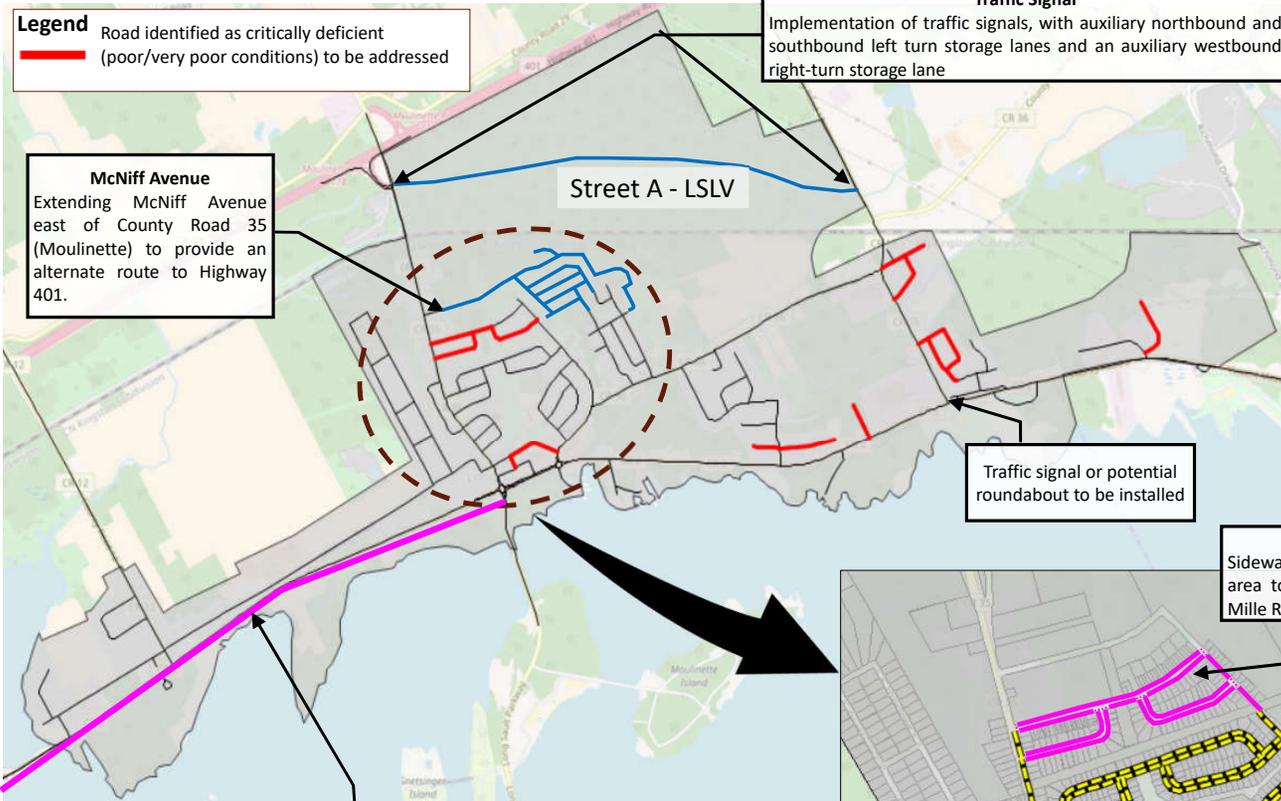
Legend

- Provincial Highway
- County Road
- Municipal Road

LONG SAULT - TRANSPORTATION SERVICE STRATEGIES

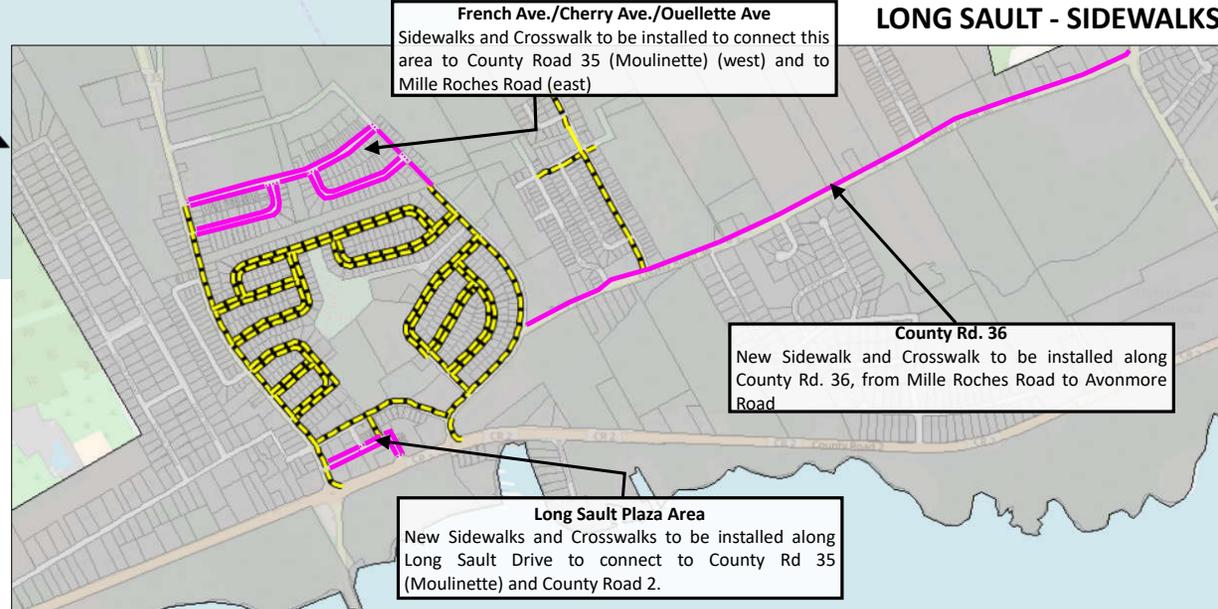
Transportation service strategies are vital a responsible development of the Township. It ensures that transportation needs are met, resources are used efficiently, and the long-term well-being of the community and the environment are prioritized.

LONG SAULT - ROAD NETWORK



Proposed Multi-use pathway (3 m separated trail)
 along County Rd 2 right-of-way for direct connection to existing trail network of Great Lakes Trail

LONG SAULT - SIDEWALKS



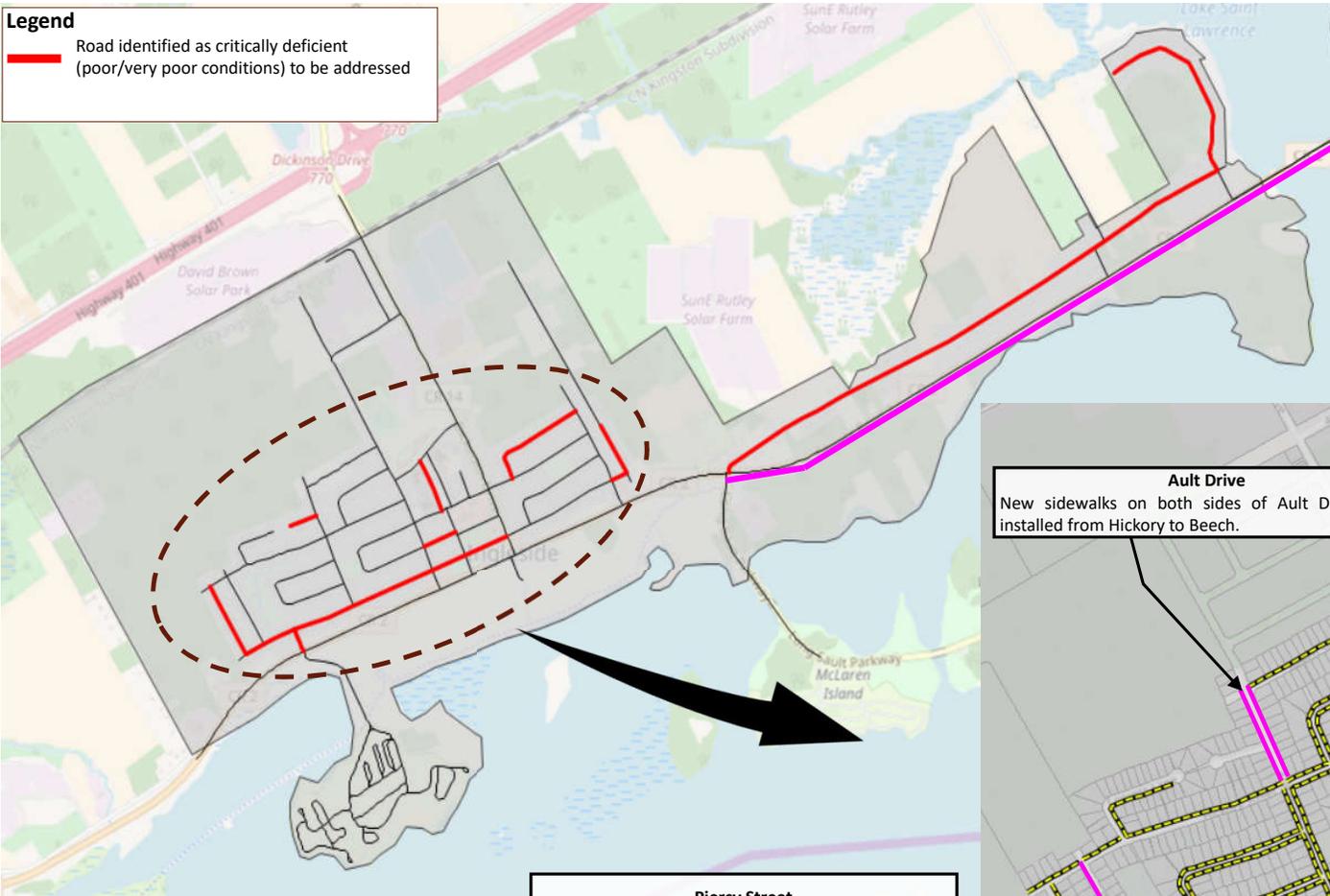
INGLESIDE - TRANSPORTATION SERVICE STRATEGIES

Transportation service strategies are vital a responsible development of the Township. It ensures that transportation needs are met, resources are used efficiently, and the long-term well-being of the community and the environment are prioritized. The Township can consider the following measures to enhance traffic, road safety and active transportation operations on their public right-of-way:

INGLESIDE - ROAD NETWORK

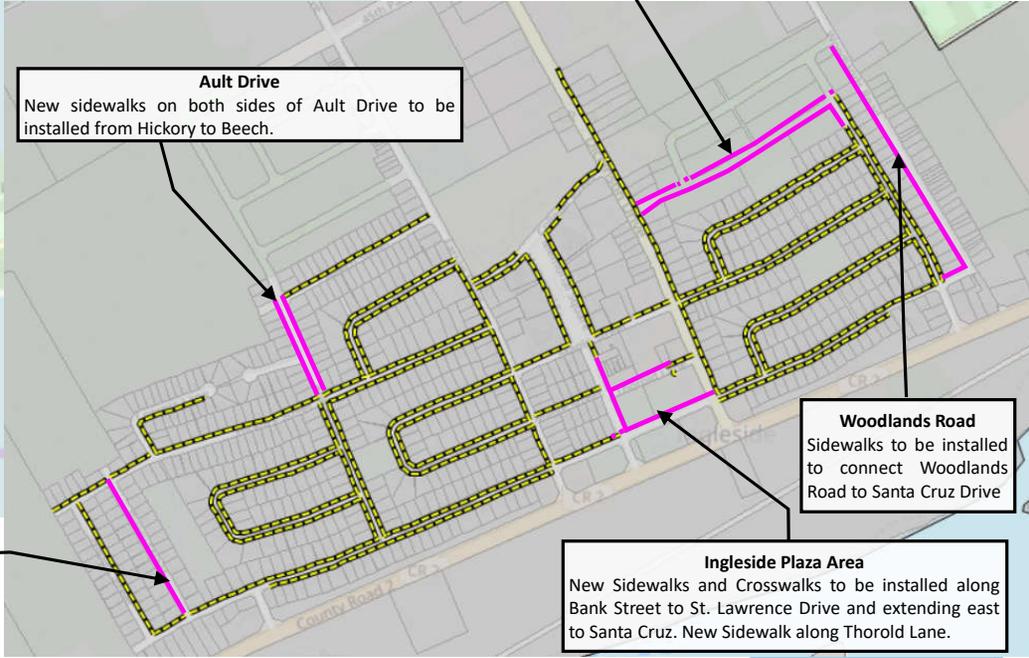
Legend

 Road identified as critically deficient (poor/very poor conditions) to be addressed



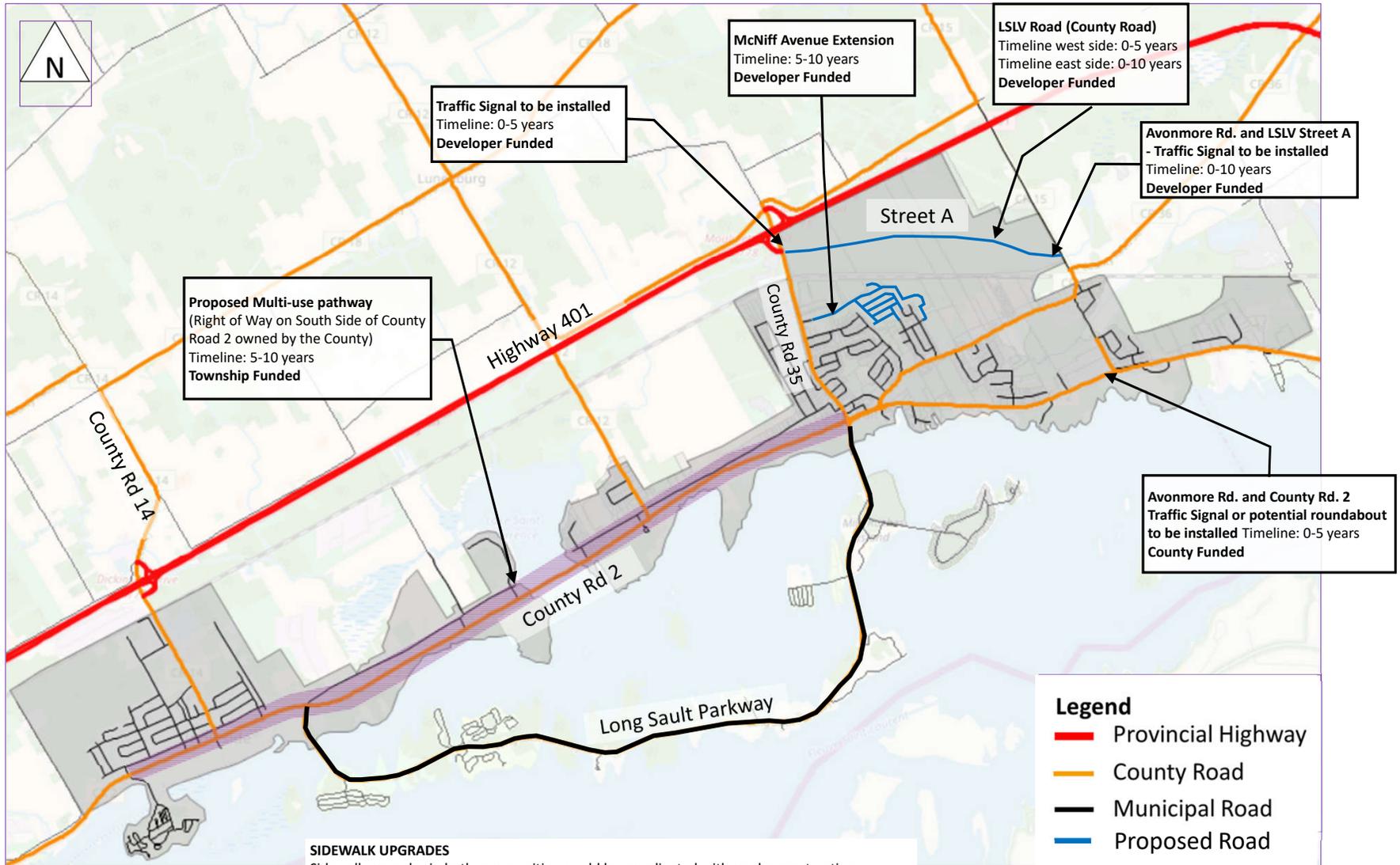
New Development Area
Sidewalks and Crosswalk to be installed to connect Wales Drive on the east to County Rd 14 (Dickinson Drive) to the west.

INGLESIDE - SIDEWALKS



Piercy Street
New Sidewalks to be installed on the left side of Piercy Street. New Crosswalk to be installed on Piercy Street along St. Lawrence Drive.

TRANSPORTATION SYSTEM – PROJECT PRIORITIZATION

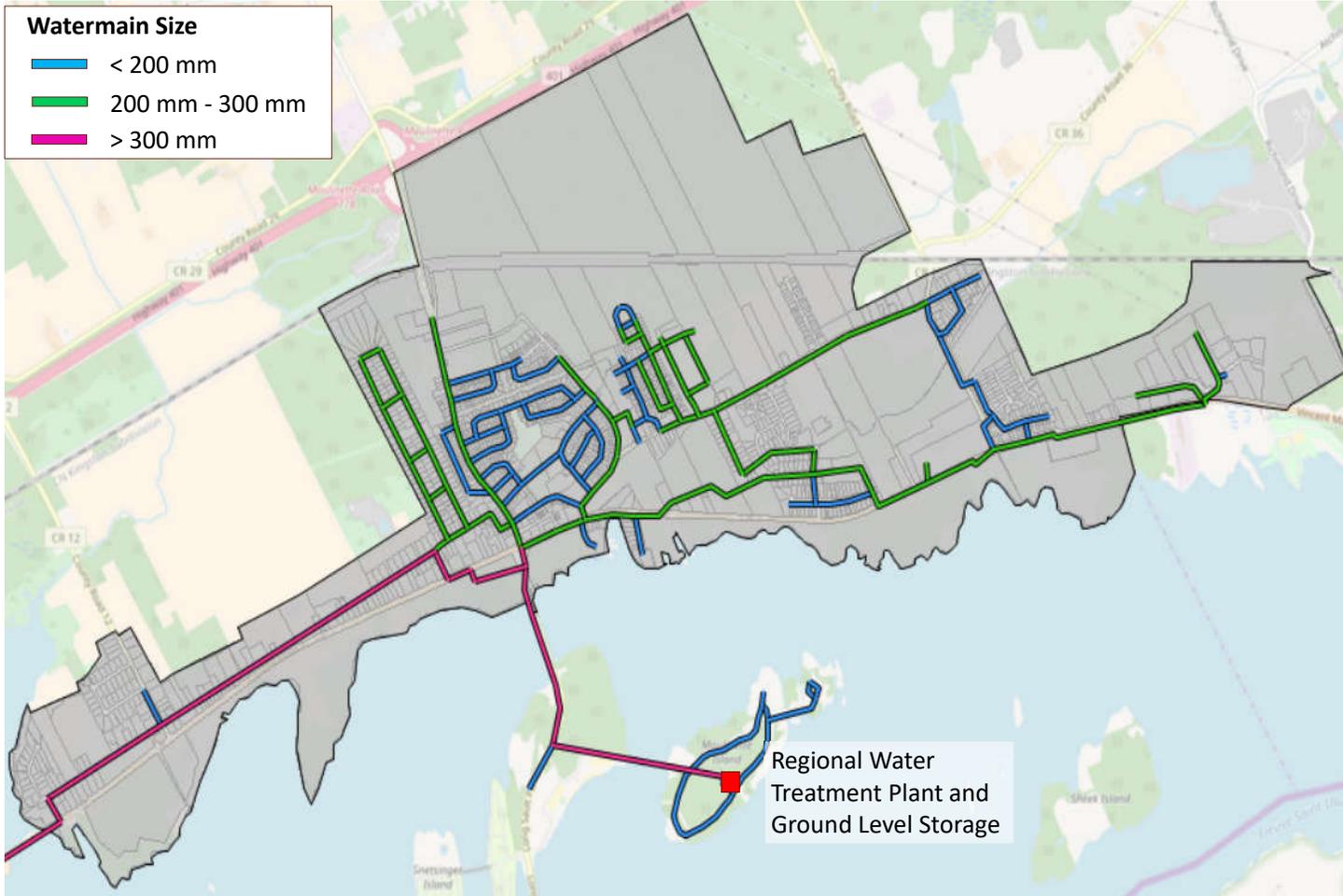


TRAFFIC CALMING OPTIONS

	Raised Crosswalk	Speed Hump	Chicane	Vertical Centerline Treatment	Speed Display Devices	Right-In/Right Out Island
Examples						
Potential Installation Location	A raised crosswalk can help reduce speed and avoid collisions. It also increases visibility of pedestrians and highlights pedestrian priority at intersections.	A speed hump is typically beneficial for reducing vehicle speeds. It increases safety for pedestrians and cyclists by slowing the speed of approaching vehicles.	A chicane can help reduce speed and manage traffic flow. Their design flexibility can help create safer and more livable streetscapes.	A flexible post-mounted delineator or raised pavement markers that act as a median can help direct traffic, increase visibility, and enhance safety on roads.	Speed display devices can help encourage responsible driving behavior, enhance road safety, and raise awareness about the importance of adhering to speed limits.	A right-in/right-out island can help enhance safety by reducing conflict points at intersections.
Potential Installation Location	Raised crosswalks can be installed at high-pedestrian crossings near schools and shopping centers.	Speed humps can be effective on local streets in residential areas and commercial activity centers.	Chicane can be installed on long and straight residential streets to prevent excessive speeding.	Vertical centerline treatments can be installed in residential areas and school zones. It can also be used to define and separate cycle lanes	Speed display devices can be installed wherever there is a long straight stretch of free-flowing traffic. It should especially be considered near existing and upcoming industrial areas that attract heavy vehicle movements	A right-in/right-out island can be installed at private accesses for major industrial or commercial activity center

The selection of suitable measures depends on the specific issue being addressed and careful consideration of site-specific conditions, supplemented by public feedback and data.

LONG SAULT WATER SYSTEM – EXISTING CONDITIONS AND BOTTLENECKS



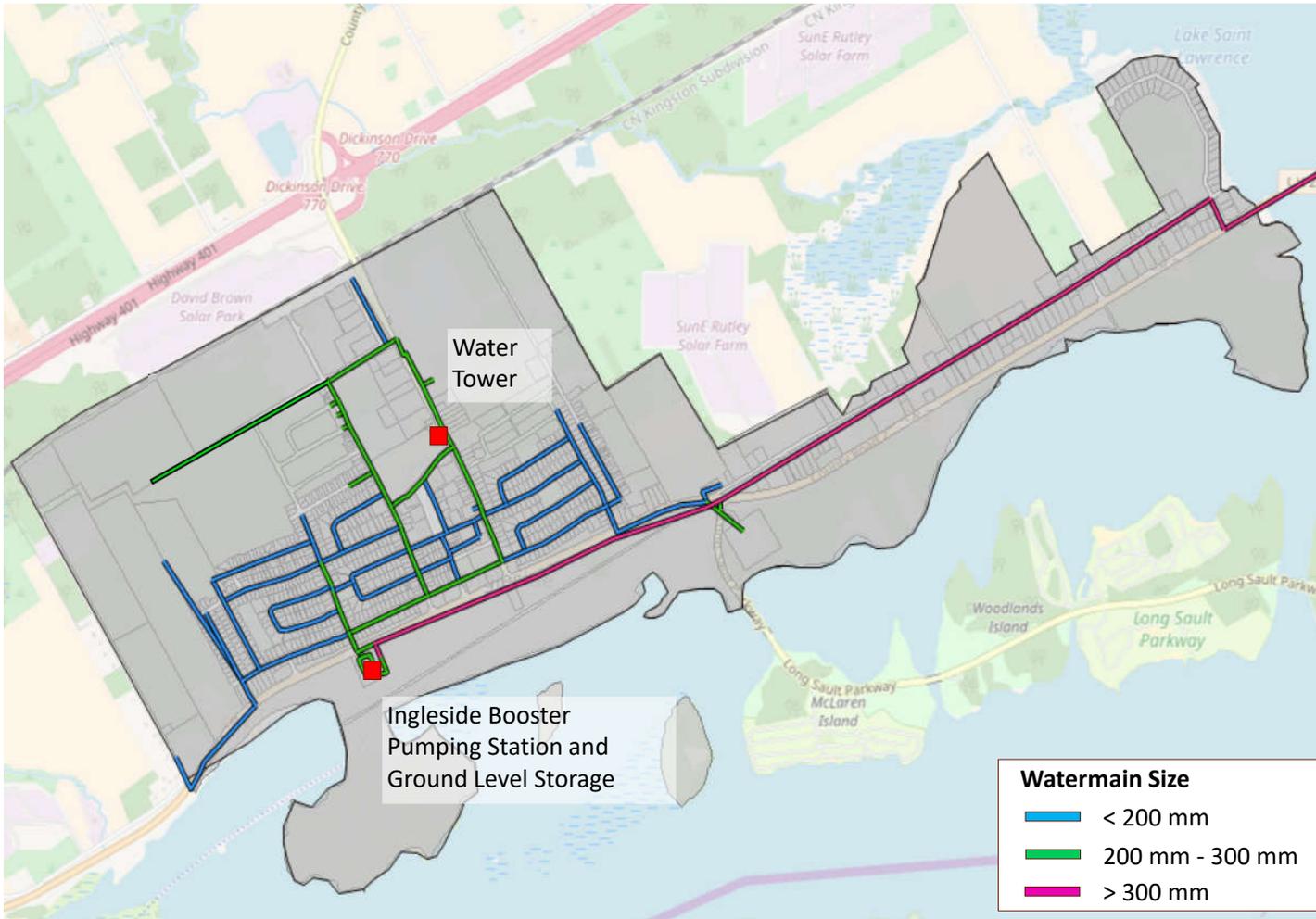
LONG SAULT DISTRIBUTION

- **Infrastructure age is only significant concern.**
- Changes to standards for minimum fire flow since the facilities were designed results in some areas that do not meet the current standard. Particularly dead-end watermains; however, Fire Department is Tanker Shuttle Accredited set up to operate with or without hydrants and no evidence of insufficient water demand for fire in past 65 years.
- No treated water storage in the core of Long Sault makes the watermain crossing the causeway from the water plant critical infrastructure that would result in loss of supply if there was a watermain break in this location. Township is in progress of providing automatic emergency back-feed from Ingleside to address this.
- Treated Water Storage will become an issue within the 20-year design timeline.

REGIONAL WATER TREATMENT CAPACITY

- Existing Treatment System is 18 years old with 20 year design capacity. Plant was originally designed for up to 2/3 additional capacity within the existing plant building.
- Development demands will exceed capacity within 2-3 years.
- Municipal Class EA is in commencing to expand Plant Capacity in 2024/2025.
- Estimated Cost of this expansion is \$3-5 million.

INGLESIDE WATER SYSTEM – EXISTING CONDITIONS AND BOTTLENECKS



INGLESIDE DISTRIBUTION

- Infrastructure age is only significant concern.
- Changes to standards for minimum fire flow since the facilities were designed results in some areas that do not meet the current standard. Particularly dead-end watermains; however, Fire Department is Tanker Shuttle Accredited set up to operate with or without hydrants and no evidence of insufficient water demand for fire in past 65 years.
- Elevated water storage tank is original to the system (1958); however, has been rehabilitated and should have up to 20-year additional lifespan with regular inspection and maintenance.

REGIONAL WATER TREATMENT CAPACITY

- Ingleside is fed with water from Long Sault via a 400mm diameter watermain between the two communities.
- Existing Treatment System is 18 years old with 20 year design capacity. Plant was originally designed for up to 2/3 additional capacity within the existing plant building.
- Development demands will exceed capacity within 2-3 years.
- Municipal Class EA is in commencing to expand Plant Capacity in 2024/2025.
- Estimated Cost of this expansion is \$3-5 million.

LONG SAULT WATER SYSTEM – STORAGE ALTERNATIVES

Watermain Size

- < 200 mm
- 200 mm - 300 mm
- > 300 mm
- Proposed Watermain



Alternative WT-S4: : Install New Elevated Storage on high point in system within Long Sault Logistics Village
Benefits: Provides storage adjacent to industrial demands, Provides emergency pressure management
Disadvantages: Higher Cost, Land Acquisition, More remote than other options.

Alternative WT-S2: Install New Elevated Storage in Long Sault between Fire Hall and Arena
Benefits: Maximizes storage close to population, Provides emergency pressure management
Disadvantages: Higher Cost, Requires use of municipal land and upgrades to distribution system.

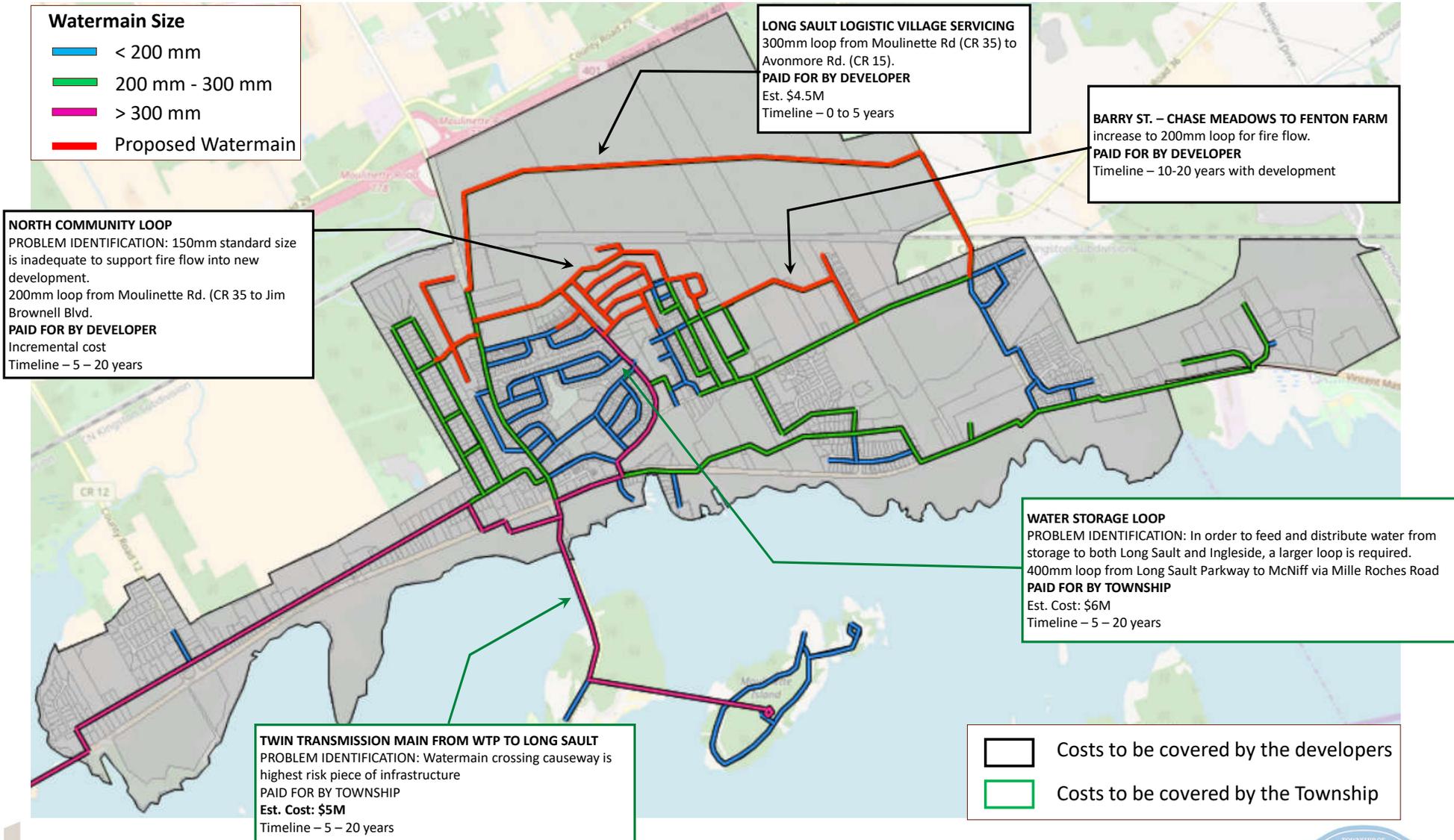
Alternative WT-S3: : Install New Elevated Storage between Long Sault and Ingleside
Benefits: Provides accessible storage for both communities, Provides emergency pressure management
Disadvantages: Higher Cost, Land Acquisition, is not looped into system

Alternative WT-S1: Expand Storage at Treatment Plant Site and in Ingleside
Benefits: Low Cost, Ease of Implementation
Disadvantages: Does not address water security for Long Sault Town site.

Preferred Alternative: Alternative WT-S2 – Elevated Storage Tank in Long Sault between Arena and Fire Hall (Former elevated tank site)

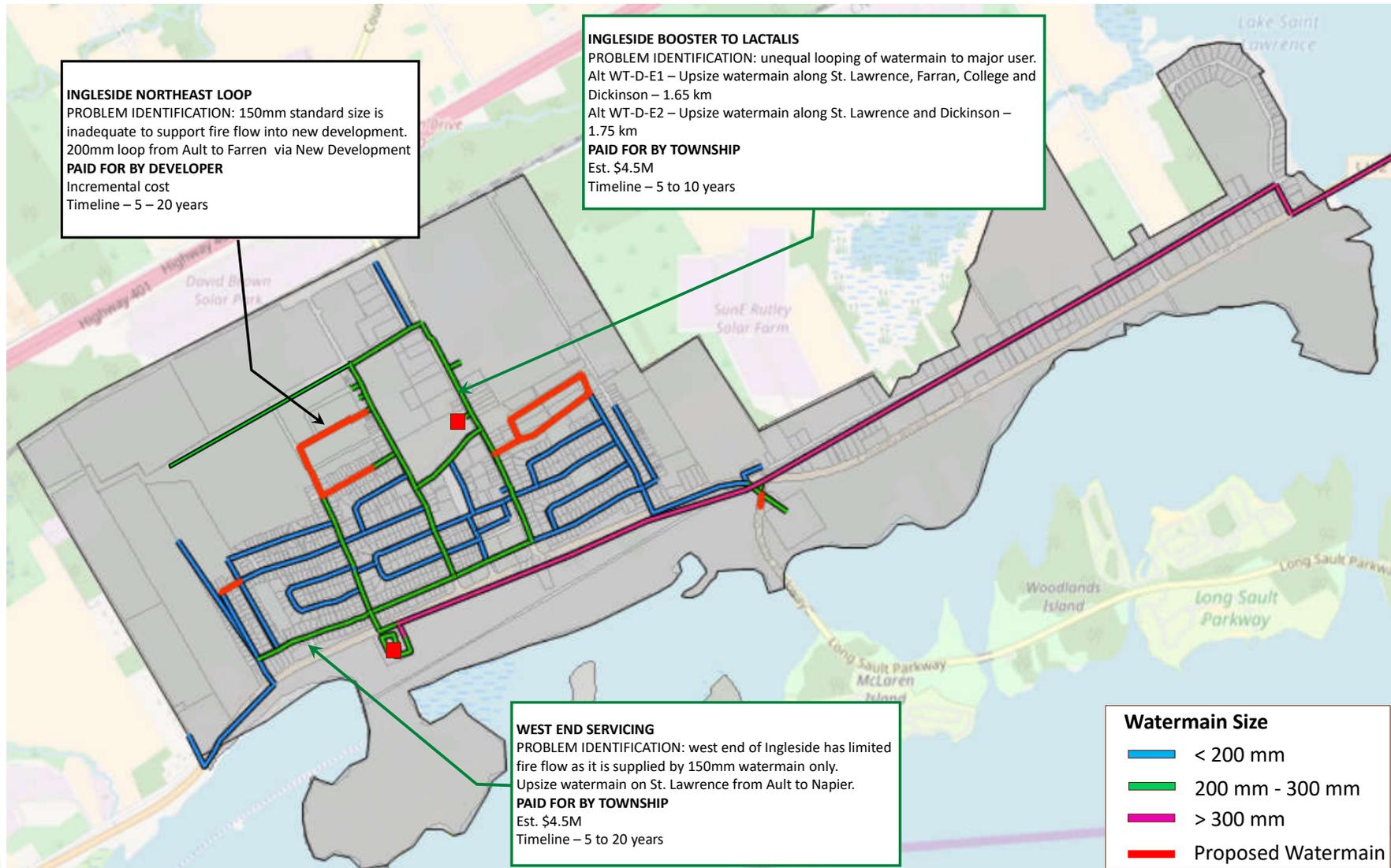
Anticipated Implementation: 10-20 years based on actual growth

LONG SAULT WATER SYSTEM – FUTURE LAYOUT AND ALTERNATIVES

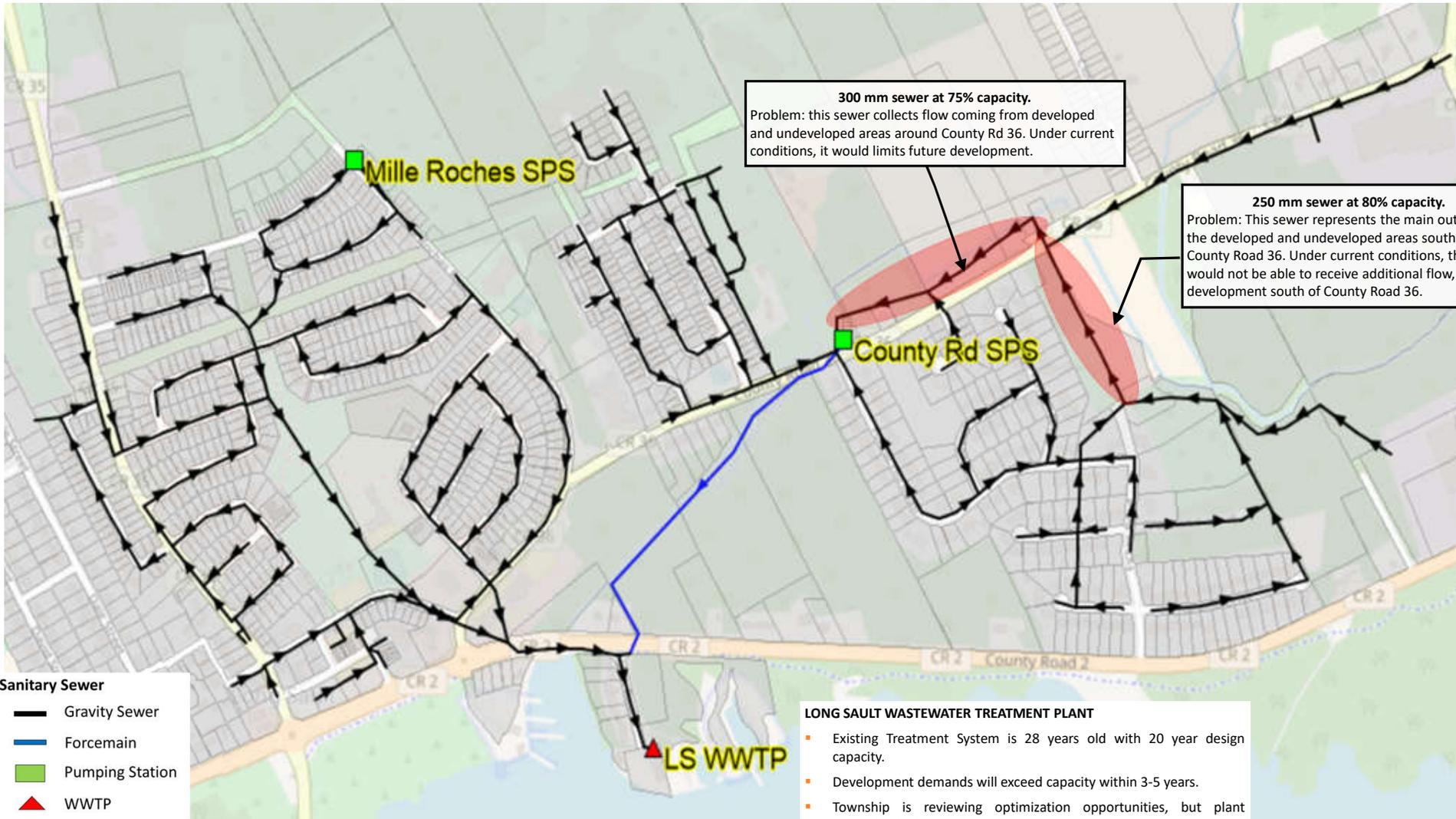


Other developments will be serviced internally with watermain sizes selected based on local needs.

INGLESIDE WATER SYSTEM – FUTURE LAYOUT AND ALTERNATIVES



LONG SAULT SANITARY SYSTEM – EXISTING CONDITIONS AND BOTTLENECKS



Sanitary Sewer

-  Gravity Sewer
-  Force main
-  Pumping Station
-  WWTP

LONG SAULT SANITARY SYSTEM – ALTERNATIVES TO EXISTING BOTTLENECKS

LONG SAULT - 250 mm sanitary sewer south of County Rd 36

Alternative A: Do Nothing



Advantages

- Low-cost alternative
- No additional costs over current planned expenditure.

Disadvantages

- Does not solve the problem as it would limit future growth

Alternative B: Upsizing sanitary sewers



Advantages

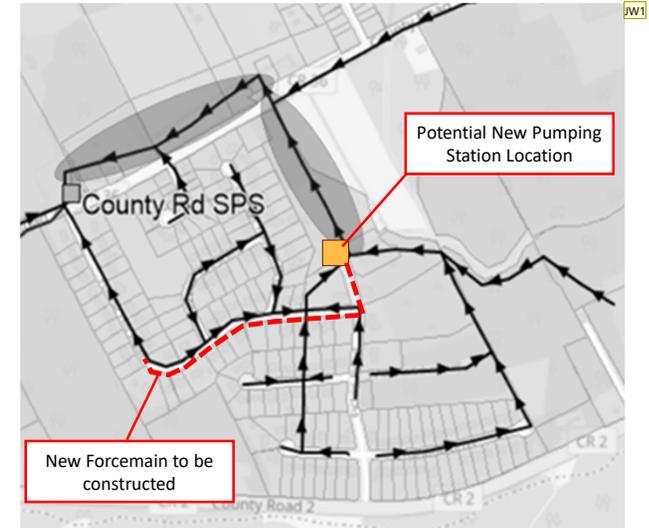
- Will support planned growth
- No Property acquisition

Disadvantages

- Moderate impacts to nearby areas during construction

Estimated Costs: \$1.1M (+/- 25%) including engineering and contingency

Alternative C: Re-routing Upstream Flow



Advantages

- Will support planned growth

Disadvantages

- Higher impacts to nearby areas during construction
- Requires land acquisition

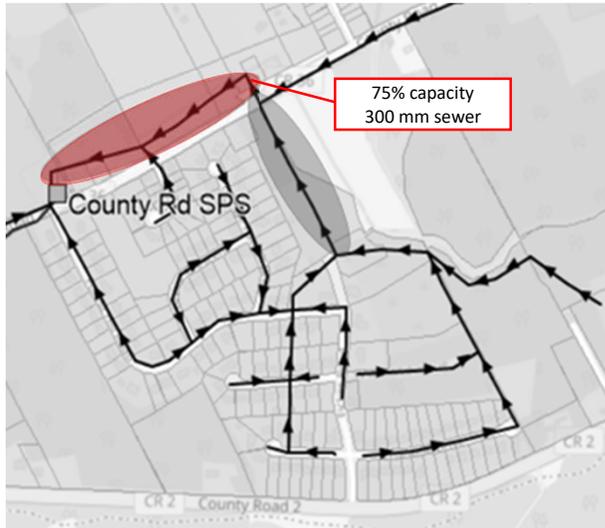
Estimated Costs: \$ 4.6M (+/- 25%) including engineering and contingency

RECOMMENDED ALTERNATIVE - ALTERNATIVE B: UPSIZING SANITARY SEWERS

SANITARY SYSTEM – ALTERNATIVES TO EXISTING BOTTLENECKS

LONG SAULT - 300 mm sanitary sewer on County Rd 36

Alternative A: Do Nothing



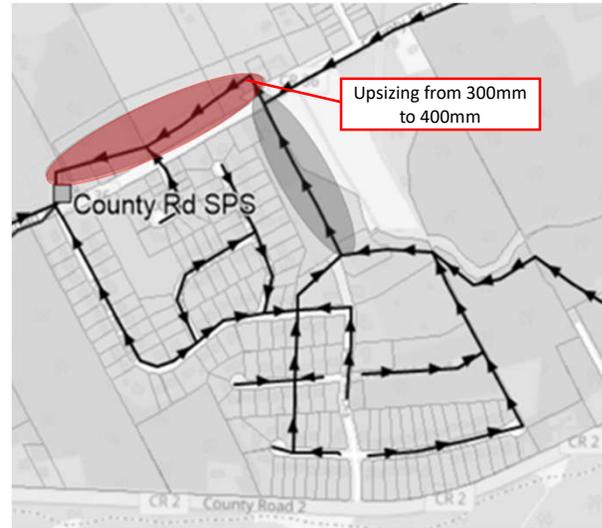
Advantages

- Low-cost alternative
- No additional costs over current planned expenditure.

Disadvantages

- Does not solve the problem as it would limit future growth

Alternative B: Upsizing sanitary sewers



Advantages

- Will support planned growth

Disadvantages

- Moderate impacts to nearby areas during construction

Estimated Costs: \$1.5 M (+/- 25%) including engineering and contingency

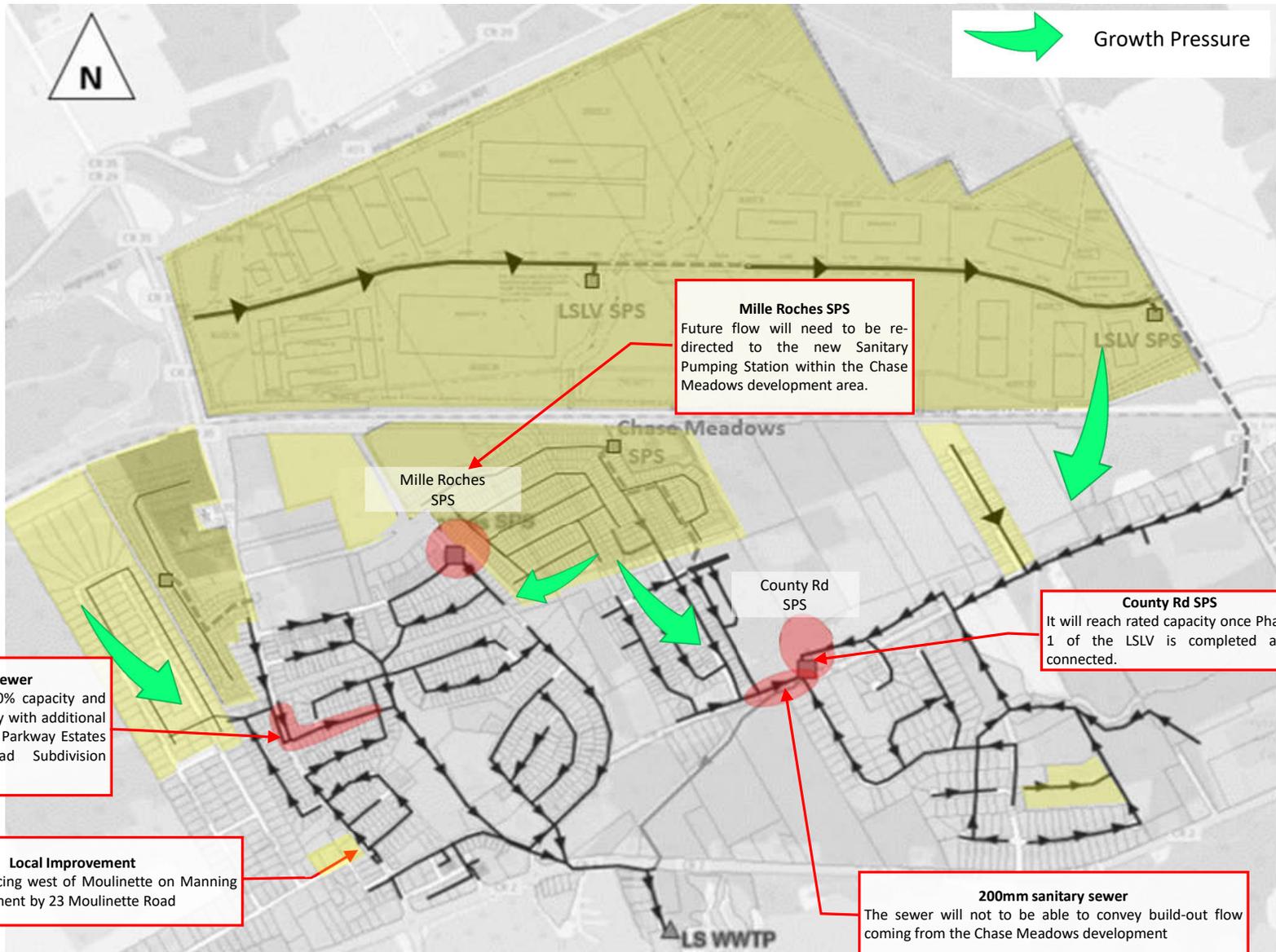
Alternative C: Re-routing Upstream Flow



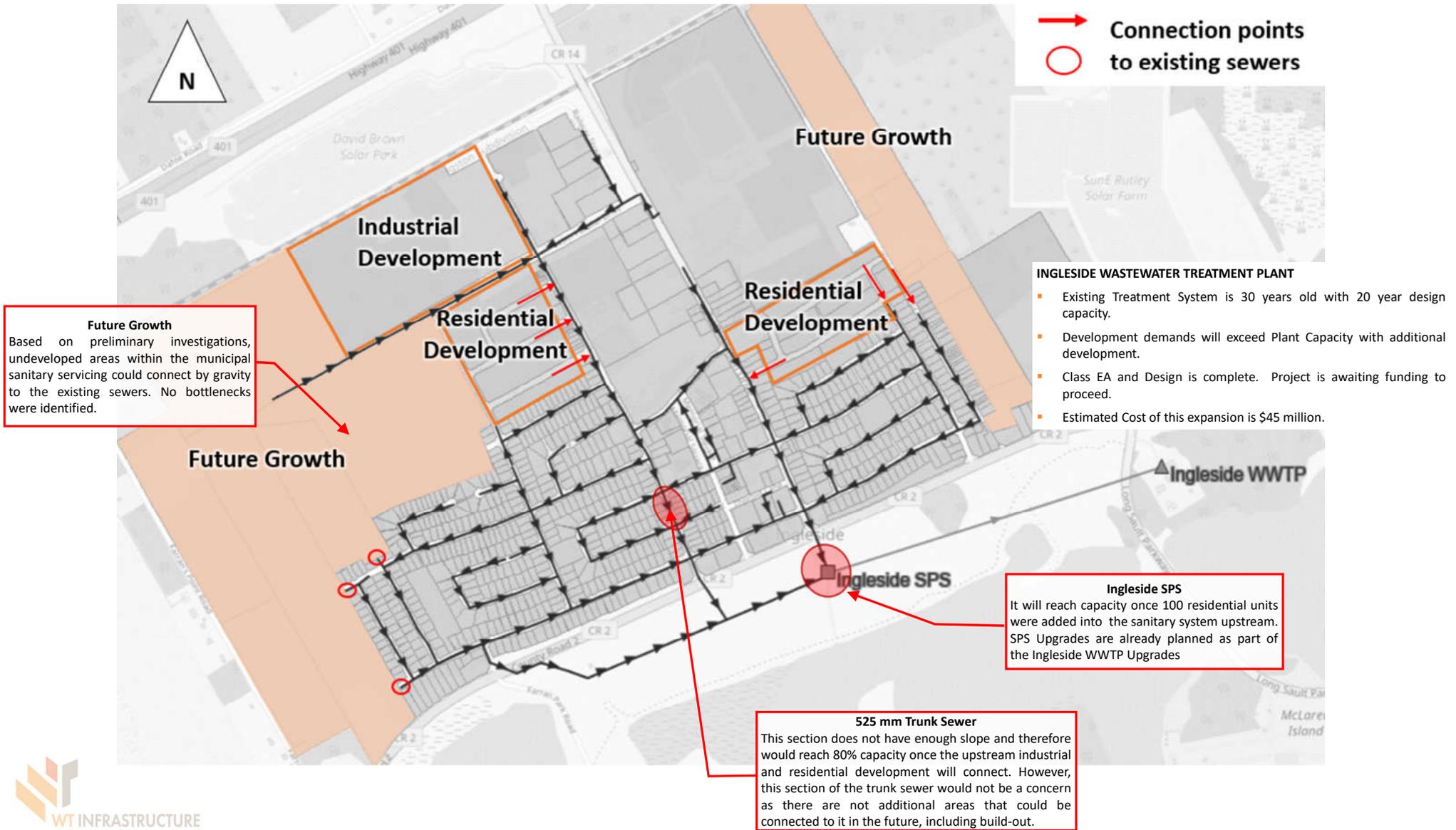
Since this sewer is the main outlet of all the development areas north and east of County Rd SPS, this option was not considered as a viable solution.

RECOMMENDED ALTERNATIVE - ALTERNATIVE B: UPSIZING SANITARY SEWERS

LONG SAULT SANITARY SYSTEM – FUTURE GROWTH LAYOUT

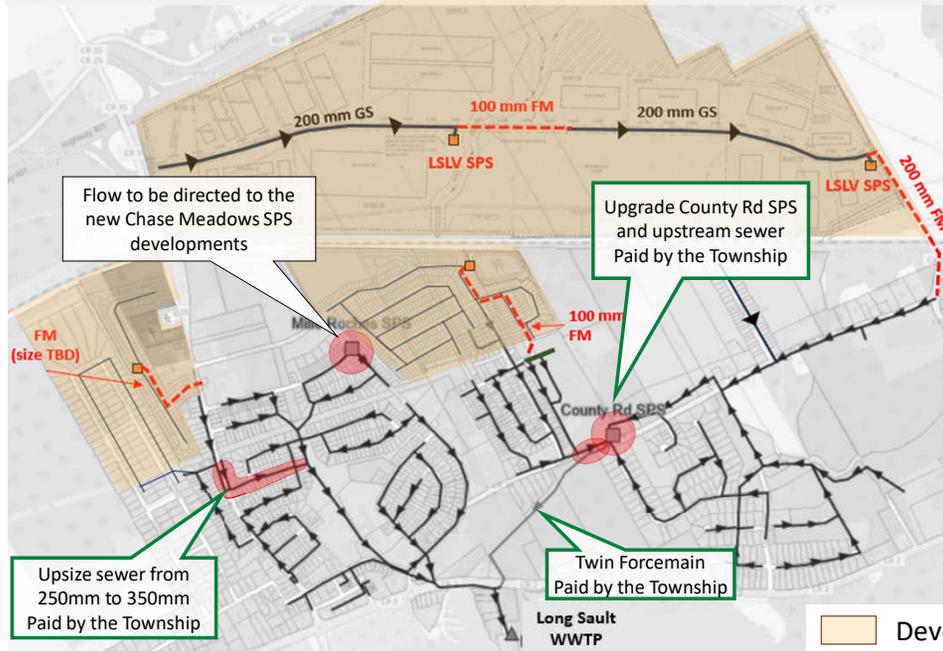


INGLESIDE SANITARY SYSTEM – EXISTING CONDITIONS AND BOTTLENECKS



LONG SAULT SANITARY SYSTEM – ALTERNATIVES TO FUTURE GROWTH

Alternative A: Decentralized Sanitary Systems Servicing the North Central Area. Upsizing sanitary sewers



Description:

Pumping Stations

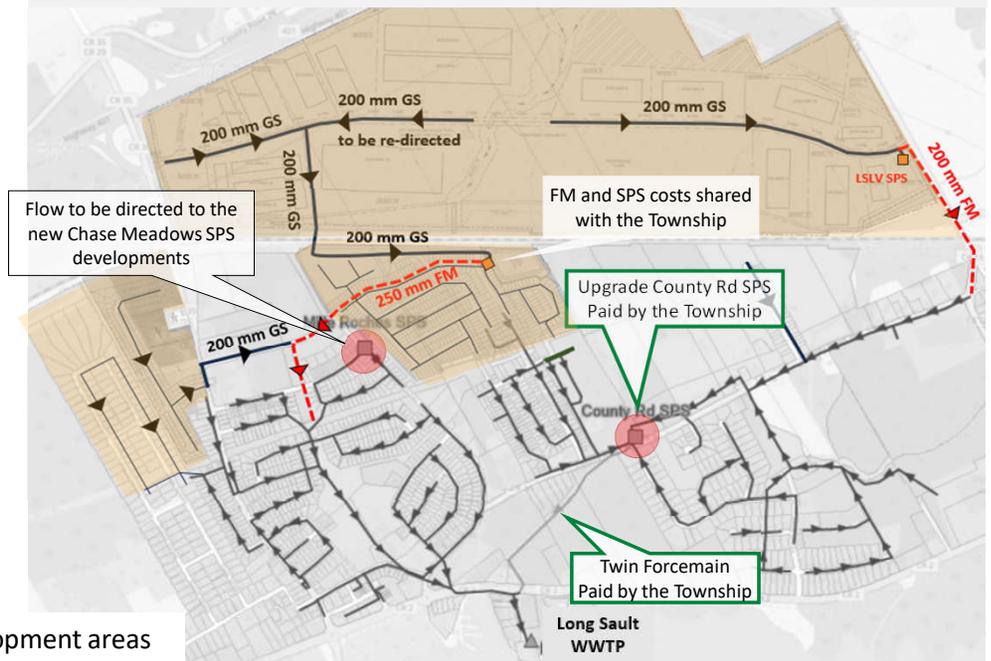
- County Rd SPS: to be upgraded
- Four (4) New SPS: as proposed by LSLV, Chase Meadows and Moulinette Subdivision developments.

Collection System

- Maintaining sewer layouts as per proposed developments
- Upsizing sewers upstream of County Rd SPS and at the eastern limit of Moulinette Rd to the Strachan.
- Twin Existing Forcemain to be upsized

Capital Costs to be covered by the Township: \$6.0 M (+/-25%) incl. engineering and contingency

Alternative B: Centralized Sanitary Systems Servicing the North Central Area.



Description:

Pumping Stations

- County Rd SPS: to be upgraded
- Two (2) New SPS: as proposed by LSLV and Chase Meadows developments

Collection System

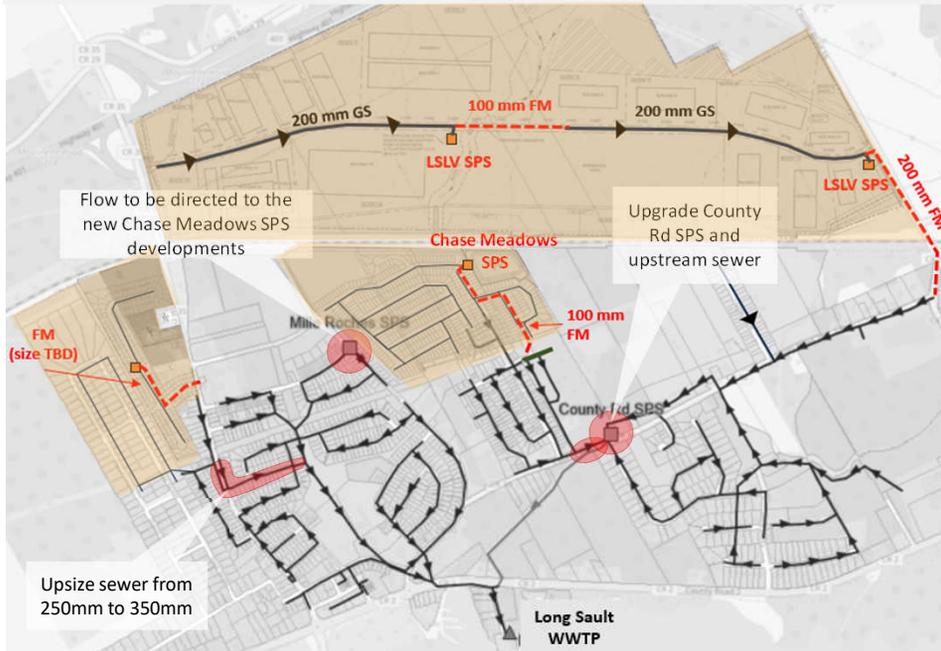
- New forcemains from Chase Meadows SPS to existing Trunk Sewer, and from LSLV SPS to existing sanitary sewer on County Rd
- New gravity sewer from LSLV to Chase Meadows SPS
- Twin Existing Forcemain

Capital Costs to be covered by the Township: \$5.0 M (+/-25%) incl. engineering and contingency

Capital costs for sanitary system infrastructure within development areas will be covered by Developers

LONG SAULT SANITARY SYSTEM – ALTERNATIVES TO FUTURE GROWTH

Alternative A: Decentralized Sanitary Systems Servicing the North Central Area. Upsizing sanitary sewers



Advantages

- Promote Future Growth
- Lower number of railway crossing required (one crossing)

Disadvantages

- Four (4) SPSs required
- Extensive interaction with existing infrastructure
- Decentralize system will require the construction of additional facilities resulting in higher social and environmental impacts due to construction
- Higher Costs

Alternative B: Centralized Sanitary Systems Servicing the North Central Area.



Advantages

- Support planned growth
- Most efficient solution for maximizing gravity conveyance to WWTP and fewer SPS required
- Centralizing wastewater related components will mitigate impacts associated with the construction of additional facilities reducing the impacts on the community

Disadvantages

- Coordination among developers required
- Higher number of railway crossing required (two crossings)

RECOMMENDED ALTERNATIVE - ALTERNATIVE B: CENTRALIZED SANITARY SYSTEMS SERVICING THE NORTH CENTRAL AREA

INGLESIDE SANITARY SYSTEM – ALTERNATIVES TO FUTURE GROWTH

INGLESIDE SANITARY PUMPING STATION: the facility will reach capacity once 100 residential units were added into the sanitary system upstream



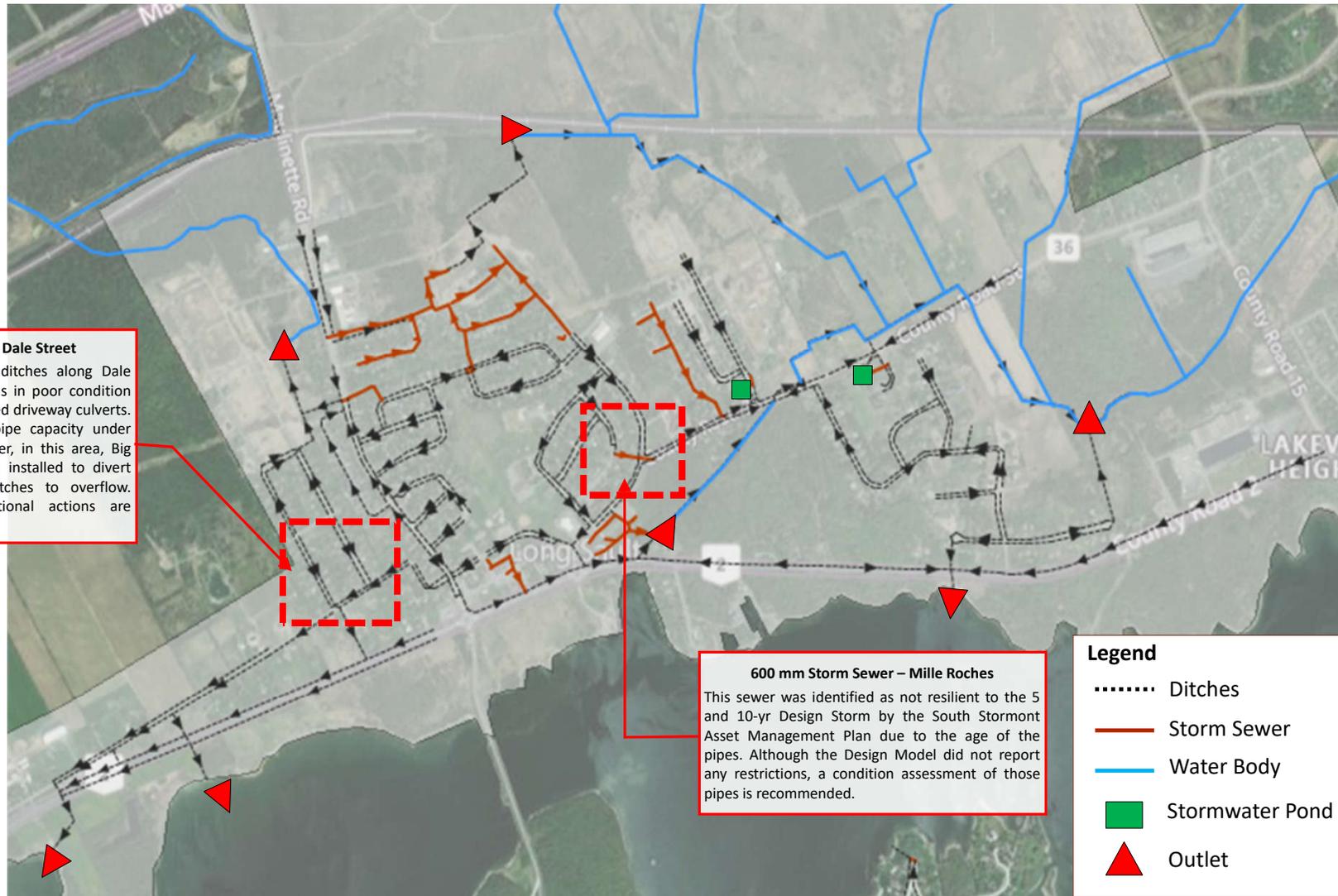
	Alternative A: Do Nothing	Alternative B: Ingleside SPS Upgrades
Advantages	<ul style="list-style-type: none"> Low-cost alternative No additional costs over current planned expenditure. 	<ul style="list-style-type: none"> Will Promote growth
Disadvantages	<ul style="list-style-type: none"> Does not solve the problem Will Limit Growth 	<ul style="list-style-type: none"> Moderate/Low Impacts during construction
Estimated Costs	No costs associated with this alternative	SPS Upgraded planned as part of the Ingleside WWTP Upgrades
Recommended Alternative	NO	YES <small>[TV]</small>

525mm TRUNK SEWER: the facility will reach capacity once 100 residential units were added into the sanitary system upstream



	Alternative A: Do Nothing	Alternative B: Reduce Infiltration and Inflow
Advantages	<ul style="list-style-type: none"> Low-cost alternative No additional costs over current planned expenditure. 	<ul style="list-style-type: none"> Improve Operation Efficiency
Disadvantages	<ul style="list-style-type: none"> Does not solve the problem 	<ul style="list-style-type: none"> Higher costs
Estimated Costs	No costs associated with this alternative	\$0.25 K(+/- 25%) for Inspection Additional costs to be assessed <small>[TV]</small>
Recommended Alternative	NO	YES

LONG SAULT STORM SEWER SYSTEM – EXISTING CONDITIONS AND BOTTLENECKS



Ditches along Dale Street
 During field review, ditches along Dale Street were flagged as in poor condition with most of the buried driveway culverts. This would reduce pipe capacity under storm events. However, in this area, Big "O" pipes have been installed to divert water and avoid ditches to overflow. Therefore, no additional actions are required

600 mm Storm Sewer – Mille Roches
 This sewer was identified as not resilient to the 5 and 10-yr Design Storm by the South Stormont Asset Management Plan due to the age of the pipes. Although the Design Model did not report any restrictions, a condition assessment of those pipes is recommended.

Legend

- Ditches
- Storm Sewer
- Water Body
- Stormwater Pond
- ▲ Outlet

INGLESIDE STORM SEWER SYSTEM – EXISTING CONDITIONS AND BOTTLENECKS



INGLESIDE STORM SEWER – ALTERNATIVES TO EXISTING BOTTLENECKS

INGLESIDE – STORM SEWER ALONG COLLEGE STREET



	Alternative A: Do Nothing	Alternative B: Upsizing sewers along College Street
Advantages	<ul style="list-style-type: none"> Low-cost alternative No additional costs over current planned expenditure. 	<ul style="list-style-type: none"> Reduce risk of flooding
Disadvantages	<ul style="list-style-type: none"> Risk of flooding 	<ul style="list-style-type: none"> Higher costs Moderate impacts to nearby neighbors during construction
Estimated Costs	No costs associated with this alternative	\$1.1 M(+/- 25%)
Recommended Alternative	NO	YES

INGLESIDE – STORM SEWER ALONG HOOPLE STREET AND EXTENDING SOUTH



	Alternative A: Do Nothing	Alternative B: Upsizing sewers from Hoople Street to Maxwell Avenue
Advantages	<ul style="list-style-type: none"> Low-cost alternative No additional costs over current planned expenditure. 	<ul style="list-style-type: none"> Reduce risk of flooding
Disadvantages	<ul style="list-style-type: none"> Risk of flooding in residential areas 	<ul style="list-style-type: none"> Higher costs Moderate impacts to nearby neighbors during construction
Estimated Costs	No costs associated with this alternative	\$1.1 M(+/- 25%)
Recommended Alternative	NO	YES 

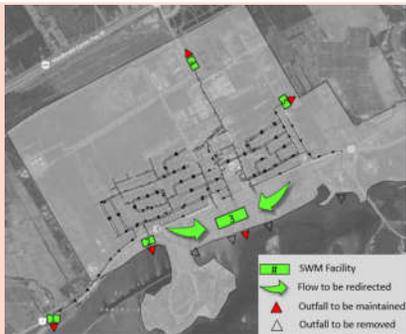
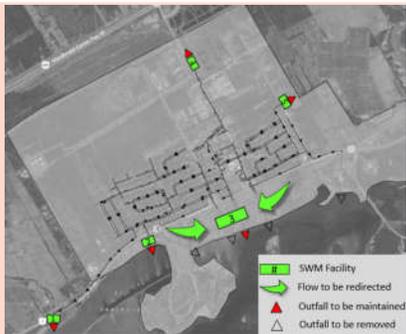
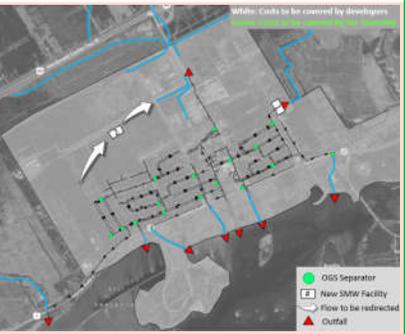
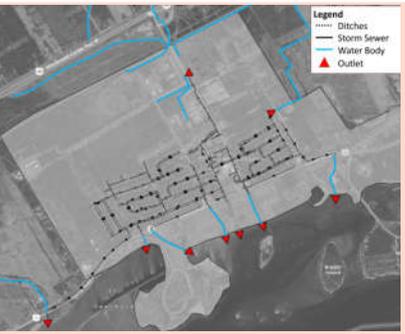
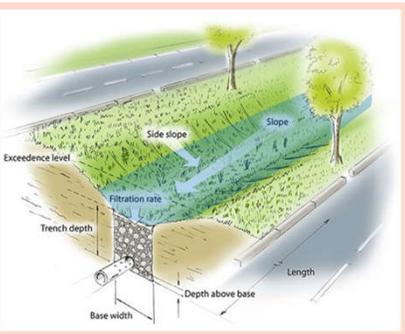
STORMWATER MANAGEMENT – ALTERNATIVES FOR FUTURE DEVELOPMENT LONG SAULT AND INGLESIDE

Alternative	System Requirements
Alternative A: Do nothing	The “Do Nothing” or null alternative is always an alternative that is reviewed to ensure that the project is in fact necessary. The “Do Nothing” scenario means that the Township will not take any actions and the stormwater system will continue to operate as per current conditions.
Alternative B: Outfall End-of-pipe treatment	<p>Stormwater Management Facilities to be constructed</p> <ul style="list-style-type: none"> • Placed at each existing stormwater outfall location and prior to discharging to a natural stream or lake. • Facilities that outlet to the St. Lawrence Seaway would be required to meet quality control requirements. • Facilities that outlet to the Raisin River would be required to meet both quality and quantity control requirements.
Alternative C: Localized Treatment	<p>Stormwater Interceptors (underground treatment maintenance holes) to be installed</p> <ul style="list-style-type: none"> • Phased approach to implementing stormwater quality controls where implementation occurs during road reconstruction projects. • Preferred quality control methodology would likely include the implementation of oil-grit separator (OGS) on a street-by-street level. • Future residential developments must meet quantity and quality control requirements with the construction of SWM facilities.
Alternative D: Individual lot-level control and storage	<ul style="list-style-type: none"> • Future developments must meet quantity and quality control requirements within the development areas before discharging to the Township. • Post-development peak runoff must not exceed the corresponding pre-development peak runoff for storm events with return periods of 5 and 100 years.
Alternative E: Implement Low Impact Design (LID) Quality Controls	<ul style="list-style-type: none"> • Existing Ditches would be retrofitted to Bio-Swale to treat and slow down stormwater discharge in existing neighbours. • A Bio-swale is a combination of vegetation and permeable backfill materials (gravel, sand) that retain, treat and promote surface water infiltration (into groundwater) rather than discharge to the surface.

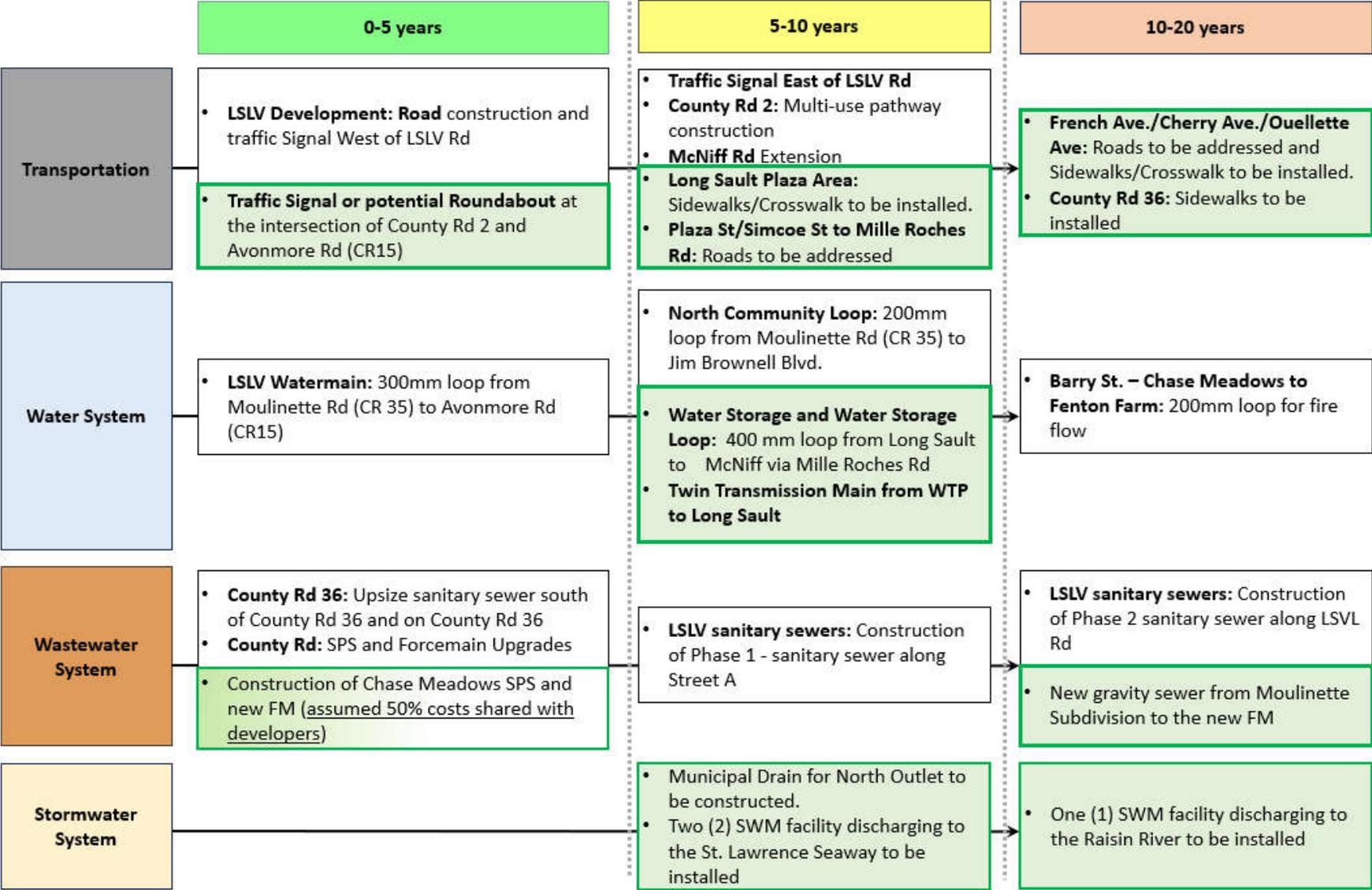
LONG SAULT STORMWATER MANAGEMENT – ALTERNATIVES FOR FUTURE DEVELOPMENT

	Alternative A - Do Nothing	Alternative B: Outfall End-of-pipe treatment	Alternative C: Localized Treatment	Alternative D: Individual lot-level control and storage	Alternative E: Implement Low Impact Design (LID) Quality Controls
Description	The stormwater system will continue to operate as per current conditions.	Stormwater (SWM) Facilities placed at each existing stormwater outfall location within original Town area. New development areas would use lot-level control	Implementing stormwater quality controls where implementation occurs during road reconstruction projects. Installation of oil-grit separator (OGS) on a street-by-street level, designed to remove oil and grit from stormwater runoff.	Future developments responsible to meet quantity and quality control requirements within the development areas before discharging to the Township.	Existing Ditches would be retrofitted to Bio-Swales to treat stormwater runoff before it enters the sewer system. The natural landscape of the bioswale helps filter out pollutants from rainwater runoff and make sure that it is cleaner when it flows into lakes, rivers and streams.
Advantages	No additional Costs Required	<ul style="list-style-type: none"> • High level of treatment achieved • Higher amount of flow to be treated/stored • Address impacts within original Town site • New development areas would use lot-level control covering capital costs and operating costs • Cost-effective alternative 	<ul style="list-style-type: none"> • Phased approach to implementing stormwater quality controls where implementation occurs during road reconstruction projects. • Promote infiltration and pollutant removal on a local site-by-site basis 	<ul style="list-style-type: none"> • Suitable for new development and vacant properties • Not dependent upon upstream and downstream drainage facilities • Developers will be responsible for capital and operation and maintenance costs 	<ul style="list-style-type: none"> • Promote infiltration and pollutant removal on a local site-by-site basis. • Focused on more frequent storm events of lower volumes as opposed to less frequent storm events with higher volume.
Disadvantages	Does not address Township Requirements	<ul style="list-style-type: none"> • Requires property acquisition for SWM facilities • Dependent upon upstream and downstream drainage facilities • Highest relative operating cost due to SWM facilities to be maintained by the Township. 	<ul style="list-style-type: none"> • Construction impacts in localized areas • Increased cost relative to the installation of stormwater interceptors to be maintained • Elevate number of infrastructure required 	<ul style="list-style-type: none"> • Construction impacts in localized areas • Does not address impacts within the original Town site area 	<ul style="list-style-type: none"> • Dependent on type of soil conditions • Leaching from swale vegetation may increase the presence of trace metals and nutrients in the runoff. • Infiltration through the swale may carry pollutants into local groundwater • Construction impacts in residential areas as Bio-Swale implementation will occur where existing ditches currently are • Increased cost relative to vegetation maintenance
Capital Costs (+/- 25%)	No Capital Costs	\$4.5M	\$6.0 M	No Capital Costs	\$7.0 M
Recommended Solutions?	NO	YES	NO	NO	NO

INGLESIDE STORMWATER MANAGEMENT – ALTERNATIVES FOR FUTURE DEVELOPMENT

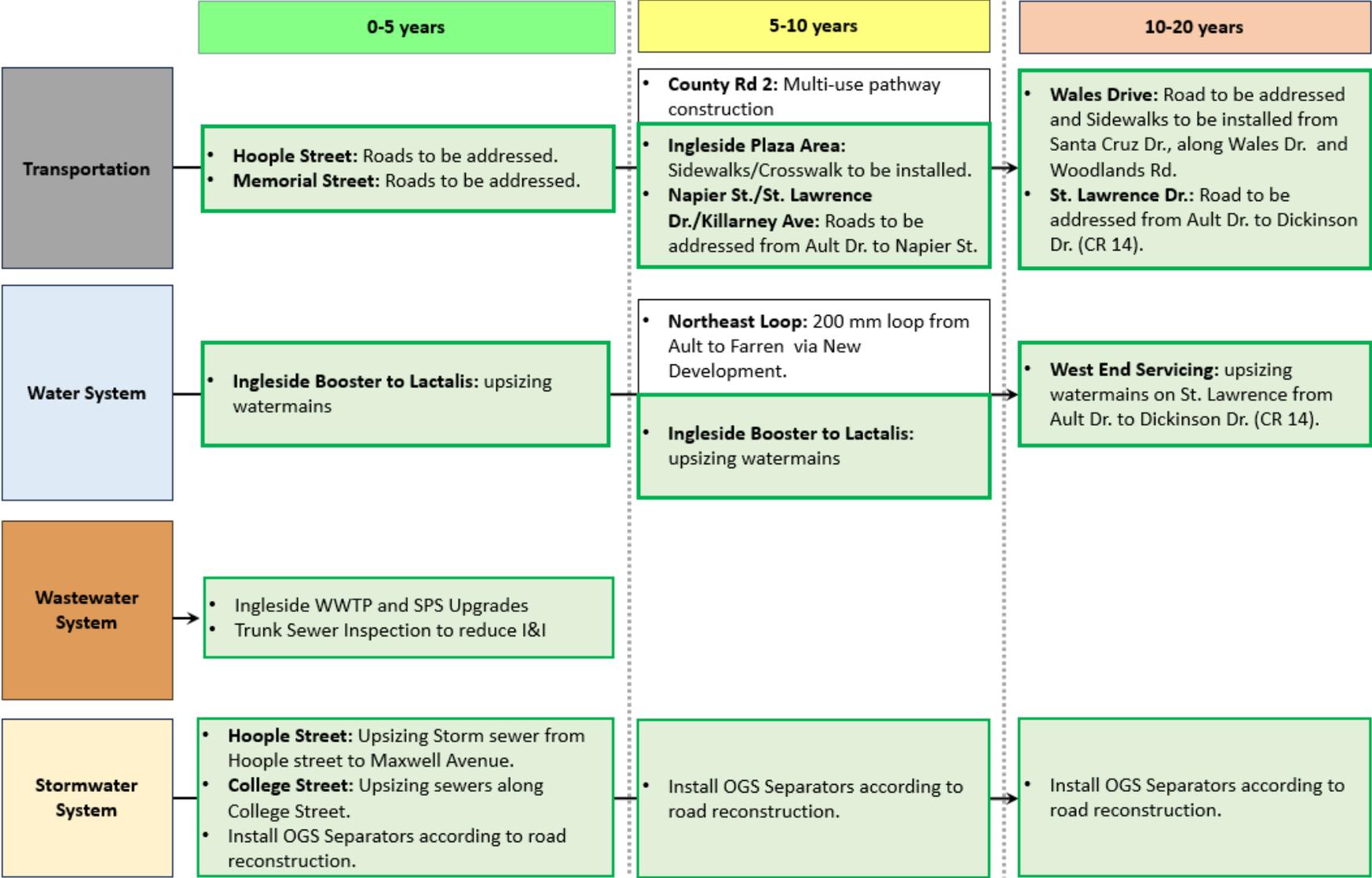
	Alternative A - Do Nothing	Alternative B: Outfall End-of-pipe treatment	Alternative C: Localized Treatment	Alternative D: Individual lot-level control and storage	Alternative E: Implement Low Impact Design (LID) Quality Controls
					
Description	The stormwater system will continue to operate as per current conditions.	Stormwater (SWM) Facilities placed at each existing stormwater outfall location within original Town area. New development areas would use lot-level control	Implementing stormwater quality controls where implementation occurs during road reconstruction projects. Installation of oil-grit separator (OGS) on a street-by-street level, designed to remove oil and grit from stormwater runoff.	Future developments responsible to meet quantity and quality control requirements within the development areas before discharging to the Township.	Existing Ditches would be retrofitted to Bio-Swales to treat stormwater runoff before it enters the sewer system. The natural landscape of the bioswale helps filter out pollutants from rainwater runoff and make sure that it is cleaner when it flows into lakes, rivers and streams.
Advantages	No additional Costs Required	<ul style="list-style-type: none"> High level of treatment achieved Higher amount of flow to be treated/stored Address impacts within original Town site New development areas would use lot-level control covering capital costs and operating costs 	<ul style="list-style-type: none"> Phased approach to implementing stormwater quality controls where implementation occurs during road reconstruction projects. Promote infiltration and pollutant removal on a local site-by-site basis Two (2) SWM facilities to be constructed by developers (capital costs covered by developers) for future residential areas to control flow, thus avoiding to upsize existing storm sewer pipes. 	<ul style="list-style-type: none"> Suitable for new development and vacant properties Not dependent upon upstream and downstream drainage facilities Developers will be responsible for capital and operation and maintenance costs 	<ul style="list-style-type: none"> Promote infiltration and pollutant removal on a local site-by-site basis. Focused on more frequent storm events of lower volumes as opposed to less frequent storm events with higher volume.
Disadvantages	Does not address Township Requirements	<ul style="list-style-type: none"> Requires property acquisition for SWM facilities Dependent upon upstream and downstream drainage facilities Highest relative operating cost due to SWM facilities to be maintained by the Township. Highest capital costs alternative 	<ul style="list-style-type: none"> SWM facilities operating costs covered by the Township Construction impacts in existing residential areas Increased cost relative to the installation of stormwater interceptors to be maintained Elevate number of infrastructure required 	<ul style="list-style-type: none"> Construction impacts in localized areas Does not address impacts within the original Town site area 	<ul style="list-style-type: none"> Dependent on type of soil conditions Leaching from swale vegetation may increase the presence of trace metals and nutrients in the runoff. Infiltration through the swale may carry pollutants into local groundwater Construction impacts in residential areas as Bio-Swale implementation will occur where existing ditches currently are Increased cost relative to vegetation maintenance
Capital Costs (+/- 25%)	No Capital Costs	\$10.0M	\$3.0 M	No Capital Costs	\$7.0 M
Recommended Solutions?	NO	NO	YES	NO	NO

COORDINATE PRIORITIZATION PROJECTS – LONG SAULT



Costs to be covered by the developers
 Costs to be covered by the Township

COORDINATE PRIORITIZATION PROJECTS – INGLESIDE



Costs to be covered by the developers
 Costs to be covered by the Township

October 17, 2023

LONG SAULT AND INGLESIDE MASTER SERVICING PLAN

Public Information Centre (PIC) Sign-in Sheet

Time: 5:00-7:00 pm, Tuesday October 17, 2023

Place: Town Hall, 2 Mille Roches Road, PO Box 84, K0C 1P0, Long Sault, ON

PLEASE SIGN IN

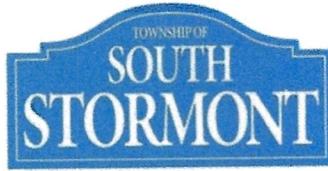
NAME
GAVIN MAUDONALD
* RAINER PETHKE
GINA SANDRETTI
DANIELLE HUNT
DAVID NANTON
Charles Duvost
Peter Waldorf
Doug Stuebel

Comments and information regarding this project are being collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. Except for personal information, comments submitted may be made public and included in the project documentation.

LONG SAULT AND INGLESIDE MASTER SERVICING PLAN
 Public Information Centre (PIC) Sign-in Sheet

PLEASE SIGN IN

NAME	ADDRESS	PHONE	EMAIL
Shafic Hammond	[REDACTED]		
Lee Hallister			



LONG SAULT AND INGLESIDE
MASTER SERVICING PLAN

Public Information Centre (PIC)

Comment Sheet

Name: <i>RAINER PETRALE</i>	[Redacted]
[Redacted]	

Comments:

noticed water flow/pressure dropped considerably when watering my new lawn seed if I wasn't at it before most people got up in the morning. Similarly at supper time.

Do you require follow-up to your comments? Please Circle YES NO

Comments and information regarding this project are being collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. Except for personal information, comments submitted may be made public and included in the project documentation.

APPENDIX E

PUBLIC INFORMATION CENTRE #2 PRESENTATION MATERIALS AND REPORT





Jamie Witherspoon, P.Eng. – President
 Consultant Project Manager
 WT Infrastructure Solutions Inc.
jamie.witherspoon@wtinfrastructure.ca

Long Sault and Ingleside Master Servicing Plan

Public Information Centre No. 2 November 7th, 2023



Mohammed Alsharqawi, Ph.D., PMP
 Public Works Director
 Township of South Stormont
mohammed@southstormont.ca

WELCOME!

The Township of South Stormont welcomes you to this Public Information Centre (PIC) so that we can share study objectives, findings to date, alternative solutions and next steps.

What is the purpose of this Public Information Centre?



To present an overview of the Long Sault and Ingleside Master Servicing Plan



To provide information regarding the project scope, identified needs, project opportunities and potential alternatives.



To collect your feedback on the proposed alternatives, assessment process and next steps of this project

Please review the material and provide us with any comments you may have. Staff are available to answer your questions and receive your comments.

We Want to Hear from You! Provide your comments

Submit comments to a member of the project team.

More information including copies of project notices and PIC materials can be found at:

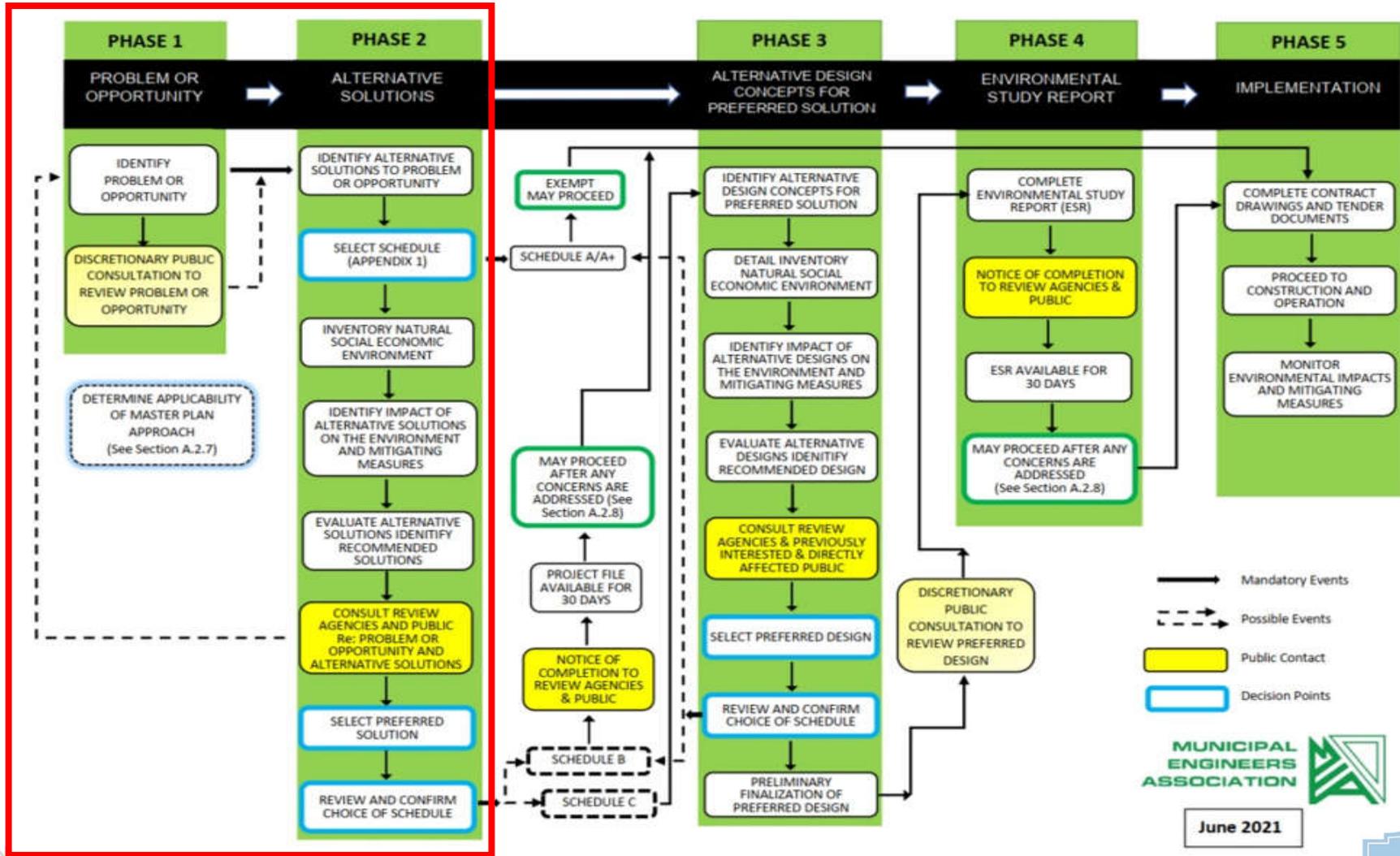
<https://www.southstormont.ca/en/index.aspx>



Thank you for attending this Public Information Centre!

MUNICIPAL CLASS EA PROCESS

The Township has initiated this Master Servicing Plan to evaluate and develop a coordinated and sustainable approach to providing municipal infrastructure for both existing and growth areas within the community. The plan completed Phase 1 and Phase 2 of the environmental assessment process.



PROJECT OBJECTIVES

This study is intended to support the forecasted growth taking into account transportation needs, water supply, wastewater collection and stormwater management within the study area of Long Sault and Ingleside. The project will be based on the following objectives:

TRANSPORTATION SYSTEM



- Address transportation impacts of future population and employment growth
- Develop design standards considering current and future development areas and needs
- Integration of active transportation and improvement of pedestrian

WATER AND WASTEWATER SYSTEM



- Determine the impacts of future growth and requirements to maintain/improve current level of service (pressure, flow, quality)
- Develop integrated system upgrades to meet current and future water and wastewater demands.
- Provide guidance for infrastructure renewal such that future water and sanitary infrastructure can be planned.

STORMWATER SYSTEM



- Protect existing and growth areas from flooding and sewer back-ups.
- Improve the quality of stormwater being discharged to local watercourses and the St. Lawrence River.
- Establish updated stormwater management requirements and watercourse improvements to support long term growth and intensification, as defined by the urban structure framework and policy

The overall goal is to identify the preferred servicing solutions and associated infrastructure needs to support projected growth.

PROJECT NEEDS

The Township has recently seen significant growth within the water and wastewater service areas of Ingleside and Long Sault. Population growth and an aging infrastructure in both communities has placed the existing infrastructure under stress.

1958

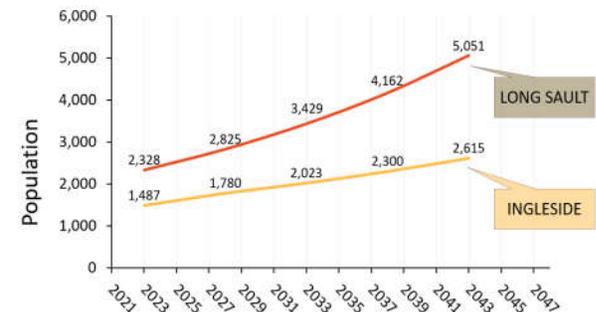


AGE OF INFRASTRUCTURE

Infrastructure were built in the late fifties, and they were not originally designed for significant growth. The unexpected growth has placed the existing infrastructure under stress.

COMMUNITY GROWTH

The Township of South Stormont has experienced population growth since 2001. Population within the Township boundaries is growing faster than expected and it is expected to continue to grow over the long term.



2023



GOOD FISCAL MANAGEMENT

Understanding infrastructure needs allows the Township to better prioritize, fund and budget projects proactively rather than responding to immediate needs of individual system events (water issue, wastewater issue, etc.)

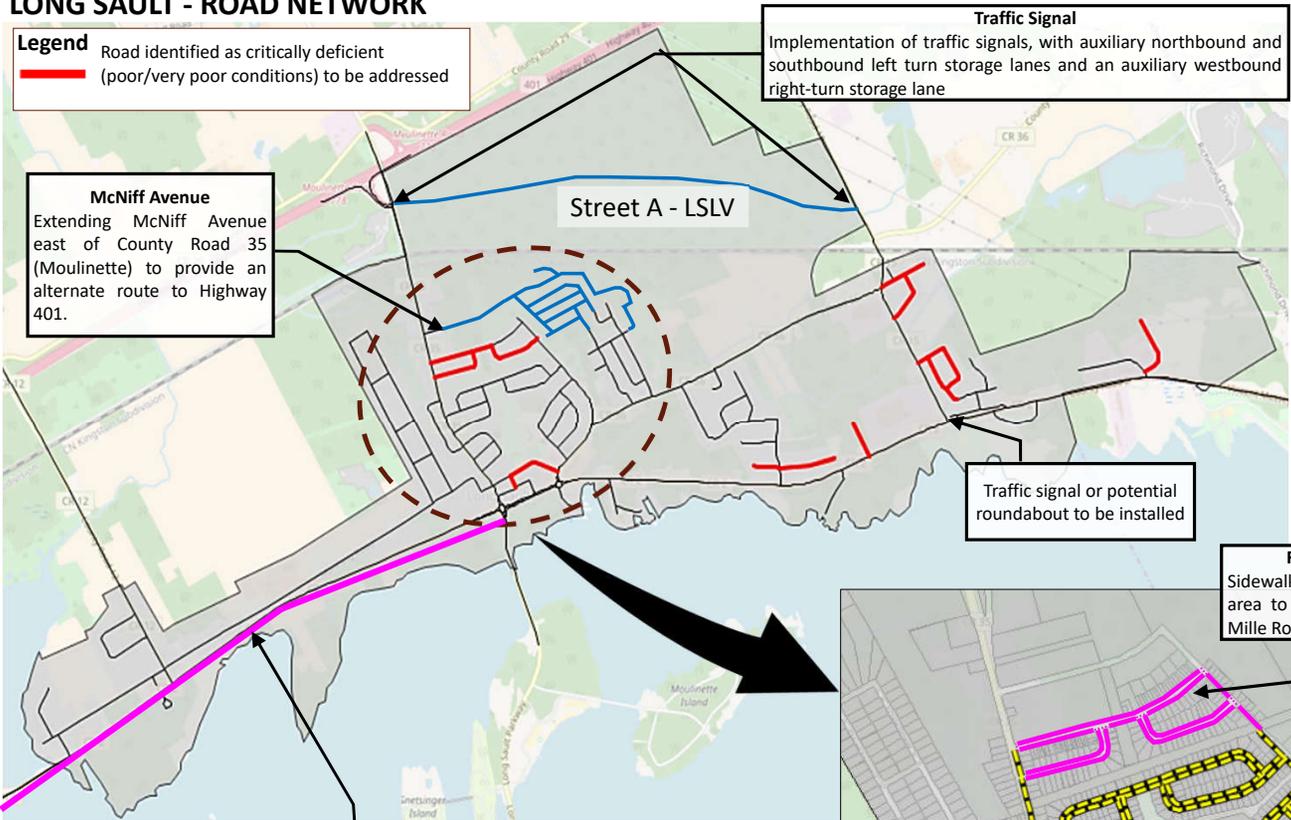


LONG SAULT - TRANSPORTATION SERVICE STRATEGIES

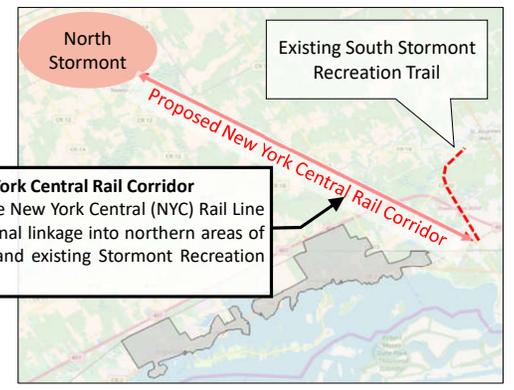
Transportation service strategies are vital a responsible development of the Township. It ensures that transportation needs are met, resources are used efficiently, and the long-term well-being of the community and the environment are prioritized.

LONG SAULT - ROAD NETWORK

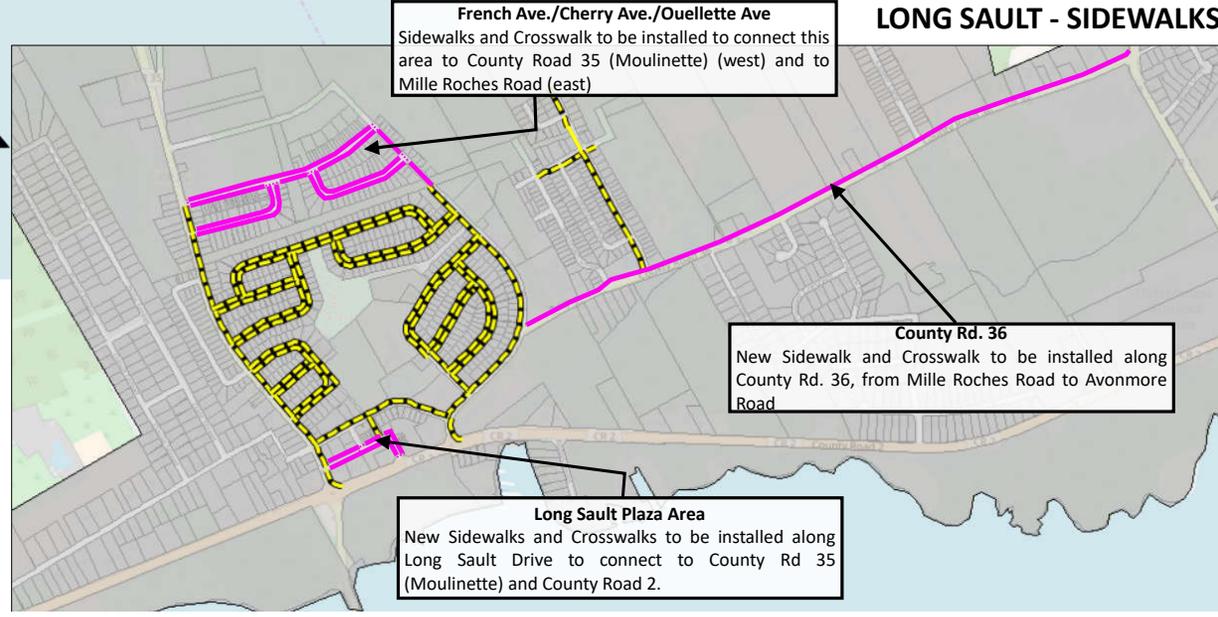
Legend
 Road identified as critically deficient (poor/very poor conditions) to be addressed



Proposed Multi-use pathway (3 m separated trail)
 along County Rd 2 right-of-way for direct connection to existing trail network of Great Lakes Trail



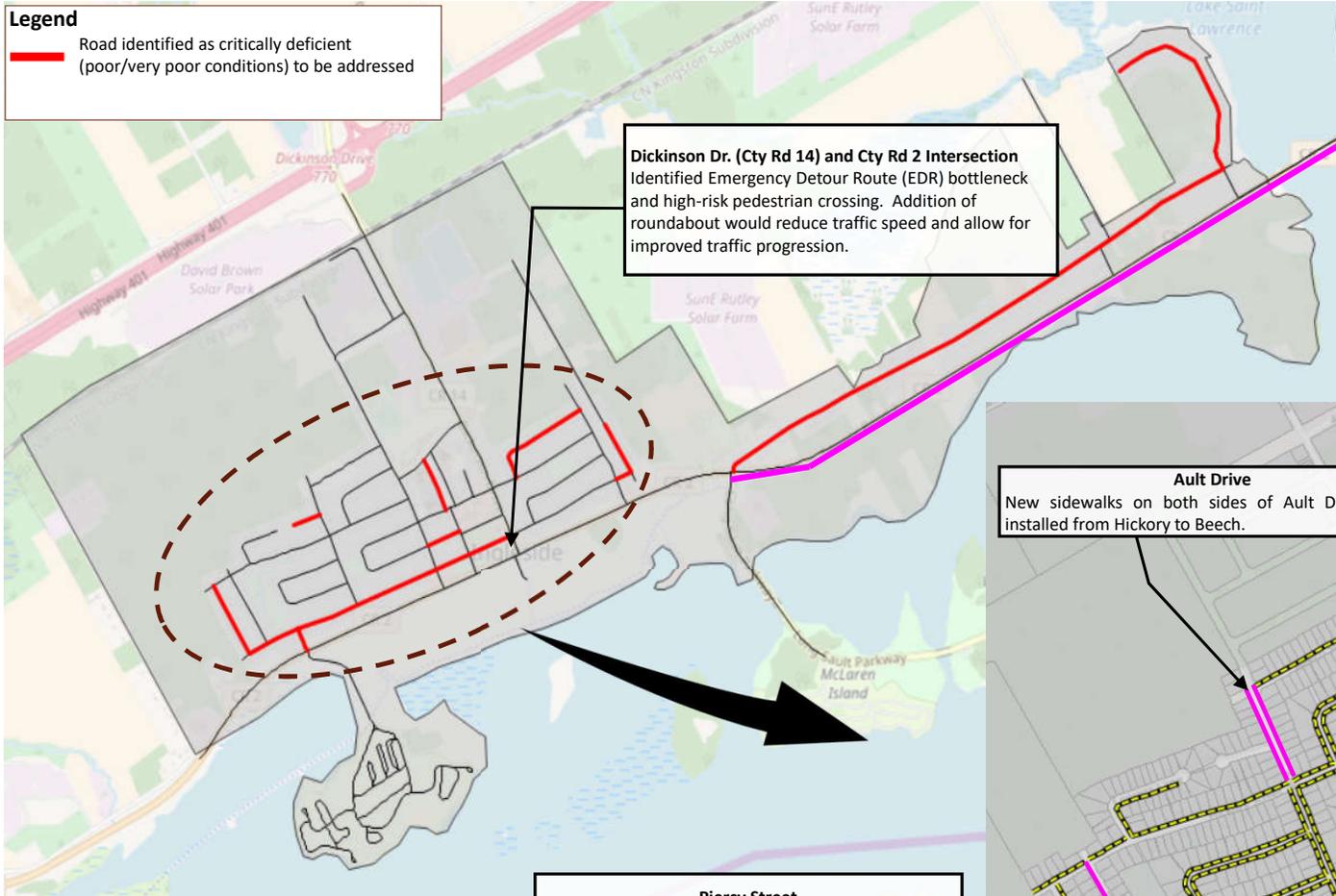
LONG SAULT - SIDEWALKS



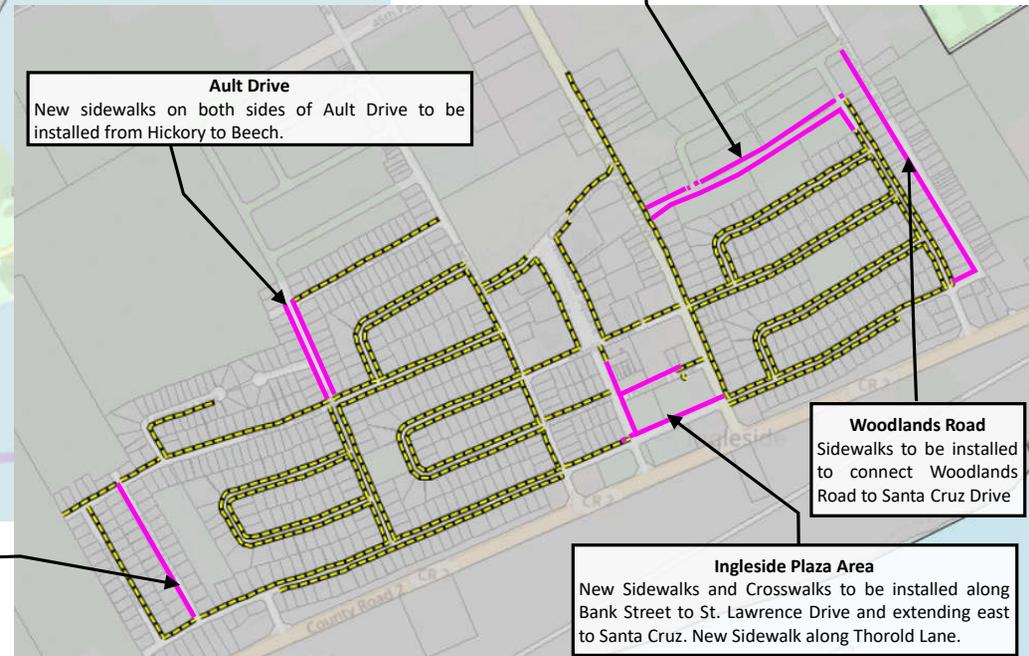
INGLESIDE - TRANSPORTATION SERVICE STRATEGIES

Transportation service strategies are vital a responsible development of the Township. It ensures that transportation needs are met, resources are used efficiently, and the long-term well-being of the community and the environment are prioritized. The Township can consider the following measures to enhance traffic, road safety and active transportation operations on their public right-of-way:

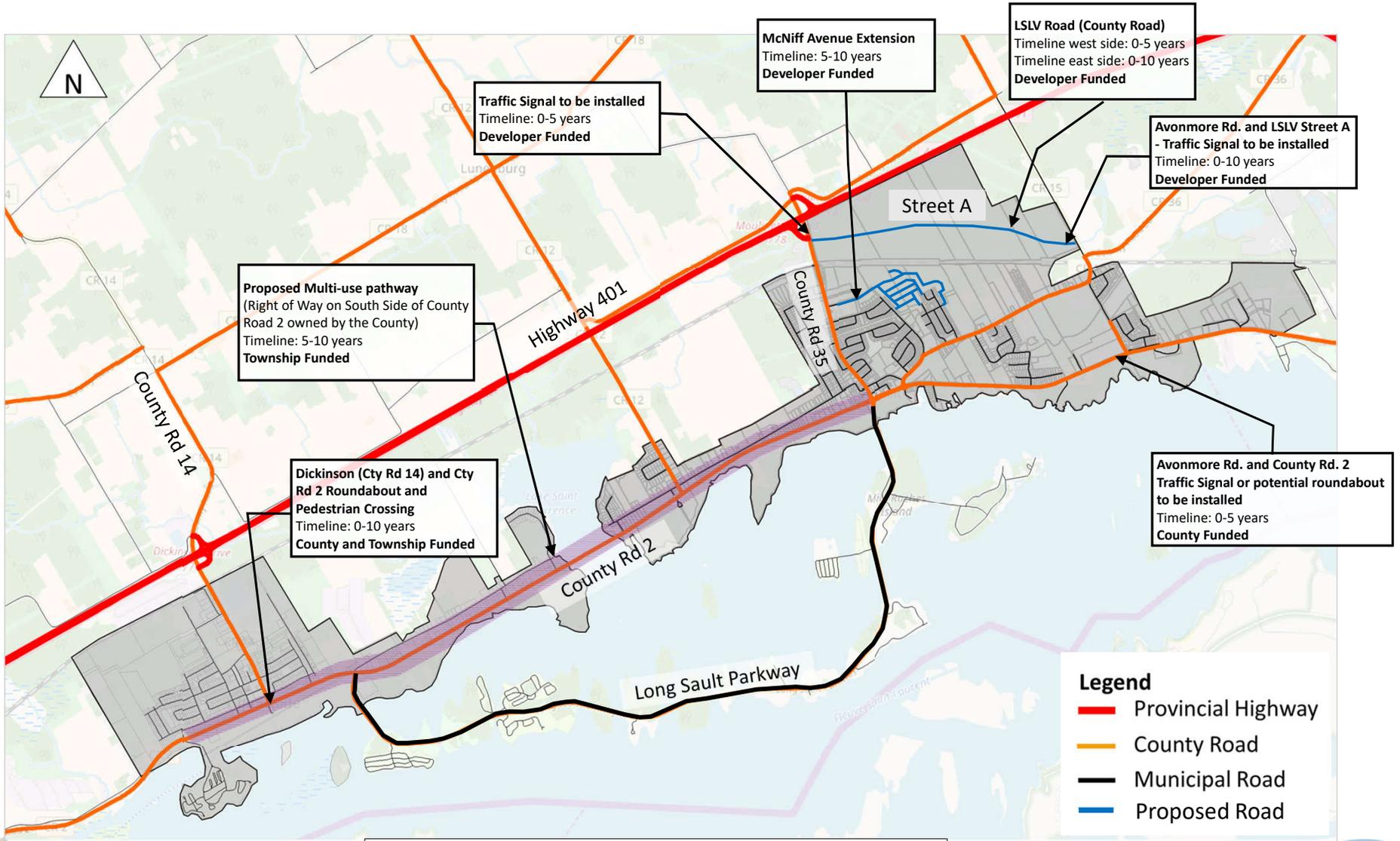
INGLESIDE - ROAD NETWORK



INGLESIDE - SIDEWALKS

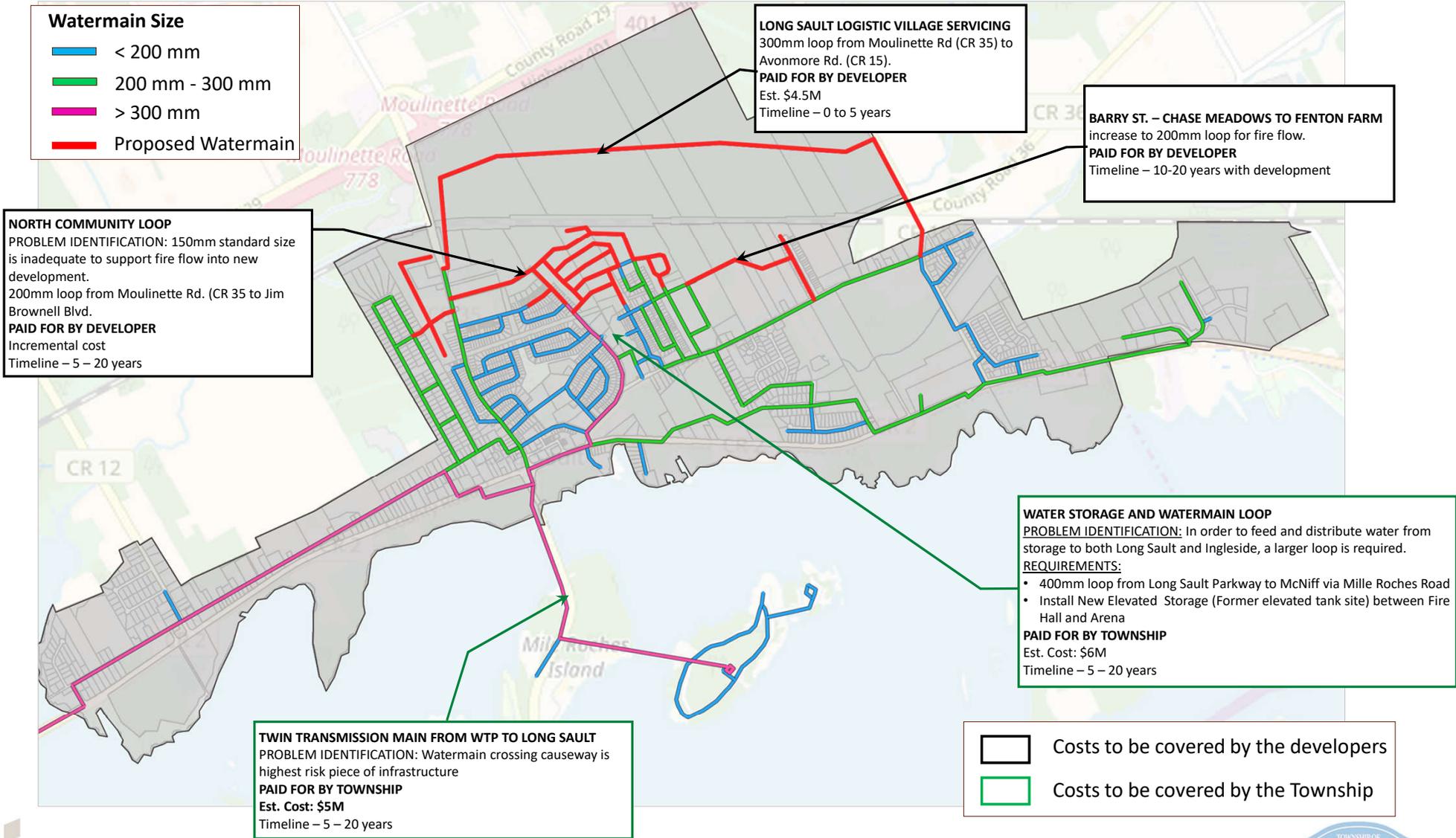


TRANSPORTATION SYSTEM – PROJECT PRIORITIZATION



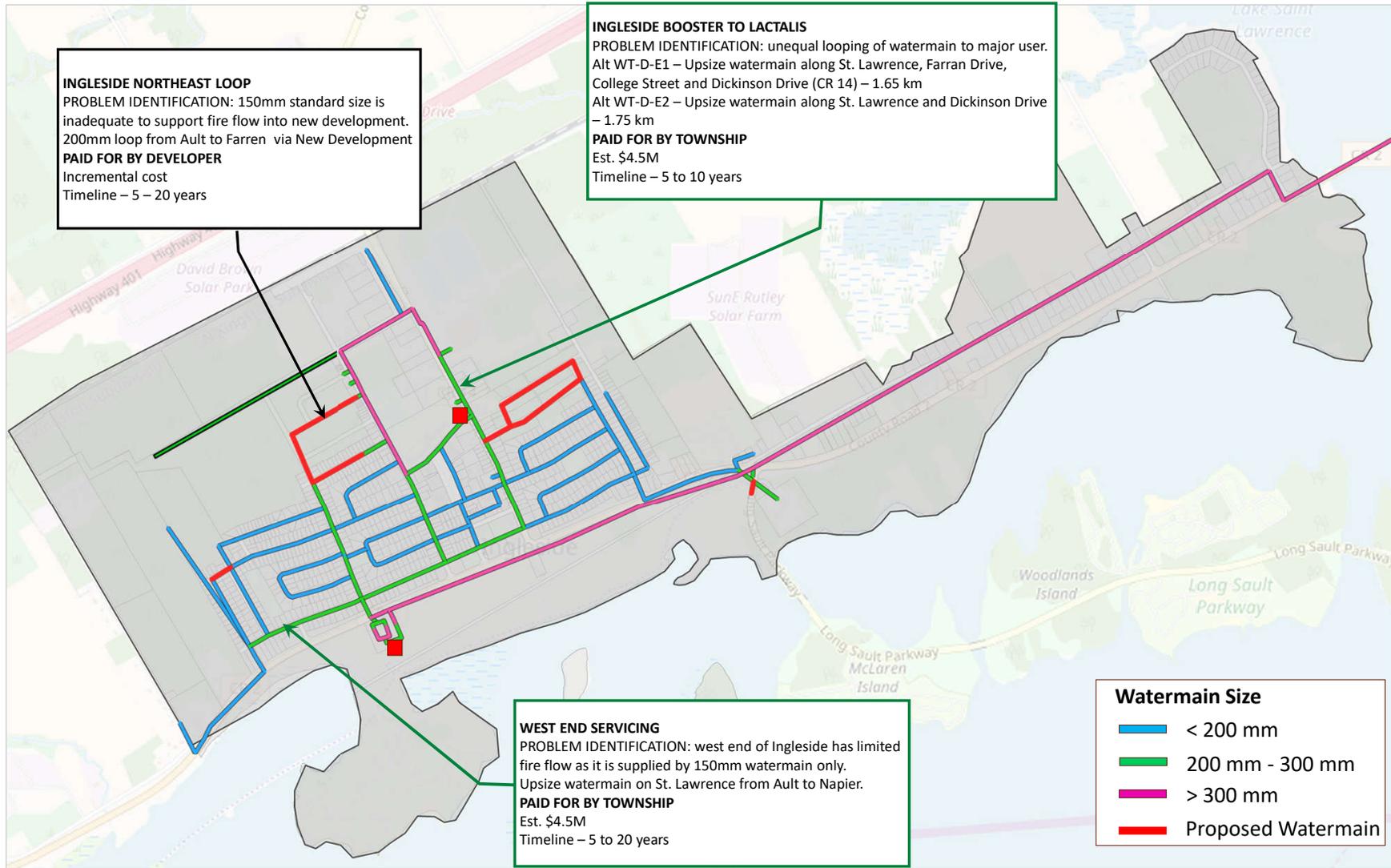
SIDEWALK UPGRADES
Sidewalk upgrades in both communities would be coordinated with road reconstruction or development projects. Existing roads would be Township funded. New roads would be Developer Funded

LONG SAULT WATER SYSTEM – FUTURE LAYOUT AND ALTERNATIVES

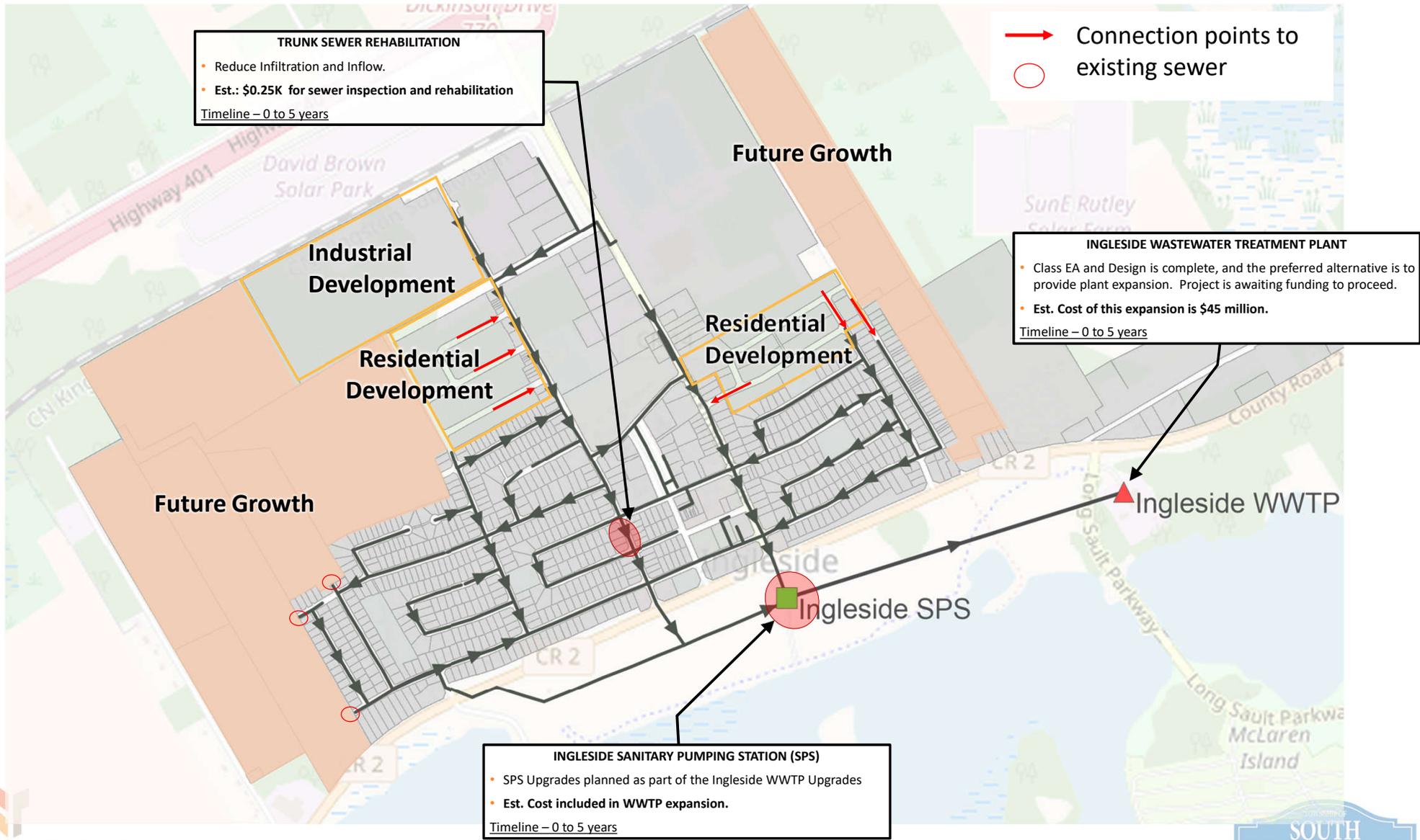


Other developments will be serviced internally with watermain sizes selected based on local needs.

INGLESIDE WATER SYSTEM – FUTURE LAYOUT AND ALTERNATIVES



INGLESIDE SANITARY SYSTEM –FUTURE GROWTH SERVICING



TRUNK SEWER REHABILITATION

- Reduce Infiltration and Inflow.
- Est.: \$0.25K for sewer inspection and rehabilitation

Timeline – 0 to 5 years

→ Connection points to existing sewer

○ existing sewer

INGLESIDE WASTEWATER TREATMENT PLANT

- Class EA and Design is complete, and the preferred alternative is to provide plant expansion. Project is awaiting funding to proceed.
- Est. Cost of this expansion is \$45 million.

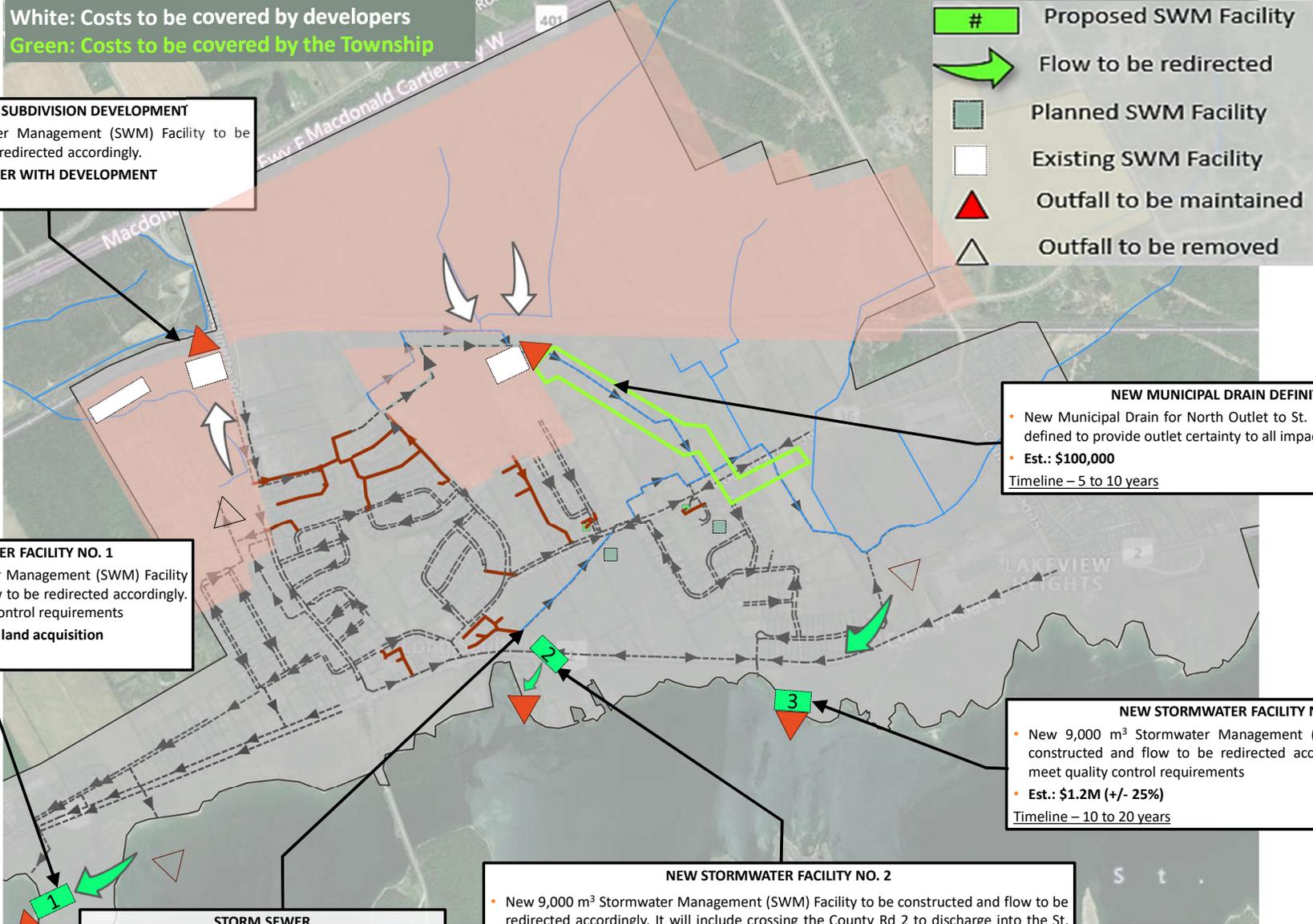
Timeline – 0 to 5 years

INGLESIDE SANITARY PUMPING STATION (SPS)

- SPS Upgrades planned as part of the Ingleside WWTP Upgrades
- Est. Cost included in WWTP expansion.

Timeline – 0 to 5 years

LONG SAULT STORMWATER MANAGEMENT – FUTURE SERVICING ALTERNATIVES



White: Costs to be covered by developers
 Green: Costs to be covered by the Township

- # Proposed SWM Facility
- ➔ Flow to be redirected
- Planned SWM Facility
- Existing SWM Facility
- ▲ Outfall to be maintained
- △ Outfall to be removed

MOULINETTE ROAD SUBDIVISION DEVELOPMENT

- New 9,000 m³ Stormwater Management (SWM) Facility to be constructed and flow to be redirected accordingly.
- Est.: PAID FOR BY DEVELOPER WITH DEVELOPMENT

Timeline – 5 to 20 years

NEW MUNICIPAL DRAIN DEFINITION

- New Municipal Drain for North Outlet to St. Lawrence River to be defined to provide outlet certainty to all impacted landowners
- Est.: \$100,000

Timeline – 5 to 10 years

NEW STORMWATER FACILITY NO. 1

- New 9,000 m³ Stormwater Management (SWM) Facility to be constructed and flow to be redirected accordingly. Required to meet quality control requirements
- Est.: \$1.2M (+/- 25%) excl. land acquisition

Timeline – 10 to 20 years

NEW STORMWATER FACILITY NO. 3

- New 9,000 m³ Stormwater Management (SWM) Facility to be constructed and flow to be redirected accordingly. Required to meet quality control requirements
- Est.: \$1.2M (+/- 25%)

Timeline – 10 to 20 years

NEW STORMWATER FACILITY NO. 2

- New 9,000 m³ Stormwater Management (SWM) Facility to be constructed and flow to be redirected accordingly. It will include crossing the County Rd 2 to discharge into the St. Lawrence River. Required to meet quality control requirements.
- Land Acquisition Required
- Est.: \$2.5 M (+/- 25%) excluding land acquisition

Timeline – 5 to 10 years

STORM SEWER

- Sewer rehabilitation required.
- Est.: \$0.15 K for sewer inspection and rehabilitation

Timeline – 0 to 5 years



STORM SEWER – ALTERNATIVES FOR FUTURE DEVELOPMENT

STORM SEWER ALONG COLLEGE STREET

- Upsizing the 100 m long storm sewer from 400 mm to 525mm
- Est.: \$1.1 M
- Timeline – 0 to 5 years

NORTHWEST COMBINED SWM FACILITY

- New 15,000 m³ Stormwater Management (SWM) Facility (Quality and Quantity) to service northwest lands.
- Est.: PAID FOR BY DEVELOPERS/DEVELOPMENT CHARGES
- Timeline – 10 to 20 years

NORTHEAST COMBINED SWM FACILITY

- New 9,000 m³ Stormwater Management (SWM) Facility to be constructed and flow to be redirected accordingly.
- Est.: PAID FOR BY DEVELOPERS
- Timeline – 10 to 20 years

STORM SEWER FROM HOOPLE STREET TO MAXWELL AVENUE

- Upsizing the 200 m long storm sewer from 200 mm to 300 mm from Hoople Street to Elm Street.
- Upsizing the 100 m long storm sewer from 300 mm to 450 mm along Elm Street.
- Upsizing the 150 m long storm sewer from 400 mm to 525 mm from Elm Street to Maxwell Avenue.
- Est.: \$1.1 M
- Timeline – 0 to 5 years

OIL-GRIT SEPARATOR (OGS) WITHIN THE EXISTING TOWNSHIP AREA

- Installation of approximately 20 oil-grit separator (OGS) on a street-by-street level, designed to remove oil and grit from stormwater runoff.
- Phased approach to implementing stormwater quality controls in the existing Township area where implementation occurs during road reconstruction projects.
- Est.: \$3.0M (+/- 25%)
- Timeline – 0 to 20 years

FUTURE GROWTH DEVELOPMENT AREAS

- New 9,000 m³ Stormwater Management (SWM) Facility to be constructed and flow to be redirected accordingly.
- Est.: PAID FOR BY DEVELOPERS
- Timeline – 10 to 20 years

-  OGS Separator
-  New SMW Facility
-  Flow to be redirected
-  Outfall



OGS Separator

INTEGRATED PREFERRED ALTERNATIVES – LONG SAULT

- **Transportation:** LSLV Phase 2 Road Construction and Traffic Signal on Avonmore Rd and LSLV Street
- **Wastewater:** LSLV Sanitary Sewer Phase 1
- **Water:** 300mm loop from Moulinette Rd (CR 35) to Avonmore Rd (CR 15)

Timeline: 0-5 years
Costs: Developer Funded

- **Transportation:** McNiff Avenue Extension
- **Wastewater:** Chase Meadows Sanitary Pumping Station and Forcemain to be constructed. Mille Roches SPS flow to be redirected to Chase Meadows SPS.
- **Water:** 200mm watermain loop from Moulinette Rd. (CR 35) to Jim Brownell Blvd.
- **Stormwater:** One SWM facility within the Chase Meadows development to be installed.

Timeline: 5-20 years
Costs: Transportation, Water and Stormwater projects paid fully by developer. Wastewater costs to be shared with the Township to finance incremental cost increase.

- **Wastewater:** Upsize sanitary sewer south and on County Rd 36, SPS and FM upgrades

Timeline: 0-5 years
Costs: Township Funded

- **Transportation:** LSLV Phase 2 Road Construction and Traffic Signal on Avonmore Rd and LSLV Street
- **Wastewater:** LSLV Sanitary Sewer and Pumping Station

Timeline: 5-10 years
Costs: Developer Funded

- **Transportation:** Jenkins Rd/Moss Dr. Roads to be addressed and sidewalk to be installed

Timeline: 5-10 years
Costs: Township Funded

- **Transportation:** Penny Lane to Columbia Ave. roads to be addressed and sidewalk to be installed

Timeline: 5-10 years
Costs: Township Funded

- **Transportation:** Warner Drive road to be addressed and sidewalk to be installed

Timeline: 5-10 years
Costs: Township Funded

- **Transportation:** Avonmore Rd. and County Rd. 2 Traffic Signal or potential roundabout to be installed

Timeline: 0-5 years
Costs: Developer Funded

- **Transportation:** Installation of sidewalks along County Rd 36.

Timeline: 0-5 years
Costs: Township Funded

- **Transportation:** Chantine Dr./ Structure Product roads to be addressed and sidewalk to be installed

Timeline: 5-10 years
Costs: Township Funded

- **Stormwater:** One SWM facility discharging to the Raisin River to be installed

Timeline: 10-20 years
Costs: Township Funded

- **Water:** Water storage and 400mm watermain storage loop from Long Sault Parkway to McNiff via Mille Roches Rd. Twin Transmission main from WTP to Long Sault

Timeline: 5-10 years
Costs: Township Funded

- **Stormwater:** One SWM facility discharging to the St. Lawrence Seaway to be installed

Timeline: 10-20 years
Costs: Township Funded

- **Stormwater:** One SWM facility (Quality Control) discharging to the St. Lawrence River to be installed

Timeline: 10-20 years
Costs: Township Funded

- **Transportation:** Multi-use pathway construction along County Rd 2.

Timeline: 5-10 years
Costs: Township Funded

- **Stormwater:** One SWM facility within the Moulinette Road Subdivision development to be installed.

Timeline: 10-20 years
Costs: Developer Funded

- **Transportation:** French Ave./Cherry Ave./Ouellette Ave. roads to be addressed and sidewalk to be installed
- **Wastewater:** New gravity sewer from Moulinette Subdivision and connecting to the New Forcemain coming from Chase Meadows Development

Timeline: 10-20 years
Costs: Transportation project paid by the Township. Wastewater costs paid fully by developer.

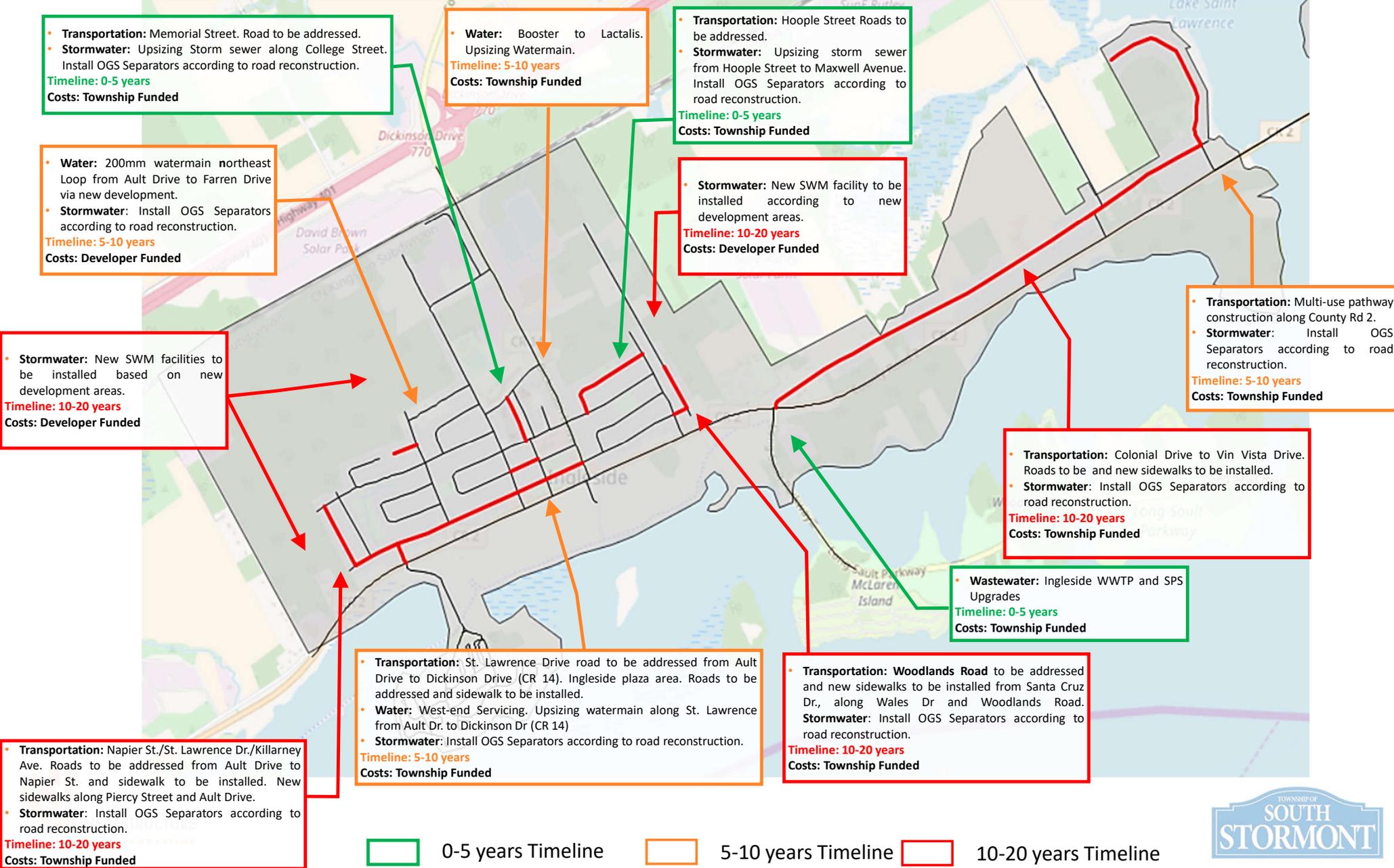
- **Transportation:** Long Sault plaza area. Roads to be addressed and sidewalk to be installed

Timeline: 5-10 years
Costs: Township Funded

0-5 years Timeline
 5-10 years Timeline
 10-20 years Timeline



INTEGRATED PREFERRED ALTERNATIVES – INGLESIDE



BOTTOM LINE – TOWNSHIP CAPITAL COST IMPACTS (\$2023)

LONG SAULT

0-5 years

Transportation:
Improvement: \$2.6M
Renewal: \$0.75M

Water:
Improvement: None
Renewal: \$0.25M

Sanitary:
Improvement: \$5.4M
Renewal: \$0.15M

Storm:
Improvement: \$0.1M
Renewal: \$0.3M

Total: \$9.5M

5-10 years

Transportation:
Improvement: None
Renewal: \$5.5M

Water:
Improvement: \$4.8M
Renewal: \$3M

Sanitary:
Improvement: None
Renewal: \$0.9M

Storm:
Improvement: \$2.2M
Renewal: \$0.9M

Total: \$17.3M

10-20 years

Transportation:
Improvement: \$1.3M
Renewal: None

Water:
Improvement: \$10M
Renewal: \$5M

Sanitary:
Improvement: None
Renewal: None

Storm:
Improvement: 2.4M
Renewal: None

Total: \$18.7M

INGLESIDE

0-5 years

Transportation:
Improvement: None
Renewal: \$1.35M

Water:
Improvement: None
Renewal: \$0.45M

Sanitary:
Improvement: None
Renewal: \$0.5M

Storm:
Improvement: \$3.2M
Renewal: \$0.2M

Total: \$5.7M

5-10 years

Transportation:
Improvement: \$2.8M
Renewal: \$4.5M

Water:
Improvement: \$4.5M
Renewal: \$1.5M

Sanitary:
Improvement: None
Renewal: \$0.75M

Storm:
Improvement: \$1M
Renewal: \$0.75M

Total: \$15.8M

10-20 years

Transportation:
Improvement: \$0.3M
Renewal: \$5.2M

Water:
Improvement: None
Renewal: \$1.3M

Sanitary:
Improvement: None
Renewal: \$0.1M

Storm:
Improvement: \$1M
Renewal: \$0.1M

Total: \$12.5M

INTEGRATION AND COLLABORATION

Integration of Development and Township Project Delivery

- In order to maximize economies of scale, in many cases it makes sense to oversize infrastructure on one development to include future developments. Since that cost benefits another landowner, the Township may either manage the entire project or contribute the increased incremental cost to the Developer to increase the size of the infrastructure.
- The Township will need to develop an equitable approach to both contribute and recover the costs to ensure that the net impact of development costs is not borne by other taxpayers.

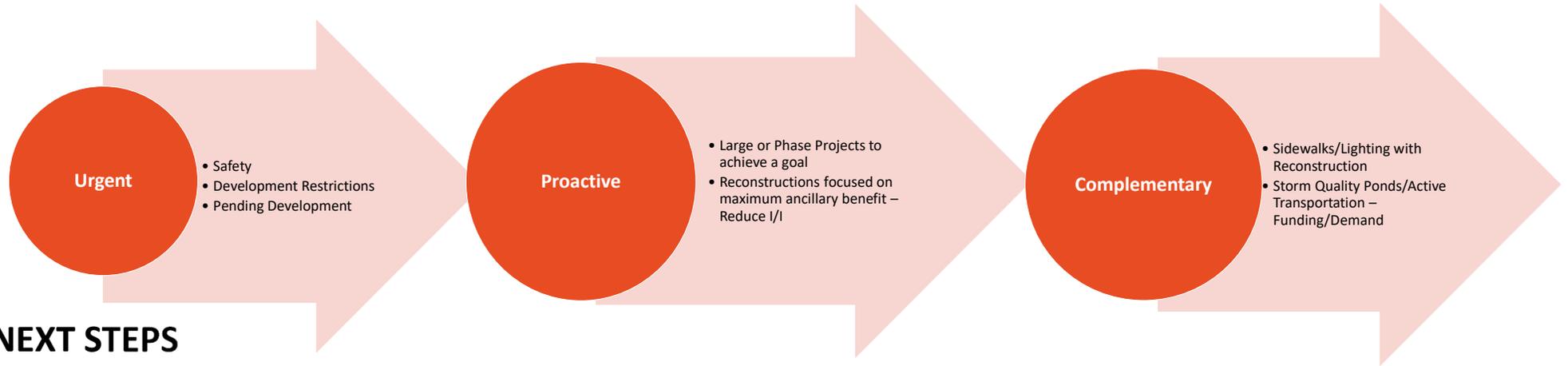
Integration of Servicing Master Plan and Infrastructure Renewal

- **“Measure twice and cut once”** – The Master Servicing Plan is recommending projects to facilitate future community growth while Asset Management Planning identifies areas of existing infrastructure renewal. The recommended approach is to develop a strategy for implementation that overlaps asset management and servicing as the first priority.
- The recommended servicing project represent approximately \$80 million (\$2023) over 20 years or approximately \$4M per year.
- The Township will be assessing the affordability and priority based on development and regulatory need.

Environmental Impacts

- The new municipal **New Stormwater Quality Ponds in Long Sault and New Long Sault Elevated Storage** will be subject to additional environmental review (Schedule B EA) due to scale and property acquisition requirements.
- The majority of the preferred alternatives are considered exempt from Class EA process as they are within existing rights-of-way or part of development projects.
- For Social and Natural Environment, the projects will mostly be integrated with developments and be subject to Development environmental reviews.
- Economic Environment impacts are limited as the projects are either developer driven or funded from reserves. Economic benefits from development exceed costs to Township for prioritized renewal.

PRIORITIZATION



NEXT STEPS



APPENDIX F

STAKEHOLDER CORRESPONDENCE



Tiziana Venditto

From: Jamie Witherspoon
Sent: Thursday, October 12, 2023 2:13 PM
To: Tiziana Venditto
Subject: FW: ENB_R230922-006ON - Enbridge Notification Response - Notification of Commencement
Attachments: ENB_R230922-006ON - Referral Response Letter.pdf



Jamie Witherspoon, P.Eng., LEED AP, ENV SP

President & CEO

Tel: 1.833.WTINFRA (984.6372) ext. 101

Cell: 519.400.6701

WT Infrastructure Solutions Inc.

jamie.witherspoon@wtinfrastructure.ca

From: [REDACTED]
Sent: Wednesday, October 11, 2023 3:44 PM
To: Jamie Witherspoon <jamie.witherspoon@wtinfrastructure.ca>; mohammed@southstormont.ca
Cc: [REDACTED]
Subject: ENB_R230922-006ON - Enbridge Notification Response - Notification of Commencement

Hello,

Thank you for sending Enbridge notice of the **Notice of Commencement regarding the Master Servicing Study for the Township of South Stormont**. B&A is the land use planning consultant for Enbridge's Liquid Pipeline Network across Canada. On behalf of Enbridge, we work with municipalities and stakeholders regarding planning and development in proximity their pipeline infrastructure to ensure that it occurs in a safe and successful manner.

Please find attached our response to your circulation letter for this Master Servicing Study.

Do not hesitate to contact me with any questions or comments. We appreciate receiving your referrals and look forward to continuing to receive them at [REDACTED] for our review and comment.

Thank you,

Kevin Bailey, BA, BEd, MPlan
Community Planner

[REDACTED]



B&A | Planning · Design · Engagement

October 11, 2023

Township of South Stormont Planning and Development
2 Mille Roches Road | PO Box 84
Long Sault, ON, K0C 1P0

Sent via email to: Jamie.Witherspoon@wtinfrastructure.ca | mohammed@southstormont.ca

ATTN: Jamie Witherspoon, P. Eng | Mohaammed Alsharqawi, Ph. D, PMP

RE: Notice of Commencement for Master Servicing Study

Your File #: NA

Our Reference #: ENB_R230922-006ON

Thank you for sending Enbridge notice of this project. B&A is the land use planning consultant for Enbridge's Liquids Pipeline network across Canada. On behalf of Enbridge, we work with municipalities and stakeholders regarding planning and development in proximity to their pipeline infrastructure to ensure that it occurs in a safe and successful manner.

We request that this response package is provided in full to the landowner / applicant as it contains useful and important information, including certain requirements that must be followed, in respect of development in proximity of pipelines.

Description of Application

We understand that this application is for a "Notice of Commencement," as well as a notice for two Public Information Centres, for a Master Servicing Study for the Township of South Stormont. In response to the significant growth being experienced in the communities of Long Sault and Ingleside, this Master Servicing Study will consider the need, capacity, location, and configuration for transportation, water, wastewater, and stormwater management within these areas.

As demonstrated in **Attachment 01 | Approximate Location of Pipeline Infrastructure** the proposed Master Servicing Study's indicated study areas are south of Enbridge's pipeline infrastructure, which is located in a pipeline corridor immediately north of Highway 401.

Assessment & Requirements

Based on a review of the project materials provided the proposed Master Servicing Study, there are not any immediate developments being proposed that would impact the Enbridge pipeline infrastructure within the jurisdiction at this time. Therefore, **Enbridge has expressed no objections to this project as proposed.**

Although Enbridge has expressed no objections to the proposed Master Servicing Study at this time, the pipeline is located north of the study areas being indicated, and some features of the proposal may have impacts on the pipeline infrastructure. For example:

- Depending on the ultimately agreed-upon location of utility networks that would supplement the final Master Servicing Plan, there could potentially be significant damage prevention impacts within the Prescribed Area (the area extending 30 metres to either side perpendicularly from the pipeline centreline) for the indicated pipeline corridor. Enbridge requests continued notification of projects impacting this area so that they may work together with the Township to ensure safe and secure development in proximity of their pipeline infrastructure.
- In relation to the previous point, if there are any overland or sub-surface crossings (roads, utilities, etc.) of the pipeline infrastructure indicated in [Attachment 01 | Approximate Location of Pipeline Infrastructure](#), there are crossing applications that must be submitted for Enbridge's approval.

Therefore, the following requirements, and those detailed within [Attachment 02 | Enbridge Development Requirements](#) must be adhered to for all future development. The landowner/developer shall ensure that all contractors and subcontractors are aware of and comply with the requirements set out in this letter.

Requirements

- 1) **Obtain a Locate Request:** To identify the precise alignment of the pipeline on the subject lands, a Locate Request must be made prior to any ground disturbance taking place.
- 2) **No development is permitted within the Enbridge right-of-way** without Enbridge's written consent and without the presence of an Enbridge representative on site.
- 3) **Written Consent from Enbridge is required for ground disturbance within 30m perpendicularly on each side from the centreline of the pipeline known as the "Prescribed Area"**. For more information about when written consent is required and how to submit an application, please see [Attachment 03 | Enbridge Pipeline Crossing Guidelines](#).
- 4) **Written Consent from Enbridge is required for all above and below ground crossings of the pipeline**. For more information about when written consent is required and how to submit an application, please see [Attachment 03 | Enbridge Pipeline Crossing Guidelines](#).

The written authorization request must include:

- a. Drawings with cross sections of the proposed roads and verification of the depth of cover from both sides of the road.
 - b. Drawings should include any new utilities that will cross the right-of-way.
- 5) **Road Crossings:** Where future development such as a roadway or a parking area is proposed within the pipeline right-of-way, Enbridge may be required to carry out pipeline

inspection and recoating of the existing pipeline(s) prior to the start of the development. The costs of Enbridge's design, inspection, recoating work and any other pipeline alteration as a result of the crossing will be borne by the Developer.

- 6) **Subdivision lot lines should not divide the pipeline right-of-way.** Wherever possible, subdivision boundaries should follow the right-of-way. If this is not possible specific language must be included in the offers of sale or lease. Please see **Attachment 02** for details.
- 7) **Development setbacks** from pipelines and rights-of-way are recommended in support of damage prevention and to allow both pipeline operators and developers buffer lands for operations and maintenance purposes.
- 8) **Landscaping** shall not take place on Enbridge's pipeline right-of-way without Enbridge's prior written consent and where consent is granted such landscaping must be performed in accordance with Enbridge's Pipeline Crossing Guidelines. Please see **Attachment 02** for details.
- 9) **Pathways** shall not be installed on Enbridge's pipeline right-of-way without Enbridge's prior written consent and where consent is granted pathways must be designed in accordance with Enbridge's requirements. Please see **Attachment 02** for details.
- 10) **Fencing** should be installed along the identified open space easement. Please see **Attachment 02** for details
- 11) **Written consent** must be obtained from Enbridge for ongoing activities such as mowing or maintenance of the pipeline right-of-way on public lands.
- 12) **Notifications of additional development for Class monitoring:** As per Federal and Provincial Regulatory Requirements and Standards, pipeline operators are required to monitor all new development in the vicinity of their pipelines that results in an increase in population or employment. Therefore, please keep us informed of any additional development being proposed within the Pipeline Assessment Area indicated in **Attachment 01 | Approximate Location of Pipeline Infrastructure**. The pipeline assessment area GIS data can be provided to the municipality upon request to [REDACTED]

The above requirements are those identified as relevant based on the application materials provided. Additional detail on these requirements and other general development requirements are included in **Attachment 02 | Enbridge Development Requirements**. For additional resources on safe development in proximity of Enbridge's pipeline network please view [Enbridge's Public Awareness Brochures](#) or visit the [Land Use Planning and Development website](#).

Please continue to keep us informed about the outcome of the project and any future policy, land use, subdivision, and development activities in proximity to Enbridge's pipelines and facilities. All future project notifications should be sent to [REDACTED], while questions about the details of this letter may be sent to the contact listed below. Thanks again for providing us with the opportunity to provide comments on this project and we look forward to working with you in the future.



[REDACTED]



Sincerely,



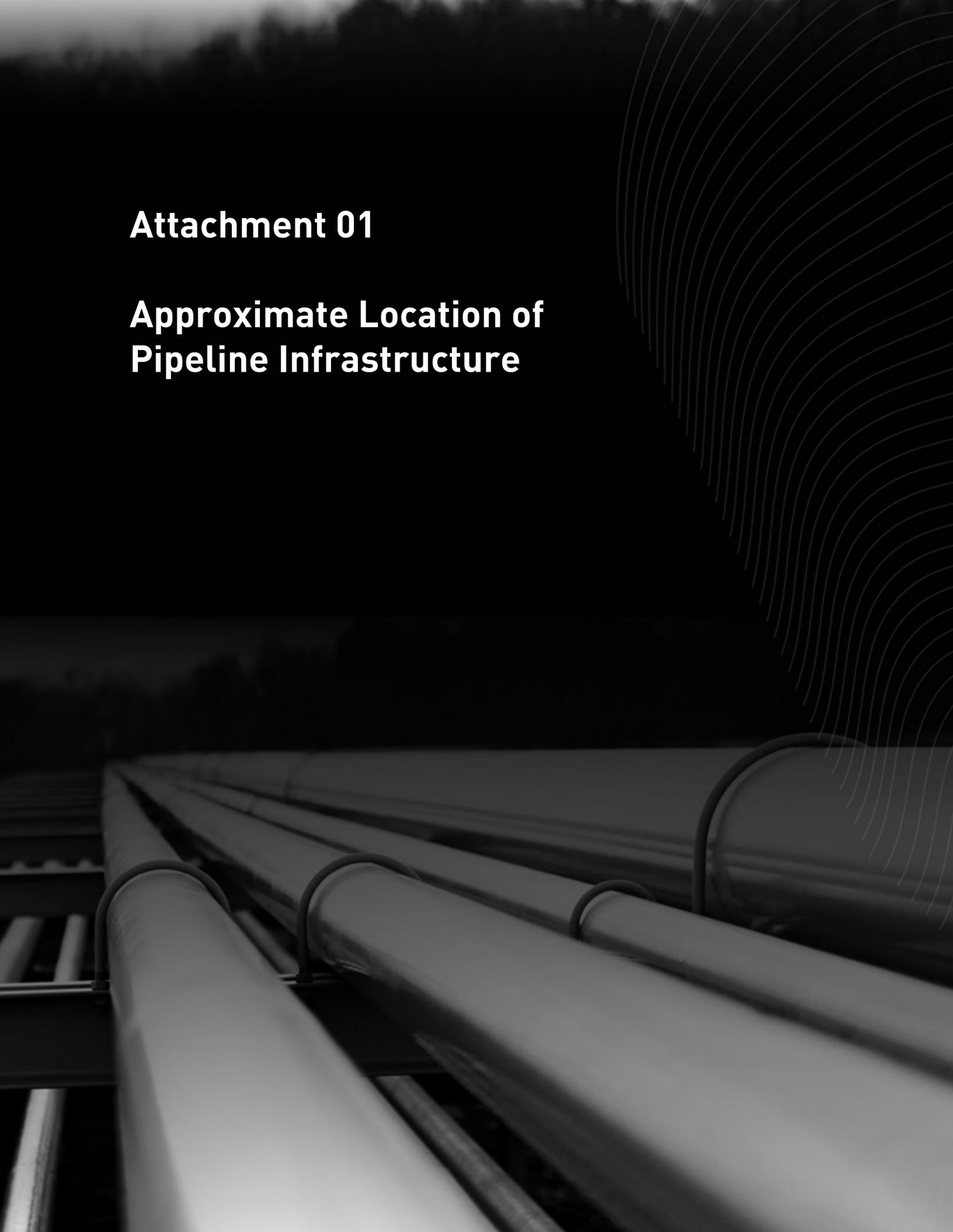
Kevin Bailey

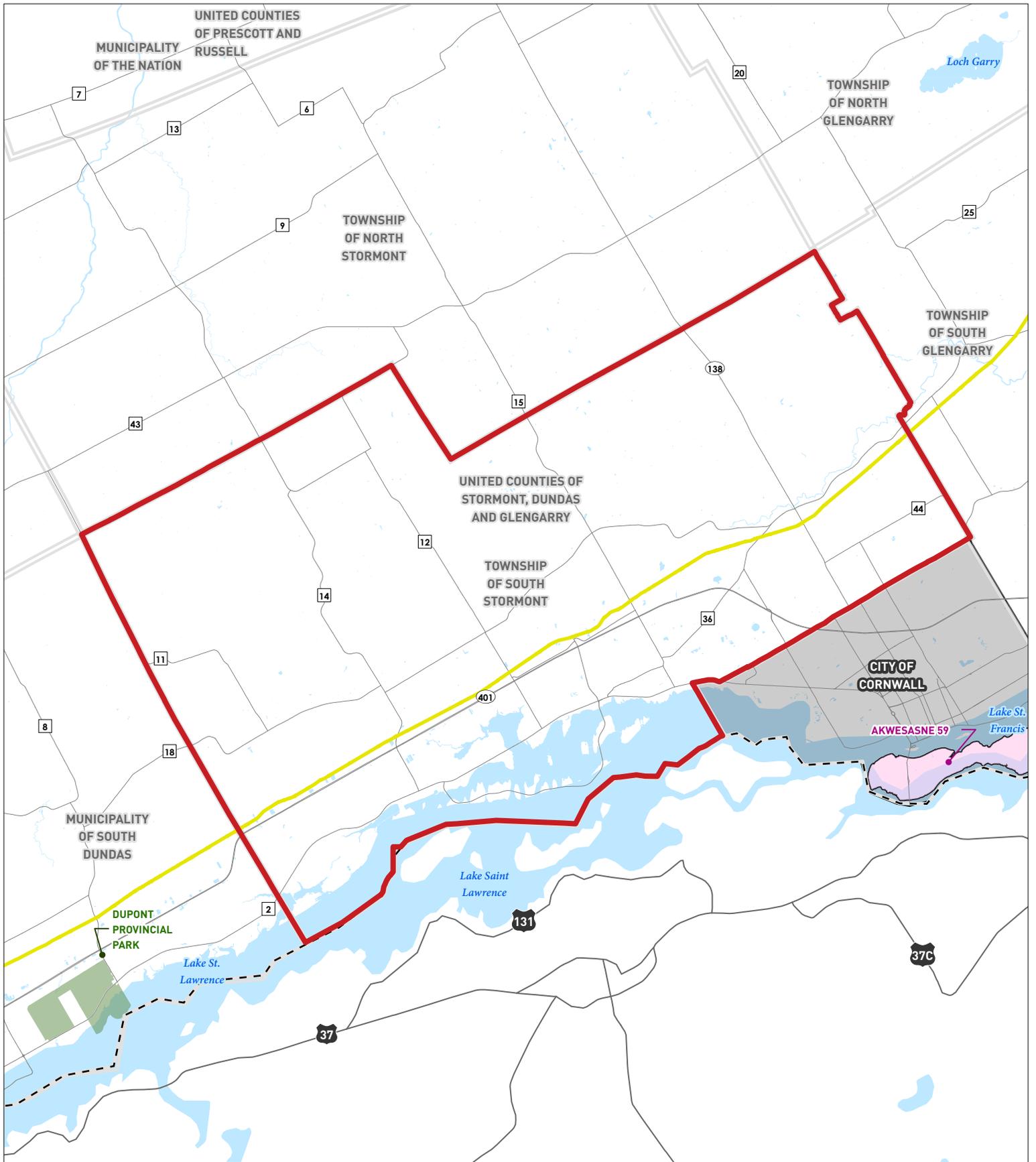
Community Planner | *BA, Med. MPlan*



Attachment 01

Approximate Location of Pipeline Infrastructure





Coordinate System: NAD 1983 UTM Zone 18N

Geographic Coordinates: -74.9377, 45.0695



1:200,000

- Subject Site
- Enbridge Pipeline
- Major Road
- First Nation/Métis Settlement
- Municipality - Rural
- Municipality - Urban
- Park/Protected Area
- Province
- USA Border
- Waterbody

Regional Context

Municipal Plan

Township Of South Stormont
Referral ID: R230922-0060N

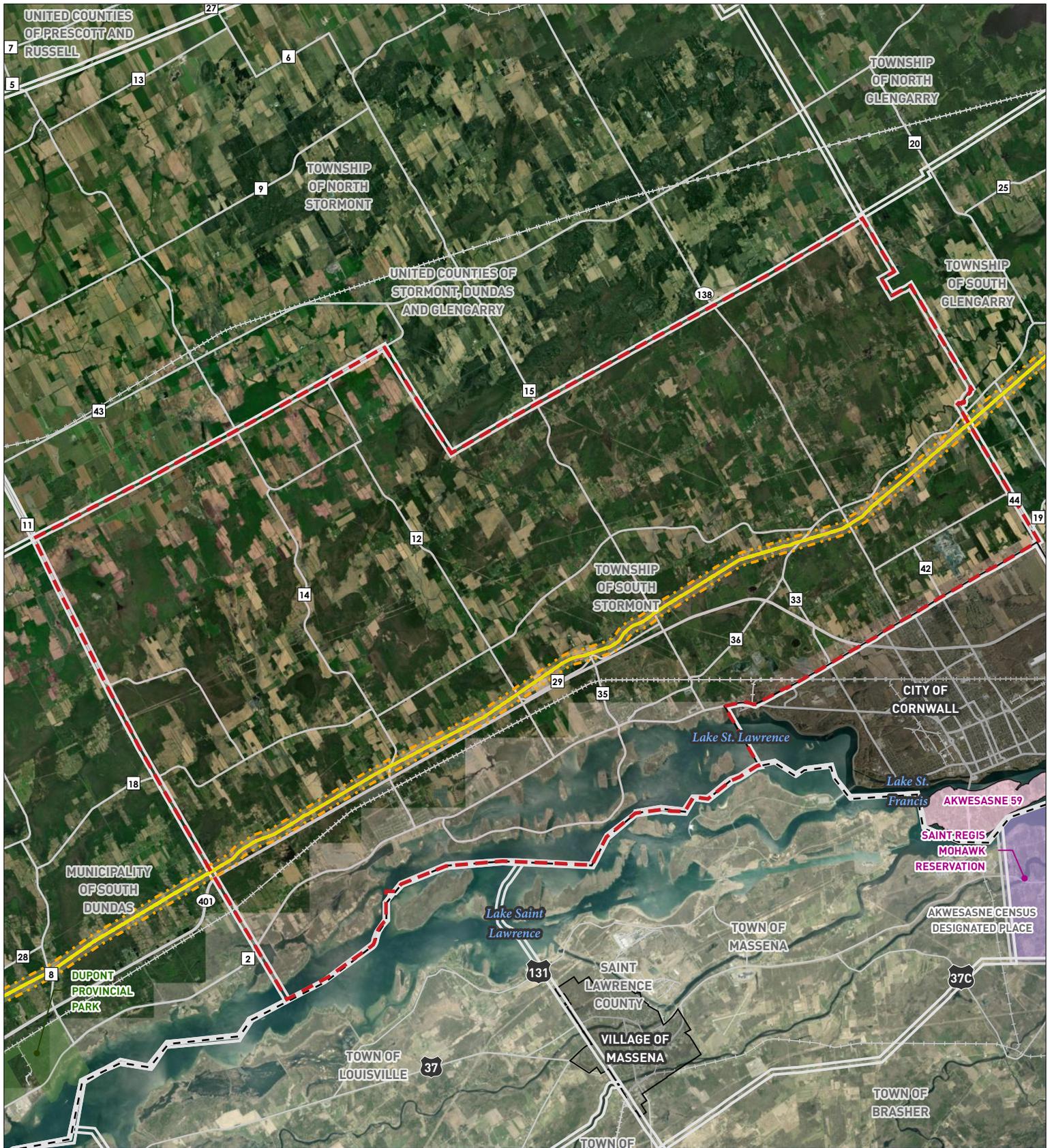


September 2023



Date Saved: Sep 22, 2023

Map and data are conceptual and for informational and planning purposes only.



PLEASE CONTACT YOUR LOCAL ONE CALL CENTRE ([WWW.CLICKBEFOREYOU DIG.COM](http://www.clickbeforeyoudig.com)) FOR ANY GROUND DISTURBANCE WITHIN THE PRESCRIBED AREA AS SHOWN ON THIS MAP.

Coordinate System: NAD 1983 UTM Zone 18N

Geographic Coordinates: -74.9377, 45.0695

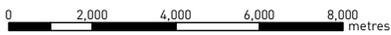


1:180,000

- Subject Site
- Enbridge Pipeline
- Pipeline Assessment Area (220m)
- Prescribed Area (30m)
- Railway

- Railway
- Major Road
- First Nation/Métis Settlement
- Native American Area
- Municipality - Rural

- Municipality - Urban
- Park/Protected Area
- Unincorporated Place
- USA Border



Date Saved: Sep 22, 2023

Local Context

Municipal Plan

Township Of South Stormont
Referral ID: R230922-0060N

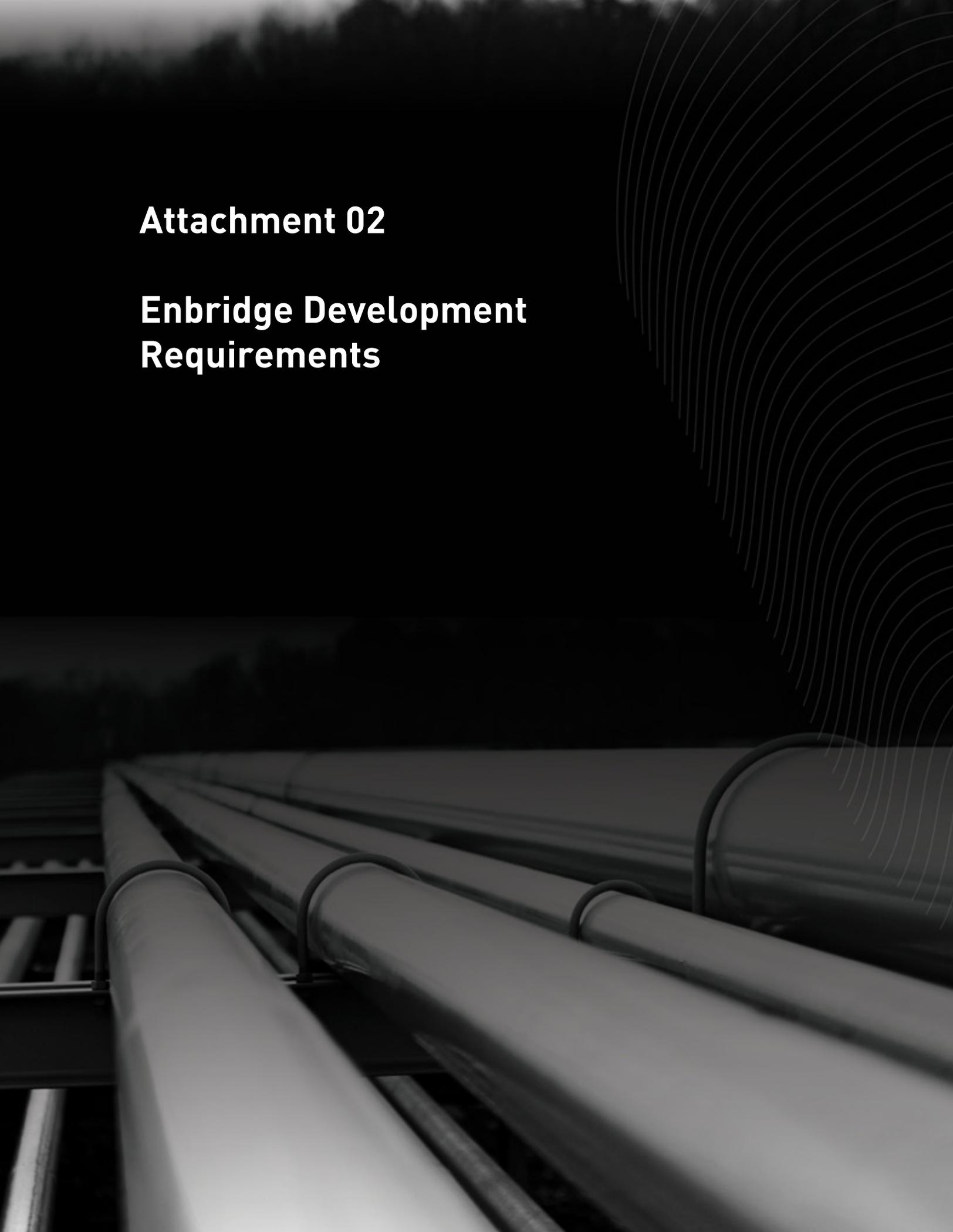
September 2023



Map and data are conceptual and for informational and planning purposes only.

Attachment 02

Enbridge Development Requirements



Attachment 02 | Enbridge Development Requirements

Definitions

- A **Right-of-Way (ROW)** is a strip of land where property rights have been acquired for pipeline systems by the pipeline company. It is a surveyed area of a specific width which grants legal rights of access to operate and maintain the infrastructure within it.
- The **Prescribed Area** is an area of 30 m (100 ft) perpendicularly on each side from the centreline of a pipeline. Excavation or ground disturbance within this zone requires written consent from the pipeline company pursuant to the Canadian Energy Regulator Pipeline Damage Prevention Regulations (Authorizations). Depending on the pipeline location and regulator this may also be known as a “controlled area” or “safety zone”.
- The **Pipeline Assessment Area** identifies lands on either side of a pipeline in which new development must be monitored by the pipeline operator. The requirement for and scope of this monitoring is governed by the Canada Energy Regulator (CER) and CSA Z662:19. Depending on the pipeline location, operator, and regulator this may also be known as the “notification zone”, “referral area” or “class location assessment area”.

Locating the Pipeline | Click Before You Dig

Any person planning to construct a facility across, on, along or under a pipeline (including the right-of-way), conduct a ground disturbance activity within 30 metres of the centreline of a pipe, or operate a vehicle or mobile equipment across a right-of-way, must first request a locate service. To identify the precise alignment of the pipeline on the subject lands, Locate Requests can be made online, via mobile apps, or via phone (see table below),

The locate request must be made a minimum of three (3) business days in advance of the construction, ground disturbance, or vehicle or mobile equipment crossing. The One-Call Centre will notify Enbridge to send a representative to mark the facilities, explain the significance of the markings and provide you with a copy of the locate report. Enbridge requests a minimum of five (5) business days’ notice for any work involving explosives.

Canadian One-Call Centres		
Province	Phone	Website
British Columbia	1.800.474.6886	www.bc1c.ca
Alberta	1.800.242.3447	www.utilitysafety.ca
Saskatchewan	1.866.828.4888	www.sask1stcall.com
Manitoba	1.800.940.3447	www.clickbeforeyoudigmb.com
Ontario	1.800.400.2255	www.ontarioonecall.com
Quebec	1.800.663.9228	www.info-ex.com
Nova Scotia & New Brunswick	1.800.344.5463	www.info-ex.com
Northwest Territories	Contact Enbridge Pipelines Inc. (1-867-587-7000)	
www.clickbeforeyoudig.com		

Right-of-way

A right-of-way is a strip of land where property rights have been acquired for pipeline systems by the pipeline company. It is a surveyed area of a specific width which grants legal rights of access to operate and maintain the infrastructure within it:

- No permanent structures are permitted within the pipeline right-of-way area without Enbridge's prior written consent.
- Enbridge must have the ability to access Enbridge's pipeline right-of-way at all times for construction, maintenance, operation, inspection, patrol, repair, replacement and alteration of the pipeline(s). Therefore, the Enbridge pipeline right-of-way shall be maintained as green space, park belt or open space.
- No work shall take place on Enbridge's pipeline right-of-way without the presence of an Enbridge representative.
- Storage of materials and/or equipment, grading or placing fill on Enbridge's pipeline right-of-way is not permitted without prior written consent from Enbridge.

Written Consent

Any proposed crossings of the pipeline right-of-way or ground disturbance within the Prescribed Area or pipeline right-of-way are subject to Enbridge's written consent in accordance with the Canadian Energy Regulator Act and regulations including the Canadian Energy Regulator Pipeline Damage Prevention Regulations as amended or replaced from time to time (or for pipelines contained within Alberta, the Pipeline Act (Alberta) and Pipeline Rules as amended or replaced from time to time).

The applicant will require Enbridge's written consent or a crossing agreement prior to undertaking the following activities:

- Constructing or installing a facility across, on, along or under an Enbridge pipeline right-of-way;
- Conducting any activity that would cause ground disturbance (excavation or digging) on an Enbridge's pipeline right-of-way or within 30m perpendicularly on each side from the centerline of Enbridge's pipe (the "Prescribed Area");
- The operation of a vehicle, mobile equipment or machinery across an Enbridge pipeline right-of-way; outside of the travelled portion of a highway or public road;
- Using any explosives within 300m of Enbridge's pipeline right-of-way.

For more information about when written consent is required and how to submit an application, please see [Attachment 03 | Enbridge Pipeline Crossing Guidelines](#).

Prescribed Area

The Prescribed Area is an area of 30 m (approximately 100 ft) perpendicularly on each side from the centreline of a pipeline. Excavation or ground disturbance within this zone requires written consent from the pipeline company pursuant to the Canadian Energy Regulator Pipeline Damage Prevention Regulations (Authorizations). Depending on the pipeline location and regulator this may also be known as a "controlled area" or "safety zone".

For pipelines crossing provincial boundaries, Enbridge is regulated by the Canada Energy Regulator and is subject to the Canadian Energy Regulator Act and its regulations as amended or replaced from time to time.

- Section 335(1) of the Canadian Energy Regulator Act prohibits any person to construct a facility across, on, along or under a pipeline or engage in an activity that causes a ground disturbance within the Prescribed Area unless the construction or activity is authorized by the pipeline company.
- Section 335(2) of the Canadian Energy Regulator Act prohibits any person to operate a vehicle or mobile equipment across a pipeline unless the vehicle or equipment is operated within the travelled portion of a highway or public road or such operation is authorized under section 13(1) of the Canadian Energy Regulator Pipeline Damage Prevention Regulations (Authorizations).

For pipelines contained within Alberta, Enbridge is regulated by the Alberta Energy Regulator and is subject to the Pipeline Act and Pipeline Rules as amended or replaced from time to time.

- As per the Alberta Energy Regulator, any person who plans to engage in an activity that causes a ground disturbance within the pipeline right-of-way must obtain the written consent of the pipeline company.

Crossings

- Written consent from Enbridge is required for all crossings of the pipeline.
- The written authorization request must include:
 - Drawings with cross sections of the proposed new road and road widening to verify the depth of cover from both sides of the road.
 - Drawings should include any new utilities that will cross the ROW.
- No vehicles or mobile equipment, including heavy machinery, will be permitted to cross Enbridge's pipeline right-of-way without the prior written consent of Enbridge. Please complete Enbridge's Equipment Specification and Data Sheet(s) to make an application for temporary equipment crossing including timeframe, type and weight of equipment per axle together with the name of the applicant, address, contact name and phone number/email.
- Where future development such as a roadway or a parking area is proposed over the pipeline right-of-way, Enbridge may be required to carry out pipeline inspection and recoating of the existing pipeline(s) prior to the start of the development. **The costs of Enbridge's design, inspection, recoating work and any other pipeline alteration as a result of the crossing will be borne by the Developer.**

Ongoing Activities

- Written consent must be obtained from Enbridge for ongoing activities such as mowing or maintenance of the pipeline right-of-way on public lands.

Class Monitoring in the Pipeline Assessment Area

As per Federal and Provincial Regulatory Requirements and Standards, pipeline operators are required to monitor all new development in the vicinity of their pipelines that results in an increase in population or employment. Therefore, please keep us informed of any additional development being proposed within the Pipeline Assessment Area indicated in **Attachment 01 | Approximate Location of Pipeline Infrastructure**.

- If a pipe replacement is necessary because of the proposed development, temporary workspace shall be granted to Enbridge on terms and conditions to be (or as) negotiated. This workspace will be adjacent to the existing pipeline right-of-way and may be up to a maximum of 15m wide on either or both sides. Grading or landscaping of the workspace is not permitted until the replacement has been completed.

Subdivisions

- Lot lines are not to be incorporated over Enbridge's pipeline right-of-way. If lot lines are incorporated over Enbridge's pipeline right-of-way, the owner agrees, in writing to include the following warning clause in all offers of sale and purpose and/or lease:
"Future residents are advised that Enbridge owns and operates _____ pipeline(s) within an _____ m pipeline right-of-way on the property. As a result, there are conditions that apply to various activities over the pipeline right-of-way that must be approved by Enbridge."
- All display plans in the lot/home sales office shall identify the Enbridge pipeline right-of-way-corridor within the proposed linear park block(s).

Structures and Setbacks

Development setbacks from pipelines and rights-of-way are recommended in support of damage prevention and to allow both pipeline operators and developers buffer lands for operations and maintenance purposes.

- No permanent structures are permitted within the pipeline right-of-way area without Enbridge's prior written consent.

Other Development

Wells / Septic Systems

Wells or septic systems shall not be located on Enbridge's pipeline right-of-way. Construction of any septic system within 30m of the pipeline right-of-way requires prior written notification to Enbridge to ensure the septic bed will not adversely impact the integrity of the pipeline and pipeline right-of-way. Written consent from Enbridge must be received prior to the start of any work.

Aerial Power Lines

Aerial power lines crossing the pipeline right-of-way require aerial warning devices installed and properly maintained. No poles, pylons, towers, guys, anchors or supporting structures of any kind are permitted on the pipeline right-of-way.

Pathways, Fencing & Landscaping

Fencing Along ROW

- For development along an Enbridge right-of-way, permanent fencing shall be erected and maintained by the Developer at the Developer's cost along the limits of Enbridge's pipeline right-of-way. The fence erected must meet Enbridge's and the governing municipality's specifications concerning type, location and height. Any excavations for fence posts on, or within 30m of the pipeline must be done by hand or hydrovac. There shall be no augers operated on the pipeline right-of-way. The Developer shall notify Enbridge three business (3) days prior to any excavation for fence posts located on or within 30m of the pipeline.
- Limits of the pipeline right-of-way parallel to the pipeline shall be delineated with permanent fencing to prevent gradual encroachment by adjacent landowners. Suitable barriers shall be installed at all road accesses to prevent unauthorized motor vehicles from entering Enbridge's pipeline right-of-way.
- Enbridge's written consent must be obtained and One Call notifications must be completed prior to any fence installations.

Landscaping

No landscaping shall take place on Enbridge's pipeline right-of-way without Enbridge's prior written consent and where consent is granted such landscaping must be performed in accordance with Enbridge's Pipeline Crossing Guidelines, as follows:

- The landowner / developer shall ensure a 5m continuous access way in the pipeline right-of-way is provided for the Enbridge repair crews.

In order to maintain a clear view of the pipeline for the purposes of right-of-way monitoring, which is required by federal regulation, trees and shrubbery planted in proximity to the pipeline must meet the following criteria:

- Enbridge permits the following vegetation within the pipeline right-of-way: Flowerbeds, vegetable gardens, lawns and low shrubbery (under 1 m in height), and
- The mature growth height of vegetation does not exceed 1.5 m (5 ft) at maturity and must maintain a minimum distance of 3 m (10 ft) from the nearest pipeline.

Pathways / Trails

No pathways shall be installed on Enbridge's pipeline right-of-way without Enbridge's prior written consent and where consent is granted pathways must be designed in accordance with Enbridge's requirements:

- A pathway crossing Enbridge's pipeline right-of-way shall be installed as close as possible to a ninety (90) degree angle to the Enbridge pipeline(s).
- The width of the pathway shall not exceed 3m.
- A parallel pathway within Enbridge pipeline right-of-way shall maintain a minimum 5m separation from the edge of the Enbridge pipeline(s).
- Enbridge's pipeline(s) must be positively identified at certain intervals as directed by Enbridge's representative for parallel installation.
- Enbridge shall install pipeline markers at all road, pathway and other crossings throughout the development area at Developer's cost.

Drainage and Erosion

- The Developer shall ensure drainage is directed away from the pipeline right-of-way so that erosion will not adversely affect the depth of cover over the pipeline(s).
- Any large-scale excavation adjacent to the pipeline right-of-way, which is deeper than the bottom of the pipe, must maintain a slope of 3:1 away from the edge of the pipeline right-of-way.
- Depth of cover over Enbridge pipeline(s) shall not be compromised over the life of the Developer's facility due to rutting, erosion or other means.

Construction

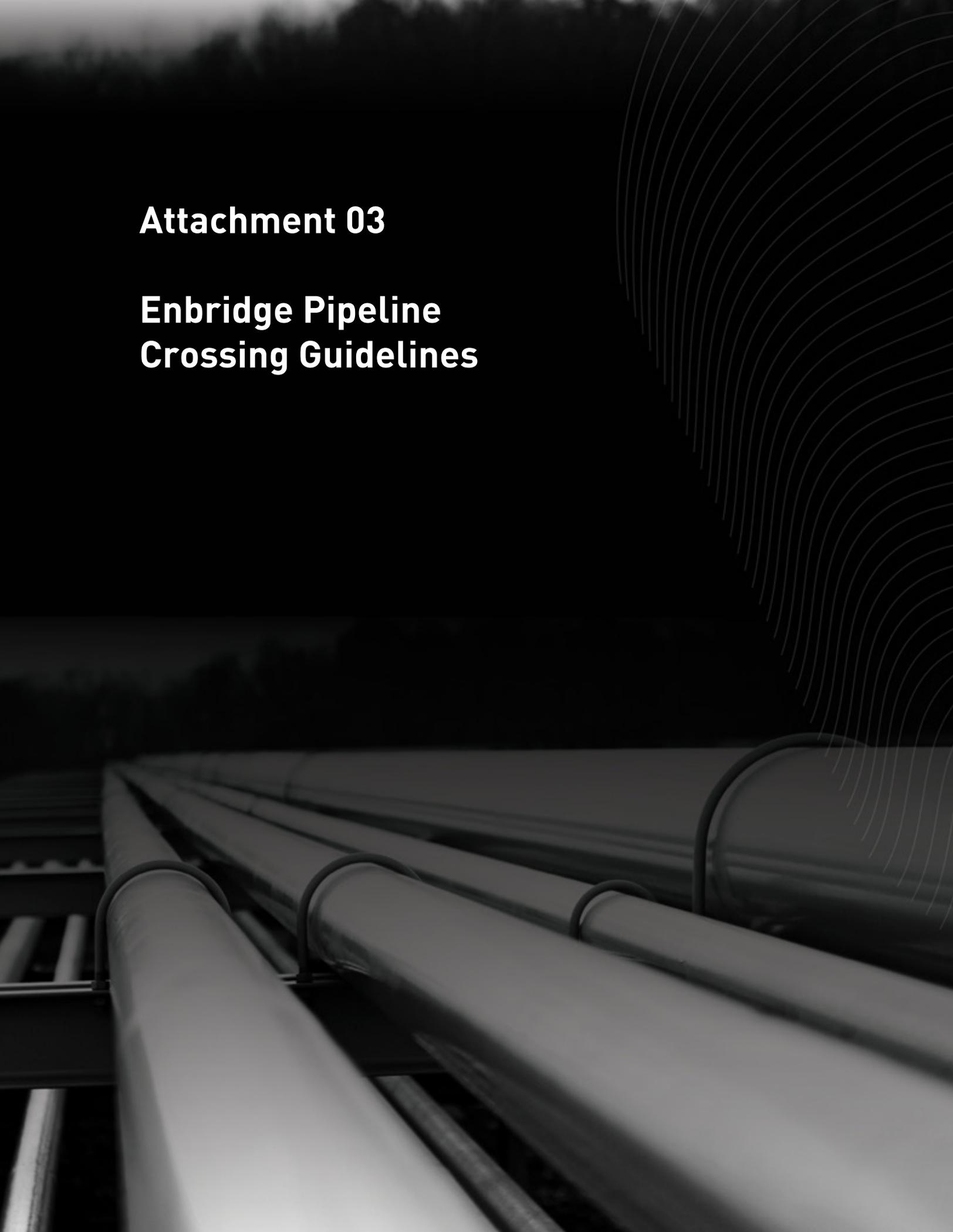
- During construction of the site, temporary fencing must be erected and maintained along the limits of the pipeline right-of-way by the Developer to prevent unauthorized access by heavy machinery. The fence erected must meet Enbridge's specifications concerning type, height and location. The Developer is responsible for ensuring proper maintenance of the temporary fencing for the duration of construction. The Developer is responsible for the cost of material, installation and removal.
- Original depth of cover over the pipeline(s) within Enbridge's pipeline right-of-way shall be restored after construction. This depth of cover over the pipeline(s) shall not be compromised over the life of the Developer's facility due to rutting, erosion or other means.
- In the event Enbridge's pipeline(s) suffer contact damage or other damage as a result of construction, work shall stop immediately and Enbridge to be immediately notified.

Liability

In no event shall Enbridge be liable to the developer and/or landowner(s) for any losses, costs, proceedings, claims, actions, expenses or damages (collectively "Claims") the Developer and/or landowner(s) may suffer or incur as a result of or arising out of the presence of Enbridge pipeline(s) and/or operations on the pipeline right-of-way. The Developer and/or landowner(s) shall be responsible for all costs and expenses incurred to install, repair, replace, maintain or remove the Developer's and/or landowner(s) installations on or near the pipeline right-of-way and shall indemnify and save harmless Enbridge from all Claims brought against, suffered or incurred by Enbridge arising out of the activities of the Developer and/or landowner(s) in respect of the development or arising out of the presence, operation or removal of the Developer's and/or landowner(s) installations on or near Enbridge's pipeline right-of-way.

Attachment 03

Enbridge Pipeline Crossing Guidelines



Enbridge Pipeline Crossing Guidelines, Canada

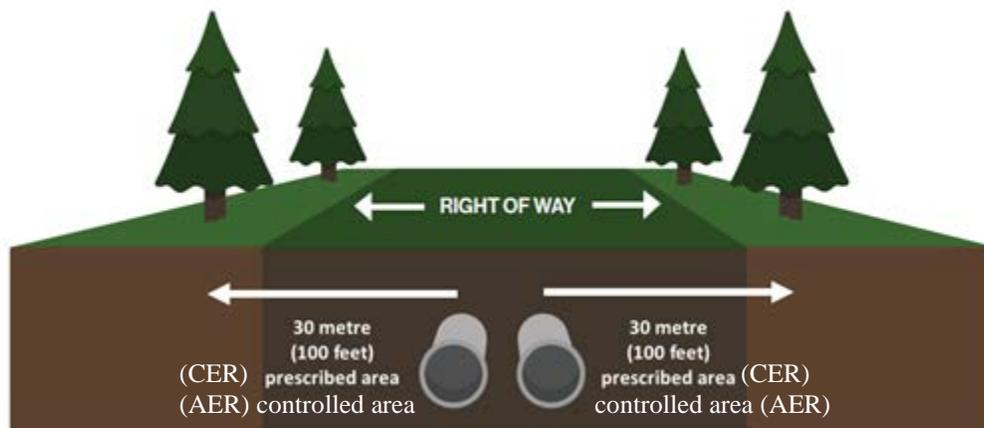
Application Guidance Details
May 2020 v2.0

Application Guidance Details

1. WHO REQUIRES CONSENT?

Consent is governed by the Canada Energy Regulator (CER) for interprovincial or international (federally regulated) pipelines and the Alberta Energy Regulatory (AER) for intra-provincial (provincially regulated) pipelines within the Province of Alberta. To ensure our pipelines and facilities operate safely written consent from Enbridge must be obtained in Canada before any of the following occur:

- ❖ Construction or installation of a new facility across, on, along or under Enbridge's pipeline and/or right-of-way;
- ❖ Ground disturbance activities in the prescribed area (CER) or controlled area (AER) which extends 30m from each side of the centerline of the pipeline;
- ❖ Operation or movement of vehicles, mobile equipment or machinery across Enbridge's right-of-way, outside of the travelled portion of a highway or public road;
- ❖ Using explosives within 300m of Enbridge's pipeline right-of-way;
- ❖ Use of the prescribed area or controlled area for storage or workspace purposes;
- ❖ Subdivision development across, on, along or over Enbridge's pipeline and/or right-of-way;
- ❖ Landowners wishing to install agricultural drainage tile across, on, along or under Enbridge's pipeline and/or right-of-way.



Activities that cause a ground disturbance include, but are not limited to, the following:

-
- | | |
|---------------------------|---|
| ❖ digging | ❖ clearing and stump removal |
| ❖ excavation | ❖ subsoiling |
| ❖ trenching | ❖ blasting/using explosives |
| ❖ ditching | ❖ quarrying |
| ❖ tunneling | ❖ grinding and milling of asphalt/concrete |
| ❖ boring/drilling/pushing | ❖ seismic exploration |
| ❖ augering | ❖ driving fence posts, bars, rods, pins, anchors or pilings |
| ❖ topsoil stripping | ❖ plowing to install underground infrastructure |
| ❖ land levelling/grading | ❖ crossing of buried pipelines or other underground infrastructure by heavy loads off the travelled portion of a public roadway |
-
- ❖ tree or shrub planting
 - ❖ installing agricultural drainage tile

Under section 2 of the Canadian Energy Regulator Act, ground disturbance does not include:

- ❖ Cultivation to a depth of less than 45cm below the surface of the ground
- ❖ Any activity to a depth of less than 30cm and that does not result in reduction of the depth of earth cover over the pipeline less than that approved at time of construction

2. CROSSING A PIPELINE WITH AN AGRICULTURAL VEHICLE OR MOBILE EQUIPMENT

For pipelines regulated by the Canada Energy Regulator, the *Canadian Energy Regulator Pipeline Damage Prevention Regulations – Authorizations* provides that persons operating agricultural vehicles or mobile equipment across pipelines may do so in low-risk areas, under certain conditions:

- ❖ the loaded axle weight and tire pressures of the vehicle or mobile equipment are within the manufacturer's approved limits and operating guidelines; AND
- ❖ the point of crossing has not been the subject of a notification from the pipeline company that crossing at that location could impair the pipeline's safety or security.

This applies to vehicles or mobile equipment used for agricultural activities in the production of crops and the raising of animals and includes pasturing and cultivation activities such as tillage, plowing, disking and harrowing.

For pipelines regulated by the Alberta Energy Regulator, the *Pipeline Regulation (under the Pipeline Act)* provides that persons operating vehicles or equipment used for farming operations; or use of off-highway vehicles [as defined in section 117(a)(iii) to (viii) of the Traffic Safety Act] or use of private passenger vehicles (as defined in section 1(1)(jj) of the Traffic Safety Act) less than ¾ ton may temporarily cross over an AER regulated pipeline without further approval from Enbridge.

However, if neither of the above requirements can be met then an application must be submitted to Enbridge for further review and processing.

3. HOW TO APPLY FOR ENBRIDGE CONSENT

The applicant must submit a written request, either by completing the Application Form (attached) or a letter with equivalent information, together with the applicable drawing(s) to the respective Enbridge crossings department as set out in the *Contact Us* section of this document.

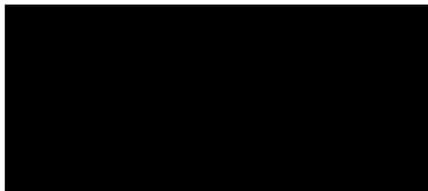
The drawing(s) must be prepared in accordance with the minimum standards as set out in the *Drawing Requirements* section of this document.

Enbridge's Equipment Specification and Data Sheet (attached) must also be completed for any vehicle/ mobile equipment crossing applications.

For federally regulated pipelines, the applicant may petition the Commission for approval of construction activity if:

- ❖ the applicant cannot comply with the terms and conditions as set out in the company's written consent;
- ❖ the applicant feels the terms and conditions in the company's written consent are excessive; or
- ❖ If the company refused to grant approval to the applicant for reasons of pipeline integrity, public safety or company policy.

An application can be filed with the Commission by writing to:



Applications may be filed with the Commission by mail, courier or facsimile by calling the toll-free number at 1-877-288-8803. Applications can also be uploaded through the CER's Applications and Filings Portal on the CER website at Home / Applications and Filings / Submit Applications and Regulatory Documents / File under the CER Act / OPR: CER Act – Guide C (<http://www.cer-rec.gc.ca/pplctnflng/sbmt/nbpr-eng.html>).

4. DRAWING REQUIREMENTS

The following represents the minimum information that is required to be shown on the drawing(s) in order for Enbridge to review your application. Dimensions must be shown on the drawing(s) and may be done in either imperial or metric units (if metric, then to one decimal point).

NOTE: incomplete drawings and/or an incomplete application will be rejected back to the applicant.

(a) Permanent Installations

All proposed permanent installation drawings MUST contain the following items:

1. Plan Number, including any revision number and the respective date;
2. North Arrow;
3. Scale;
4. Legend;
5. Location indicator including: legal land description, PIN, GPS coordinates;
6. Plan view of whole quarter section or affected area including:
 - ❖ Lot lines, road limits
 - ❖ Proposed facilities (including curbs, footing, guard rails, guy wires, poles, fences, etc.) with tie dimensions to lot survey line preferably along pipeline and/or right-of-way boundary
 - ❖ Location of cathodic test lead terminals (if applicable);
7. Cross section view and/or profile view including:
 - ❖ For surface structures, show profile along pipeline(s) with highest elevation
 - ❖ For underground facilities show profile along facility
 - ❖ Property lines, pipeline(s) and depth of cover
 - ❖ All underground facilities must maintain an even elevation across the entire width of right-of-way except for gravity type facilities or those facilities installed by HDD;
 - ❖ Drill path plan for HDD installations
 - ❖ Unsupported span (m) of Enbridge pipeline for open cut installations
8. Crossing Angle;
9. Crossing location circled in red;
10. Identify all affected Enbridge facilities, right-of-way(s) and pipeline markers;
11. Method of Installation (MOI) (**Refer to Interpretation/Definitions section*);
12. Minimum Clearance (**Refer to Interpretation/Definitions section*);
13. Facility specifications:
 - ❖ PIPE/CABLE: pipe diameter, pipe material, product conveyed, cable size, if cable is within a conduit, conduit material, cable voltage; unsupported span (meters) of existing pipeline if MOI is open cut;
 - ❖ ROAD: width of road, cover at ditch, cover at center of road, surface material, road type/use; design loading calculation; indicate if any Government or Provincial setback requirements
 - ❖ OVERHEAD POWER: pole number(s), location of pole/guy wire/anchors/etc., method of installation of pole/guy wire/anchors/etc., horizontal clearance to pipe from proposed pole/guy wire/anchors/etc., vertical clearance to ground/grade, voltage, type of power (AC/DC), AC mitigation plan may be required;
 - ❖ PIPE RACK: height of pipe rack, pile location(s), pile clearance to Grantor's facility, pile installation method; alternate access route provided for rural locations
 - ❖ DRAINAGE TILE: location of tiles and incremental cost analysis.
14. Complete the Equipment Specification and Data Sheet, when required.

(b) Temporary Activities

All temporary drawings MUST contain the following:

1. Plan Number, including any revision number and the respective date;
2. North Arrow;
3. Scale;
4. Legend;
5. Location indicator including: legal land description, PIN, GPS coordinates;
6. Plan view of whole quarter section or affected area;
7. Temporary activities location circled in red;
8. Identify all affected Enbridge facilities, right of way(s) and/or PLA/easement ownership;
9. Facility specifications:
 - ❖ WORKSPACE: location, measurement of workspace, purpose;
 - ❖ ACCESS OF ROW: location, kilometer usage of ROW, width of access; egress/ingress points, complete the Equipment Specification and Data Sheet (attached);
 - ❖ EQUIPMENT CROSSING: complete the Equipment Specification and Data Sheet (attached);
 - ❖ ROAD USE: indicate road(s) to be utilized, km usage, reason required, frequency of use; complete the Equipment Specification and Data Sheet (attached);
 - ❖ GEOPHYSICAL: project/prospect name, number of reading units/lines, type of source, CER approval required (Y/N).

5. INTERPRETATION / DEFINITIONS

For crossing application purposes, Enbridge defines the following as:

Grantee means the applicant or the facility owner; a company, a person, a municipality or government body, etc.

Method of Installation means OPEN CUT or HDB or HDD; all defined as follows:

OPEN CUT

Enbridge defines open cut as trench methodology wherein access is gained to the required level underground for the proposed installation, maintenance or inspection of a pipe, conduit or cable. The excavated trench is then backfilled and the surface restored.

HORIZONTAL DIRECTIONAL BORE (HDB)

Enbridge defines horizontal directional bore as meeting ALL of the following:

- (a) The designed horizontal distance of the crossing shall be less than or equal to 150m (500ft) in length; AND
- (b) The depth of the pipeline installation shall be limited to 8m (25ft) to the centre (cross-section) of the pilot hole and measured to the corresponding surface location; AND
- (c) Straight alignment in the horizontal plane; AND
- (d) Pilot bit is steerable and trackable.

HORIZONTAL DIRECTIONAL DRILL (HDD)

Enbridge defines horizontal directional drill as an *HDB* that DOES NOT meet all of the criteria for an *HDB*. An *HDD* will satisfy some but not all of: a, b and c above and will satisfy d.

Minimum Clearance means the required distance between the existing Enbridge facility and the proposed facility based on the selected *Method of Installation*.

Minimum clearance required for installation ABOVE Enbridge facility by OPEN CUT is 0.3m
Minimum clearance required for installation BELOW Enbridge facility by OPEN CUT is 0.6m
Minimum clearance required for installation BELOW Enbridge facility by HDB is 1.0m
Minimum clearance required for installation BELOW Enbridge facility by HDD is 3.0m
Minimum clearance required for road installation from bottom of ditch to top of Enbridge facility is 0.9m and from centerline of road to top of Enbridge facility is 1.2m
Minimum clearance required for railway installation from bottom of ditch to top of Enbridge <i>uncased</i> facility is 1.83m and from centerline of rail bed to top of Enbridge <i>uncased</i> facility is 3.05m
Minimum clearance required for railway installation from bottom of ditch to top of Enbridge <i>cased</i> facility is 0.91m and from centerline of rail bed to top of Enbridge <i>cased</i> facility is 1.68m

6. WRITTEN CONSENT

After applying for written consent, Enbridge will review the proposed installation and/or temporary activities application in order to ensure that the proposed work will not pose a risk to existing Enbridge facilities, as well as, to ensure that any access required to existing facilities for maintenance or in an emergency situation will not be impeded.

Some applications may require further engineering assessment which will require additional time to review the proposed installation and/or temporary activities prior to Enbridge issuing consent. All efforts will be made to provide an agreement within an appropriate timeframe, however, please ensure that your application request is submitted with ample lead time.

7. CONTACT US

To obtain written consent from Enbridge, please contact the respective office as set out below:

REGION	CONTACT INFORMATION
LIQUIDS PIPELINES - WESTERN CANADA (Alberta, Saskatchewan, Manitoba and Norman Wells)	
LIQUIDS PIPELINES - EASTERN CANADA (Ontario and Quebec)	
GAS PIPELINES / STORAGE - BRITISH COLUMBIA	

GAS STORAGE - ONTARIO

GAS PIPELINE - ALLIANCE

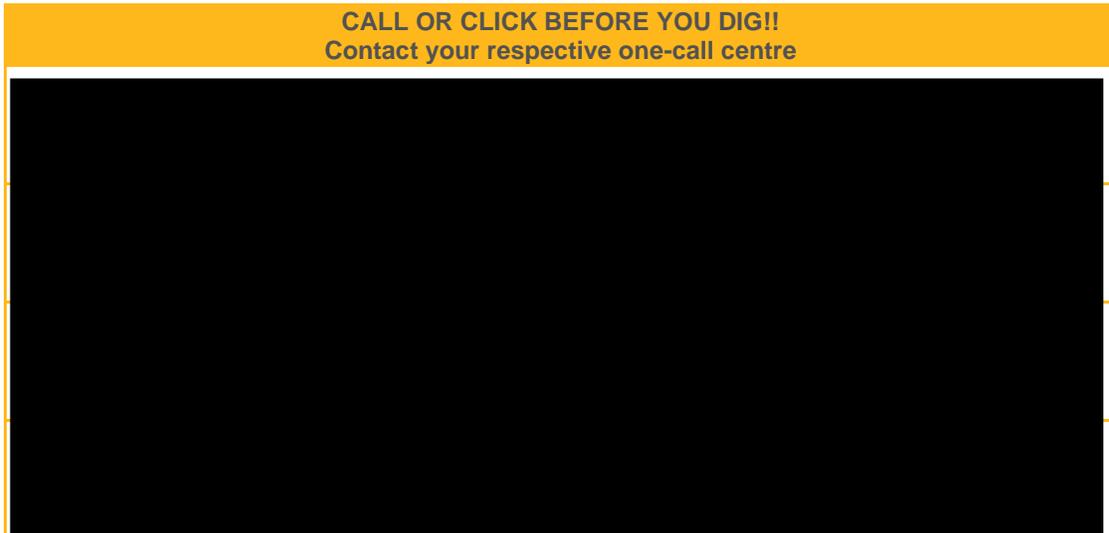


For more information on Enbridge Gas Distribution please click the link: <https://www.enbridgegas.com/gas-safety/pipeline-safety.aspx>

8. ONE CALL CENTRES

Before putting a shovel in the ground, whether it is in your backyard or a commercial jobsite, please do a locate request to safely identify any buried utility lines at www.clickbeforeyoudig.com.

Your local one call centre can also be reached by phone as shown below:



9. REGULATORS

In Canada, Enbridge has pipelines that are regulated by both the federal government and provincial governments. For more information on any of the regulators please visit their respective website.

Canada Energy Regulator: www.cer-rec.gc.ca

Alberta Energy Regulator: www.aer.ca

10. DEVELOPMENT ON OR NEAR THE RIGHT-OF-WAY

Enbridge should be consulted early in the design phase with regards to proposed subdivisions, roads and utilities, and municipal landscaping.

Subdivisions – Enbridge highly recommends that our right-of-way be used as a passive green space or as part of a linear park system. Permanent structures on the right-of-way are not permissible.

Roads and Utilities – Roads may be permitted to cross and/or run parallel to the right-of-way but no portion of a road allowance can be located on the right-of-way (apart from approved road crossings). Enbridge will review the location of utilities which are often proposed within the road allowance.

Landscaping – Projects such as pedestrian pathways may be permitted as long as they do not impede Enbridge's access along its right-of-way for operational and/or maintenance activities. Enbridge's written consent will specify the permitted landscaping requirements.

11. DAMAGE PREVENTION

Enbridge's underground facilities must be positively identified, to Enbridge's satisfaction, prior to the start of any proposed construction activities.

Enbridge's representative(s) have the authority to stop work at any time due to safety, environmental or operational concerns and/or unforeseen circumstances or emergency situations.

****IMMEDIATELY NOTIFY ENBRIDGE IF YOU COME INTO CONTACT WITH THE PIPE! ****

As a small scratch or dent in the pipeline's coating can impact long term safety of the pipeline and must be assessed by Enbridge.

Please note that obstacles or un-approved above ground installations located on an Enbridge right-of-way, such as sheds, trailers, boats and pools can interfere with Enbridge's access of their right-of-way. Permanent structures on the right-of-way are NOT permissible.

Enbridge must be contacted before conducting any blasting activities within 300m of the pipeline right-of-way so that Enbridge can review the proposed plans in order to see if there might be potential impacts to its facilities. Blasting activities related to prospecting for mines and minerals within 40m of a federally regulated pipeline right-of-way requires permission from the Canada Energy Regulator.

12. EMERGENCY SITUATIONS

In an emergency situation please provide as much notice, as is practicable, to Enbridge prior to commencement of any construction, excavation, installation or temporary crossing of existing pipelines and/or right-of-ways in order to access the emergency site.

Enbridge classifies an emergency situation as:

- ❖ A risk to human life;
- ❖ Required emergency repairs of public services; or
- ❖ To contain an environmental emergency.

In an emergency situation please call: **1-877-420-8800** (toll free) and/or contact your local One Call provider at the numbers listed in section 8.

DISCLAIMER: THESE GUIDELINES ARE INTENDED TO PROVIDE USEFUL CROSSING APPLICATION GUIDANCE INFORMATION TO THE APPLICANT. SUBMISSION OF AN APPLICATION MEETING THE REQUIREMENTS AS SET OUT HEREIN DOES NOT CONSTITUTE WRITTEN CONSENT FROM ENBRIDGE. ALL APPLICATIONS WILL BE REVIEWED BY ENBRIDGE TO DETERMINE WHETHER THE APPLICATION WILL BE APPROVED.

APPLICANT INFORMATION**Grantee* Full Legal Name for Agreement:****Regulator:****Other:****Grantee Address for Service:****Grantor/Enbridge Entity****Application by Broker/Land Consultant**Yes No **Broker/Land Consultant Name:****Contact Person Name:****Contact Person Phone Number:****File Number:****Broker/Land Consultant Address:****CROSSING INFORMATION****Expected construction start and end date(s):****Permanent Installation** **Temporary Activities** Crossing Drainage Tile Pole/Pile Installation Other Workspace Equipment Crossing Access of ROW Geophysical Road Use Proximity Other **Location indicator including affected legal land description(s), PIN and GPS Coordinates (Latitude and Longitude Decimal Degree):****Grantor's Affected Disposition(s) (Alberta) (i.e. PLA # or License # or Line #):****Grantee's Field Contact Information:**

Name:

Phone:

Email:

Details of Grantee's Proposed Permanent Installation and/or Purpose of Temporary Activities

Method of Installation* *(For permanent installations)*

Open Cut HDB HDD

Drawing(s) Attached

Yes No

Drawing Requirements Met *

Yes No

Equipment Specification and Data Sheet Attached *

Yes No N/A

Notes/Additional Information:

SUBMIT TO:

**LIQUIDS PIPELINES
WESTERN CANADA**
(Alberta, Saskatchewan, Manitoba
and Norman Wells)

**LIQUIDS PIPELINES
EASTERN CANADA**
(Ontario and Quebec)

Equipment Specification and Data Sheet(s)



In order to properly conduct an analysis on the requested crossing the following general information and appropriate data sheets are required to be completed.

Steps:

1. Complete the *Applicant – Information and Details* document for each crossing application
2. Add and complete the *Data Sheet – Equipment or Vehicle with Tires* for EACH piece of equipment
3. Add and complete the *Data Sheet – Equipment with Tracks* for EACH piece of equipment
4. Return fully completed general information and data sheets and any other pertinent information

Applicant Information

Applicant Name:	
Applicant Contact Person Name:	
Email:	
Phone Number:	
Applicant Reference/File Number:	

Details

Description and Purpose of Crossing:				
Location Indicator (legal land description, PIN, etc.)				
GPS Coordinates:(Latitude and Longitude Decimal Degree)				
Duration:	Temporary		Permanent	
Start Date:			End Date:	
Equipment or Vehicle with Tires:	Yes	No	Datasheet:	
Equipment with Tracks:	Yes	No	Datasheet:	

Data Sheet – Equipment with Tracks

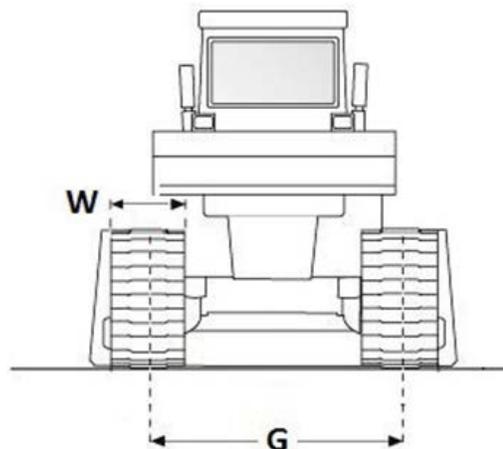
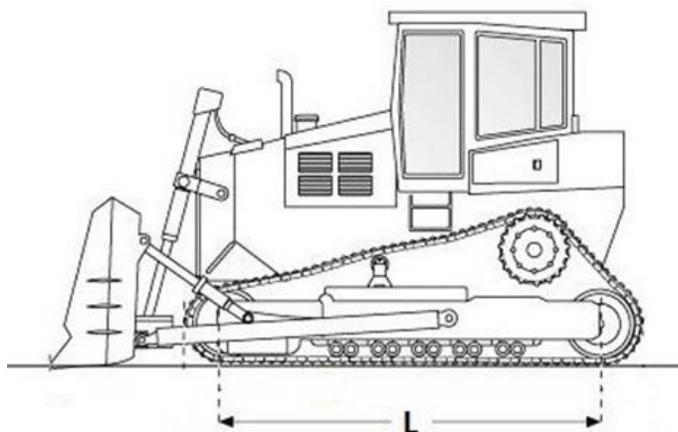


Complete this data sheet for each piece of equipment with tracks.

Equipment with Tracks

INDICATE UNITS

Manufacturer:			
Model:			
Equipment Description:			
Fully Loaded Gross Vehicle Weight:			
	Track Shoe Width (refer to W below)	Track Length on Ground (refer to L below)	Track Gauge (on center) (refer to G below)
Units			
Track			



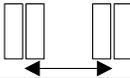
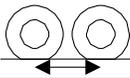
Data Sheet – Equipment or Vehicle with Tires

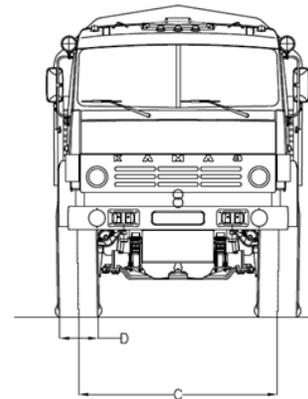
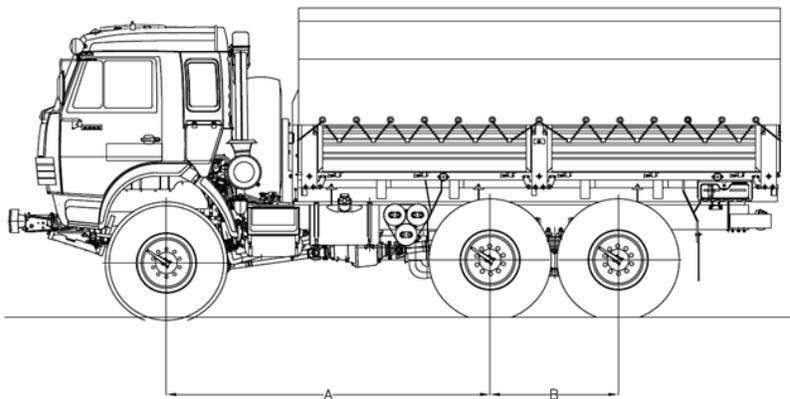


Complete this data sheet for **EACH** piece of equipment or vehicle with tires.
EXCLUSION: pick up trucks of one ton or less

Equipment or Vehicle with Tires

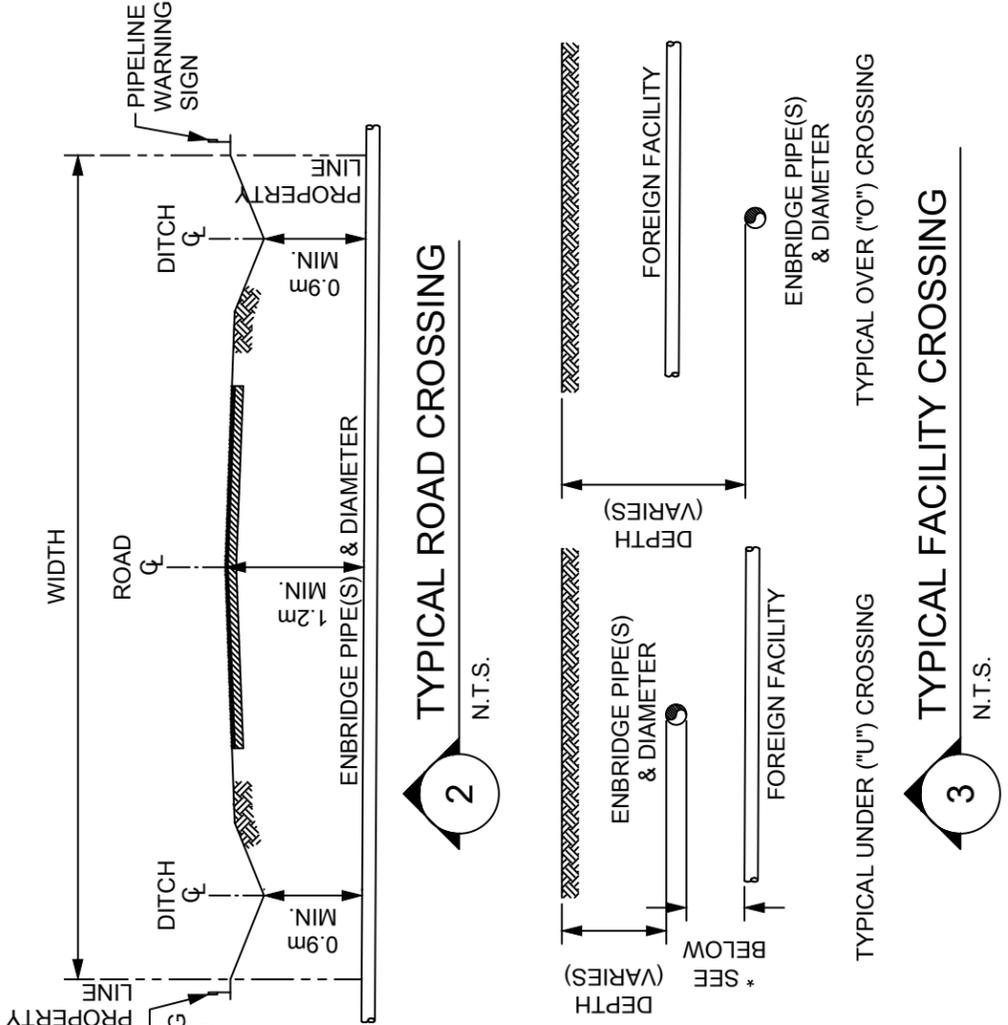
INDICATE UNITS

Manufacturer:						
Model:						
Equipment Description:						
Fully Loaded Gross Vehicle Weight:						
Road legal without overweight permit?		Yes			No	
Axle	Maximum Loaded Weight PER Axle	Number of Tires PER Axle	Tire Width (refer to D below)	Tire Pressure	Distance between Tire Set Centerlines (refer to C below)	Centerline Distance to Previous Axle (refer to A below) (refer to B below)
						
Units						
Steering						
2 nd						
3 rd						
4 th						
5 th						
6 th						
7 th						

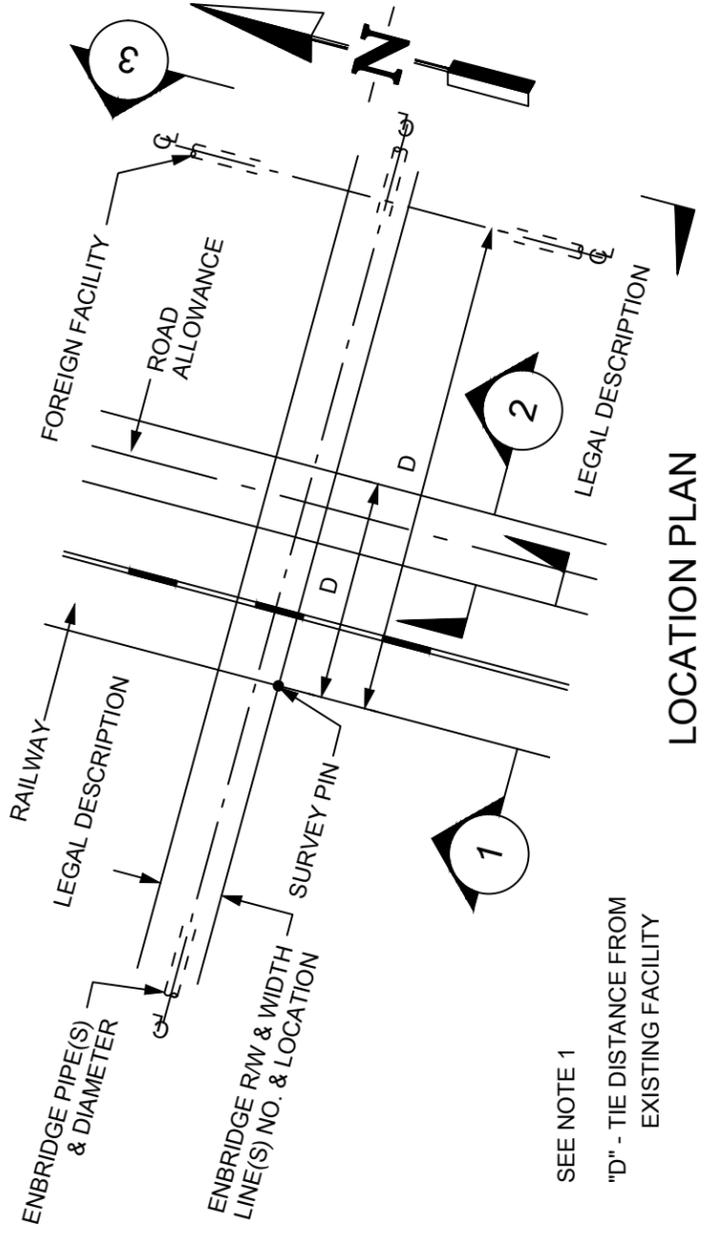
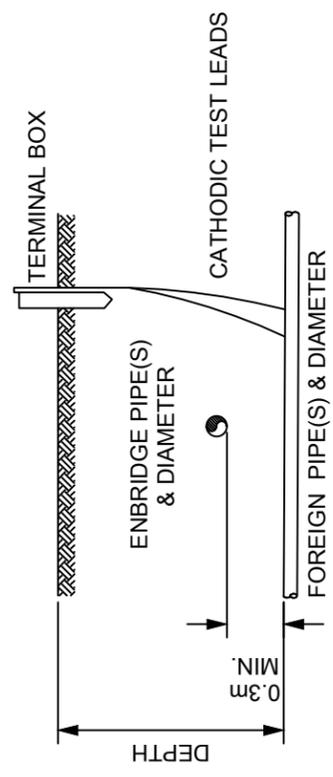


NOTE:

1. ENBRIDGE PIPELINES OPERATE UNDER HIGH PRESSURE THEREFORE ENBRIDGE REPRESENTATIVE(S) MUST BE PRESENT DURING CONSTRUCTION.
2. THIS DRAWING IS FOR REFERENCE ONLY. ACTUAL SITE DETAILS OR REQUIREMENTS MAY VARY.

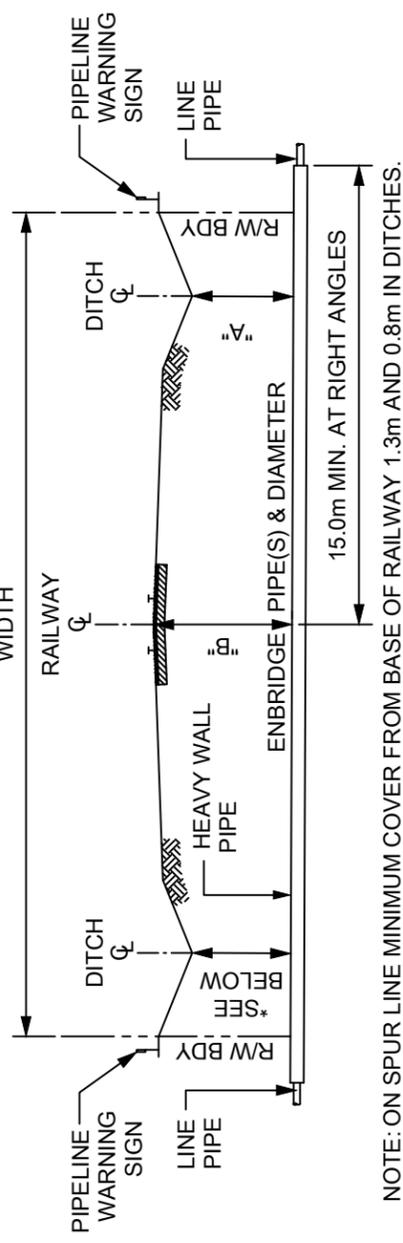


*** MINIMUM CLEARANCE:**
 -0.3m IF OPEN CUT ABOVE ENBRIDGE PIPES
 -0.6m IF OPEN CUT BELOW ENBRIDGE PIPES
 -1.0m IF HDD UNDER ENBRIDGE PIPES
 -3.0m IF HDD UNDER ENBRIDGE PIPES



SEE NOTE 1

"D" - TIE DISTANCE FROM EXISTING FACILITY



NOTE: ON SPUR LINE MINIMUM COVER FROM BASE OF RAILWAY 1.3m AND 0.8m IN DITCHES.

*** MINIMUM CLEARANCE:**

	"A"	"B"
CASED	0.91m	1.68m
UNCASED	1.83m	3.05m

REFERENCE DRAWINGS	
3	AS BUILT INTERNATL DRAFTING DRA34
2	REVISIONS TO STANDARD DRA34 & REVISED AS PER STANDARDS UPDATE
1	REVISED AS PER OPERATIONS INFORMATION
REVISION NO.	DESCRIPTION
DATE	BY
CHK	APPR

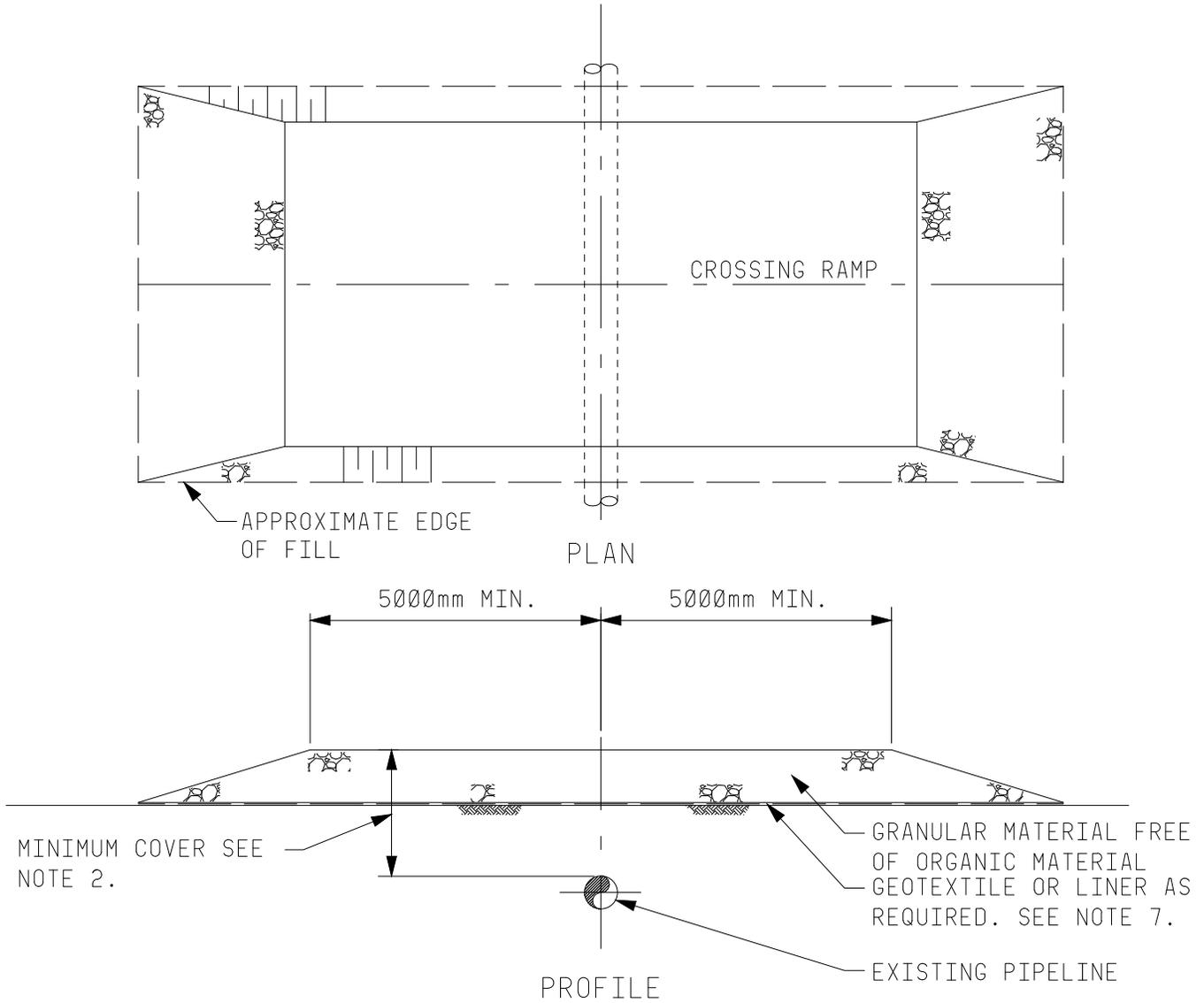
DATE: 30 AUG 08
 BY: ME
 CHK: EH
 ENG: HCFROST
 SCALE: NTS
 STATUS: AS BUILT

ENBRIDGE

TYPICAL CROSSING DETAILS FOR THIRD PARTY APPLICANTS CROSSING ENBRIDGE PIPELINES CANADA

ENB APPR: GAFALLDER
 DATE: 18 AUG 08
 SCALE: NTS
 STATUS: AS BUILT

DWG NO: B-1.02-5052-0
 REV NO: 3



NOTES:

1. ON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL REMOVE COMPLETE RAMP AND RESTORE AREA TO ORIGINAL CONDITION.
2. MINIMUM COVER SHALL BE AS SPECIFIED IN THE CROSSING AGREEMENT.
3. LENGTH OF RAMP TO VARY IN ACCORDANCE WITH CROSSING ANGLE.
4. RAMP WIDTH SHALL BE MINIMIZED AS MUCH AS POSSIBLE, AND SHALL NOT ENCROACH BOUNDARIES SET IN THE CROSSING AGREEMENT.
5. RAMP SIDE SLOPE SHALL NOT BE STEEPER THAN 1V:4H.
6. RAMP SHALL BE COMPACTED, AND HAVE A CROSS FALL TO ENSURE THAT WATER WILL NOT POND ON THE RAMP CAUSING EXCESSIVE RUTTING.
7. A GEOTEXTILE OR LINER BARRIER TO BE INSTALLED AT THE DISCRETION OF THE ENBRIDGE FIELD REPRESENTATIVE.
8. REFER TO DRAWING A-1.8-43105 FOR FRENCH VERSION. REFERE AU DESSIN A-1.8-43105 POUR VERSION FRANCAISE.

2

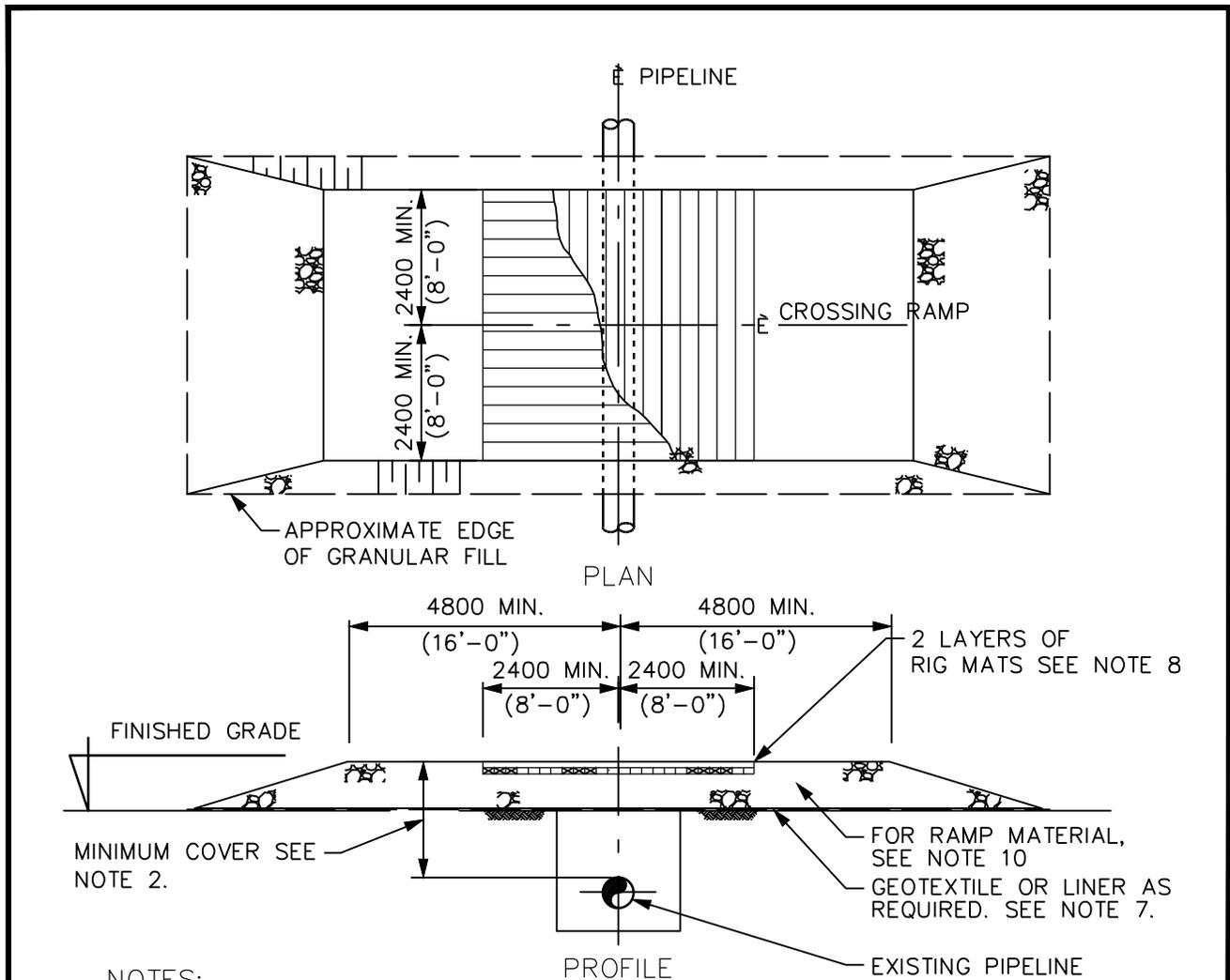
A-1.8-43105-0 TYPICAL DESIGN DETAIL
REFERENCE DRAWINGS

2	FRENCH TRANSLATION REFERENCE AS PER IDR 583	2019 JAN 11 MM	BLB	ENB
1	AS BUILT INTERNAL DRAFTING ID 304	20 MAR 18 BLB	GB	ENBRIDGE
REV. NO.	REVISION DESCRIPTION	DATE BY	CHK	APPR.

COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.

**TYPICAL DESIGN DETAIL
TYPICAL TEMPORARY CROSSING RAMP
WITH EARTH**

BY: GB	CHK: GG	ENG.:	ENB APPR:
DATE: 14 FEB 18	SCALE: NTS	STATUS: AS BUILT	
DWG. NO.: A-1.8-42872-0			REV. NO.: 2



NOTES:

1. ON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL REMOVE COMPLETE RAMP AND RESTORE AREA TO ORIGINAL CONDITION.
2. MINIMUM COVER SHALL BE AS SPECIFIED IN THE CROSSING AGREEMENT.
3. LENGTH OF RAMP TO VARY IN ACCORDANCE WITH CROSSING ANGLE.
4. RAMP WIDTH SHALL BE MINIMIZED AS MUCH AS POSSIBLE, AND SHALL NOT ENCR OACH BOUNDARIES SET IN THE CROSSING AGREEMENT.
5. RAMP SIDE SLOPE SHALL NOT BE STEEPER THAN 1V:4H.
6. RAMP SHALL BE COMPACTED, AND HAVE A CROSS FALL TO ENSURE THAT WATER WILL NOT POND ON THE RAMP CAUSING EXCESSIVE RUTTING.
7. A GEOTEXTILE OR LINER BARRIER TO BE INSTALLED DURING SPRING, SUMMER AND FALL SEASONS.
8. RIG MATS SHALL BE STAGGERED OR PLACED IN A PERPENDICULAR ORIENTATION FROM THE PREVIOUS LAYER SO THAT THE EDGES DO NOT LINE UP
9. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
10. SNOW OR ICE CAN BE USED AT THE DISCRETION OF THE ENBRIDGE FIELD REPRESENTATIVE.
11. REFER TO DRAWING A-1.8-43106 FOR FRENCH VERSION. REFERE AU DESSIN A-1.8-43106 POUR VERSION FRANCAISE.

A-1.8-43106-0		TYPICAL DESIGN DETAIL	
REFERENCE DRAWINGS			
3	AS BUILT DR. IDR 743	20 JUN 19 MF	AE ENB
2	FRENCH TRANSLATION REFERENCE AS PER IDR 583	11 JAN 19 MM	BLB ENB
1	AS BUILT INTERNAL DRAFTING ID 304	20 MAR 18 BLB	GB ENBRIDGE
REV. NO.	REVISION DESCRIPTION	DATE BY	CHK APPR.
COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.			
ENBRIDGE			
TYPICAL DESIGN DETAIL TYPICAL TEMPORARY CROSSING RAMP WITH RIG MATS			
BY: GB	CHK: GG	ENG.:	ENB APPR:
DATE: 14 FEB 18	SCALE: NTS	STATUS: AS BUILT	
DWG. NO.:	A-1.8-42873-0		REV. NO. 3



Hydro One Networks Inc.

483 Bay Street
8th Floor South Tower
Toronto, Ontario M5G 2P5

HydroOne.com

August 17, 2023

Re: Long Sault and Ingleside Master Servicing Study

Attention:

Jamie Witherspoon, P.Eng.

Project Manager

WT Infrastructure Solutions Inc

Thank you for sending us notification regarding (Long Sault and Ingleside Master Servicing Study). In our preliminary assessment, we have confirmed that Hydro One has existing high voltage Transmission facilities and Distribution facilities within your study area. At this time we do not have sufficient information to comment on the potential resulting impacts that your project may have on our infrastructure. As such, we must stay informed as more information becomes available so that we can advise if any of the alternative solutions present actual conflicts with our assets, and if so; what resulting measures and costs could be incurred by the proponent. Note that this response does not constitute approval for your plans and is being sent to you as a courtesy to inform you that we must continue to be consulted on your project.

In addition to the existing infrastructure mentioned above, the applicable transmission corridor may have provisions for future lines or already contain secondary land uses (e.g., pipelines, watermains, parking). Please take this into consideration in your planning.

Also, we would like to bring to your attention that should (Long Sault and Ingleside Master Servicing Study) result in a Hydro One station expansion or transmission line replacement and/or relocation, an Environmental Assessment (EA) will be required as described under the Class Environmental Assessment for Minor Transmission Facilities (Hydro One, 2016). This EA process would require a minimum of 6 months for a Class EA Screening Process (or up to 18 months if a Full Class EA were to be required) to be completed. Associated costs will be allocated and recovered from proponents in accordance with the Transmission System Code. If triggered, Hydro One will rely on studies completed as part of the EA you are current undertaking.

Consulting with Hydro One on such matters during your project's EA process is critical to avoiding conflicts where possible or, where not possible, to streamlining processes (e.g., ensuring study coverage of expansion/relocation areas within the current EA). Once in receipt of more specific project information regarding the potential for conflicts (e.g., siting, routing), Hydro One will be in a better position to communicate objections or not objections to alternatives proposed.

If possible at this stage, please formally confirm that Hydro One infrastructure and associated rights-of-way will be completely avoided, or if not possible, allocate appropriate lead-time in your project schedule to collaboratively work through potential conflicts with Hydro One, which ultimately could result in timelines identified above.

In planning, note that developments should not reduce line clearances or limit access to our infrastructure at any time. Any construction activities must maintain the electrical clearance from the transmission line conductors as specified in the Ontario Health and Safety Act for the respective line voltage.

Be advised that any changes to lot grading or drainage within, or in proximity to Hydro One transmission corridor lands must be controlled and directed away from the transmission corridor.

Please note that the proponent will be held responsible for all costs associated with modifications or relocations of Hydro One infrastructure that result from your project, as well as any added costs that may be incurred due to increased efforts to maintain said infrastructure.

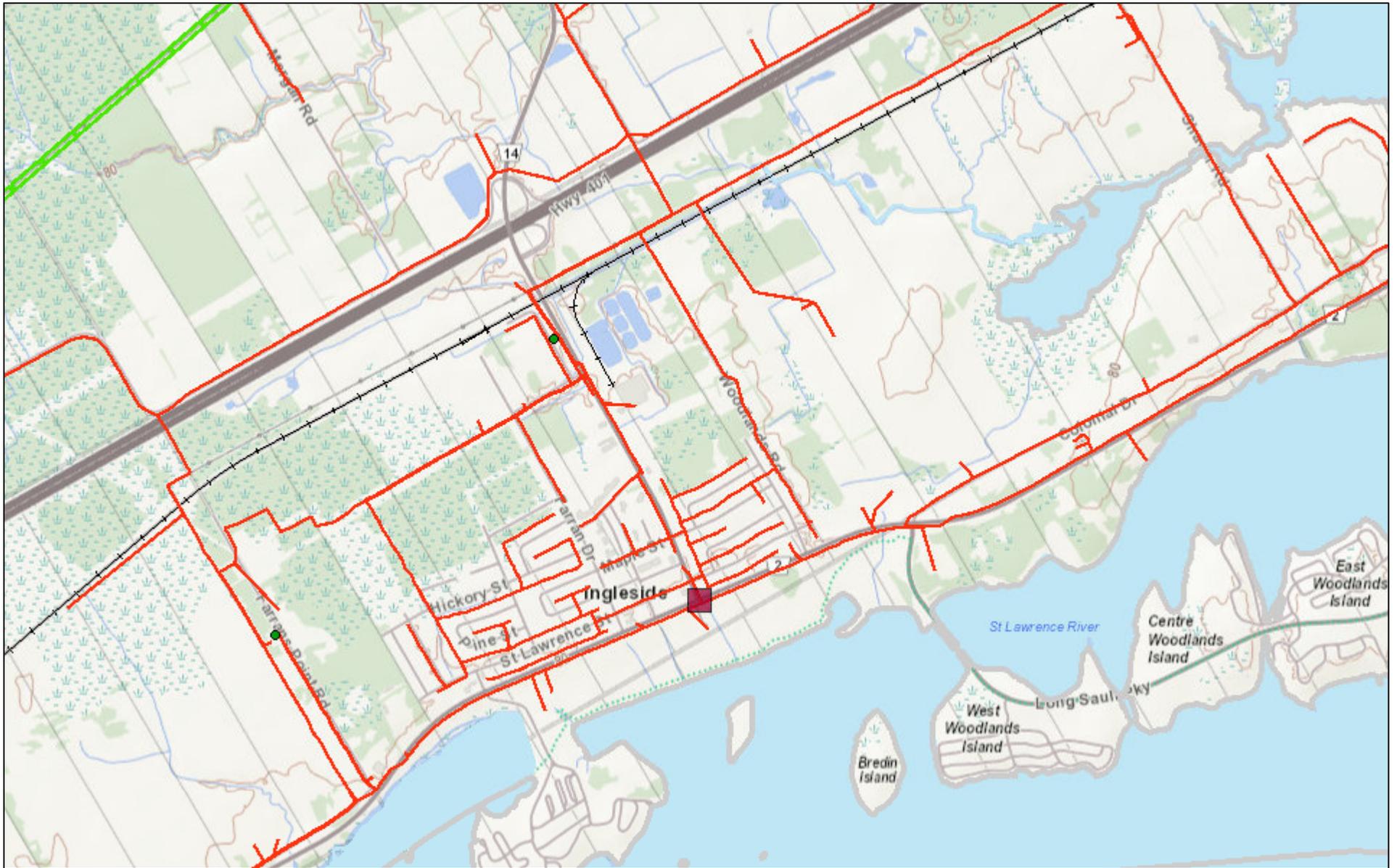
We reiterate that this message does not constitute any form of approval for your project. Hydro One must be consulted during all stages of your project. Please ensure that all future communications about this and future project(s) are sent to us electronically to

[REDACTED]

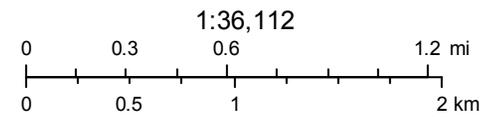
Sent on behalf of,

***Secondary Land Use
Asset Optimization
Strategy & Integrated Planning
Hydro One Networks Inc.***

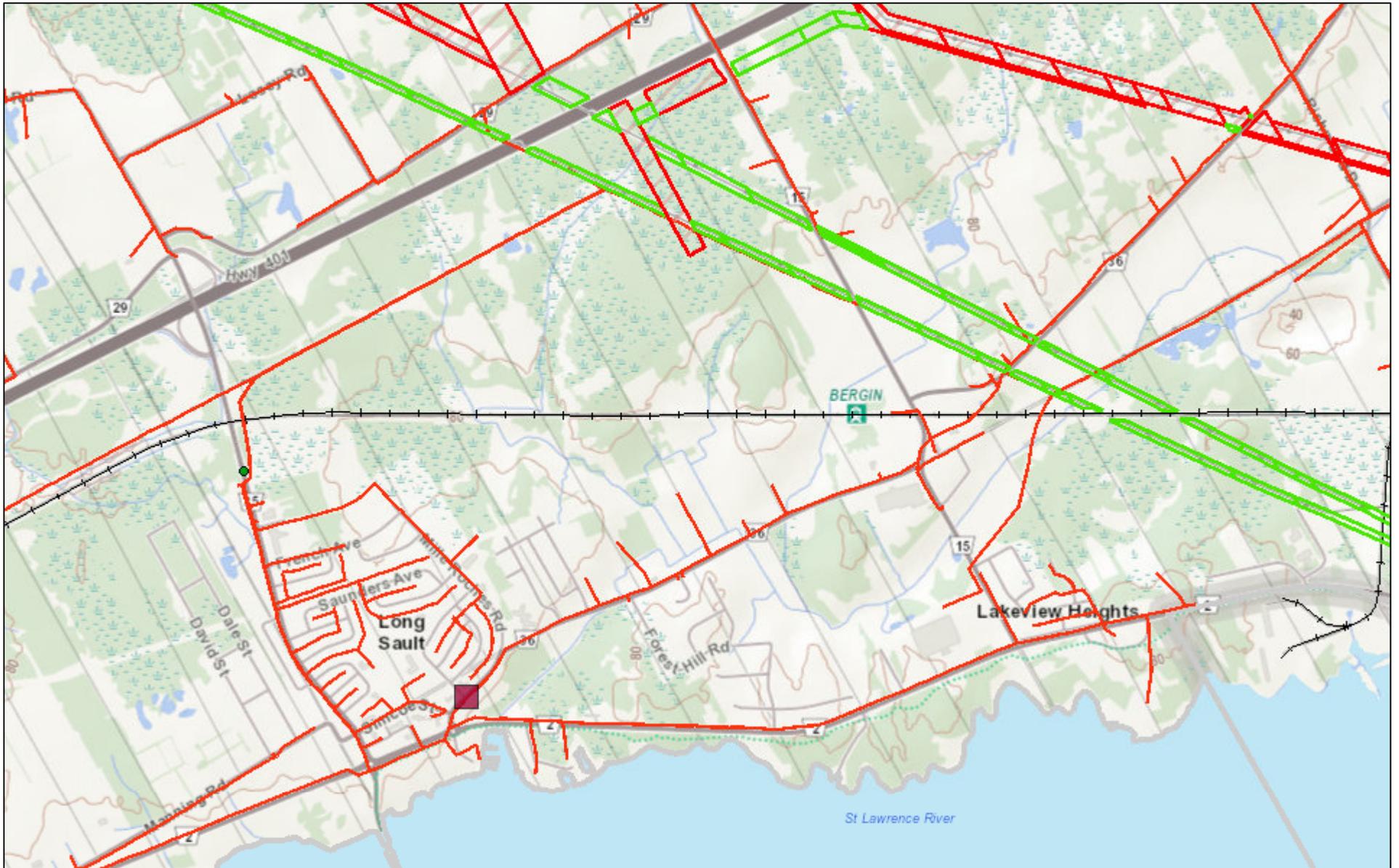
Landscape PDF



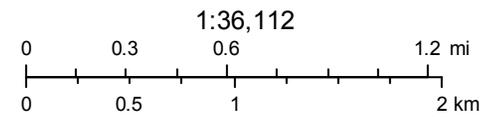
August 17, 2023



Landscape PDF



August 17, 2023





Hydro One Networks Inc.

483 Bay Street
8th Floor South Tower
Toronto, Ontario M5G 2P5

HydroOne.com

November 28, 2023

Re: Long Sault and Ingleside Master Servicing Study

Attention:
Jamie Witherspoon, P.Eng.
Project Manager
WT Infrastructure Solutions Inc

Thank you for sending us notification regarding (Long Sault and Ingleside Master Servicing Study). In our assessment, we have confirmed that Hydro One has existing high voltage Transmission facilities and Distribution facilities within your study area.

At this point in time, we do not have enough information about your project to provide you with meaningful input with respect to the impacts that your project may have on our infrastructure. As such, this response does not constitute any sort of approval for your plans and is being sent to you as a courtesy to inform you that we must be consulted on your project.

Hydro One must be consulted during all stages of your project. Please ensure that all future communications about this and future project(s) are sent to us electronically to

[REDACTED]

Sent on behalf of,

**Secondary Land Use
Asset Optimization
Strategy & Integrated Planning
Hydro One Networks Inc.**

APPENDIX F

NOTICE OF COMPLETION



APPENDIX H

CAPITAL PROJECT PRIORITIZATION



Township of South Stormont Master Servicing Study
Capital Project Prioritization - Municipally Funded Projects

Project No.	Community	Description	Service Type	Time Horizon	Staging Opportunities	Prerequisite Conditions	Prerequisite Projects	Capital Cost (\$2024)	Recommended EA Year	Recommended Design Year	Recommended Construction Year	Inflation Impact	Future Capital Cost	Comments
IRNWL_LS_2025	Long Sault	Annual renewal of 200-300 m of roadway including services for I/I/leakage reduction and renewal.	Integrated	2025-2030	Annual expenditures can be expanded/reduced to meet specific sites.	None	None	\$ 7,500,000.00	n/a	2026	2027	\$2,000,775.61	\$ 9,500,776.00	Recommend one project implemented annually maximizing overlap with other projects to minimize total cost.
IRNWL_IS_2025	Ingleside	Annual renewal of 200-300 m of roadway including services for I/I/leakage reduction and renewal.	Integrated	2025-2030	Annual expenditures can be expanded/reduced to meet specific sites.	None	None	\$ 7,500,000.00	n/a	2026	2027	\$695,452.50	\$ 8,195,453.00	Recommend one project implemented annually maximizing overlap with other projects to minimize total cost.
WSA-C2	Ingleside	Ingleside West End Servicing - Upsize watermain on St. Lawrence from Ault to Farran Point Rd.	Water	2025-2030	Phase 1: Ault to Killarney Phase 2: Killarney to Napier St. Phase 3: Napier to Farran Point Rd.	None	Phase 3 to be coordinated with Ault Dr road reconstruction	\$ 3,500,000.00	n/a	2031	2032	\$1,794,064.04	\$ 5,294,064.00	Phasing to be integrated with infrastructure renewal projects.
SPS-L1	Long Sault	County Rd 36 SPS and Forcemain Upgrades	Sanitary	2025-2030		None	None	\$ 2,800,000.00	2025	2026	2027	\$84,000.00	\$ 2,884,000.00	Will become critical when Phase 2 of LSLV is implemented.
SA-L1	Long Sault	Upsizing sewer on County Rd 36 from 300 mm to 450 mm	Sanitary	2025-2030	To be coordinated with County Rd Reconstruction and sidewalk		SPS-L1 - County Rd 36 SPS and Forcemain Upgrades	\$ 1,500,000.00	n/a	2027	2038	\$45,000.00	\$ 1,545,000.00	Phasing to be integrated with infrastructure renewal projects.
SA-L2	Long Sault	Upsizing sewer south of County Rd 36 from 250 mm to 350 mm	Sanitary	2025-2030	To be coordinated with County Rd Reconstruction and sidewalk		SPS-L1 - County Rd 36 SPS and Forcemain Upgrades	\$ 1,200,000.00	n/a	2027	2038	\$73,080.00	\$ 1,273,080.00	Phasing to be integrated with infrastructure renewal projects.
SPS-LD1	Long Sault	Chase Meadows Development Integrated Pumping Station. Municipal cost only. DC costs to be applied to land developers.	Sanitary	2025-2030		Flow from existing Mille Roches SPS to be directed to the new Chase Meadows SPS; To be coordinated with all developments to ensure that gravity inflow is achieved.	None	\$ 2,700,000.00	2025	2026	2027	\$164,430.00	\$ 2,864,430.00	Project to be integrated with development but may need to be led by the Township if LSLV proceeds in advance of Chase Meadows
SA-I1	Ingleside	Trunk Sewer Rehabilitation	Sanitary	2025-2030		None	None	\$ 250,000.00	n/a	n/a	2025	\$15,225.00	\$ 265,225.00	Phasing to be integrated with infrastructure renewal projects.
ST-LR1	Long Sault	Condition assessment of the 600mm diameter storm sewer along Miller Roches and directed to County Rd 36	Storm	2025-2030		None	None	\$ 150,000.00	n/a	n/a	2025	\$9,135.00	\$ 159,135.00	Phasing to be integrated with infrastructure renewal projects.
ST-I1	Ingleside	Upsizing Storm Sewer along College Street	Storm	2025-2030		None	None	\$ 1,100,000.00	n/a	2025	2026	\$293,447.09	\$ 1,393,447.00	Phasing to be integrated with infrastructure renewal projects.
ST-I2	Ingleside	Upsizing Storm Sewer along Hoople Street to Maxwell Avenue	Storm	2025-2030		None	None	\$ 1,300,000.00	n/a	2025	2026	\$396,205.14	\$ 1,696,205.00	Phasing to be integrated with infrastructure renewal projects.
TSW-L1	Long Sault	French Ave., Long Sault Dr., and County Rd No. 36	Transportation	2025-2030	Phase 1: County Rd to be upgraded with SA-L1 County Rd sanitary sewer upgrades Phase 2: French Ave to be upgraded with WSA-A2 North Community Loop Phase 3: Long Sault Drive	None		\$ 1,000,000.00	n/a	2025	2026	\$304,773.18	\$ 1,304,773.00	Prioritize County to upgraded SA County sanitary upgrades French to upgraded WSA North Loop Long Drive of land south of County Road No. 2
TSW-I1	Ingleside	Ault Dr. and Bank St	Transportation	2025-2030	Phase 1: Bank St.reconstruction to be coordinated with OGS for STWM Phase 2: Aul Dr. reconstruction to be coordinated with WSA-C2 Phase 3 (Watermain upgrades) and to be coordinated with OGS for STWM	None	None	\$ 100,000.00	n/a	2025	2026	\$55,796.74	\$ 155,797.00	Phasing to be integrated with infrastructure renewal projects.
FUS-FireFlow	Long Sault	Watermain to be upsized to meet FUS requirement at the east end of Moulinette Island, Jenkins Rd, Chantine Dr.	Water	2025-2045	To be coordinated with Infrastructure Renewal					2026	2027	\$ -	\$ -	Costs are covered within the integrated infrastructure renewal projects.
SWM-ING	Ingleside	Oil-Grit Separator (OGS) Within the Existing Township Area	Storm	2025-2045	Coordinated with Road Reconstruction	None	Roads Reconstruction	\$ 3,000,000.00	n/a	2025	2045	\$800,310.24	\$ 3,800,310.00	Phasing to be integrated with infrastructure renewal projects.
WSA-B3	Long Sault	New transmission main from Long Sault Parkway entrance to connection to North Community Loop via Moulinette, Simcoe, Open Space Park to McNiff - 1.4 km length	Water	2031-2035	Phase 1: Transmission Main to Future Storage Site. Phase 2: Future Storage Site to McNiff Connection	None	WSA-A2 - North Community Loop	\$ 3,500,000.00	2030	2032	2033	\$324,544.50	\$ 3,824,545.00	Key to storage upgrade, but also for looping of the entire system back to north end of Long Sault.
WSA-E2	Ingleside	Booster to Lactalis via Elevated Stage Augmentation – Upsize watermain to 300mm – St. Lawrence, Farran, College and Dickinson Alignment	Water	2031-2035	Watermain Upgrades on College St to be coordinated with ST-I1 Storm Sewer upgrades on college street	None	None	\$ 6,000,000.00	n/a	2032	2033	\$556,362.00	\$ 6,556,362.00	Phasing to be integrated with infrastructure renewal projects.
ST-MD1	Long Sault	New Municipal Drain Definition for North Outlet to St. Lawrence River	Storm	2031-2035		To be defined in advance of the LSLV Phase 1	None	\$ 100,000.00	n/a	2031	2032	\$9,272.70	\$ 109,273.00	Proceed in advance of completion of Phase I of LSLV

Township of South Stormont Master Servicing Study
Capital Project Prioritization - Municipally Funded Projects

Project No.	Community	Description	Service Type	Time Horizon	Staging Opportunities	Prerequisite Conditions	Prerequisite Projects	Capital Cost (\$2024)	Recommended EA Year	Recommended Design Year	Recommended Construction Year	Inflation Impact	Future Capital Cost	Comments
SWM-L1	Long Sault	New 9,000 m3 Stormwater Management (SWM)	Storm	2031-2035	Correspond with future development	Requires land acquisition	Correspond with future development	\$ 2,500,000.00	2031	2032	2033	\$2,150,736.43	\$ 4,650,736.00	It will include crossing the County Rd 2 to discharge into the St. Lawrence River. Required to meet quality control requirements. Cost does not include land acquisition
AT-1	Both Communities	Multi-use pathway along the south side of County Rd 2 between Long Sault and Ingleside	Transportation	2031-2035		None		\$ 4,400,000.00	n/a	2031	2032	\$1,341,002.01	\$ 5,741,002.00	Phasing to be integrated with infrastructure renewal projects.
IRNWL_LS_2031	Long Sault	Annual renewal of 200-300 m of roadway including services for I/I/leakage reduction and renewal.	Integrated	2031-2035	Annual expenditures can be expanded/reduced to meet specific sites.	None	None	\$ 7,500,000.00	n/a	2032	2033	\$3,844,422.94	\$ 11,344,423.00	Recommend one project implemented annually maximizing overlap with other projects to minimize total cost.
IRNWL_IS_2031	Ingleside	Annual renewal of 200-300 m of roadway including services for I/I/leakage reduction and renewal.	Integrated	2031-2035	Annual expenditures can be expanded/reduced to meet specific sites.	None	None	\$ 7,500,000.00	n/a	2032	2033	\$4,184,755.62	\$ 11,684,756.00	Recommend one project implemented annually maximizing overlap with other projects to minimize total cost.
WT-S5	Long Sault	New Elevated Storage Tank in Long Sault to be located in open space park southeast of existing United Church property - 4500m ³	Water	2036-2045	None	Installed before Water Storage requirements in Long Sault exceed available storage of 1,760 cu.m. - Anticipate 2040	WSA-B3 - New Transmission Main to Water Storage Site and McNiff Ave.	\$ 9,000,000.00	2037	2038	2039	\$4,613,307.52	\$ 13,613,308.00	Important to stage this before the development requires it. Tracking growth will be important. Should be in place 2-5 years before required.
SWM-L2	Long Sault	New 9,000 m3 Stormwater Management (SWM)	Storm	2036-2045	Correspond with future development	None	Correspond with future development	\$ 1,200,000.00	2036	2037	2038	\$365,727.82	\$ 1,565,728.00	Prioritize with development of land south of County Road No. 2
SWM-L3	Long Sault	New 9,000 m3 Stormwater Management (SWM)	Storm	2036-2045	Correspond with future development	None	Correspond with future development	\$ 1,200,000.00	2037	2038	2039	\$365,727.82	\$ 1,565,728.00	Prioritize with development of land south of County Road No. 2
IRNWL_LS_2036	Long Sault	Annual renewal of 200-300 m of roadway including services for I/I/leakage reduction and renewal.	Integrated	2036-2045	Annual expenditures can be expanded/reduced to meet specific sites.	None	None	\$ 15,000,000.00	n/a	2040	2041	\$9,792,714.48	\$ 24,792,714.00	Recommend one project implemented annually maximizing overlap with other projects to minimize total cost.
IRNWL_IS_2036	Ingleside	Annual renewal of 200-300 m of roadway including services for I/I/leakage reduction and renewal.	Integrated	2036-2045	Annual expenditures can be expanded/reduced to meet specific sites.	None	None	\$ 15,000,000.00	n/a	2040	2041	\$9,792,714.48	\$ 24,792,714.00	Recommend one project implemented annually maximizing overlap with other projects to minimize total cost.

Township of South Stormont Master Servicing Study
Capital Project Prioritization - Developer or Development Charges Funded Projects

Project No.	Community	Description	Service Type	Time Horizon	Staging Opportunities	Prerequisite Conditions	Prerequisite Projects	Capital Cost (\$2024)	Recommended EA Year	Recommended Design Year	Recommended Construction Year	Inflation Impact	Future Capital Cost	Comments
DS-3	Long Sault	Long Sault Logistics Village Servicing – East and West Connection - 1930m	Water	2025-2030	Phase 1: East Site Connection - Moulinette to Development. - 730m Phase 2: Avonmore Road to Development - 1200 m	Development Approval	None	\$ 3,000,000.00	2024	2026	2027	\$278,181.00	\$ 3,278,181.00	Project implementation may be by Township or Developer
SA-LD1	Long Sault	New 200 mm – 1.5 km long gravity sewer from LSLV to Chase Meadows SPS.	Sanitary	2025-2030	Correspond with future development	n/a			2026	2027	2028	\$0.00	\$ -	
WSA-A2	Long Sault	North Community Loop - Upsize developer watermain on McNiff Ave. from Moulinette to connection with Jim Brownell Blvd. to 200 mm	Water	2031-2035	Correspond with future development	Development of McNiff Corridor and Chase Meadows Development	None			-1		\$0.00	\$ -	
SPS-LD2	Long Sault	Long Sault Logistics Village Servicing – New Sanitary Pumping Station (east side of the development).	Sanitary	2031-2035	Correspond with future development	n/a	SPS-L1 Couty Rd 36 SPS and FM Upgrades SA-L1 Upsizing sewer on County Rd 36 SA-L2 Upsizing sewer soth of County Rd 36		2031	2032	2033	\$0.00	\$ -	
SWM-LD-1	Long Sault	New 9,000 m3 Stormwater Management in Moulinette Subdivision Development	Storm	2031-2035	Correspond with future development	n/a	Moulinette Subdivision Development		2032	2033	2034	\$0.00	\$ -	
IC-2	Long Sault	Barry St. – Chase Meadows Development Interconnectivity - 725m	Water	2036-2045	Correspond with future development	Development proposal that closes gap between Fenton Farms and Chase Meadows	None	\$ 725,000.00	n/a	2043	2044	\$90,993.89	\$ 815,994.00	Cost is full cost. Actual cost related to MSS is only pipe upsizing from 150mm to 200mm.
WSA-D2	Ingleside	Ingleside Northwest Loop – Upsize development watermain from Ault to Farran Dr. via development lands	Water	2036-2045	Correspond with future development	Secondary linking street between Ault and Farran Drive.	None	\$ 300,000.00	n/a	2039	2040	(\$300,000.00)	\$ -	Cost is full cost. Actual cost related to MSS is only pipe upsizing from 150mm to 200mm.
SA-LD2	Long Sault	New 200 mm – 750 m long gravity sewer from the Moulinette Rd Subdivision development to be connected to the existing trunk sanitary sewer directed to the Long Sault WWTP	Sanitary	2036-2045	Correspond with future development	Needs to be coordinated with McNiff and Chase Meadows SPS	SPS-LD1 - Chase Meadows SPS to be in place		n/a	2036	2037	\$0.00	\$ -	
SWM-ID1	Ingleside	Northeast Combined SWM Facility	Storm	2036-2045		Land Acquisition Required	Correspond with future development		2036	2037	2038	\$0.00	\$ -	
SWM-ID2	Ingleside	Northwest Combined SWM Facility	Storm	2036-2045			Correspond with future development		2037	2038	2039	\$0.00	\$ -	
SWM-ID3	Ingleside	New SWM Facility for Future Growth Development Areas	Storm	2036-2045	Correspond with future development		Correspond with future development		2038	2039	2040	\$0.00	\$ -	