



The Corporation of the Town of Tecumseh

Public Works & Engineering Services

To: Mayor and Members of Council

From: Phil Bartnik, Director Public Works & Engineering Services

Date to Council: January 26, 2023

Report Number: PWES-2023-01

Subject: 2023-2027 Public Works & Engineering Services Five-year
Capital Works Plan

Recommendations

It is recommended:

That the Public Works & Engineering Services (PWES) Capital projects for 2023, as summarized in Attachment 1 to Report PWES-2023-01, 2023-2027 Public Works & Engineering Services Five-Year Capital Works Plan, **be approved**;

And that the 2023 PWES Capital projects be funded through the following reserves and reserve funds as set out in Report PWES-2023-01:

- Road Lifecycle Reserve
- Sidewalk Lifecycle Reserve
- Bridges Lifecycle Reserve
- Watermain Reserve Fund
- Wastewater Sewers Reserve Fund
- Wastewater Facilities Reserve Fund
- Storm Sewer Lifecycle Reserve
- Infrastructure Reserve

And that the Public Works & Engineering Services Capital Works Plan for 2023-2027, as outlined in Attachment 2 to Report PWES-2023-01, **be approved**.

Executive Summary

The Public Works & Engineering Services (PWES) Department is recommending approval of the 2023 PWES Capital Works Projects and funding allocations for 2023 as well as approval of the capital works plan for 2023-2027.

The total number of 2023 projects for PWES is 24, representing \$38.6M in budget allocation, \$21.3M previously allocated and \$17.3M requested allocation for 2023. Most of these projects are on-going and approximately 7 are new projects. The new projects generally relate to water, road, sanitary and bridge repairs/ improvements required to maintain existing infrastructure, support proposed growth-related developments and/or satisfy funding agreements. Notable projects for 2023 consist of the following:

- Detailed design of the Tecumseh Secondary Plan Area Northwest water and wastewater infrastructure;
- Finalization of various studies such as the Shoreline Management Plan, the Stormwater Rates Study, and the Sanitary Sewer Model Update;
- Continuation of detailed design and construction for the Scully, St. Marks and PJ Cecile Storm Pump Stations under the Disaster Mitigation and Adaptation Fund program;
- Construction of the Lesperance Road/VIA Crossing Improvement Project;
- Construction of watermain and sanitary sewer infrastructure related to the County of Essex County Road 42 Improvements Project;

Details and in-progress updates for the 2023-2027 projects are provided within the following sections of this report.

Background

Approval of 2023 PWES Capital Works Projects and the full 2023-2027 capital works plan is sought to maintain a consistently high level of service and strive to improve the Town's infrastructure components in a timely manner. This capital works plan is the first to specifically tie in the capital priorities related to Council's growth-related direction.

Council received presentations on the PWES Capital Priorities 2023-2031 at the [March 29th](#) and [May 5th](#) Special Council Meetings (SCMs).

At the May 5th SCM, Administration was directed to incorporate the recommended hybrid scenario within the 2022 and 2023-2027 PWES Capital Works Plans. This hybrid scenario will address the strategic priorities of growth and economic development as well as Council approved mandates.

The recommended hybrid scenario was structured for proposed capital expenditures at 156% (\$15.10M annually) of the Town's past 10-year average (\$9.67M annually) for Public Works & Engineering Services. It also highlighted the need for extraordinary resources (staffing, financial, consulting services and construction) above the current annual PWES capital program.

In general, many of the projects listed in this report for 2023 are ongoing projects that require works to continue into 2023. Additionally, new projects are recommended to implement Council's growth-related direction, satisfy applicable legislation, and maintain assets. Applicable grants and user contributions are identified, where available (confirmed and applied).

The report is structured so that all projects with a funding allocation request in the 2023 budget year are detailed first in Section A, followed by ongoing projects which have prior funding allocations in Section B. Section C provides highlights of projects proposed for 2024-2027. Section D rounds out the report with municipal drain projects.

Comments

Detailed information is provided for all 2023 projects, both those previously approved and those newly proposed to commence in 2023. Generally, the description for each project includes cost estimates for each of the related infrastructure categories (i.e., roads, water, wastewater, storm, etc.). Project descriptions also outline the main project drivers, grant funding available, sources of internal funding and prior reports to Council.

Attachment 1 details the cost of each project by related infrastructure category and includes previously approved budget allocations, and requested budget allocations for 2023, as well as future and total costs. Attachment 2 provides the entire proposed Capital Works Plan for 2023-2027. Attachment 3 illustrates the geographic location of the 2023 projects, by ward.

Certain projects have been proposed to be phased in over a multi-year period because the project scope is too large or costly to be completed in one construction season or would be too disruptive over a large area and for too long relative to the adjacent properties. Phased projects are typically tendered as separate tender calls.

Finally, all new projects, and infrastructure replacement projects, will be designed to be compliant with the current requirements of the Accessibility for Ontarians with Disabilities Act (AODA).

In the following sections, unless otherwise noted, these acronyms are used: "CR" means County Road; "EA" means Environmental Assessment; "FSR" means Functional Servicing Report; "ERCA" means Essex Region Conservation Authority and "Ha" means hectares.

Section A: Projects Requiring Funding Allocations in 2023

A1. Annual Tar & Chip, Asphaltting and Crack Sealing

Work	Requested for 2023	Location of Work	Extent
Asphaltting	\$650,000	Mayrand Crescent Shawnee Road Lacasse Park – Parking Lot	Full Extent Maisonneuve to Intersection Full Extent Full Extent
Crack Sealing	\$300,000	Various locations	To be determined.

Roads recommended for inclusion in the annual paving program are selected with reference to the Town's Road Needs Study, PWES staff input and recommendations from the Manager of Public Works & Transportation. PWES investigates and categorizes the needs based on the condition of the roads in comparison with other similar traffic volumes.

PWES also recommends that an amount be set aside for crack sealing of Town roads to extend the lifespan of the pavement before more substantial repairs or replacement are required. An amount of \$300,000 is set aside for crack sealing in the annual paving program.

Inspection and project administration will be carried out by PWES staff upon award of the Contract by Council. Quality control of the materials will be carried out by a Consulting Geotechnical Engineer.

Funding is to be provided from Road Lifecycle Reserve in the amount of \$950,000.

➤ Reference Reports:

- [Report PWES-2020-21](#), "Town of Tecumseh Road Needs Study 2019, Study Completion and Adoption", April 28, 2020; Motion RCM-139/20.

A2. Annual Project Contingency

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$0	\$250,000	\$0	\$250,000

Administration recommends carrying an Annual Project Contingency for Public Works & Engineering Services. This allocation is for needs that arise from time to time that cannot be anticipated during the preparation of the PWES Five Year Capital Works Plan. The allocation will be used to address these needs in accordance with the Town Purchasing and Procurement Policies. Use of these funds is communicated through quarterly budget variance reports to Council.

Funding for this Annual Project Contingency is to be provided from the Road Lifecycle Reserve in the amount of \$250,000.

A3. 2023 Sidewalk Repair Projects

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$0	\$400,000	\$0	\$400,000

The 2023 sidewalk program will be based on sidewalk conditions determined through the comprehensive sidewalk inspection conducted annually. Currently this inspection is completed by Public Works staff and, along with input from Council and residents, this information is used to develop the annual program for recommended sidewalk repair and replacements. Should this inspection generate large amounts of sidewalk replacement, a Request for Quotation (RFQ) will be issued.

Trip hazards identified throughout the Town will be addressed to keep the Town in compliance with minimum maintenance standards and as a risk management measure. Currently, a detailed list of sidewalks to be repaired/ replaced has not been generated. The funding requested is for an upset limit to carry out the work. Inspection and project administration will be carried out by PWES Staff upon award of the Contract.

Additional funding is being requested in 2023 for the replacement of the existing brick pavers on Tecumseh Road from the City of Windsor limit to VIA Rail (just west of Lacasse Boulevard).

Funding for the 2023 sidewalk repair project is to be provided from the Sidewalk Lifecycle Reserve in the amount of \$400,000.

A4. Lesperance Road Multi-Use Trail – CR22 to CR42

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$137,500	\$2,661,250	\$0	\$2,798,750
Grant (confirmed): ICIP, Public Transit Stream 2019 Intake - \$466,707			

In May 2019, Council approved the recommendation of Report No. PBS-2019-16 that endorsed this Multi-Purpose Pathway as a candidate project for funding through the Investing in Canada Infrastructure Program (2019 Intake of the Public Transit Funding Stream). Following this meeting, an application for funding was submitted which was ultimately approved by the funding agency. The maximum amount of funding available for this project is \$466,707 which will offset Town funds for the total project costs.

Dillon Consulting Ltd. was retained and is proceeding with the detailed design which is expected to be completed in 2023. It is planned to tender the project in Fall 2023 for construction to proceed in 2024.

The 2023 funding request for this project is to be provided from the Infrastructure Reserve in the amount of \$2,661,250.

➤ **Reference Reports:**

- [Report PBS-2019-16](#), “Investing in Canada Infrastructure Program, 2019 Intake of the Public Transit Funding Stream, Lesperance Road Multi-Purpose Pathway – Cty Rd 22 to Cty Rd 42 Final Recommendation”, May 28, 2019; Motion RCM-150/19.
- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services, 2022 Capital Works Projects”, December 8, 2020; Motion RCM-375/20.

A5. Snake Lane Road Culverts (with Spans <3.0m) – Culverts No. 42, 53 & 54

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$192,500	\$1,941,940	\$0	\$2,134,440

The 2016 Culvert Needs Study (Structures with Spans < 3.0m) identified the following Culverts for rehabilitation or replacement within a 1 to 5-year time frame:

- Culvert No. 42 – South Talbot Road Drain at Snake Lane Road (Est. cost \$650,440)
- Culvert No. 53 – 9th Line Drain at Snake Lane Road (Est. cost \$742,000)
- Culvert No. 54 – Webster Drain at Snake Lane Road (Est. cost \$742,000)

In December 2020, Council approved the recommendations of Report PWES-2020-33 that authorized Administration to proceed with the 2021 capital works projects, which included moving forward with the design for Culverts No. 42, 53 & 54. Dillon Consulting Ltd. was retained and detailed design for these Culverts commenced in 2021 and it is anticipated the design will be completed in early 2023. Administration is recommending construction commence in 2023.

Additional funding for this project is to be provided from the Bridges Lifecycle Reserve in the amount of \$1,941,940.

➤ **Reference Reports:**

- [Report PWES No. 39/16](#), “2016 Culvert Needs Study (Structures with Spans < 3.0m)”, November 8, 2016; Motion RCM-384/16.
- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20.
- [Report PWES-2022-03](#) “Approval of 2022 Public Works & Engineering Services, 2022 Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

A6. County Road 46 Municipal Class Environmental Assessment

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$0	\$70,000	\$0	\$70,000

The County of Essex is looking to proceed with a Municipal Class Environmental Assessment (Class EA) for County Road 46 from the City of Windsor limits to County Road 19 commencing as early as 2023. This Class EA will analyze all modes of transportation within this corridor and recommend improvements to the infrastructure based on the interim and long-term needs.

Town Administration is recommending to partner with the County of Essex on the Class EA, with an expanded scope to include the 8th & 9th Concession Roads (from County Road 46 to City of Windsor limits). This will ensure the integration between the County Road 46 Class EA and the Sandwich South Master Servicing Plan currently being undertaken by the City of Windsor.

Funding for this project is to be provided from the following:

- Road Lifecycle Reserve in the amount of \$70,000

A7. 12th Concession Watermain Replacement

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$247,900	\$32,100	\$0	\$280,000

In December 2020, Council approved the recommendations of Report PWES-2020-33 that authorized Administration to proceed with various watermain replacement projects That included:

- 12th Concession Road Watermain (two sections South of CR42)
 - Once section of watermain will be included within the County's CR42 & CR43 Improvement Project phase 1, which is slated for construction in 2023.
 - One section of watermain will be tendered as a stand-alone project, with construction to commence in 2023.
- CR43 Watermain (CR42 northerly)
 - To be included in the County's CR42 & CR 43 Improvement Project Phase 2, slated for construction in 2024.
- Tecumseh Road Watermain (Brighton Road to Pike Creek)
 - Construction completed in 2022.

Dillon Consulting Ltd. was retained for engineering services for all the above watermain replacement projects. The above project budget has been revised to include the one watermain section in 12th Concession Road located approximately 450m south of CR42.

Additional funding for this project is to be provided from the following:

- Watermain Reserve Fund in the amount of \$32,100

➤ **Reference Reports:**

- [Report PWES-2020-33](#), "Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects", December 8, 2020; Motion RCM-375/20.
- [Report PWES-2022-03](#), "Approval of 2022 Public Works & Engineering Services Capital Works Projects", January 25, 2022; Motion RCM-23/22.

A8. County Road 19 Improvements – County Road 22 to Jamsyl Drive

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$758,000	\$264,000	\$0	\$1,022,000

In 2017 the County implemented an interim solution at the CR22/CR19 intersection, and made improvements to the north, east and west legs to provide a greater level of service until the ultimate solution could be implemented. At this time, the south leg

improvements of the intersection were not completed. The County of Essex is now proceeding with the design and construction of the south leg, which involves the interim widening of CR19 south of CR22 to Jamsyl Drive.

In March 2020, Council approved the recommendations of Report PWES-2020-13 that authorized Administration to add the CR19 Trunk Watermain Installation project to the 2020 Capital Works projects. Project expenditures of \$758,000 were also funded through the Watermain Reserve Fund. The installation of the 400mm dia. trunk watermain on CR19 was to be incorporated as part of the County's Improvement Project to CR19. Detailed design has been ongoing since 2020, with construction anticipated to commence in late 2023/early 2024.

The watermain budgetary estimate has been updated to reflect the current market conditions from recent tenders.

Additional funding for this project is to be provided from the following:

- Watermain Reserve Fund in the amount of \$264,000

➤ **Reference Reports:**

- [Report PWES-2020-15](#), "2018 Water and Wastewater Master Plan Update, Study Completion and Final Adoption", March 10, 2020; Motion RCM-87/20.
- [Report PWES-2021-13](#), "Amendment to the 2021 PWES Capital Works Projects, County Road 19 Trunk Watermain Installation (from County Road 22 to south of Jamsyl Drive)", March 9, 2021; Motion RCM-75/21.

A9. County Road 46, Webster and Laval Sanitary Sewer Extension

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$445,250	\$6,303,550	\$0	\$6,748,000
Estimated Landowner Recoveries (Sanitary Sewers): \$1,767,000			

In December 2018, Council approved the recommendations of Report PWES-2018-08 that authorized Administration to complete the engineering design for the CR46 Webster and Laval Sanitary Sewer Extension. In accordance with this report, Dillon Consulting Ltd. was retained to complete the engineering design.

The CR46 Webster and Laval Sanitary Sewer Extension is a continuation of the sanitary sewer servicing within the 8th Concession Road sanitary service area. The project includes the extension of a sanitary sewer along CR46 from the 8th Concession Road to Webster Drive, as well as on Webster Drive (entire length), and the extension of a sanitary sewer through an easement just south of Highway 401. This project will

incorporate the strategic priorities of growth and economic development as outlined within the May 5, 2022 SCM Presentation.

Detailed design, consultation with utility companies and preparation of final easement documentation continued in 2022. In addition, geotechnical investigations related to new regulations from the Ontario Ministry of Environment, Conservation and Parks for excess soil generated from construction projects commenced in late 2021. Detailed design will be completed in early 2023 with the preparation of tender documents, completion of the excess soil investigations and obtaining approvals. It is planned to tender the project in Fall of 2023 for construction to proceed in 2024.

The project cost of \$6,748,800 includes \$2,203,500 for road reconstruction, \$734,400 for storm sewers, \$2,101,300 sanitary sewers and \$1,709,600 for watermains.

Estimated recoveries from landowners for the sanitary sewers would be approximately \$1,767,000 and will be refined once the By-Law for the 8th Concession Road sanitary service area is in place.

Additional funding for this project is to be provided from the following:

- Road Lifecycle Reserve in the amount of \$2,082,750
- Wastewater Sewers Reserve Fund in the amount of \$1,934,600
- Storm Sewer Lifecycle Reserve in the amount of \$657,000
- Watermain Reserve Fund in the amount of \$1,629,20

➤ **Reference Reports:**

- [Report PWES-2018-08](#), “2019-2023 Public Works & Environmental Services Five Year Capital Works Plan”, December 11, 2018; Motion RCM-361/18.
- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20.
- [Report PWES-2022-03](#), “Approval of 2022 Public Works & Engineering Services Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

A10. Del Duca Drive Sanitary Sewer Extension

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$524,350	\$4,880,350	\$0	\$5,404,700
Estimated Landowner Recoveries (Sanitary Sewers): \$1,050,000			

In December 2018, Council approved the recommendations of Report PWES-2018-08 that authorized Administration to complete the engineering design for the Del Duca Drive Sanitary Sewer Extension. In accordance with this report, Stantec Consulting Ltd. was retained to complete the detailed design.

The Del Duca Drive Sanitary Sewer Extension is a continuation of the sanitary sewer servicing within the 8th Concession Road sanitary service area. The project includes the extension of a sanitary sewer along Del Duca Drive and will incorporate the strategic priorities of growth and economic development as outlined within the May 5, 2022 SCM Presentation.

The Oldcastle Stormwater Master Plan was being completed concurrently with the design for the Del Duca Sanitary Sewer Extension. Through the Oldcastle Stormwater Master Plan it was determined that a future major storm event flow route is required from the Del Duca Drive cul-de-sac southerly to the Hurley Relief Drain. Coordination has occurred between these two projects to ensure that the Del Duca design provides for the anticipated recommendations of the Oldcastle Stormwater Master Plan. Based on this coordination, it was determined that a previously identified sanitary easement needs to be modified to accommodate a future storm sewer. Continued discussions will take place with property owners and it is anticipated the necessary easements will be obtained by mid-2023.

It is anticipated that completion of the detailed design, easement acquisition, geotechnical investigations related to new regulations from the Ontario Ministry of Environment, Conservation and Parks for excess soil generated from construction projects, utility relocations, preparation of tender documents and obtaining required approvals will occur in early 2023. It is planned to tender the project in Fall 2023 for construction to proceed in 2024.

The project cost of \$5,404,700 includes \$2,153,900 for road reconstruction, \$1,898,200 for storm sewers, \$1,316,700 for sanitary sewers and \$35,900 for watermains. Estimated recoveries from landowners for the sanitary sewers would be approximately \$1,050,000 and will be refined once the By-Law for the 8th Concession Road sanitary service area is completed.

Additional funding for this project is to be provided from the following:

- Road Lifecycle Reserve in the amount of \$2,036,450
- Wastewater Sewers Reserve Fund in the amount of \$1,108,200
- Storm Sewer Lifecycle Reserves in the amount of \$1,708,350
- Watermain Reserve Fund in the amount of \$27,350

➤ **Reference Reports:**

- [Report PWES-2018-08](#), "2019-2023 Public Works & Environmental Services Five Year Capital Works Plan", December 11, 2018; Motion RCM-361/18.

- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20.
- [Report PWES-2022-03](#) “Approval of 2022 Public Works & Engineering Services Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

A11. 2023 Sanitary Pump Station Improvements

Previously Approved	Requested for 2022	Future Costs	Total Project Costs
\$0	\$130,000	\$0	\$130,000

The Town owns and operates four (4) sanitary pump stations. The 2016 Pump & Metering Station Condition Assessment identified ‘Immediate Repairs’ and ‘10 Year Repairs’ for the sanitary pump stations. In addition, The Town contracts the Ontario Clean Water Agency (OCWA) as the Overall Responsible Operator for the Town’s pump stations. Accordingly, OCWA also provides recommendation to the Town for the on-going maintenance needs of our pump stations.

Administration recommends the following sanitary pump station works be undertaken in 2023, based on the recommendations contained in the 2016 Pump & Metering Station Condition Assessment and the recommendations provided by OCWA:

- Sylvestre Drive Sanitary Pump Station (Estimated Cost \$30,000)
 - Purchase of a spare pump (emergency rentals are not available anymore)
- Lakewood Sanitary Pump Station (Estimated Cost \$70,000)
 - Purchase of a spare pump (emergency rentals are not available anymore)
- Gauthier Sanitary Pump Station (Estimated Cost \$30,000)
 - Screw inspection
 - Upper and lower bearing 30HP pump

Funding for this project is to be provided from the Wastewater Facilities Reserve Fund in the amount of \$130,000.

➤ Reference Reports:

- [Report PWES No. 51/16](#), “2016 Pump & Metering Station Condition Assessment”, December 13, 2016; Motion RCM-440/16.

A12. Ministry of Environment, Conservation and Parks – Consolidated Linear Infrastructure

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$0	\$50,000	\$0	\$50,000

The Province has adopted a Consolidated Linear Infrastructure Permissions Approach (CLI) to replace the current Ontario Environmental Compliance Approvals (ECA) framework for low risk projects related to municipal sanitary collection and stormwater management.

The purpose of the CLI is to consolidate certain municipal sewage works approvals into the following: a single CLI ECA for all of a municipality's sanitary collection works and a single CLI ECA for all of a municipality's stormwater management works (collectively, CLI ECAs).

The Province's stated objective with transitioning to CLI and consolidating approvals under the CLI ECAs is to reduce administrative regulatory burden, provide clear and consistent requirements across the province and improve environmental protection. The CLI will replace the current 'one-for-one' or 'pipe-by-pipe' environmental compliance approval system with a consolidated list of approved municipal sewage works, in one approval document for each type of municipal sewage system, that will cover all infrastructure, as applicable, within i) the Town's sewage collection system and ii) the Town's stormwater management system.

In addition, the ECAs will outline the Town's requirements for establishing Operational & Maintenance (O&M) Manuals for all of the CLI infrastructure, criteria for an erosion control plan (ECP) and monitoring plans, as well as reporting timelines for all inspection, operational and maintenance activities.

In reviewing the draft CLI ECA for the Town, Administration is recommending allocating a \$50,000 allowance to retain consulting services as needed to assist in the creation of the required O&M Manual, Standard Operating Procedures, ECPs, Monitoring Plans and reporting documentation.

Funding for this project is to be provided from the following:

- Storm Sewer Lifecycle Reserve in the amount of \$25,000
- Wastewater Facilities Reserve Fund in the amount of \$25,000

A13. Scully & St. Mark's Storm Pump Station & Riverside Drive Storm Sewers

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$17,050,000	\$6,285,000	\$0	\$23,335,000
Grant (confirmed): DMAF 2020 Intake - \$6,820,000			

This project consists of decommissioning the St. Mark's storm pump station and redirecting those flows into an upgraded and expanded Scully storm pump station to provide a greater level of service. The consolidated Scully St. Mark's pump station is to have increased pump capacity to accommodate the additional flows from the current St. Mark's service area, as well as other adjacent areas where interconnections and overland flows have been identified as part of the Town's Storm Drainage Master Plan (2019). This project also includes trunk storm sewer improvements along Riverside Drive to add resiliency to the system and improve the level of service to address area-wide issues of surface flooding.

In October 2020 the Town was advised that our funding application to the federal Disaster Mitigation and Adaptation Fund (DMAF) was approved for funding totalling \$10.7M for the following projects:

- Scully & St. Mark's Storm Pump Station & Riverside Drive Trunk Storm Sewers project.
- P.J. Cecile Storm Pump Station Improvements project.

Under DMAF, all works must be completed by March 31, 2028. The Scully & St. Mark's Storm Pump Station & Riverside Drive Trunk Storm Sewer project is a major infrastructure improvement project that will enhance the level of service and provide approximately 6-times more capacity than the existing pump station to accommodate the growing frequency of heavy rainfall events.

The DMAF projects were originally valued at \$26.7M with the Town receiving \$10.7M in DMAF grant funding. Phase 1, the Scully-St. Mark's Pump Stations and Riverside Storm Trunk Sewer was estimated at \$17.05M and Phase 2 PJ Cecile Storm Pump Station was estimated at \$9.70M.

The project cost estimates have been updated to be more in line with recent market conditions and inflation. The Scully-St. Marks Pump Stations and Riverside Drive estimate was increased to \$23,335,000 from \$17.05M, which is broken down as \$20,600,000 for storm sewers and pumping stations, \$635,000 for sanitary sewers and \$2,100,000 for road reconstruction. Discussions have been ongoing with DMAF staff on whether the grant funding allocation of \$10.7M will be increased, and the response to date has been to wait to see how the tendering costs are submitted.

Throughout 2022 the Town's Consultant, Dillon Consulting Ltd., has continued with the engineering designs for the pump station and sewer improvements, which are nearing the 100% completion stage.

In August 2022, Wood Canada Limited was retained to perform ancillary consulting services, which included:

- Excess soils regulations and geotechnical services
- Shoreline protection wall design
- Stage 1 & 2 Archeological Assessment and Indigenous Consultation

It is planned to complete all design components of this project by Q1 2023 with tendering anticipated in Q1 2023.

Additional funding for this project is to be provided from the following:

- Storm Sewer Lifecycle Reserve in the amount of \$5,493,000
- Wastewater Sewers Reserve Fund in the amount of \$220,000
- Road Lifecycle Reserve in the amount of \$572,000

➤ **Reference Reports:**

- [Report PWES-2018-17](#), "Flood Mitigation Strategy", June 26, 2018; Motion RCM-194/18.
- [Report PWES-2018-08](#), "2019-2023 Public Works & Environmental Services Five Year Capital Works Plan", December 11, 2018; Motion RCM-361/18.
- [Report PWES-2019-02](#), "Disaster Mitigation and Adaptation Fund, Special Spring 2019 Flooding Intake, Expression of Interest and Full Application", July 23, 2019; Motion RCM-229/19.
- [Report PWES-2019-50](#), "Storm Drainage Master Plan, Study Completion and Final Adoption", December 10, 2019; Motion RCM-402/19.
- [Report PWES-2020-33](#), "Pre-Approval of 2021 Public Works & Environmental Services, 2022 Capital Works Projects", December 8, 2020; Motion RCM-375/20.
- [Report PWES-2021-03](#), "Disaster Mitigation and Adaptation Fund, Agreement for Climate Change and Flood Resiliency Project, Storm Infrastructure Improvements", February 9, 2021; Motion RCM-40/21.
- [Report PWES-2022-03](#), "Approval of 2022 Public Works & Engineering Services, 2022 Capital Works Projects", January 25, 2022; Motion RCM-23/22.

- [Report PWES-2022-34](#) “Disaster Mitigation and Adaptation Fund 2020 Intake Ancillary Consulting Services for the Scully and St. Marks Pump Stations – Tender Award”, August 09, 2022; Motion RCM-250/22

A14. P.J. Cecile (Kensington) Storm Pump Station

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$2,000,000	\$9,639,800	\$0	\$11,639,800
Grant (confirmed): DMAF 2020 Intake - \$3,880,000			

This project consists of the construction of a new pump station over the footprint of the existing structure with increased capacity and larger inlet and outlet piping.

As indicated in A13 above, the Town received federal funding for this project through the DMAF program. As noted, under the DMAF, all works must be completed by March 31, 2028.

The P.J. Cecile (Kensington) Storm Pump Station is a major infrastructure improvement project that will enhance the level of service and provide approximately 8-times more capacity than the existing pump station to accommodate the growing frequency of heavy rainfall events.

The DMAF projects were originally valued at \$26.7M with the Town receiving \$10.7M in DMAF grant funding. Phase 1, the Scully-St. Mark’s Pump Stations and Riverside Storm Trunk Sewer was estimated at \$17.05M and Phase 2 PJ Cecile Storm Pump Station was estimated at \$9.70M.

The project cost estimates have been updated to be more in line with recent market conditions and inflation. The Scully-St. Marks Pump Stations and Riverside Drive estimate was increased to \$11,639,800 from \$9.70M, which is broken down as \$11,311,000 for storm sewers and pump stations and \$328,800 for road reconstruction. Discussions have been ongoing with DMAF staff on whether the grant funding allocation of \$10.7M will be increased, and the response to date has been to wait to see how the tendering costs are submitted.

A Request for Proposals for Engineering Consulting Services for the detailed design, contract administration and Inspection has been issued and Administration will be bringing forward a separate report for awarding those services.

Additional funding is to be provided from the following:

- Storm Sewer Lifecycle Reserve in the amount of \$9,367,500
- Road Lifecycle Reserve in the amount of \$272,300

➤ **Reference Reports:**

- [Report PWES-2018-17](#), “Flood Mitigation Strategy”, June 26, 2018; Motion RCM-194/18.
- [Report PWES-2018-08](#), “2019-2023 Public Works & Environmental Services Five Year Capital Works Plan”, December 11, 2018; Motion RCM-361/18.
- [Report PWES-2019-02](#), “Disaster Mitigation and Adaptation Fund, Special Spring 2019 Flooding Intake, Expression of Interest and Full Application”, July 23, 2019; Motion RCM-229/19.
- [Report PWES-2019-50](#), “Storm Drainage Master Plan, Study Completion and Final Adoption”, December 10, 2019; Motion RCM-402/19.
- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20.
- [Report PWES-2021-03](#), “Disaster Mitigation and Adaptation Fund, Agreement for Climate Change and Flood Resiliency Project, Storm Infrastructure Improvements”, February 9, 2021; Motion RCM-40/21.
- [Report PWES-2022-03](#) “Approval of 2022 Public Works & Engineering Services, 2022 Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

A15. Public Works & Transportation North Building Improvements

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$0	\$66,000	\$534,000	\$600,000

The original Public Works & Transportation north building is an older structure that has had two major expansions to it over the years. The first being an expansion to the east for a forebay and storage pre-1987, and the second being an expansion to the west that included four (4) forebays in 2001/2002. There have been no significant improvements to the kitchen, washroom, change room and employees work space in the last 20 years.

Improvements to the Public Works & Transportation north building are required to meet obligations under the Occupational Health & Safety Act, which include the recommendations of:

- A second washroom facility that will be accessible for staff and outside contractors (i.e. Essex Power) without having to walk through the employee change room.
- A new mud room and laundry facility.

- A relocated storage room.
- An improved change room to include a new staff washroom w/ shower and private change areas.
- An improved kitchen, lunch area, work stations with computers and printer, a file area for drawings, first aid and eye wash station and a whiteboard/projector area for staff training and educational webinars.
- New HVAC system

The project budget is estimated to be \$600,000, with \$52,000 for design, \$428,000 for construction and \$120,000 for Contingency.

It is anticipated that design would commence in 2023 and the recommended improvements would take place in 2024.

Funding for the initial phase of this project is to be provided from:

- Road Lifecycle Reserve in the amount of \$22,000
- Wastewater Sewers Reserve Fund in the amount of \$22,000
- Storm Sewer Lifecycle Reserve in the amount of \$22,000

A16. Multi-Use Recreational Trails: Lesperance Road (Riverside Drive to First Street) & Little River Boulevard (Lesperance to City Limits) & Lesperance Road Rehabilitation (McNorton Street to First Street)

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$0	\$4,700,000	\$0	\$4,700,000
Grant (applied): Active Transportation Fund - \$2,616,000			

At the March 8, 2022 Regular Meeting of Council, Council authorized Administration, under report PWES-2022-11, to submit an application for funding under the Active Transportation Fund for a future commitment to install a multi-use recreational trail on the west side of Lesperance Road (from Riverside Drive to First Street) and on the north side of Little River Boulevard (from Lesperance Road to Gauthier Street).

The Active Transportation Fund (ATF) is a national, merit-based contribution program intended to support projects that improve active transportation infrastructure across Canada. The Fund will make available \$400 million over five years to help build new and expanded networks of pathways, bike lanes, trails and pedestrian bridges, as well as support Active Transportation planning and stakeholder engagement activities. Projects under the Capital Stream of the ATF will be funded up to 60% with no maximum amount payable.

A formal announcement for funding has not yet been made, however, Administration has included this project within the 2023-2027 Five Year Capital Works Plan in the event the Town is successful in its application.

Should the Multi-Use Recreational Trails project proceed, Administration also recommends that Lesperance Road from McNorton Street to First Street be rehabilitated (milling and paving, catch basin and manhole repairs and new pavement markings for the continuation of the on-street bike lanes).

If the application to the Active Transportation Fund is successful, Administration will report back to Council for approval to enter into an agreement with the Government of Canada. Works would not commence on this project until confirmation that the grant is in place.

The estimated project cost is \$4,700,000, with \$4,360,000 for the Multi-Use Recreational Trails and \$340,000 for the rehabilitation of Lesperance Road from McNorton Street to First Street. The ATF grant would cover up to 60% of the \$4,360,000, totaling \$2,616,000.

Funding is to be provided from the following:

- Infrastructure Reserve in the amount of \$4,360,000
- Road Lifecycle Reserve in the amount of \$340,000

➤ **Reference Reports:**

- [Report PWES-2022-11](#), "Active Transportation Fund, Multi-Use Recreational Trails: Lesperance Road & Little River Boulevard", March 8, 2022; Motion RCM-84/22.

Section B: Carry Over Projects from 2022 Not Requiring Additional Funding in 2023

B1. Lesperance/VIA Rail Improvements

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$4,271,200	\$0	\$0	\$4,271,200
Grant (confirmed): Rail Safety Improvement Program - \$1,232,400			

On March 19, 2021, the Town received confirmation that the Tecumseh Road VIA Crossing Improvements project had been selected for 2021-2022 Rail Safety Improvement Funding. Subsequently, Dillon Consulting Ltd. was retained to undertake

the detailed design for the project due to their past involvement in the crossing investigations and on-going work with the related Tecumseh CIP/Streetscape project.

On June 28, 2022, the members of Council rejected the single tender received due to it being significantly over budget. The project was re-tendered in November 2022 and subsequently the second tender was awarded to Rudak Excavating Inc. at the December 13, 2022 meeting of Council. It is anticipated that construction will commence in the Spring 2023.

The Town was successful in receiving funding through the Rail Safety Improvement Program (RSIP) for 80% of eligible costs up to a maximum of \$1,027,000. Subsequent discussions with RSIP Staff have resulted in additional funding (up to 20% of the original grant) being available, which would total \$205,400.

Additional details and project scope can be found within the reference reports listed below.

➤ **Reference Reports:**

- [Report PWES-2019-49](#), “2020-2024 Public Works & Environmental Services Five Year Capital Works Plan” December 10, 2019; Motion RCM-401/19
- [Report PWES-2020-24](#), “Rail Safety Improvement Program – Infrastructure, Technology and Research Funding (RSIP-ITR) 2021/2022 Intake VIA Crossing at Lesperance Road (Chatham Mile 99.31)”, July 28, 2020; Motion RCM-236/20
- [Report PWES-2021-32](#), “Rail Safety Improvement Program, 2021/2022 Intake Agreement for Rail Grade Crossing Improvements VIA Rail at Lesperance Road (Chatham Mile 99.31)”, July 13, 2021; Motion RCM-229/21
- [Report PWES-2022-32](#), “Lesperance Road VIA Rail Crossing Improvements – Tender Results”, June 28 2022; Motion RCM-198/22
- [Report PWES-2022-44](#), “Lesperance Road VIA Rail Crossing Improvements – Tender Award and VIA Rail Agreements”, December 13, 2022; Motion RCM-345/22)

B2. County Road 42 and County Road 43 Improvements – Phase 1

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$6,476,000	\$0	\$0	\$6,476,000

Improvements to CR42 (City of Windsor to CR19) and CR43 (south of CR42 to CP Rail) were identified as part of the County's 25-year capacity program. Over the last few years, work on the project has progressed as the County retained an engineering consultant for the detailed design, acquired the required property and advanced utility relocations along CR42.

Based on these proposed road improvements, Tecumseh Administration identified improvements to existing or new municipal services (watermains and sanitary sewers) that were required. In December 2018, Council approved the recommendations of Report PWES-2018-08 that included the undertaking of advanced engineering design for these municipal services as part of the County's improvement project.

At the January 25, 2022 Regular Meeting of Council the members approved the recommendations (Motion: RCM-23/22) of Report PWES-2022-03, titled 'Approval of 2022 Public Works & Engineering Services Capital Works Projects' that authorized Administration to proceed with the identified 2022 capital works projects including the construction of water mains and sanitary sewers as part of the CR42 and CR43 improvement project.

At the September 7, 2022 Regular Meeting of County Council, the members adopted the County Administration Report on the CR42 and CR43 Phase 1 project. The report highlighted the County's procurement efforts that included and advertised tender and limited tender. The County retained a contractor and construction commenced in Q4 2022. Phase 1 works consists of the installation of underground infrastructure on CR42 from CR19 to CR43. Construction of Phase 1 is anticipated to be completed in December 2023.

➤ **Reference Reports:**

- [Report PWES-2018-08](#), "2019-2023 Public Works & Environmental Services, Five Year Capital Works Plan", December 11, 2018; Motion RCM-361/18.
- [Report PWES-2019-49](#), "2020-2024 Public Works & Environmental Services Five Year Capital Works Plan", December 10, 2019; Motion RCM-401/19.
- [Report PWES-2020-33](#), "Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects", December 8, 2020; Motion RCM-375/20.
- [Report CAO-2020-06](#), "Boundary Adjustment Agreement and the County Road 43 Class Environmental Assessment Study", August 11, 2020; Motion RCM-245/20.
- [Report PWES-2022-03](#), "Approval of 2022 Public Works & Engineering Services, 2022 Capital Works Projects", January 25, 2022; Motion RCM-23/22.

B3. North Tecumseh Water Distribution Model

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$70,000	\$0	\$0	\$70,000

In March 2020, Council approved the recommendations of Report PWES-2020-15 which adopted the Tecumseh 2018 Water and Wastewater Master Plan Update.

The Town of Tecumseh receives its potable water supply from the ENWIN Utilities Water System. In 2019, the ENWIN Utilities Water System Master Plan was completed which incorporated information from the Tecumseh 2018 Water and Wastewater Master Plan Update.

As a result of the Master Plan recommendations, discussions have occurred between Town Administration and ENWIN to optimize the water system needs. ENWIN currently has a functional water model which accurately depicts the City of Windsor and Town of LaSalle's water distribution systems. ENWIN's model includes a high-level layout of the Tecumseh water distribution system, however, to optimize the system requirements a more detailed model of the Tecumseh water system is required.

In 2021, ENWIN, through coordination with the Town, expanded their water model to include a detailed assessment of the Town's South water distribution system to more accurately represent the system and use the model to determine the best location for an elevated water storage facility within the ENWIN-Tecumseh system. The detailed water model also allows Tecumseh to assess existing water flows and pressures within the south Tecumseh system and develop strategies to improve water supply in identified areas of concern.

A similar water model update is to be completed on the Town's North water distribution system. This model will provide insight into the existing characteristics of the water distribution system, assist with the design of future watermain replacement projects and assess available capacity to accommodate infill and redevelopment within the Town.

Funding for this project will be from the Watermain Reserve Fund in the amount of \$70,000.

➤ Reference Reports:

- [Report PWES-2020-15](#), "2018 Water and Wastewater Master Plan Update, Study Completion and Final Adoption", March 10, 2020; Motion RCM-87/20.

- [Report PWES-2022-03](#), “Approval of 2022 Public Works & Engineering Services, 2022 Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

B4. Sanitary Sewer Model Update and Flow Monitoring

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$345,000	\$0	\$0	\$345,000

In June 2018, Council approved the recommendation of Report PWES-2018-17 “Flood Mitigation Strategy” that the report be received. Continued flow monitoring and sanitary sewer modeling were recommended flood mitigation strategies in the report. The report further identified that updating the sanitary sewer model would be incorporated within the 5-year PWES Capital Works Plan.

In December 2018, Council approved the recommendations of Report PWES-2018-08 that authorized Administration to complete a Sanitary Sewer Model Update and Flow Monitoring project. In accordance with this report, Dillon Consulting Ltd. was retained to undertake the modelling project.

A significant component of the model development is model calibration/verification. In order to calibrate/verify a model, flow monitoring data is used to confirm that the flows generated by the model are representative of actual flows measured in the sewers during recorded events. In order to assess rain derived inflow and infiltration, a significant rainfall event is required. During the scheduled flow monitoring period, only minor rain events were received. Accordingly, the flow monitoring was extended into Fall 2021 which captured the significant rainfall event of July 16, 2021.

The final report for this project is expected in early 2023. The updated model will provide insight into the existing flow characteristics of the sanitary sewer system and on available sanitary sewer capacity to accommodate infill development within the Town.

Funding for this project was previously provided from the Wastewater Sewers Reserve Fund in the amount of \$345,000.

➤ **Reference Reports:**

- [Report PWES-2018-17](#), “Flood Mitigation Strategy”, June 26, 2018; Motion RCM-194/18.
- [Report PWES-2018-08](#), “2019-2023 Public Works & Environmental Services Five Year Capital Works Plan”, December 11, 2018; Motion RCM-361/18.

- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20.
- [Report PWES-2022-03](#) “Approval of 2022 Public Works & Engineering Services, 2022 Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

B5. 8th Concession Sanitary Sewer By-Law

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$45,000	\$0	\$0	\$45,000

The Oldcastle Hamlet is approximately 815 Ha of land which has largely developed for industrial purposes. Many existing developments within the hamlet had historically been serviced by private on-site sewage disposal (septic) systems.

Several studies, however, identified significant pollution problems and potential health risks attributed to the discharge of raw wastewater from failing septic systems into roadside open ditches. As a result of these studies, the Town commenced the phased introduction of sanitary sewers into the Oldcastle Hamlet in 2010. The Oldcastle Hamlet is serviced by two trunk sanitary sewers: North Talbot Road Trunk Sanitary Sewer and 8th Concession Road Trunk Sanitary Sewer.

In December 2011, Council approved the recommendations of PWES Report No.39/11 where it was recommended the cost of the sanitary sewer collection system (including the municipal sanitary sewers (sewer mains) and the pipes within the municipal road allowances that connect each property to a sewer main (laterals)) for the area within the North Talbot Road Sanitary Sewer Outlet be assessed against the benefitting lands within that area based on Main and Lateral Charges in accordance with Part XII of the Municipal Act 2001; and that the "North Talbot Road Sanitary Sewer Outlet Main and Lateral Charges By-Law" be considered.

Similar to the cost recovery process for the North Talbot Road Sanitary Sewer Outlet Area, it was intended that the cost of the sanitary sewer collection system for the 8th Concession Road Sanitary Sewer Outlet Area would be assessed against the benefitting lands within that area in accordance with Part XII of the Municipal Act.

In February 2018, Council approved the recommendations of Report PWES-2018-01 which included the cost of the sanitary sewer collection system for the “8th Concession Road Sanitary Sewer Outlet” area be assessed against the benefitting lands within that area based on Main and Lateral Charges in accordance with Part XII of the Municipal Act; and that a by-law that outlines the charges be considered.

In 2022 Watson & Associates was retained to assist the Town with the preparation of a Part XII By-Law to recover costs for the sanitary sewer collection system servicing

the 8th Concession Sanitary Sewer Area from the benefitting lands. It is anticipated the a report and by-law would be brought to Council by mid-2023.

Funding for this project was previously provided from the Wastewater Sewers Reserve Fund in the amount of \$45,000.

➤ **Reference Reports:**

- [Report PWES No. 39/11](#), “North Talbot Road Sanitary Sewer Outlet, Part XII By- Law”, December 13, 2011; Motion RCM-427/11.
- [Report PWES No. 45/17](#), “8th Concession Road Sanitary Sewer Outlet, Main and Lateral Charges Cost Recovery By-Law”, September 26, 2017; Motion SCM- 13/17.
- [Report PWES-2018-01](#), “8th Concession Road Sanitary Sewer Outlet, Main and Lateral Charges Cost Recovery Part XII By-Law”, February 13, 2018; Motion SCM-02/18.
- [Report PWES-2022-03](#) “Approval of 2022 Public Works & Engineering Services Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

B6. County Road 42 and County Road 43 Improvements – Phase 2

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$378,800	\$0	\$681,200	\$1,060,000

In December 2020 Council approved the recommendations of Report PWES-2020-33 that authorized Administration to proceed with the engineering design of two sections of watermains on CR43 and Banwell Road. These locations consist of:

- CR43 from CR42 to Shields Drive (\$260,000)
- Banwell Road / CR43 from Intersection Road to South of CP Rail (\$800,000)

Connection of these existing watermains will add resiliency to the water supply for the Tecumseh Vista School, improve water quality and reduce the required number of auto flushers.

Based on the County of Essex revised phasing plan for their CR 42/43 improvements, it is anticipated that the design of the CR43/Banwell watermain will be coordinated with the County’s project and that construction would commence in 2024/2025.

Funding for this project was previously provided from the Watermain Reserve Fund in the amount of \$378,800.

➤ **Reference Reports:**

- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20.
- [Report PWES-2022-03](#), “Approval of 2022 Public Works & Engineering Services Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

B7. Hwy 3/CR34 Water Valve Replacement

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$456,300	\$0	\$0	\$456,300

In December 2020, Council approved the recommendations of Report PWES-2020-33 that authorized Administration to proceed with the Hwy 3/CR43 Water Valve Replacement Project. This project consists of the replacement of water valves on the existing 300mm diameter watermain located on Highway No.3 (Oldcastle Road to CR34) and on CR34 (Highway No.3 to Malden Road). Blackrock Consulting Ltd. was retained to prepare tender documents and to assist with tendering and contract administration. Draft tender documents were prepared in 2021 along with preliminary discussions with approval agencies, it is anticipated construction will commence in 2023.

Funding for this project was previously provided from the Watermain Reserve Fund in the amount of \$456,300.

➤ **Reference Reports:**

- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20.
- [Report PWES-2022-03](#), “Approval of 2022 Public Works & Engineering Services Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

B8. Sylvestre Drive Sanitary Sewer Extension

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$285,000	\$0	\$2,211,900	\$2,496,900
Estimated Landowner Recoveries (Sanitary Sewers): \$1,324,400			

This project consists of the extension of a sanitary sewer on Sylvestre Drive from Sylvestre Drive to CR19 (approximately 410-metres), as well as adjacent to the CR19 right-of-way through a future easement (approximately 215-metres) or within an

expanded County road right of way as part of a future CR19 improvement project. The installation of the sanitary sewers to service the properties identified within the study area is in keeping with Town's Water & Wastewater Master Plan, the Provincial Policy Statement, the County of Essex Official Plan, and the Town's Official Plan to provide full municipal services to those properties within designated Settlement Areas.

It was originally planned to obtain required approvals, prepare tender documents, obtain easements and undertake utility relocations in 2020 with construction tentatively planned to proceed in 2021. The County of Essex recently advised that future improvements to CR19 may commence in the next 5 to 10 years. The CR19 improvements will require the County to obtain a right of way widening over the area where the sanitary sewer easement is required. To obtain construction efficiencies and potentially avoid the need for the Town to obtain easements, it is beneficial to plan for this sanitary sewer construction when the CR19 improvements are completed. Accordingly, the potential construction of this project has tentatively been moved to beyond 2025. This schedule will be further updated in future Five Year Capital Works Plans as the County's schedule for the CR19 improvements is refined.

The project cost of \$2,496,900 includes \$1,114,000 for road works, \$1,324,400 for sanitary sewers and \$58,500 for storm sewers.

Estimated recoveries from landowners for the sanitary sewers would be approximately \$1,324,400, with assessments to be calculated by Administration and invoiced back to the landowners by means of a Part XII by-law (Municipal Act, s.391).

In January 2022, Council authorized Administration to hold a Public Information Centre to communicate estimated changes to the property owners and to report back to Council with a summary of the comments for consideration in preparing the cost recovery by-law. A virtual PIC was held between March 24 and April 22, 2022. The results of the PIC and a final by-law will be brought forward to Council in a separate report for the consideration in early 2023.

Funding for this project was previously provided from the following:

- Road Lifecycle Reserve in the amount of \$94,000
- Wastewater Sewers Reserve Fund in the amount of \$186,800
- Storm Sewer Lifecycle Reserves in the amount of \$4,200

- **Reference Reports:**
 - [Report PWES No. 57/17](#), "2018-2022 Public Works & Environmental Services Capital Works Plan", December 12, 2017; Motion RCM-441/17.
 - [Report PWES-2019-31](#), "Sylvestre Drive Sanitary Sewer Extension, Municipal Class Environmental Assessment, Schedule B – Filing the Notice of Study Completion", July 23, 2019; Motion RCM-232/19.

- [Report PWES-2019-51](#), “Sylvestre Drive Sanitary Sewer Extension, Municipal Class Environmental Assessment, Schedule B – Study Completion and Final Adoption”, December 10, 2019; Motion RCM-403/19.
- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20.
- [Report PWES-2022-03](#), “Approval of 2022 Public Works & Engineering Services Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

B9. Shoreline Management Plan

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$350,000	\$0	\$0	\$350,000

In June 2018, Report PWES-2018-17 outlined the need for a Shoreline Management Plan as one of the recommended flood mitigation strategies. This Plan was subsequently incorporated within the 2020 5-year PWES Capital Works Plan. Thereafter, Zuzek Inc. was retained to complete the study.

The Shoreline Management Plan commenced in 2020 with public information centres held on October 29, 2020, April 20, 2021 and August 18, 2021. The Shoreline Management Plan generally includes the following components:

- Re-assessment of the 1:100-year Lake St. Clair flood elevations.
- A detailed shoreline property inventory including topographic information for each shoreline property within the Town of Tecumseh.
- Determination of vulnerable flood locations along the shoreline.
- Determination of extent of inland flooding based on lake water conveyance through vulnerable areas.
- Assessment of potential impacts of climate change.
- Assessment of lake flooding plus rain generated runoff (Integration with Dillon 2D Storm Drainage Master Plan model).
- Damage value estimates for public and private properties.
- High level conceptual mitigation measures that could be considered in the next phases of the study.

The study is expected to be finalized and reported to Council in early 2023. It is intended that the final report to Council will include a presentation by the study consultant.

Funding for this project was previously provided from the Storm Sewer Lifecycle Reserve in the amount of \$350,000.

➤ **Reference Reports:**

- [Report PWES-2018-17](#), “Flood Mitigation Strategy”, June 26, 2018; Motion RCM-194/18.
- [Report PWES-2019-49](#), “2020-2024 Public Works & Environmental Services Five Year Capital Works Plan”, December 10, 2019; Motion RCM-401/19.
- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20.
- [Report PWES-2022-03](#), “Approval of 2022 Public Works & Engineering Services, 2022 Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

B10. Stormwater Rate Study

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$45,000	\$0	\$0	\$45,000

In December 2019, Council authorized Administration to undertake a Stormwater Rate Study, the study was to assess the feasibility of implementing a user fee system to meet the significant funding requirements needed to implement stormwater infrastructure improvements. Watson & Associates Economists Ltd were retained to undertake the Study, which is nearing completion.

Funding for this project was previously provided from the Storm Sewer Lifecycle Reserve in the amount of \$45,000.

➤ **Reference Reports:**

- [Report PWES-2019-50](#), “Storm Drainage Master Plan, Study Completion and Final Adoption”, December 10, 2019; Motion RCM-402/19.
- [Report PWES-2019-49](#), “2020-2024 Public Works & Environmental Services Five Year Capital Works Plan”, December 10, 2019; Motion RCM-401/19.
- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20.
- [Report PWES-2022-03](#), “Approval of 2022 Public Works & Engineering Services Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

B11. Manning Road Secondary Plan Area (MRSPA) – Stormwater Infrastructure

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$2,780,000	\$0	\$9,955,000	\$12,735,000
Estimated Landowner Recoveries (Stormwater): \$10,188,000			

In December 2019 through Report PWES-2019-49, Council authorized Administration to complete the detailed design for the Manning Road Secondary Plan Area (MRPSA) stormwater facility and to move forward with acquiring property for the MRSPA stormwater management pond in 2020. In accordance with this report, Dillon Consulting Ltd. was retained based on their previous work on the MRSPA EA, MRSPA EA Addendum and related Functional Servicing Report (FSR).

This project will incorporate the strategic priorities of growth and economic development as outlined within the May 5, 2022 SCM Presentation.

During 2020, the Town acquired property for the MRSPA stormwater management facility. In addition, prior to completing the detailed design for the MRSPA stormwater facility, the previous 2015 Environmental Study Report and FSR must be updated to reflect the current storm design criteria as provided in the Windsor/Essex Region Stormwater Management Standards Manual (December 2018). This is anticipated to be completed in early 2023.

Options for cost recovery are currently being considered by Administration, and a future report will be brought forward to Council regarding cost recovery recommendations for this project.

Funding for this project was previously provided from the Storm Sewer Lifecycle Reserve in the amount of \$2,780,000.

➤ **Reference Reports:**

- [Report PWES-2019-55](#), “Amendment to 2019-2023 PWES Five Year Capital Works Plan, Manning Road Secondary Plan Area, Stormwater Management Facility”, November 12, 2019; Motion RCM-369/19.
- [Report PWES-2019-49](#), “2020-2024 Public Works & Environmental Services Five Year Capital Works Plan”, December 10, 2019; Motion RCM-401/19.
- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20.
- [Report PWES-2022-03](#), “Approval of 2022 Public Works & Engineering Services Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

B12. Tecumseh Hamlet Environmental Assessment & Functional Servicing Report

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$805,000	\$0	\$0	\$805,000

In December 2019, Council authorized Administration to undertake various initiatives to move forward with the Tecumseh Hamlet Secondary Plan area. These initiatives included a stormwater management analysis, finalizing the road network and commencing the Class EA, which would run concurrently with the related planning process for the Tecumseh Hamlet Secondary Plan.

This project will incorporate the strategic priorities of growth and economic development as outlined within the May 5, 2022 SCM Presentation.

It is anticipated that the Tecumseh Hamlet Secondary Plan, along with the Class EA and Functional Servicing Report will be completed by early/mid 2023.

Funding for this project was previously provided from the following:

- Road Lifecycle Reserve in the amount of \$98,000
- Watermain Reserve Fund in the amount of \$98,000
- Wastewater Sewers Reserve Fund in the amount of \$113,000
- Storm Sewer Lifecycle Reserve in the amount of \$496,000

➤ **Reference Reports:**

- [Report PWES-2019-49](#), “2020-2024 Public Works & Environmental Services Five Year Capital Works Plan”, December 10, 2019; Motion RCM-401/19.
- [Report PWES-2020-33](#), “Pre-Approval of 2021 Public Works & Environmental Services Capital Works Projects”, December 8, 2020; Motion RCM-375/20. [Report PWES-2022-03](#), “Approval of 2022 Public Works & Engineering Services Capital Works Projects”, January 25, 2022; Motion RCM-23/22.

B13. Centennial Drive & Woodridge Drive Watermain Replacement Project

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$3,500,000	\$0	\$0	\$3,500,000
Grant (confirmed): ICIP, Green Stream Stage II 2021 Intake - \$2,566,550			

In September 2021 Special Meeting of Council, Council authorized Administration to apply to the ICIP Green Stream Stage II 2021 Intake for the watermain replacement on

the full length of Centennial Drive, a section of Woodridge Drive (from Dillon Drive to St. Thomas Street) and interconnections with Little River Boulevard and St. Thomas Street.

In April 2022, the Town received correspondence that their application to ICIP Green Stream Stage II 2021 Intake was successful. Projects under this intake are subject to a \$5 million funding cap for total eligible costs, with funding allocations of 40% Federal, 33.33% Provincial and 26.67% Municipal.

In June 2022, Council approved the recommendations of Report PWES-2022-21 that authorized Administration to add the Centennial Drive & Woodridge Drive Watermain Replacement project to the 2022 Capital Works projects. Total project expenditures of \$3,500,000 were also funded through the Watermain Reserve Fund.

A Request for Proposals was issued and HRYCAY Consulting Engineers Inc. was retained in September 2022 to undertake detailed design, contract administration and inspection for the project. Detailed design will be undertaken in 2022 and 2023, with construction tentatively scheduled for 2025.

With the ICIP Green Stream II 2021 Intake funding allocations of \$2,566,550, the Town's anticipated costs are \$933,450 of the total \$3.5M project cost.

Funding for this project was previously provided from the following:

- Watermain Reserve Fund in the amount of \$3,500,000

➤ **Reference Reports:**

- [Report PWES-2021-38](#), "Investing in Canada Infrastructure Program, Green Stream Stage II, 2021 Intake, Watermain Replacement Project: Centennial Drive & Woodridge Drive", September 8, 2021; Motion SCM-20/21.
- [Report PWES-2022-21](#), "Investing in Canada Infrastructure Program, Agreement for Green Stream Stage II, 2021 Intake, Watermain Replacement Project: Centennial Drive & Woodridge Drive", June 28, 2022; Motion RCM-197/22.

B14. Tecumseh Secondary Plan Area – Northwest Water & Wastewater Infrastructure Projects

Previously Approved	Requested for 2023	Future Costs	Total Project Costs
\$1,020,000	\$0	\$12,941,300	\$13,961,300

In June 2022, Council approved the recommendations of Report PWES-2022-27 that authorized Administration to add the Tecumseh Secondary Plan Area – Northwest Water & Wastewater Infrastructure Projects to the 2022 Capital Works projects.

Expenditures for the completion of the detailed engineering design and funding for project management resources in 2022 and 2023 as outlined in the May 5, 2022 Special Council Meeting (SCM) PWES Capital Plan 2023-2031 Presentation to Council, were also authorized.

The recommended hybrid scenario from the May 5, 2022 SCM identified water and wastewater infrastructure projects to commence in the northwest area of the Tecumseh Hamlet between 2023 to 2026. This infrastructure will help facilitate development along the Banwell Road corridor (north of CP Rail) as well as provide sanitary relief to allow the area along the Manning Road corridor (south of CP Rail) to develop. The water and wastewater infrastructure includes the projects identified in the Town's Water & Wastewater Master Plan, 2018 Update, being: West Tecumseh Watermain (W-1), West Tecumseh Sanitary (WW-1) and Diversion Sanitary Sewer (WW-2).

It is anticipated that detailed engineering design will commence once the Tecumseh Hamlet Secondary Plan is completed in early 2023.

Funding for this project was previously provided from the following:

- Watermain Reserve Fund in the amount of \$300,000
- Wastewater Sewer Reserve Fund in the amount of \$720,000

➤ **Reference Reports:**

- [Report PWES-2020-15](#), "2018 Water and Wastewater Master Plan Update, Study Completion and Final Adoption", March 10, 2020; Motion RCM-87/20.
- [Report PWES-2022-27](#), "Amendment to the 2022 PWES Capital Works Projects, Tecumseh Secondary Plan Area – Northwest Water & Wastewater Infrastructure Projects", June 28, 2022; Motion RCM-199/22.

Section C: 2024-2027 Capital Projects

This section provides highlights of projects proposed for 2024-2027. Council approval and funding allocations will be sought for under the 5-year capital works plans that are brought forward to Council on an annual basis.

➤ **2024: Roads Needs Study (\$85,000)**

The Town utilizes a Road Needs Studies on a five-year basis to help prioritize road projects and gauge the Town's effectiveness in the replacement and rehabilitation strategies to date. The last Roads Needs Study was completed in 2019.

➤ **2024 & 2026: Bridge & Culvert Needs Study (Spans > 3m) (\$45,000 each)**

Inspection of the Town's 16 bridges and culverts with a span greater than 3.0 metres are to take place every two years as legislated by Section 2(3) of the *Public Transportation and Highway Act*. Previous studies were completed in 2003, 2008, 2014, 2016, 2018, 2020 and 2022.

➤ **2024/2026: Tecumseh Hamlet Secondary Plan Area – Northwest Stormwater Management Ponds, Gouin & Lachance (\$5,330,000)**

The northwest area of the Tecumseh Hamlet was identified as a high priority for development to proceed at the May 5, 2022 Capital Priorities Presentation to Council. The design of the trunk sanitary and watermains was approved in late 2022. This project has been identified should the Town need to assist the development community in the design, construction and financing of the regional stormwater management ponds. These costs would also be recoverable from the development community.

➤ **2024-2028: County Road 19 Improvements (\$4,225,000)**

The County of Essex will commence the first phase of construction in 2023/2024 on CR19 from CR22 to south of Jamsyl Drive. The timing of construction and costs allocated to the Town for the subsequent phases are as follows:

- 2026: Phase 2 Jamsyl to CP Rail – watermains (\$2,730,000)
- 2027: Phase 3 CP Rail Grade Separation – watermains (\$520,000)
- 2028: Phase 4 CP Rail to CR42 – watermains (\$975,000)

➤ **2025: Bridge & Culverts Needs Study (Spans < 3m) (\$80,000)**

A condition assessment was completed in 2016 on the Town's 72 bridges and culverts with spans that were less than 3.0 metres. It is recommended that an update to the study be completed to determine and prioritize the short, medium and long term recommended works.

➤ **2025: Lakewood Park Pedestrian Bridge Maintenance (\$200,000)**

As identified in the 2022 Bridge & Culvert Needs Study (Spans >3m), the Lakewood Park pedestrian bridge is showing signs of corrosion on the floor system (stringer members). It is recommended that maintenance be completed on the stringers and floor beams.

➤ **2025: Roadside Safety Improvements – Bridge #1010 (\$70,000)**

A roadside safety assessment, in accordance with the 2017 MTO Roadside Design Manual, of the Town's bridges and culverts identified the need to install a guide rail at Bridge #1010.

➤ **2025: Water & Wastewater Master Plan Update (\$200,000)**

The last update to the Water and Wastewater Master Plan was completed and brought to Council for approval in late 2019. Since that time, several studies are ongoing or completed that will impact the servicing strategy and warrant the need for a Master Plan update. These studies include:

- Water Model Update – South Service Area
- Water Model Update – North Service Area
- Tecumseh Hamlet Secondary Plan Area – Class EA and FSR
- Sanitary Sewer Model update

➤ **2025/2026: Riverside Drive East Pathway Improvements (\$487,500)**

Installation of a multi-use trail on the south side of Riverside Drive to connect the existing pathways between Arlington Boulevard and Kensington Boulevard. It is also recommended to install cross-rides at the intersections between Brighton Road and Manning Road and to conduct a lighting assessment to ensure the safety of trail users.

➤ **2025/2026: Brighton Road Pathway Extension and Traffic Calming (\$312,000)**

Extension of the existing pathway on the west side of Brighton Road, south of the Tecumseh Road roundabout for approximately 75-metres. This work would be in conjunction with a pedestrian cross-over and traffic calming measure on Brighton Road midway between Tecumseh Road and VIA Rail. The traffic calming measure was recommended as part of the 2019 Brighton Road Corridor Review.

➤ **2025-2027: County Road 42 & County Road 43 Improvements (\$882,000)**

The County of Essex has commenced the first phase of construction in 2022 and it is anticipated to be completed Q4 2023. The timing of construction and costs to the Town for the subsequent phases are estimated as follows:

- 2026: Phase 3 (CR42) – roads, sidewalks, bike lanes (\$247,000)
- 2027: Phase 4 (CR42) – sidewalks, bike lanes (\$635,000)

➤ **2026: (Tecumseh) Storm Drainage Master Plan Update (\$200,000)**

The Tecumseh Storm Drainage Master Plan was completed in 2019 and had identified recommended solutions in the amount of \$107M. Its study area comprised the existing built-up area north of CR42 to Lake St. Clair. It is recommended to conduct an update to the Master Plan in 2026 to expand the study area to include lands in the Tecumseh Hamlet Secondary Planning area and the stormwater solutions that were determined in the stand-alone Class Environmental Assessments and Functional Servicing Reports for this area.

➤ **2026: Town Property Shoreline Protection Condition Assessment (\$50,000)**

The Town owns shoreline properties with shore protection structures of varying age, type and condition. To maintain this infrastructure and provide for necessary improvements in future capital works plans, it is recommended that a condition assessment be undertaken.

➤ **2026/2027: Oldcastle Stormwater Master Plan – Property & Easement Acquisition (\$4,000,000)**

The Oldcastle Stormwater Master Plan was completed and adopted by Council in June 2022. The Master Plan recommended stormwater solutions across the various watershed areas. It also recommended that the Town proceed as soon as possible to secure the lands and easements required for these improvements.

➤ **2027: Manning Road Improvements, Phase 3 (\$8,369,980)**

Phase 3 relates to the road re-construction component of the project from Riverside Drive to St. Gregory's Road including improvements to an urban cross-section that accommodates pedestrians, cyclists and urban design features to create a gateway into Lakewood Park. It is also intended to construct the storm overflow from St. Thomas Street to Lakewood Park which had been identified as a recommendation in the Town's Storm Drainage Master Plan as project ESL-1.

➤ **2027+: Ure Street Sanitary Sewer Extension (\$1,982,000)**

Ure Street Sanitary Sewer extension is a continuation of the sanitary sewer servicing within the 8th Concession Road sanitary service area in the Oldcastle Hamlet.

➤ **2027+: AODA Sidewalk Ramp Repairs (\$100,000 Annually)**

Review and repair sidewalk ramps throughout the Town to ensure that they are AODA compliant. The sidewalk ramp condition, alignment and location will all be reviewed as part of the assessment.

Section D: Municipal Drain Projects

Town of Tecumseh is obligated to manage, repair, maintain and improve the Town's 120 Municipal Drains (totaling 221km) in accordance with the Drainage Act, including assessing costs to the benefitting upstream landowners according to the most current by-law. Municipal Drains are not municipal infrastructure and only the actual Town assessments are funded from the general tax rate.

There are approximately 54 active drainage projects that the Town is undertaking. These works include new municipal drains (4), maintenance of existing drains (16), drain improvements requiring an engineer's report (30) and apportionment agreements (4) all of which are at various stages of completion. The Drainage Superintendent receives requests for maintenance or repair and improvements for Municipal Drains and determines which section of the Drainage Act is most suitable to proceed with the request. These drainage requests, and subsequent works, are addressed as they occur and are brought before Council for their approval on a project-by-project basis.

Funding for the Town's assessment for Municipal Drains will generally come from the Drains Lifecycle Reserve.

Consultations

Financial Services

Development Services

Financial Implications

The capital expenditures proposed for 2023 total just over \$38.8M in addition to unfinished works carried forward from 2022, with a preliminary estimate of an additional \$59.0M projected for future years.

Projects proposed are consistent with Council's adopted five-year strategic capital plan with the exception of some new projects added and the acceleration of some projects, totalling \$17.9M over the five-year period.

New projects added include: A15 Public Works & Transportation North Building Improvements (\$600,000), A16 Multi-Use Recreational Trails: Lesperance Road (\$4,700,000), future phases of CR19 Improvements (\$3,250,000) and future phases of CR42 & CR43 Improvement Project (\$882,000).

Accelerated projects include: A10 Del Duca Drive Sanitary Sewer Extension (\$5,404,700).

In addition, many project cost estimates have been increased to reflect recent inflationary pressures. Over the five-year period, inflationary costs totalling close to

\$14M have been incorporated within the 2023-2027 Public Works & Engineering Services Five-Year Capital Works Plan.

Combined, estimated capital expenditure costs for the five-year period have increased by roughly \$32M as compared to the projections made in May 2022 when Council adopted the five-year strategic capital plan.

Offsetting some of this increase, the province announced OCIF allocations for 2023 including \$1.2M greater allocation for the Town than planned, 2021 Town Operating surpluses transferred to the Town's Infrastructure Reserve of \$810,000, confirmed increase to RSIP grant of \$205,000 and potential ATF grant funding of \$2,616,000.

Notwithstanding these offsetting sources of funds, the estimated net cost increases, if materialized, would significantly impact capital reserves.

Generally speaking, funding for most projects is covered through reserves, reserve funds and grants where reserves and reserve funds accumulate funds through annual budget allocations. There is, however, long-term debt planned with respect to the Scully/St. Marks and PJ Cecile Storm Pumping Station projects, with borrowing estimated at \$15M (PWES-2021-03) over the course of a few years commencing in 2023.

Although three of the Town's capital funding reserve/reserve fund categories are either in, or soon-to-be in a deficit position, the Town's overall capital funding reserve/reserve funds are relatively healthy.

The recent volatility in construction costs, capacity constraints in the construction sector and unpredictability with supply chains may make for challenging times ahead. Administration will continue to pursue transfer payment adjustments for grants secured to combat inflationary increases. Further, the Town's existing capital reserves and relatively low debt levels provide for financial flexibility and some additional funding capacity.

Administration is comfortable recommending the advancement of the projects identified in this report. However, should recent inflationary pressures experienced with 2022 capital projects occur in upcoming 2023 project tenders, alterations to capital plans may need to be considered.

Projected Lifecycle Reserve and Reserve Fund balances for 2023 are provided in Attachment 4.

Link to Strategic Priorities

Applicable	2019-22 Strategic Priorities
<input checked="" type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input checked="" type="checkbox"/>	Ensure that Tecumseh’s current and future growth is built upon the principles of sustainability and strategic decision-making.
<input type="checkbox"/>	Integrate the principles of health and wellness into all of Tecumseh’s plans and priorities.
<input checked="" type="checkbox"/>	Steward the Town’s “continuous improvement” approach to municipal service delivery to residents and businesses.
<input checked="" type="checkbox"/>	Demonstrate the Town’s leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Communications

Not applicable

Website

Social Media

News Release

Local Newspaper

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Dana Reid
Public Works & Engineering Services Assistant

Reviewed by:

Tom Kitsos, CPA, CMA, BComm
Director Community Safety & Fire Chief

Reviewed by:

Brian Hillman, MA, MCIP, RPP
Director Development Services

Reviewed by:

Phil Bartnik, P.Eng.
Director Public Works & Engineering Services

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
1	Requested 2023 Budget Allocations
2	2023-2027 PWES Five Year Capital Works Plan
3	Location Map of 2023 Projects
4	Lifecycle Reserve Summaries

**Attachment 1
2023-2027 PWES Five Year Capital Works Plan**

	Previously Approved	Requested for 2023	Future Costs	Total Costs
Sidewalk Projects				
1. Sidewalk Repair Program - Various Locations	\$ -	\$ 400,000	\$ -	\$ 400,000
Sub-Total:	\$ -	\$ 400,000	\$ -	\$ 400,000
Grants:	\$ -	\$ -	\$ -	\$ -
Recoveries:	\$ -	\$ -	\$ -	\$ -
Sidewalk Lifecycle Reserve:	\$ -	\$ 400,000	\$ -	\$ 400,000

New Infrastructure				
1. Lesperance Road Trail (CR22 to CR42)	\$ 137,500	\$ 2,661,250	\$ -	\$ 2,798,750
2. Multi-Use Trails: Lesperance & Little River	\$ -	\$ 4,360,000	\$ -	\$ 4,360,000
Sub-Total:	\$ 137,500	\$ 7,021,250	\$ -	\$ 7,158,750
Grants:	\$ -	\$ -	\$ 466,707	\$ 466,707
Recoveries:	\$ -	\$ -	\$ -	\$ -
Infrastructure Reserve:	\$ 137,500	\$ 7,021,250	\$ 466,707	\$ 6,692,043

Road Projects				
1. Road Paving - Asphaltting	\$ -	\$ 650,000	\$ -	\$ 650,000
2. Road Paving - Crack Sealing	\$ -	\$ 300,000	\$ -	\$ 300,000
3. Public Works North Building Improvements	\$ -	\$ 22,000	\$ 178,000	\$ 200,000
4. Lesperance Rd Rehabilitation (McNorton to First)	\$ -	\$ 340,000	\$ -	\$ 340,000
5. Tecumseh Hamlet SPA EA FSR	\$ 98,000	\$ -	\$ -	\$ 98,000
6. Lesperance/VIA Rail Improvements	\$ 3,746,000	\$ -	\$ -	\$ 3,746,000
7. Sylvestre Drive Sanitary Sewer Extension	\$ 94,000	\$ -	\$ 1,020,000	\$ 1,114,000
8. Scully & St. Mark's Storm PS/Riverside Drive	\$ 1,528,000	\$ 572,000	\$ -	\$ 2,100,000
9. Cty Rd 46/Webster/Laval Sanitary Sewer Extension	\$ 120,750	\$ 2,082,750	\$ -	\$ 2,203,500
10. Del Duca Drive Sanitary Sewer	\$ 117,450	\$ 2,036,450	\$ -	\$ 2,153,900
11. Annual Project Contingency	\$ -	\$ 250,000	\$ -	\$ 250,000
12. County Road 46 Municipal Class EA	\$ -	\$ 70,000	\$ -	\$ 70,000
13. PJ Cecile Storm Pump Station	\$ 56,500	\$ 272,300	\$ -	\$ 328,800
Sub-Total:	\$ 5,760,700	\$ 6,595,500	\$ 1,198,000	\$ 13,554,200
Grants:	\$ -	\$ -	\$ -	\$ -
Recoveries:	\$ -	\$ -	\$ -	\$ -
Road Lifecycle Reserve:	\$ 5,760,700	\$ 6,595,500	\$ 1,198,000	\$ 13,554,200

Bridge Projects				
1. Culvert #42 - Snake Lane Road	\$ 62,300	\$ 588,140	\$ -	\$ 650,440
2. Culvert #53 - Snake Lane Road	\$ 65,100	\$ 611,800	\$ -	\$ 676,900
3. Culvert #54 - Snake Lane Road	\$ 65,100	\$ 611,800	\$ -	\$ 676,900
Sub-Total:	\$ 192,500	\$ 1,811,740	\$ -	\$ 2,004,240
Grants:	\$ -	\$ -	\$ -	\$ -
Recoveries:	\$ -	\$ -	\$ -	\$ -
Bridges Lifecycle Reserve:	\$ 192,500	\$ 1,811,740	\$ -	\$ 2,004,240

	Previously Approved	Requested for 2023	Future Costs	Total Costs
Water Projects				
1. Hwy3-CR34 Water Valve Replacement	\$ 456,300	\$ -	\$ -	\$ 456,300
2. Lesperance/VIA Rail Improvements	\$ 79,100	\$ -	\$ -	\$ 79,100
3. Tecumseh Hamlet SPA EA FSR	\$ 98,000	\$ -	\$ -	\$ 98,000
4. Cty Rd 46/Webster Laval Sanitary Sewer Exten.	\$ 80,400	\$ 1,629,200	\$ -	\$ 1,709,600
5. Del Duca Drive Sanitary Sewer	\$ 8,550	\$ 27,350	\$ -	\$ 35,900
6. CR42/43 Improvements Phase 1	\$ 3,359,000	\$ -	\$ -	\$ 3,359,000
7. TSPA Northwest W & WW Infrastructure (W-1)	\$ 300,000	\$ -	\$ 3,773,400	\$ 4,073,400
8. CR19 Improvements (CR22 to Jamsyl) (W-2B)	\$ 758,000	\$ 264,000	\$ -	\$ 1,022,000
9. 12th Concession Watermain Replacement	\$ 247,900	\$ 32,100	\$ -	\$ 280,000
10. Centennial & Woodridge Watermain Replacements	\$ 3,500,000	\$ -	\$ -	\$ 3,500,000
11. North Tecumseh Water Distribution Model	\$ 70,000	\$ -	\$ -	\$ 70,000
Sub-Total:	\$ 8,957,250	\$ 1,952,650	\$ 3,773,400	\$ 14,683,300
Grants:	\$ -	\$ -	\$ 2,566,550	\$ 2,566,550
Recoveries:	\$ -	\$ -	\$ -	\$ -
Watermain Reserve Fund:	\$ 8,957,250	\$ 1,952,650	\$ 1,206,850	\$ 12,116,750

Attachment 1
2023-2027 PWES Five Year Capital Works Plan

Wastewater Projects

1. Sylvestre Drive Sanitary Sewer Extension	\$ 186,800	\$ -	\$ 1,137,600	\$ 1,324,400
2. Public Works North Building Improvements	\$ -	\$ 22,000	\$ 178,000	\$ 200,000
3. Lesperance/VIA Rail Improvements	\$ 100,800	\$ -	\$ -	\$ 100,800
4. Tecumseh Hamlet SPA EA FSR	\$ 113,000	\$ -	\$ -	\$ 113,000
5. Cty Rd 46/Webster/Laval Sanitary Sewer Exten.	\$ 166,700	\$ 1,934,600	\$ -	\$ 2,101,300
6. Scully & St. Mark's Storm PS/Riverside Drive	\$ 415,000	\$ 220,000	\$ -	\$ 635,000
7. Del Duca Drive Sanitary Sewer	\$ 208,500	\$ 1,108,200	\$ -	\$ 1,316,700
8. Sanitary Sewer Model Update	\$ 345,000	\$ -	\$ -	\$ 345,000
9. CR42/43 Improvements Phase 1	\$ 3,177,000	\$ -	\$ -	\$ 3,177,000
10. TSPA Northwest W&WW Infrastructure (WW-1, WW-2)	\$ 720,000	\$ -	\$ 9,167,900	\$ 9,887,900
11. MECP Consolidated Linear Infrastructure ECA	\$ -	\$ 25,000	\$ -	\$ 25,000
12. 8th Concession Sanitary Sewer By-Law	\$ 45,000	\$ -	\$ -	\$ 45,000
Sub-Total:	\$ 5,477,800	\$ 3,309,800	\$ 10,483,500	\$ 19,271,100
Grants:	\$ -	\$ -	\$ -	\$ -
Recoveries:	\$ -	\$ -	\$ 4,141,400	\$ 4,141,400
Wastewater Sewers Reserve Fund:	\$ 5,477,800	\$ 3,309,800	\$ 6,342,100	\$ 15,129,700

Wastewater Facility Projects

1. Sylvestre Drive Sanitary PS - 2023 Improvements	\$ -	\$ 30,000	\$ -	\$ 30,000
2. Lakewood Sanitary PS - 2023 Improvements	\$ -	\$ 70,000	\$ -	\$ 70,000
3. Gauthier Sanitary PS - 2023 Improvements	\$ -	\$ 30,000	\$ -	\$ 30,000
Sub-Total:	\$ -	\$ 130,000	\$ -	\$ 130,000
Grants:	\$ -	\$ -	\$ -	\$ -
Recoveries:	\$ -	\$ -	\$ -	\$ -
Wastewater Facilities Reserve Fund:	\$ -	\$ 130,000	\$ -	\$ 130,000

	Previously Approved	Requested for 2023	Future Costs	Total Costs
Stormwater Projects				
1. Lesperance/VIA Rail Improvements	\$ 345,300	\$ -	\$ -	\$ 345,300
2. Public Works North Building Improvements	\$ -	\$ 22,000	\$ 178,000	\$ 200,000
3. Sylvestre Drive Sanitary Sewer Extension	\$ 4,200	\$ -	\$ 54,300	\$ 58,500
4. Tecumseh Hamlet SPA EA FSR	\$ 496,000	\$ -	\$ -	\$ 496,000
5. Cty Rd 46/Webster/Laval Sanitary Sewer Exten.	\$ 77,400	\$ 657,000	\$ -	\$ 734,400
6. Scully & St. Marks Storm PS/Riverside Drive	\$ 15,107,000	\$ 5,493,000	\$ -	\$ 20,600,000
7. MRSPA Stormwater Infrastructure	\$ 2,780,000	\$ -	\$ 9,955,000	\$ 12,735,000
8. Del Duca Drive Sanitary Sewer	\$ 189,850	\$ 1,708,350	\$ -	\$ 1,898,200
9. Shoreline Management Plan	\$ 350,000	\$ -	\$ -	\$ 350,000
10. Stormwater Rate Study	\$ 45,000	\$ -	\$ -	\$ 45,000
11. PJ Cecile Pump Station	\$ 1,943,500	\$ 9,367,500	\$ -	\$ 11,311,000
12. MECP Consolidated Linear Infrastructure ECA	\$ -	\$ 25,000	\$ -	\$ 25,000
Sub-Total:	\$ 21,316,650	\$ 17,294,450	\$ 10,187,300	\$ 48,798,400
Grants:	\$ -	\$ -	\$ 18,700,000	\$ 18,700,000
Recoveries:	\$ -	\$ -	\$ -	\$ -
Storm Sewer Lifecycle Reserve:	\$ 21,316,650	\$ 17,294,450	\$ 8,512,700	\$ 30,098,400

TOWN OF TECUMSEH
2023 - 2027 Public Works & Engineering Services Capital Works Plan

Note: Depicting Timing of Expenditures, not Budget Allocations

Infrastructure	Construction	Engineering	Contingency	Total	2023	2024	2025	2026	2027
Roads									
Paving	\$ 5,750,000	\$ -	\$ -	\$ 5,750,000	\$ 950,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000
Traffic Signal Controller Upgrade (w/ County) CFWD	\$ 150,000	\$ -	\$ -	\$ 150,000	\$ 125,000				
Lesperance Road Rehabilitation (McNorton to First)	\$ 290,000	\$ 25,000	\$ 25,000	\$ 340,000	\$ 20,000		\$ 320,000		
Public Works North Building Improvements	\$ 142,500	\$ 17,500	\$ 40,000	\$ 200,000	\$ 22,000	\$ 178,000			
CR42/CR43 Phase 3 CFWD	\$ 50,000	\$ 10,000	\$ 10,000	\$ 70,000			\$ 47,550		
Tecumseh Hamlet SPA EA FSR CFWD	\$ -	\$ 98,000	\$ -	\$ 98,000	\$ 30,000				
Lesperance/VIA Rail Improvements CFWD	\$ 1,456,800	\$ 318,700	\$ 73,800	\$ 1,849,300	\$ 1,850,000				
Manning Road Reconstruction - Phase 3 CFWD	\$ 6,863,880	\$ 898,000	\$ 286,000	\$ 8,047,880					\$ 7,722,380
Sylvestre Drive Sanitary Sewer Extension CFWD	\$ 895,700	\$ 173,500	\$ 44,800	\$ 1,114,000				\$ 1,020,000	
Roads Needs Study	\$ -	\$ 85,000	\$ -	\$ 85,000		\$ 85,000			
Scully & St Mark's Storm PS/Riverside Drive CFWD+	\$ 1,600,000	\$ 250,000	\$ 250,000	\$ 2,100,000	\$ 100,000		\$ 1,900,000		
CR46/Webster/Laval Sanitary Sewer(LRPCP) CFWD	\$ 1,870,000	\$ 245,000	\$ 88,500	\$ 2,203,500	\$ 10,000	\$ 2,072,750			
Delduca Drive Sanitary Sewer (LRPCP) CFWD+	\$ 1,900,000	\$ 194,200	\$ 59,700	\$ 2,153,900	\$ 30,000	\$ 2,006,450			
Ure Street Sanitary Sewer (LRPCP)	\$ 640,680	\$ 115,320	\$ 76,920	\$ 833,000					\$ 58,000
PJ Cecile Storm PS CFWD+	\$ 234,000	\$ 70,800	\$ 24,000	\$ 328,800	\$ 60,000	\$ 40,000			\$ 228,800
County Road 46 Municipal Class EA	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ 70,000				
Annual Project Contingency	\$ -	\$ -	\$ 1,250,000	\$ 1,250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000
	\$ 21,843,560	\$ 2,571,020	\$ 2,228,720	\$ 26,643,380	\$ 3,517,000	\$ 5,832,200	\$ 3,717,550	\$ 2,470,000	\$ 9,459,180
Sidewalks/Pathways									
Sidewalk Repair Program	\$ 676,000	\$ -	\$ -	\$ 676,000	\$ 400,000	\$ 69,000	\$ 69,000	\$ 69,000	\$ 69,000
AODA Sidewalk Ramp Repair	\$ 100,000	\$ -	\$ -	\$ 100,000					\$ 100,000
Lesperance Road Trail (CR22 to CR42) CFWD	\$ 2,400,000	\$ 177,500	\$ 221,250	\$ 2,798,750	\$ 50,000	\$ 2,611,250			
Lesperance Road Trail (Riverside to First) & Little River	\$ 3,625,000	\$ 435,000	\$ 300,000	\$ 4,360,000	\$ 225,000	\$ 50,000	\$ 4,085,000		
Riverside Drive East Pathway Improvements	\$ 375,000	\$ 56,250	\$ 56,250	\$ 487,500			\$ 60,000	\$ 427,500	
CR42/CR43 Phase 3 (Sidewalks)	\$ 80,000	\$ -	\$ 12,000	\$ 92,000				\$ 92,000	
CR42/CR43 Phase 4 (Sidewalks)	\$ 400,000	\$ -	\$ 10,000	\$ 410,000					\$ 410,000
Brighton Rd Pathway Extension & Traffic Calming	\$ 240,000	\$ 36,000	\$ 36,000	\$ 312,000			\$ 50,000	\$ 262,000	
	\$ 7,896,000	\$ 704,750	\$ 635,500	\$ 9,236,250	\$ 675,000	\$ 2,730,250	\$ 4,264,000	\$ 850,500	\$ 579,000
CWATS Projects									
CR42/CR43 Phase 3 (Bike Lanes)	\$ 85,000	\$ -	\$ -	\$ 85,000				\$ 85,000	
CR42/CR43 Phase 4 (Bike Lanes)	\$ 225,000	\$ -	\$ -	\$ 225,000					\$ 225,000
	\$ 310,000	\$ -	\$ -	\$ 310,000	\$ -	\$ -	\$ -	\$ 85,000	\$ 225,000
Bridges									
Bridge & Culvert Condition Assessment (<3m Span)	\$ -	\$ 80,000	\$ -	\$ 80,000			\$ 80,000		
Bridge & Culvert Needs Study (>3m Span)	\$ -	\$ 90,000	\$ -	\$ 90,000		\$ 45,000		\$ 45,000	
Culvert #42: Snake Lane Road CFWD	\$ 499,440	\$ 79,000	\$ 72,000	\$ 650,440	\$ 588,140				
Culvert #53: Snake Lane Road CFWD	\$ 591,000	\$ 79,000	\$ 72,000	\$ 742,000	\$ 676,900				
Culvert #54: Snake Lane Road CFWD	\$ 591,000	\$ 79,000	\$ 72,000	\$ 742,000	\$ 676,900				
Roadside Safety Improvements - Bridge #1010	\$ 50,000	\$ 10,000	\$ 10,000	\$ 70,000			\$ 70,000		
Lakewood Park Pedestrian Bridge	\$ 200,000	\$ -	\$ -	\$ 200,000			\$ 200,000		
	\$ 1,931,440	\$ 417,000	\$ 226,000	\$ 2,574,440	\$ 1,941,940	\$ 45,000	\$ 350,000	\$ 45,000	\$ -

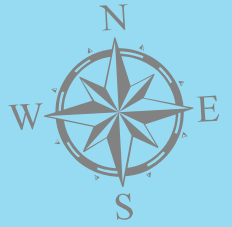
Infrastructure	Construction	Engineering	Contingency	Total	2023	2024	2025	2026	2027
Watermains									
Hwy3-CR34 Water Valve Replacement CFWD	\$ 370,700	\$ 30,000	\$ 55,600	\$ 456,300	\$ 431,000				
Tecumseh Hamlet SPA EA FSR CFWD	\$ -	\$ 98,000	\$ -	\$ 98,000	\$ 30,000				
CR46/Webster/Laval Sanitary Sewer(LRPCP) CFWD	\$ 1,500,000	\$ 154,000	\$ 55,600	\$ 1,709,600	\$ 50,000	\$ 1,579,200			
Delduca Drive Sanitary Sewer (LRPCP) CFWD+	\$ 30,480	\$ 4,100	\$ 1,300	\$ 35,900		\$ 27,350			
CR42/43 Phase 1 (Water) CFWD	\$ 2,895,000	\$ 264,000	\$ 200,000	\$ 3,359,000	\$ 3,227,000				
CR42/43 Phase 2 (Water) CFWD	\$ 820,000	\$ 120,000	\$ 120,000	\$ 1,060,000		\$ 1,010,000			
TSPA Northwest W & WW Infrastructure (W-1) CFWD	\$ 3,102,000	\$ 536,700	\$ 434,700	\$ 4,073,400	\$ 300,000	\$ 2,830,050	\$ 943,350		
CR19 Improvements Ph1: CR22 to Jamsyl (W-2B) CFWD	\$ 846,000	\$ 88,000	\$ 88,000	\$ 1,022,000	\$ 50,000	\$ 922,000			
CR19 Improvements Ph2: Jamsyl to CPR (W-2B)	\$ 2,100,000	\$ 315,000	\$ 315,000	\$ 2,730,000		\$ 180,000		\$ 2,550,000	
CR19 Improvements Ph3: @ CPR (W-2B & W-5A)	\$ 400,000	\$ 60,000	\$ 60,000	\$ 520,000			\$ 45,000		\$ 475,000
CR19 Improvements Ph4: CPR to CR42 (W-5A)	\$ 750,000	\$ 112,500	\$ 112,500	\$ 975,000				\$ 60,000	
North Tecumseh Water Distribution Model	\$ -	\$ 70,000	\$ -	\$ 70,000	\$ 70,000				
12th Concession Watermain Replacement CFWD	\$ 218,000	\$ 31,000	\$ 31,000	\$ 280,000	\$ 255,000				
Centennial & Woodridge Watermain Replacements	\$ 2,700,000	\$ 400,000	\$ 400,000	\$ 3,500,000	\$ 200,000		\$ 3,300,000		
Water/Wastewater Master Plan Update	\$ -	\$ 100,000	\$ -	\$ 100,000			\$ 100,000		
	\$ 15,732,180	\$ 2,383,300	\$ 1,873,700	\$ 19,989,200	\$ 4,613,000	\$ 6,548,600	\$ 4,388,350	\$ 2,610,000	\$ 475,000

Wastewater Projects									
Sylvestre Drive Sanitary Sewer Extension CFWD	\$ 940,000	\$ 290,400	\$ 94,000	\$ 1,324,400				\$ 1,137,600	
Sylvestre Drive Sanitary PS - 2023 Improvements	\$ 30,000	\$ -	\$ -	\$ 30,000	\$ 30,000				
Lakewood Sanitary PS - 2023 Improvements	\$ 70,000	\$ -	\$ -	\$ 70,000	\$ 70,000				
Gauthier Sanitary PS - 2023 Improvements	\$ 30,000	\$ -	\$ -	\$ 30,000	\$ 30,000				
Public Works North Building Improvements	\$ 142,500	\$ 17,500	\$ 40,000	\$ 200,000	\$ 22,000	\$ 178,000			
Tecumseh Hamlet SPA EA FSR CFWD	\$ 30,000	\$ -	\$ -	\$ 30,000	\$ 30,000				
CR46/Webster/Laval Sanitary Sewer(LRPCP) CFWD	\$ 1,870,000	\$ 170,000	\$ 61,300	\$ 2,101,300	\$ 25,000	\$ 1,909,600			
Scully & St Mark's Storm PS/Riverside Drive CFWD+	\$ 485,000	\$ 75,000	\$ 75,000	\$ 635,000	\$ 20,000		\$ 555,000		
Delduca Drive Sanitary Sewer (LRPCP) CFWD+	\$ 1,100,000	\$ 165,700	\$ 51,000	\$ 1,316,700	\$ 60,000	\$ 1,048,200			
Sanitary Sewer Model Update CFWD+	\$ -	\$ 345,000	\$ -	\$ 345,000					
CR42/43 Phase 1 (Wastewater) CFWD	\$ 2,671,000	\$ 246,000	\$ 200,000	\$ 3,117,000	\$ 2,994,000				
Ure Street Sanitary Sewer (LRPCP)	\$ 489,000	\$ 88,080	\$ 58,680	\$ 636,000					\$ 44,000
TSPA Northwest W & WW Infrastructure (WW-1 & WW-2)	\$ 7,513,000	\$ 1,338,700	\$ 1,036,200	\$ 9,887,900	\$ 720,000	\$ 6,875,925	\$ 2,291,975		
MRSPA WW Infrastructure (WW-12 & WW-13)	\$ 2,300,000	\$ 345,000	\$ 345,000	\$ 2,990,000				\$ 350,000	
8th Concession Sanitary Sewer By-Law	\$ -	\$ 45,000	\$ -	\$ 45,000	\$ 45,000				
MECP Consolidated Linear Infrastructure ECA	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ 25,000				
Water/Wastewater Master Plan Update	\$ -	\$ 100,000	\$ -	\$ 100,000			\$ 100,000		
	\$ 17,670,500	\$ 3,251,380	\$ 1,961,180	\$ 22,883,300	\$ 4,071,000	\$ 10,011,725	\$ 2,946,975	\$ 1,487,600	\$ 44,000

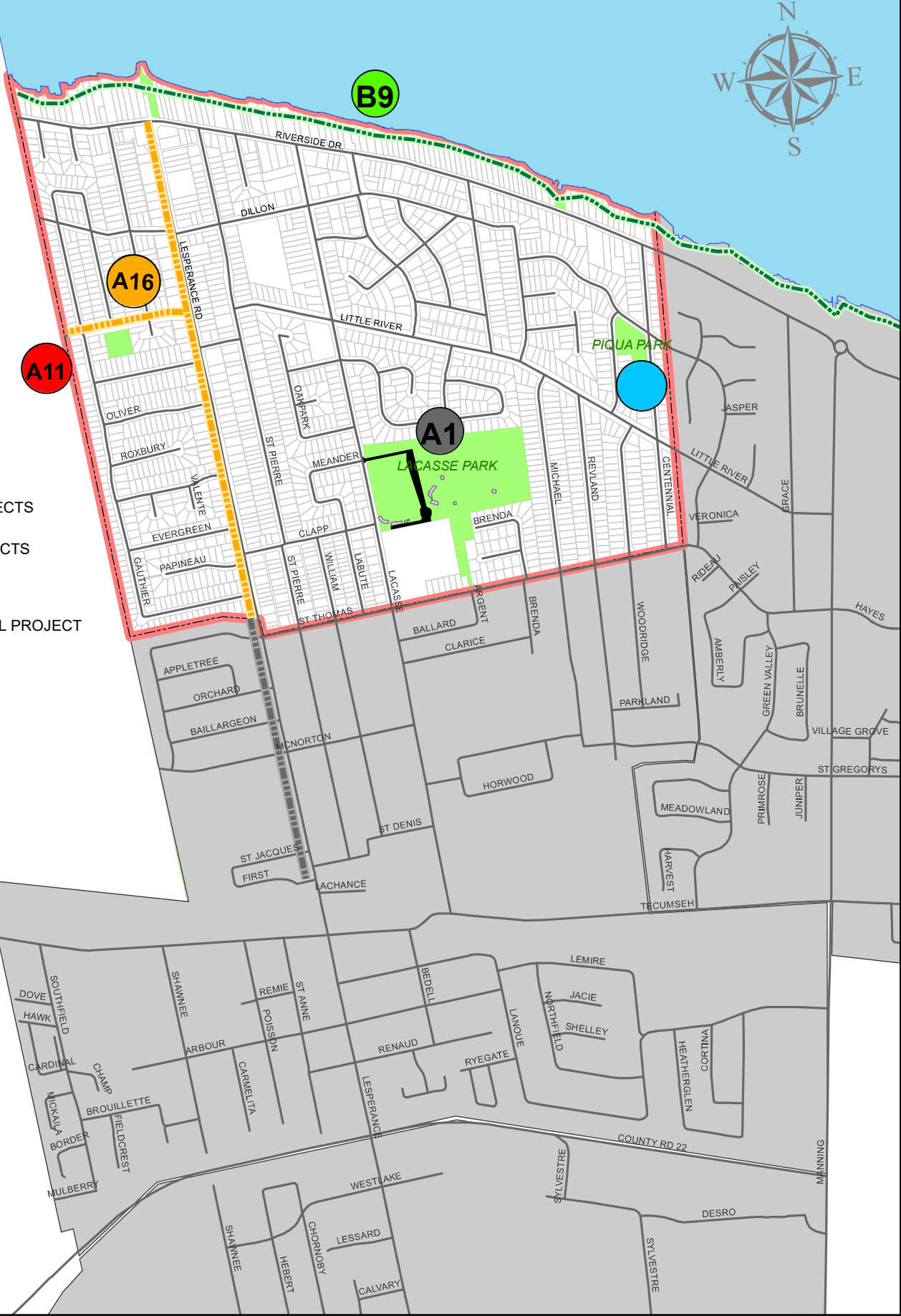
Infrastructure	Construction	Engineering	Contingency	Total	2023	2024	2025	2026	2027
Storm Sewers									
Manning Road Reconstruction - Phase 3 CFWD	\$ 266,800	\$ 42,000	\$ 13,300	\$ 322,100					\$ 319,600
Public Works North Building Improvements	\$ 142,500	\$ 17,500	\$ 40,000	\$ 200,000	\$ 22,000	\$ 178,000			
Lesperance/VIA Rail Improvements CFWD+	\$ 224,400	\$ 47,300	\$ 11,200	\$ 282,900	\$ 120,400				
Sylvestre Drive Sanitary Sewer Extension CFWD	\$ 43,500	\$ 10,000	\$ 5,000	\$ 58,500				\$ 54,300	
Oldcastle Storm Master Plan - Property/Easements	\$ -	\$ 4,000,000	\$ -	\$ 4,000,000				\$ 2,000,000	\$ 2,000,000
Tecumseh Hamlet SPA EA FSR CFWD	\$ -	\$ 496,000	\$ -	\$ 496,000	\$ 50,000				
CR46/Webster/Laval Sanitary Sewer(LRPCP) CFWD	\$ 650,000	\$ 62,000	\$ 22,400	\$ 734,400	\$ 10,000	\$ 647,000			
Scully & St Mark's Storm PS/Riverside Drive CFWD+	\$ 16,500,000	\$ 2,500,000	\$ 1,600,000	\$ 20,600,000	\$ 7,000,000	\$ 10,000,000	\$ 2,600,000		
Delduca Drive Sanitary Sewer (LRPCP) CFWD+	\$ 1,700,000	\$ 151,600	\$ 46,600	\$ 1,898,200	\$ 40,000	\$ 1,668,350			
Shoreline Management Plan CFWD	\$ -	\$ 350,000	\$ -	\$ 350,000	\$ 10,000				
Stormwater Rate Study	\$ -	\$ 45,000	\$ -	\$ 45,000	\$ 5,000				
P.J. Cecile Storm PS * CFWD+	\$ 8,079,600	\$ 1,615,800	\$ 1,615,800	\$ 11,311,000	\$ 1,600,000	\$ 1,100,000	\$ 3,700,000	\$ 3,200,000	\$ 1,711,000
Ure Street Sanitary Sewer (LRPCP)	\$ 394,560	\$ 71,040	\$ 47,400	\$ 513,000					\$ 36,000
Breakwall Condition Assessment	\$ -	\$ 70,000	\$ -	\$ 70,000				\$ 70,000	
MECP Consolidated Linear Infrastructure ECA	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ 25,000				
TSPA Northwest SWM Ponds (Gouin & Lachance)	\$ 4,100,000	\$ 615,000	\$ 615,000	\$ 5,330,000		\$ 400,000		\$ 4,930,000	
MRSPA SWM Infrastructure CFWD	\$ 9,775,000	\$ 1,660,000	\$ 1,300,000	\$ 12,735,000	\$ 50,000		\$ 500,000		\$ 6,000,000
Tecumseh Storm Drainage Master Plan Update	\$ -	\$ 200,000	\$ -	\$ 200,000				\$ 200,000	
	\$ 41,876,360	\$ 11,978,240	\$ 5,316,700	\$ 59,171,100	\$ 8,932,400	\$ 13,993,350	\$ 6,800,000	\$ 10,454,300	\$ 10,066,600
TOTAL	\$ 107,260,040	\$ 21,305,690	\$ 12,241,800	\$ 140,807,670	\$ 23,750,340	\$ 39,161,125	\$ 22,466,875	\$ 18,002,400	\$ 20,848,780

WARD 1

2023 Capital Projects



- ASPHALT PROJECTS
- STORM WATER PROJECTS
- WASTEWATER PROJECTS
- WATER PROJECTS
- MULTI-USE REC. TRAIL PROJECT

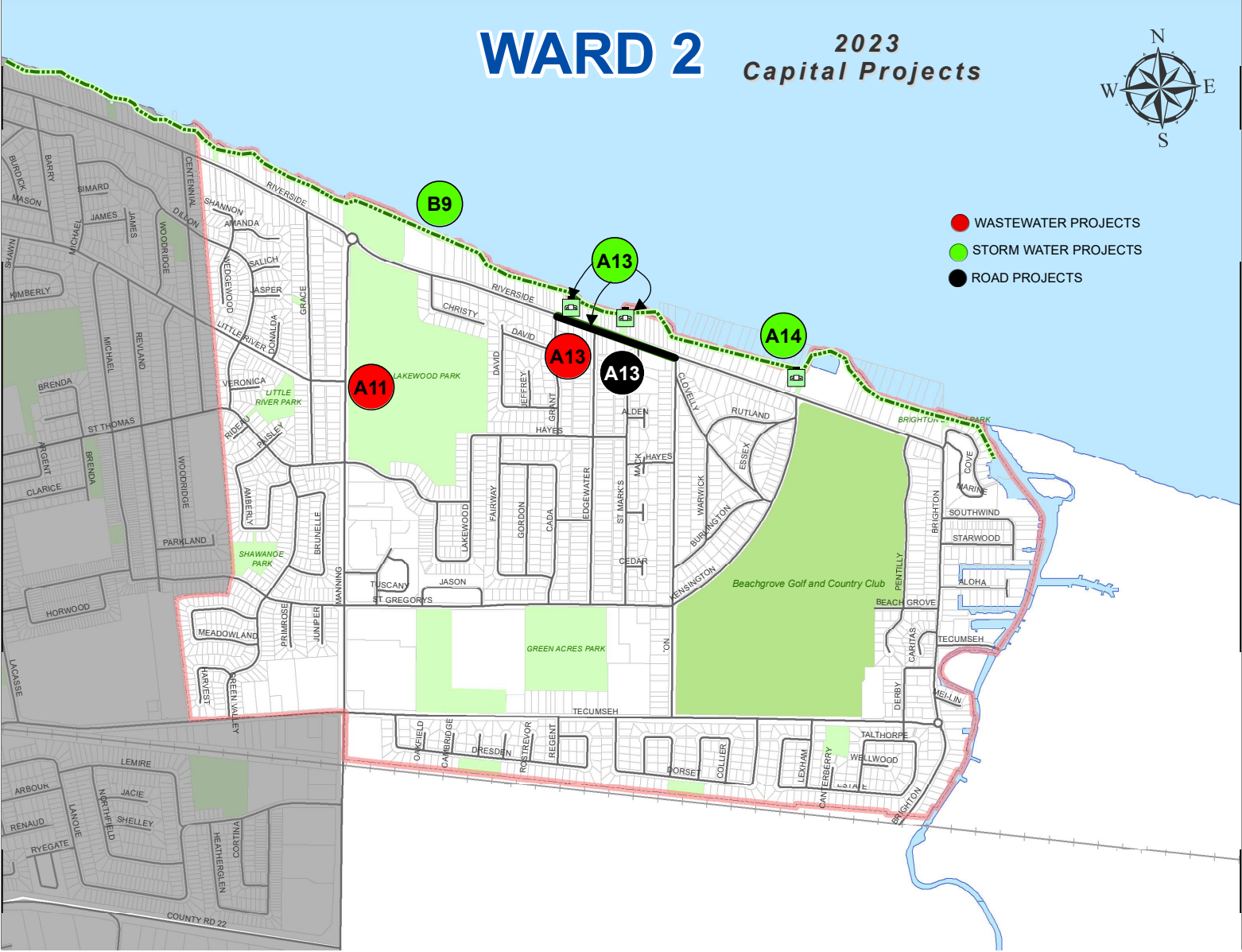


WARD 2

2023 Capital Projects



- WASTEWATER PROJECTS
- STORM WATER PROJECTS
- ROAD PROJECTS

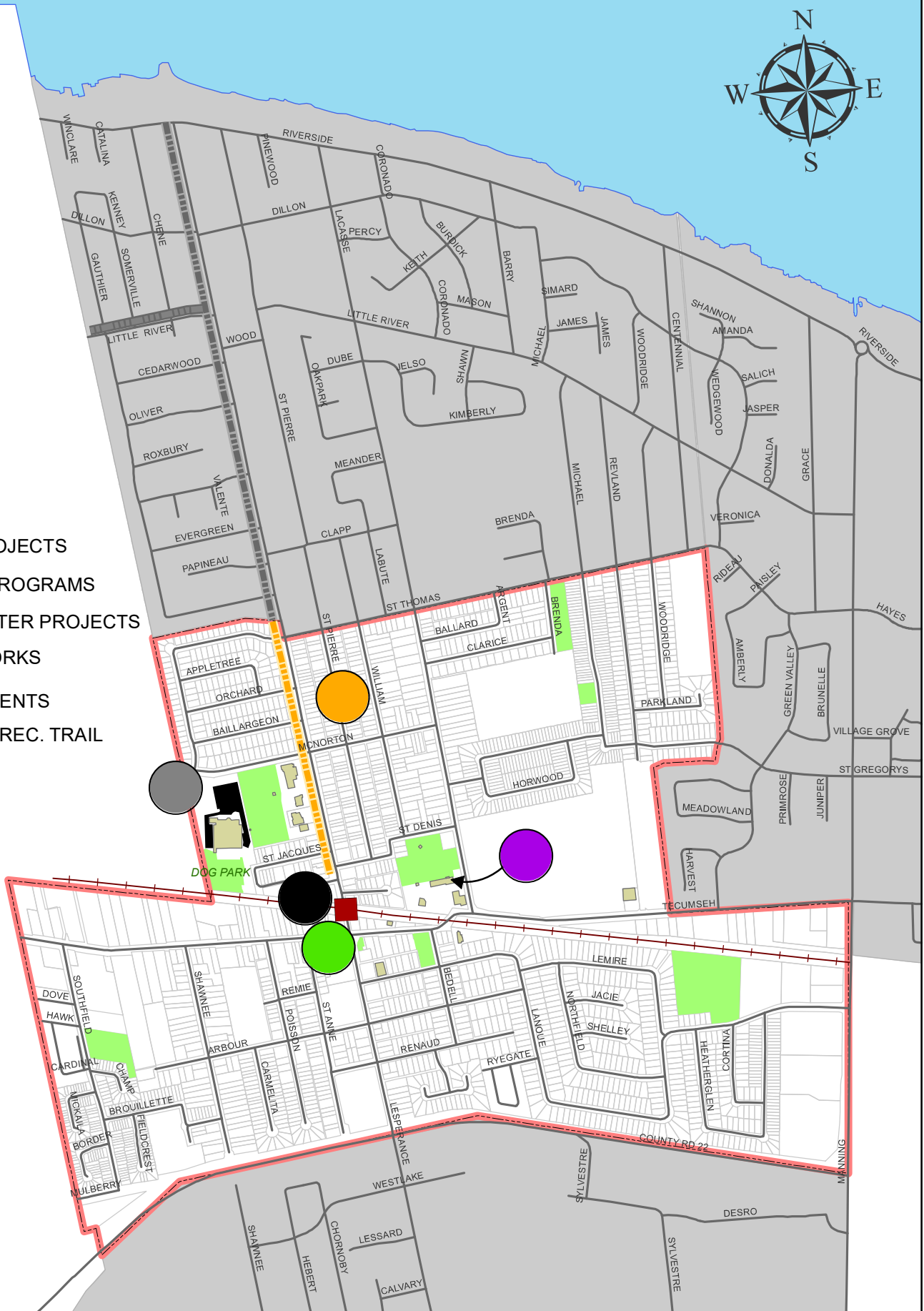


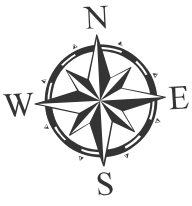
WARD 3

2023 Capital Projects



- ROADS PROJECTS
- ASPHALT PROGRAMS
- STORM WATER PROJECTS
- PUBLIC WORKS BUILDING IMPROVEMENTS
- MULTI-USE REC. TRAIL PROJECT

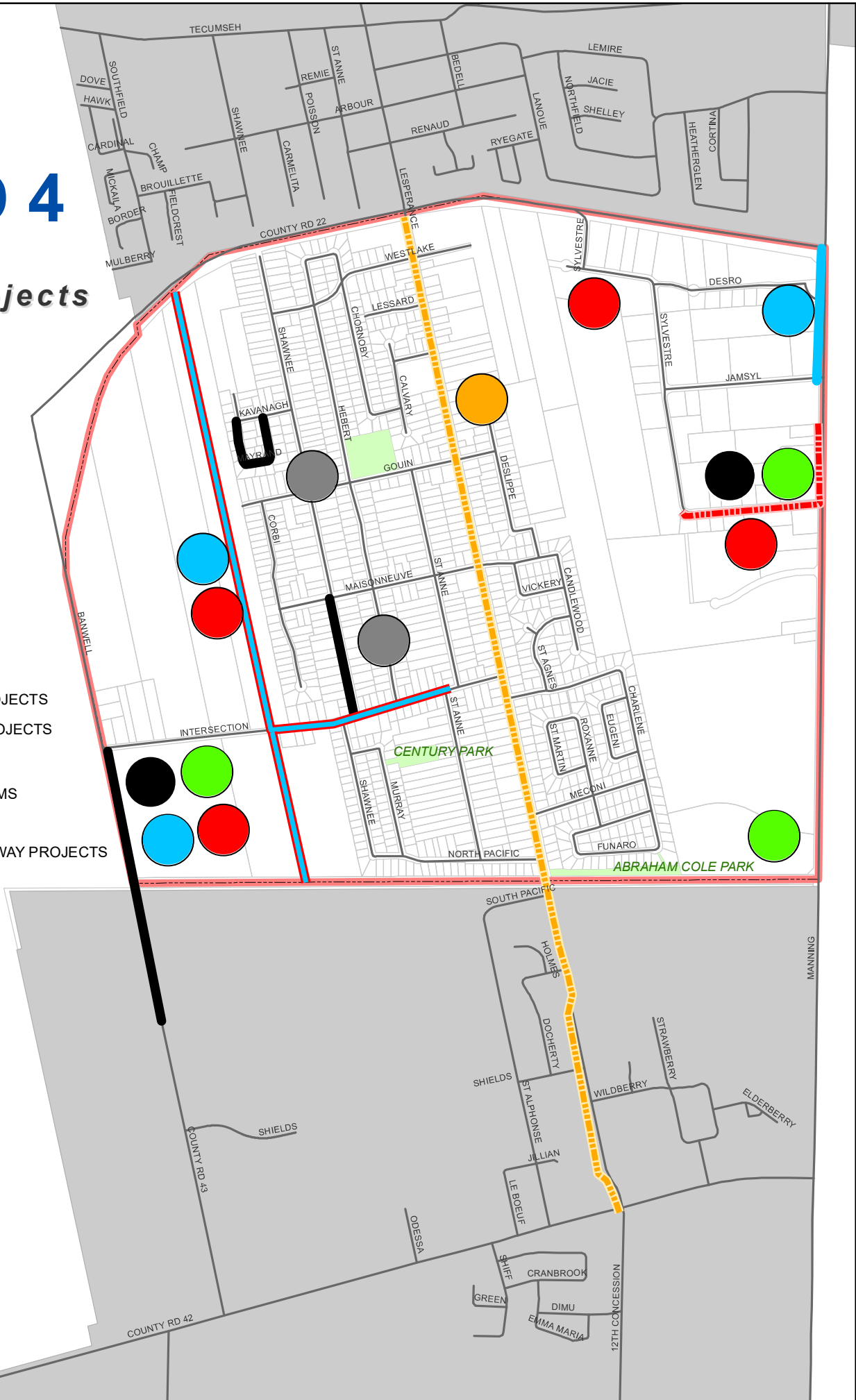




WARD 4

2023 Capital Projects

- WASTEWATER PROJECTS
- STORM WATER PROJECTS
- WATER PROJECTS
- ASPHALT PROGRAMS
- ROAD PROJECTS
- SIDEWALK & PATHWAY PROJECTS



WARD 5

2023
Capital Projects



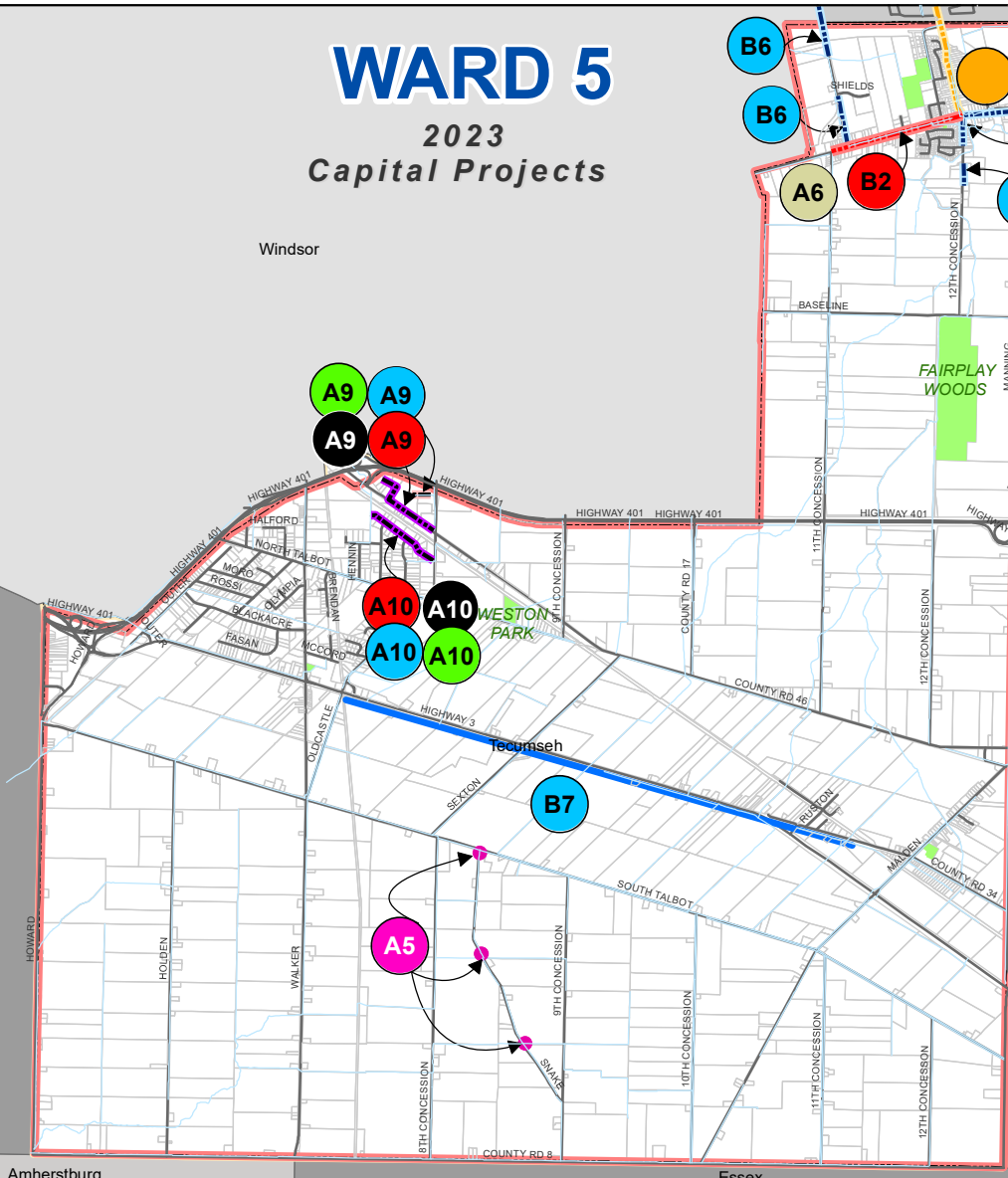
Windsor

Lakeshore

LaSalle

Amherstburg

Essex



- SIDEWALK & PATHWAY PROJECTS
- BRIDGES
- WATER PROJECTS
- WASTEWATER PROJECTS
- STORM WATER PROJECTS
- ROADS PROJECTS