



Report of the Commissioner of Public Works

Direct Purchase of North YDSS (York Durham Sewage System) Expansion Phase 1 Delivery Services

1. Recommendations

1. Council authorize the Commissioner of Public Works to negotiate and execute a direct purchase agreement with GHD Limited for program management, engineering design and construction support services for the North YDSS Expansion Phase 1 at an estimated value not to exceed \$84.5 million, exclusive of taxes, as outlined in this report, on business terms satisfactory to the Commissioner of Public Works and on legal terms acceptable to the Regional Solicitor.
2. Council authorize the Commissioner of Public Works to negotiate and execute a direct purchase agreement with Revay and Associates Limited for project planning and performance monitoring services related to the North YDSS Expansion Phase 1 at an estimated value not to exceed \$3.0 million, exclusive of taxes, as outlined in this report, on business terms satisfactory to the Commissioner of Public Works and on legal terms acceptable to the Regional Solicitor.

2. Purpose

This report seeks Council authority for York Region (the “Region”) to negotiate directly with and enter into agreements with GHD Limited (“GHD”) and Revay and Associates Limited (“Revay”) for consulting services pursuant to Sections 14 and 18.1.e of the Region’s [Procurement Bylaw 2021-103 \(“Procurement Bylaw”\)](#), and in compliance with applicable trade treaty requirements that allow for limited tendering.

Key Points:

- North YDSS Expansion Phase 1 involves field work, design, construction, and delivery of seven critical infrastructure components valued at more than an estimated \$500 million within an aggressive five-year timeline. To meet legislative deadlines applicable to the North YDSS

Expansion Phase 1, where the earliest infrastructure component is to be delivered by the end of 2026, the Region must commence and complete the design work for Phase 1 in an expedited manner

- The Region is seeking authorization to directly engage GHD and Revay because of their respective proven expertise in similar complex capital delivery projects, which will facilitate the expeditious planning and delivery of North YDSS Expansion Phase 1 within the legislated timeline while enhancing design component integration and mitigating construction coordination issues
- Direct purchase of consulting services from GHD and Revay will quickly advance project planning and execution through a coordinated system-wide design, enhance risk management by applying a holistic YDSS lens, and achieve delivery efficiency with cost certainty for long-term quality program management and engineering services
- A Procurement Review Committee meeting held pursuant to the requirements of the Procurement Bylaw determined that direct purchases from GHD and Revay comply with the Region's Non-Standard Procurements Protocol, subject to Council approval as the total cost of the non-standard procurement exceeds \$500,000 (Procurement Bylaw s. 18.1 (e))
- Ontario's *More Homes Built Faster Act, 2022* and the associated *Supporting Growth and Housing in York and Durham Regions Act, 2022* mandate York Region and Durham Region to expedite delivery of the York Region Sewage Works Project to support accelerated growth and housing in the Regions. Not proceeding with these direct purchases puts the Region at risk of not delivering on the Province's legislated mandate
- The York Region Sewage Works Project will expand and improve the existing York Durham Sewage System (YDSS) to convey sewage to Duffin Creek Water Pollution Control Plant ("Duffin Creek Plant") for treatment and discharge to Lake Ontario
- The York Region Sewage Works Project consists of three groups of projects: 1) North YDSS Expansion; 2) South YDSS Expansion; and 3) YDSS Primary System Expansion (including Duffin Creek Plant)
- The North YDSS Expansion includes 22 critical infrastructure components to be delivered in three phases over the next two decades, at a conceptual construction cost currently estimated upwards of \$1.8 billion
- Independent consultant, Ernst and Young Orenda Corporate Finance Inc. ("EY Inc."), has recommended a program management approach for optimal delivery of the engineering services required for the North YDSS Expansion due to the urgent timeline, size, and complexity of the overall project

3. Background

***Supporting Growth and Housing in York and Durham Regions Act* mandates expedited delivery of a Lake Ontario servicing solution for Aurora, East Gwillimbury and Newmarket**

Enacted in November 2022, the *Supporting Growth and Housing in York and Durham Regions Act*, as part of *More Homes Built Faster Act*, mandates the Region to support growth and housing in Aurora, East Gwillimbury and Newmarket via a Lake Ontario-based servicing solution. This sudden and significant pivot from the originally planned Lake Simcoe-based Upper York Sewage Solution involves conveyance and treatment of wastewater at the co-owned Duffin Creek Plant in Durham Region.

As detailed in the update to Council on [March 9, 2023](#), York and Durham Regions have been working with Ministry of Environment, Conservation and Parks staff to develop a list of infrastructure needs to be included in the York Region Sewage Works Project mandated in the Act. The York Region Sewage Works Project currently consists of three groups of infrastructure project components: 1) North YDSS Expansion, 2) South YDSS Expansion; and 3) YDSS Primary System Expansion (including Duffin Creek Plant) as shown in Appendix A.

The North YDSS Expansion involves the most critical group of projects and must be advanced immediately. The North YDSS Expansion will be delivered in three phases as shown in Table 1 and Appendix B. This report focuses on securing program management and engineering services required for expedited delivery of the North YDSS Expansion Phase 1.

York and Durham Regions submitted an extensive Project Report along with consultation reports for Provincial review and approval

In accordance with the *Supporting Growth and Housing in York and Durham Regions Act*, York and Durham Regions submitted a final Project Report outlining necessary work, costing, approvals, and mitigation measures for impacts of each component of the York Region Sewage Works Project on October 31, 2023.

- The Project Report addressed Provincial requirements for all infrastructure components of the York Region Sewage Works Project, including infrastructure system planning, conceptual designs, environmental studies, impact assessments and mitigation, and Indigenous and interested persons consultations
- The Regions spent seven months from April 2023 through October 2023 preparing the Project Report, mobilizing over 200 multi-disciplinary professionals for over 30,000 hours to complete over 80 technical memos, including over 200 coordination meetings. The Regions were able to expedite planning and field investigation work by engaging engineering consultants with prior experience and knowledge of the former Upper York Sewage Solutions project, including GHD

- Following the letter from the Minister of the Environment, Conservation and Parks (the “Minister”) of April 25, 2023, the project team reached out to 23 regulatory agencies, local municipalities, nine Indigenous communities, and published a public notice in local newspapers to encourage participation in the consultation process. In addition to regular email communications, over 30 in-person and virtual meetings were held to actively engage various interested parties

Staff have been meeting regularly with Provincial staff to assist and advance an expedited review and approval process. Approval of the Project Report by the Minister is anticipated by end of 2023, which will allow the Regions to proceed with implementation of the York Region Sewage Works Project subject to a broader funding strategy. Staff will work to mitigate expenditures if this project does not get approved by year-end.

North YDSS Expansion consists of 22 project components to be delivered in three phases over next two decades

The York Region Sewage Works Project Report identified 22 project components for the North YDSS Expansion to fulfill the Lake Ontario-based servicing solution. The Region’s Long-Range Planning, Water and Wastewater Master Plan and Capital Delivery teams collaborated to propose a phased delivery of components to accommodate projected growth in the northern York Region communities in a manner that recognizes and addresses financial and resource impacts to the Region. A preliminary list of components in each delivery phase of the North YDSS Expansion Project is provided in Table 1. All costs represent York Region’s share. Appendix B shows locations and delivery phases of infrastructure components of the North YDSS Expansion while Appendix C lays out implementation timelines for the phases.

Table 1
North YDSS Expansion Project Components

Delivery Phase	Project Components	Anticipated Completion Date	Estimated Construction Cost
Phase 1	Leslie Street Trunk Sewer Phase 1 (19 th Ave to Bloomington Road) Aurora Pumping Station Gravity Sewer Twinning Second Concession Pumping Station Upgrade Second Concession South Gravity Sewer Second Concession North Gravity Sewer Newmarket Pumping Station Upgrades Bloomington Interceptor Sewer	2027/2028	\$500+ million
Phase 2	Leslie Street Trunk Sewer Phase 2 (Bloomington Road to St. John's Sideroad) Aurora East Pumping Station Gravity Interconnection Aurora East Pumping Station Aurora East Pumping Station Forcemains Queensville East Pumping Station Queensville East Pumping Station Forcemains	2031	\$550 – 650+ million
Phase 3	Mulock Pumping Station Mulock Pumping Station Forcemains Leslie Street Trunk Sewer Phase 3 (Greenlane to Mulock Drive) Newmarket East Pumping Station Newmarket East Forcemains Holland Landing Pumping Station Upgrade Queensville West Pumping Station Upgrades Bogart Pumping Station Upgrades Yonge Street Sewer Rehabilitation	2036/2041	\$500 – 600+ million

Immediate commencement of North YDSS Expansion Phase 1 projects required to meet Minister's timelines

Addressing growth demands through expedited delivery of the York Region Sewage Works Project is a primary objective of the Province. Through a letter dated March 28, 2023, the Minister requested an aggressive implementation timeline with certain infrastructure components to be in service as early as the end of 2026. Delivery of seven or more critical infrastructure projects on this accelerated schedule underscores the need to rely on experienced partners for engineering services for program management and preliminary design, followed by immediate commencement of the North YDSS Expansion Phase 1 detailed design work and construction support. Furthermore, the aggressive timeline for delivery of the York Region Sewage Works Project could not be foreseen by the Region and cannot accommodate the time required to competitively procure urgent consulting services required for immediate commencement of North YDSS Expansion Phase 1.

Following Ministry of Environment, Conservation and Parks approval of the Project Report anticipated by year-end, continued engineering services from GHD will enable fast tracking design and project execution while minimizing any lost cost and time related to securing a new service provider. A new service provider would also need to be brought up to speed on 15 years of history and technical detail translated from the original Upper York environmental assessment, alternative selection and conveyance design, including the Newmarket Forcemain Twinning Project.

4. Analysis

Procurement Review Committee determined direct purchases with GHD and Revay are permissible under limited tendering rules of trade treaties

The Region's Procurement Bylaw 2021-103 requires Council to approve non-standard procurements over \$500,000 and provides that non-standard procurements are permitted under the specific circumstances described in the Region's Non-standard Procurements Protocol. This protocol sets out the requirements for acquiring deliverables through a non-standard procurement process described in section 18.1 (e) and section 14. Additionally, section 5.3 of the Non-standard Procurements Protocol permits direct purchases over \$100,000 in "Any circumstances under applicable trade treaties allowing for deliverables to be directly purchased....".

When seeking a determination on whether a deliverable with a total cost over \$100,000 can be acquired using a non-standard procurement method, such as a direct purchase, section 7.1 (c) of the Procurement Bylaw requires that a Procurement Review Committee (PRC) meeting be held.

A PRC meeting held on October 12, 2023, determined that direct purchases with GHD and Revay as described in this report are permissible under the limited tendering rules of the applicable trade treaties as set out in the copy of the PRC Report dated October 12, 2023, attached as Appendix D to this report. Additional details supporting this finding are set out below.

Traditional consulting services delivery model not suitable for North YDSS Expansion Phase 1

The North YDSS Expansion Phase 1 project is comprised of interdependent infrastructure construction projects, the mandated scope and timeline of which is unprecedented for York Region in terms of size, complexity, and accelerated delivery.

When constructing less integrated infrastructure components, construction projects are typically managed individually where the Region would engage a separate consultant for the planning and design of each infrastructure construction project. However, due to the mandated delivery timeline for the North YDSS Expansion Phase 1, the different components must be delivered with a much higher degree of coordination where the infrastructure components are designed and planned in conjunction with one another and delivered with overlapping project timelines rather than sequentially. This project design and delivery method is required to provide timely servicing capacity while minimizing system operational risk.

Program management approach ensures North YDSS Expansion Phase 1 components are delivered in an efficient and integrated manner to meet provincial mandate

After considering the nature of the project, EY Inc., an independent consultant retained by the Region concluded, to ensure effective planning, risk mitigation and coordinated delivery of all components, a program management approach would be the most suitable delivery method for the consulting services required for North YDSS Expansion Phase 1.

Under the program management approach, a single consultant would be engaged on an expedited basis to provide all services required for the planning and design of all infrastructure components involved in North YDSS Expansion Phase 1. The construction of each infrastructure component would then be competitively tendered and built using a Design-Bid-Build delivery model. Other YDSS consulting work, such as engineering services for the Primary System and Duffin Creek Plant, were secured through a similar direct purchase contract.

The scope of work for the program management consultant would therefore include:

- Continuing to advance the North YDSS Expansion Phase 1 preliminary design including delivery of program and supporting services such as field investigations, property acquisition, utility coordination, and permitting
- Performing engineering design and construction contract administration services for all seven North YDSS Expansion Phase 1 components and assisting with the competitive tendering of the related construction contracts

Using a single consultant as a program manager for all Phase 1 works rather than multiple consultants provides several advantages that facilitate delivery of the mandated infrastructure components within the Province's strict legislative timelines. This program management approach will allow the Region to centralize key common elements of project delivery such as utility relocation,

property acquisition, geotechnical and hydro-geological investigation, design and construction to enhance systematic planning, delivery efficiency, and quality of work. Other benefits include:

- Increased efficiency through a single point of coordination including:
 - Integrated project scheduling
 - Contracting coordination for repeatable and scalable tasks (for example, field investigations and community consultations)
 - Consideration for design of large-scale solutions to manage technical requirements and risks (for example, excess soil management from over 40 km of tunnelling)
 - Defined governance framework allowing for more efficient decision-making among the Region, stakeholders (for example, the Province) and consultants
 - Centralized systems knowledge, promoting greater efficiency in delivery, and capturing downstream benefits (for example, system-wide design standards and specifications, and reducing operating and maintenance costs)
 - Data management and knowledge transfer across a multi-decade program
- Extended capacity and capability to deliver infrastructure components within timeframes driven by Provincial growth targets by tapping into service providers with technical capabilities required for project delivery beyond the current capacity of the Region's team
- Management of risks and issues on a systematic basis, providing greater opportunity for holistic responses and quality outcomes
- Improved line of sight to all project components to foster communication and collaboration among stakeholders and prompt identification of potential issues for timely decision-making to reduce the likelihood of delays and cost overruns

The proposed implementation steps, developed with EY Inc., for the consultant program management delivery model are outlined in Table 2.

Table 2
Implementation Steps (Q4 2023 to Q1 2024)

Action Item	Description
1. Council Approval Process	Obtain authorization for contract negotiation
2. Engineering Services Scope	Review and finalize scope of work of engineering services over the contract term jointly with program management consultant
3. Contract Development	Draft contract with legal counsel support
4. Program Management	Develop a comprehensive program framework outlining key activities, responsibilities, and deliverables to ensure project goals are effectively met

GHD has extensive knowledge of the North YDSS system and demonstrated experience in delivering similar complex capital programs

GHD’s demonstrated experience with the North YDSS system and similar capital programs makes GHD the most qualified candidate for the program management and engineering services consultant for North YDSS Expansion Phase 1.

In 2008, the Region retained GHD through a competitive procurement process to provide consulting services for the Upper York Sewage Solutions (UYSS) Individual Environmental Assessment (IEA) to address sewage capacity needs in Aurora, East Gwillimbury and Newmarket. Through the comprehensive investigation and studies of this project, along with successful delivery of other capital projects in the area, GHD has gained extensive knowledge of the North YDSS system complexity, environmental constraints, opportunities and strategies for expansion.

In 2014, following completion of the Upper York Sewage Solutions IEA, GHD was selected as the successful proponent through a competitive procurement process to assist the Region with implementing the preferred solution identified in the IEA. This complex project included, a state-of-the-art Water Reclamation Centre with a conveyance system, and the YDSS Forcemain Twinning project comprised of a large diameter sewage forcemain between Newmarket and Aurora Sewage Pumping Stations to provide critical system redundancy.

GHD has been awarded numerous projects related to the North YDSS system via competitive procurement processes and has completed projects at all the pumping stations in the North YDSS system. They recently completed the Feasibility Study and Conceptual Design Services for the

Queensville, Holland Landing and Sharon System Upgrades. This work included a conceptual design and implementation strategy to convey sewage from East Gwillimbury south to the YDSS.

Along with their deep and recent knowledge of YDSS conditions, limitations and operating strategy GHD has extensive experience delivering major infrastructure projects and programs locally and internationally. GHD provided program management and design services for Toronto constructing 100+ kilometres of linear infrastructure within City streets over 10 years. They have worked on large infrastructure projects internationally, as seen in Table 3, including the Northeast Link project, Victoria’s largest road infrastructure project in Australia with an approximate value of \$17 billion.

Table 3
GHD Historical and Current Major Infrastructure Projects and Programs

Year	Project	Client	Program Value
2014 – 2021	Upper York Sewage Solutions Detailed Design and Construction Services	York Region	\$550 million
2018 – 2026	Coordinated Toronto Water and Transportation Services, Construction Years 2020-2023	Toronto	\$243 million
2023 – ongoing	Coordinated Toronto Water and Transportation Services, Construction Years 2024-2026	Toronto	\$200 million
2015 – ongoing	Level Crossing Removals Program	Victoria, Australia	\$6 billion
2017 – ongoing	Northeast Link Program	Northeast Link Authority, Australia	\$17 billion

GHD’s pre-existing knowledge regarding the complexity, environmental constraints, and opportunities for expansion that currently affect the North YDSS system is crucial for delivery of the North YDSS Expansion Phase 1 within legislative deadlines. This pre-existing knowledge will allow GHD to immediately contribute to planning and development of highly complex North YDSS Expansion Phase 1 works without the steep learning curve that inevitably faces engineering service providers with less YDSS history and experience.

The Region is therefore requesting Council authorize negotiation and execution of a direct purchase contract with GHD as program management and engineering consultant for early program establishment and immediate start of detailed design works. GHD will manage program delivery

including advancing technical support functions and delivering Phase 1 design and construction support services to meet tight deadlines mandated by the Province. Using a single program management consultant will allow Phase 1 work to progress quickly while minimizing risks of delay in establishing early stages of the program.

For Phase 2 and Phase 3 of the North YDSS Expansion, there will be opportunity to re-examine what delivery model is best suited for delivery of those phases.

Revay is an industry leader in project control and performance monitoring services with demonstrated experience in delivering similar complex capital programs

A scheduling and cost control consultant is required during the early planning and development stages of North YDSS Expansion Phase 1 to ensure that delivery of the individual infrastructure components is on time and on budget. Use of scheduling and cost control services has a proven track record for reduced project risks and increased probability of on-time and on-budget project completions by providing an independent review of consultant and contractor's work.

The Region requests Council to authorize negotiation and execution of a direct purchase contract with Revay because Revay has extensive experience on projects similar in size, scope and complexity and has provided effective scheduling and cost control services for the Region since 2005. Notably, Revay assisted York Region Rapid Transit Corporation and Metrolinx on the VivaNext project (approximate value of \$1.8 billion) under various types of contract delivery models such as Public Private Partnership, Design Build with Guaranteed Maximum Price, and Design-Bid-Build. They provided project planning and control services for the Duffin Creek Plant expansion project (completed in 2018) valued at \$1.2 billion, and the most recent YDSS Forcemain Twinning project (completed in 2021) with a value of \$105 million.

Revay thoroughly understands anticipated challenges and risks and has demonstrated effective risk mitigation approaches. Revay will provide guidance, expert advice based on unbiased analysis, and reliable performance monitoring and reporting that can identify off-trends at an early stage to avoid or mitigate risks to critical time and cost objectives.

5. Financial Considerations

2023 Capital Plan includes \$433 million in Capital Spending Authority for wastewater servicing program

As part of the Project Report, the project team completed preliminary cost estimates for all infrastructure components of the York Region Sewage Works Project based on the conceptual designs. Construction cost for the entire North YDSS Expansion is currently estimated to be upward of \$1.8 billion based on conceptual, preliminary information. The cost estimate will be reviewed and updated as the program progresses with field and subsurface investigation and project design.

Previously planned Wastewater Servicing for the Aurora, East Gwillimbury and Newmarket program (UYSS program) has \$550 million identified in the existing Development Charge Bylaw and \$433 million in Capital Spending Authority in the 2023 Capital Plan. The 2024 Capital Plan is being assessed to include \$515 million in Capital Spending Authority for the North YDSS Phase 1 Expansion. Given the magnitude of the entire North YDSS Expansion including Phase 2 and Phase 3, funding sources will need to be addressed to accommodate projected growth in northern York communities.

A funding contribution from the Province will assist the Region in advancing this important infrastructure work

Considerations for developer financing agreements may be brought forward to Council once broader funding strategies for accelerated growth and infrastructure planning are fully developed. These funding strategies are subject to significant changes proposed for inclusion in the next Development Charge Bylaw update. Implementation of the North YDSS expansion is critical to support Provincial growth targets and a funding contribution from the Province will assist the Region in advancing this important infrastructure work.

New \$84.5 million contract enables GHD to provide adequate resources to support integrated program and effective delivery of the North YDSS Expansion Phase 1

Based on a preliminary scope of services and commercial principles developed collaboratively by the Region, GHD and EY Inc., GHD completed a high-level work plan along with resource requirements to support the Region in delivering the North YDSS Phase 1 program including a budgetary fee structure. This fee structure was reviewed by an independent consultant specialized in infrastructure project controls and cost estimation to ensure it is within general industry practice and provides good value to the Region. The firm concluded that GHD's fees for program management, supporting functions, design and construction services are very competitive compared to industry practice for similar complex projects.

The North YDSS Expansion Phase 1 requires careful planning, comprehensive environmental studies, thorough field investigations, and engineering solutions to ensure environmental protection, constructability and biddability. GHD's proposed level of effort to resource the North YDSS Expansion Phase 1, using a multidisciplinary management team including engineering and field construction professionals, demonstrates a thorough understanding of project risks and aligns with the Region's estimate of necessary resources and level of effort to effectively deliver the Phase 1 work.

Table 4 shows a breakdown of GHD's program management and engineering services along with their proposed budget fees to assist the Region in delivering the North YDSS Expansion Phase 1 work. Upon execution of this new agreement, the existing contract with GHD for Detailed Design, Contract Administration and Site Inspection for Upper York Sewage Solutions project will be suspended. The \$12 million in remaining funds will be consolidated under the new contract purchase order.

Table 4
GHD Fees for North YDSS Expansion Phase 1

GHD Program Management and Supporting Services for North YDSS Expansion Phase 1	Fees (\$ million)
1. Program Management	9.0
2. Project Report Development and Consultation	3.4
3. Project Components Planning and Definition	4.5
4. Communication and Engagement	1.0
5. Field Investigation	13.0
6. Utility Coordination and Relocation	0.5
7. Property Acquisition	0.8
8. Agency Consultation, Permits and Approvals, and Environmental Compliance	1.5
9. Environmental Engineering	1.0
10. Technical Support Services for Peer Reviews and Advisory Panels	0.8
11. Design of North YDSS Expansion Phase 1	20.0
12. Construction Services for North YDSS Expansion Phase 1	29.0
Total for North YDSS Expansion Phase 1:	84.5

New \$3 million contract with Revay for scheduling and cost control services for the North YDSS Expansion Phase 1 work represents good value for money given the magnitude of project risks

Revay has successfully provided scheduling and cost-control services since 2005. They are experienced with the Region’s capital programs including strict scheduling requirements, project constraints, technical complexities, and procurement methods.

The \$3 million upset limit contract represents good value for money to the Region, given the magnitude of project risks, including highly constrained servicing capacity by the end of 2026. Revay’s fee is 3.6% of GHD’s \$84.5 million program. This corresponds with historical spending values, as shown in Table 5. This cost represents good value for money in terms of risk avoidance for delivering a complex and phased capital program.

Table 5
Historical Engineering Consultants' and Revay's Fees and New Proposed Fee

Year	Project	Revay's Fee (\$ million)	Consultant's Fee (\$ million)	Revay's Fee as a Percentage of Consultant's Fee
2005	Duffin Creek Stage 3 Expansion*	0.98	63.3	1.6%**
2010	Duffin Creek Stage 1 and 2 Refurbishment	1.48	30.1	4.9%
2017	Duffin Creek Biosolids Replacement	1.0	28.5	3.5%
2019	YDSS Forcemain Twinning*	0.6	14.2	4.2%
2023	Proposed New Contract	3.0	84.5	3.6%

*Competitively bid procurement

**Fee included limited scope of services not directly comparable to subsequent project work scopes

6. Local Impact

The *Supporting Growth and Housing in York and Durham Regions Act* requires expedited delivery of the York Region Sewage Works Project to meet growth needs in Aurora, East Gwillimbury, and Newmarket and prevent a potential servicing capacity shortfall in 2026. Advancing Phase 1 of the North YDSS Expansion is critical to achieving this goal.

Establishing a program management approach along with expedited consulting service agreements with GHD and Revay will enable the Region to deliver infrastructure components in an integrated, flexible and timely manner to accommodate future development in these communities.

7. Conclusion

The complexity and expedited timeline of the project as mandated by legislation does not provide the Region with the opportunity to design and manage construction of different infrastructure components separately. Instead, to ensure successful delivery of North YDSS Expansion Phase 1, the Region must implement a highly coordinated program management method of delivery and rely

on parties who have proven track records in delivery of similar complex capital programs and extensive experience with the North YDSS system.

Ernst & Young Orenda Corporate Finance Inc. identified a program management approach as an innovative and optimal delivery model for the North YDSS Expansion. The program requires strengthening established consultant service relationships with GHD and Revay to meet servicing needs and objectives for provincially mandated growth targets and expedited timelines associated with the *Supporting Growth and Housing in York and Durham Regions Act, 2022*.

GHD has extensive knowledge in the North YDSS system from their comprehensive involvement in the Upper York Sewage Solutions project, delivery of the York Region Sewage Works Project Report and demonstrated experience in delivering similar complex capital programs. Revay is an industry leader in scheduling and cost control services and has a proven track record for providing independent performance monitoring services in similar complex capital programs.

Scope, complexity, and urgent timelines for the North YDSS Expansion Phase 1 does not allow necessary consulting services to be obtained through a conventional public procurement process. Accordingly, this report seeks Council approval for the Commissioner of Public Works to negotiate and execute a direct purchase contract with GHD to manage and assist the Region in delivering the North YDSS Expansion Phase 1 design and a direct purchase agreement with Revay and Associates Limited for associated project planning and monitoring services as permitted by the Region's Procurement Bylaw.

For more information on this report, please contact Pina Accardi, Director (A), Capital Delivery, Water and Wastewater, Public Works, at 1-877-464-9675 ext.75355. Accessible formats or communication supports are available upon request.

Recommended by:



Mike Rabeau, P.Eng

General Manager, Capital Infrastructure Services



David Szeptycki

Acting Commissioner of Public Works



Approved for Submission:

Erin Mahoney

Chief Administrative Officer

October 25, 2023

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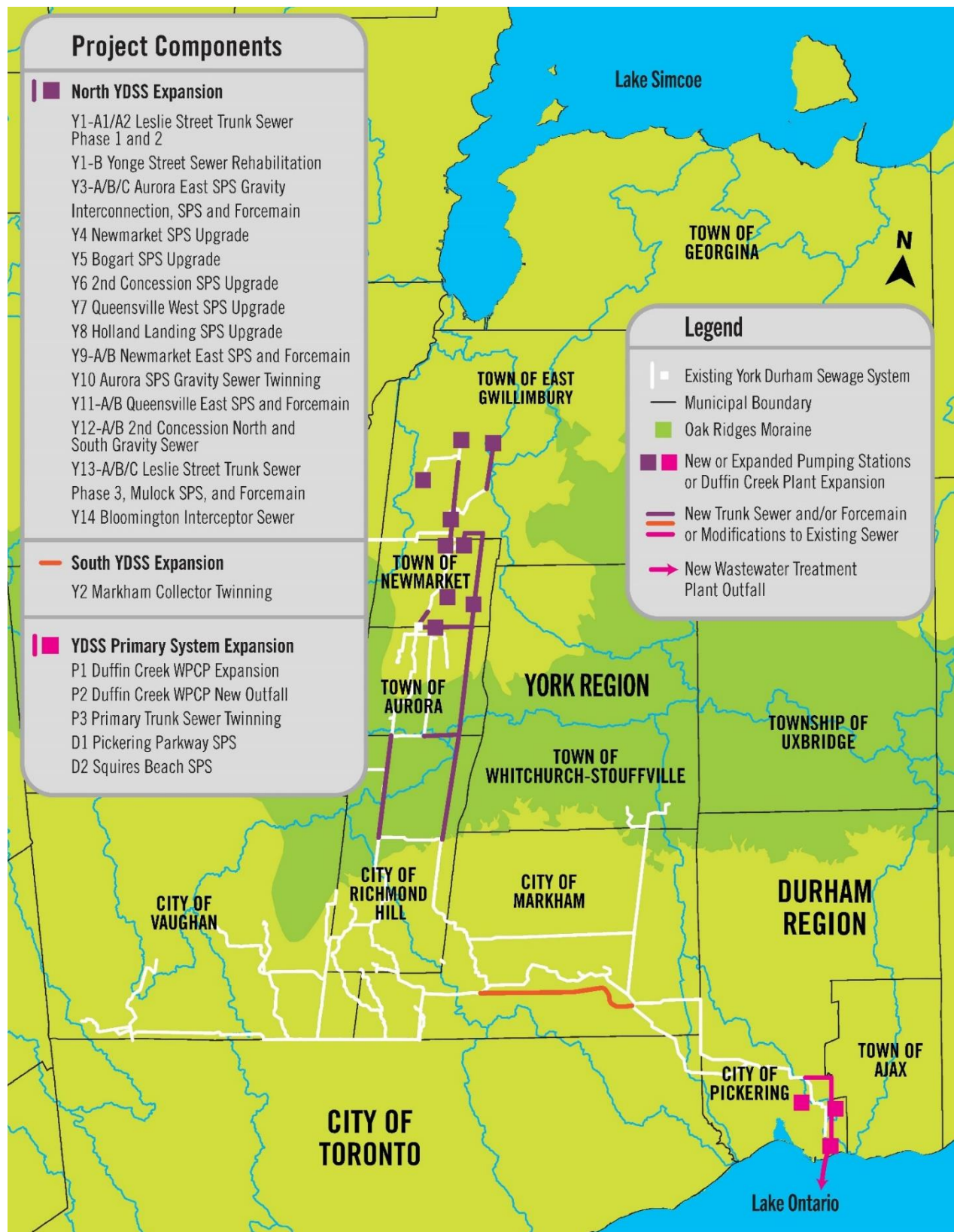
Appendix A - York Region Sewage Works Project Infrastructure Components

Appendix B - Locations and delivery phases of North YDSS Expansion Infrastructure Components

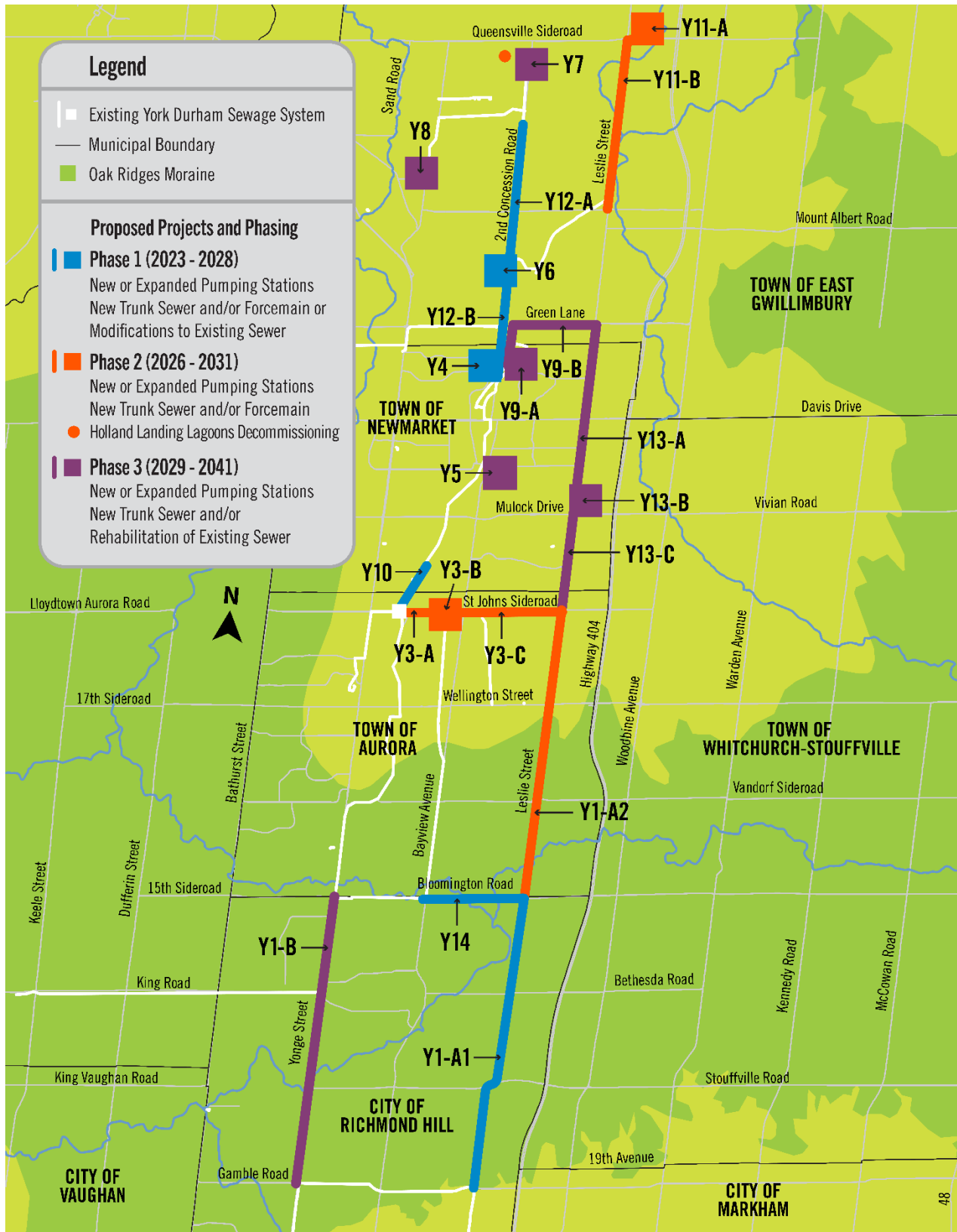
Appendix C - Implementation Timelines of North YDSS Expansion

Appendix D - Procurement Review Committee Report

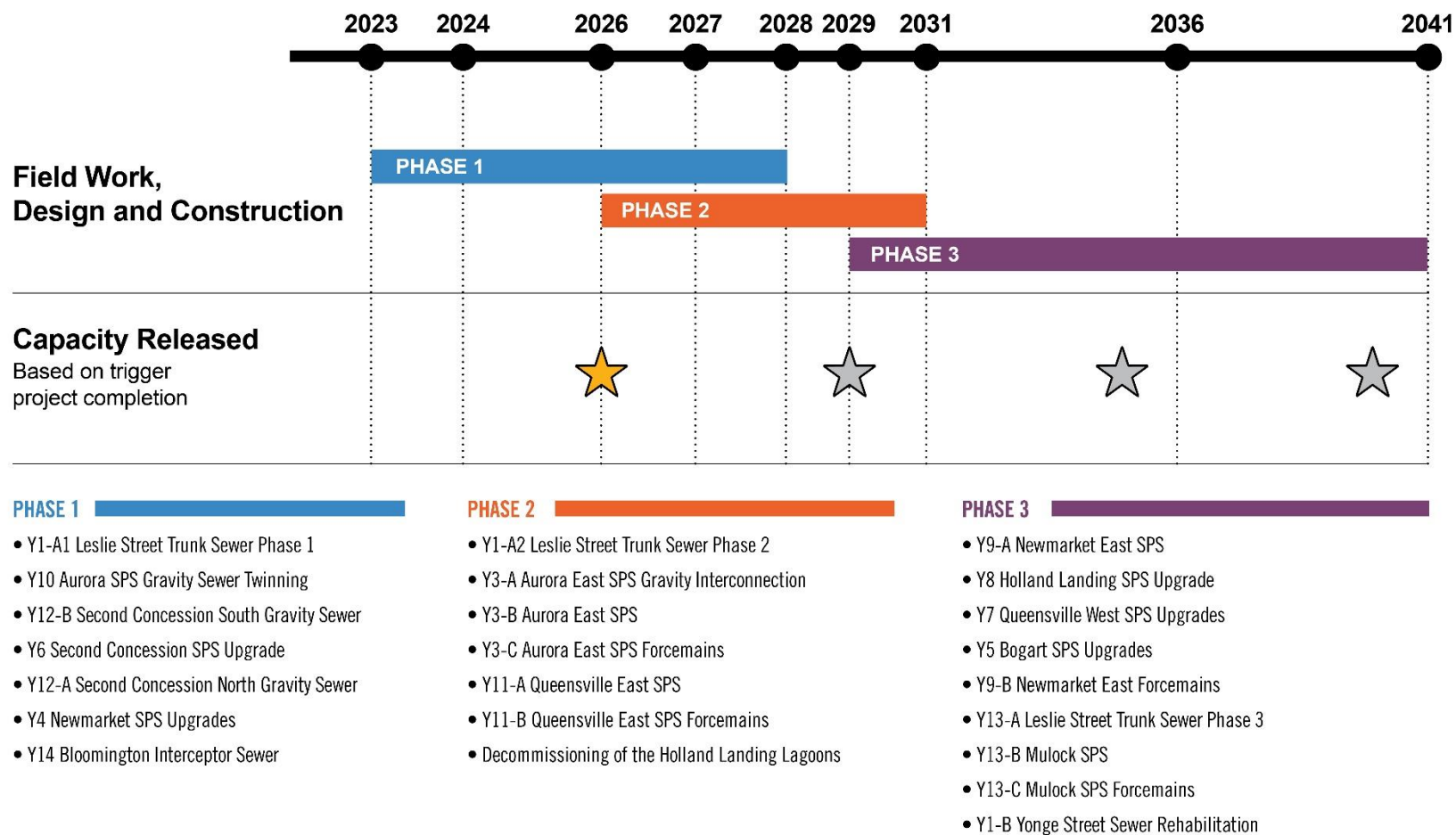
Appendix A - York Region Sewage Works Project Infrastructure Components



Appendix B - Locations and delivery phases of North YDSS Expansion Infrastructure Components



Appendix C - Implementation Timelines of North YDSS Expansion



Appendix D – Procurement Review Committee Report

Meeting Date: October 12, 2023 at 1:00 pm via Teams

Attendees: Public Works, Water and Wastewater – Pina Accardi, Director, Capital Delivery; Shu He – Manager Engineering, Procurement Office – Fadi Samara, Director; Umesh Kalia, Manager, Procurement Strategy and Operations; Legal Services– Christopher Zaleski, Counsel; Emily Fan, Senior Associate Counsel (**bolding denotes voting member**)

Issue: Determine whether the following non-standard procurements as outlined in the Private Report of the Commissioner of Public Works for the Direct Purchase of North YDSS (York Durham Sewage System) Expansion Phase 1 Delivery Services may proceed:

1. Direct purchase for program management, engineering design and construction support services for the North York Durham Sewage System (YDSS) Expansion Phase 1 (the “Management, Design and Construction Support Services”); and
2. Direct purchase for project planning and performance monitoring services related to the North YDSS Expansion Phase 1 (the “Planning and Performance Monitoring Services”);

collectively the (“Phase 1 Delivery Services”).

Estimated Contract Value for #1: \$84.5 million

Estimated Contract Value for #2: \$3 million

Analysis

Pursuant to the Procurement Bylaw:

- Section 18.1.e requires Council approval for non-standard procurements where the total cost exceeds \$500,000.
- Section 7.1.c requires the PRC to make determinations under the Non-Standard Procurements Protocol where the total cost of the deliverables exceeds \$100,000.
- Section 14.2 indicates that non-standard procurements are permitted only under the specific circumstances set out in the Non-Standard Procurements Protocol.

Pursuant to the Non-standard Procurements Protocol

- Section 5.3 states in part that direct purchases over \$100,000 are permitted in “Any circumstances under applicable trade treaties allowing for deliverables to be directly purchased....”.

Pursuant to the trade treaties:

- Article 513(1)(d) of the Canadian Free Trade Agreement (CFTA) permits limited tendering in the following circumstance (among others): “*if strictly necessary, and for reasons of urgency*”

brought about by events unforeseeable by the procuring entity, the goods or services could not be obtained in time using open tendering”.

- Article 19.12(1)(d) of the Canada-EU Comprehensive and Economic Trade Agreement (CETA) permits limited tendering in the following circumstance (among others): *“only when strictly necessary, if for reasons of extreme urgency brought about by events unforeseeable by the procuring entity, the goods or services could not be obtained in time for open tendering or selective tendering”.*
- Article 9.14(1)(d) of the Trade and Cooperation Agreement Between Ontario and Quebec (OQTCA) permits limited tendering the following circumstance (among others): *“only when strictly necessary, where for reasons of extreme urgency brought about by events unforeseeable by the procuring entity, the goods or services could not be obtained in time using open tendering or selective tendering”.*
- These agreements define “limited tendering” as “a procurement method whereby the procuring entity contacts a supplier or suppliers of its choice”.

The committee reviewed the estimated total cost of the direct purchases and noted they met the thresholds of Sections 7.1.c and 18.1.e of the Procurement Bylaw requiring a PRC determination and Council approval for a non-standard procurement respectively, and also met the thresholds for the applicability of the CFTA, CETA and the OQTCA.

The committee was advised of and considered the following:

- In 2008, the Region commenced working on the Upper York Sewage System (UYSS) Individual Environmental Assessment Study to provide sewage servicing capacity for projected growth in the communities of Aurora, East Gwillimbury and Newmarket, which recommended a Lake Simcoe-based solution.
- In July 2014, the Region submitted an Environmental Assessment (EA) report for the UYSS project to the Ministry of the Environment, Conservation and Parks (the “Ministry”). Ministry review of the EA continued until 2021 when the Ministry put the UYSS project on hold through the *York Region Wastewater Act, 2021*.
- In November 2022, pursuant to the *Supporting Growth and Housing in York and Durham Regions Act*, as part of *More Homes Built Faster Act 2022*, the Region was mandated to support growth and housing in Aurora, East Gwillimbury and Newmarket via a Lake Ontario-based servicing solution through the York Region Sewage Works Project. The York Region Sewage Works project will expand and improve the existing York Durham Sewage System (YDSS) to ultimately discharge treated wastewater to Lake Ontario, representing a significant pivot from the proposed UYSS Lake Simcoe-based solution.
- On March 28, 2023, the Ministry advised the Region of an aggressive timeline for certain components of Phase 1 of the Lake Ontario-based servicing solution to be in service no later than December 31, 2026.
- Due to the aggressive timeline and the significant pivot to a Lake Ontario-based solution, the Region does not have sufficient time to competitively procure the Phase 1 Delivery Services which have become strictly necessary for reasons of urgency or extreme urgency due to events unforeseeable by the Region.
- The consulting firm selected by the Region for the direct purchase of the Management, Design and Construction Support Services has been working with the Region pursuant to competitive procurements in 2008 and 2014 on UYSS related projects and is already assisting the Region with delivering a Project Report for the York Region Sewage Works project to the Ministry which is due on October 31, 2023.

- The consulting firm selected by the Region for the direct purchase of the Planning and Performance Monitoring Services has extensive experience on projects similar in size, scope and complexity and has provided effective scheduling and cost control services for the Region since 2005.

Decision

The PRC was satisfied that the Phase 1 Delivery Services were urgent or extremely urgent due to events unforeseeable by the Region thereby meeting the limited tendering requirements for reasons of urgency of the applicable trade treaties. The PRC determined a direct purchase of the Management, Design and Construction Support Services, and a separate direct purchase of the Planning and Performance Monitoring Services were permissible under the trade treaties and therefore met the requirements of the Region's Procurement Bylaw and Non-standard Procurements Protocol for non-standard procurements subject to Council approval pursuant to Section 18.1.e of the Procurement Bylaw.