

Staff Report

Report To: Operations Committee
Report From: Lara Widdifield, Director of Public Works and Engineering
Meeting Date: March 16, 2023
Report Code: OP-23-012
Subject: Consolidated Linear Infrastructure Approval

Recommendations:

THAT in consideration of Staff Report OP-23-012 respecting Consolidated Linear Infrastructure Environmental Compliance Approvals for sewage works and stormwater, the Operations Committee recommends that City Council receive the report for information purposes.

Highlights:

- In 2021, the Ministry of the Environment, Conservation and Parks (MECP) unveiled a new Consolidated Linear Infrastructure (CLI) Environmental Compliance Approval (ECA) for municipal wastewater and stormwater infrastructure to replace the multiple standalone ECAs each municipality has for those asset classes.
- The City's Wastewater and Stormwater CLI ECAs have been approved.
- Each CLI ECA contains several conditions with associated deadlines to complete and submit additional documentation to the Minister. These conditions pose budgetary and effort requirements, summarized within this report.

Strategic Plan Alignment:

This report supports the delivery of Core Service.

Previous Report/Authority:

Not applicable.

Background:

On March 17, 2021, the Ontario Ministry of Environment, Conservation and Parks (MECP) implemented changes to the Environmental Compliance Approval (ECA) process by adopting the Consolidated Linear Infrastructure (CLI) Permissions Approach, which is modelled after the current framework for municipal drinking water systems. The framework was intended to streamline approvals by allowing the municipality to self-approve certain classes of infrastructure projects and to replace, in many cases, the numerous standalone ECAs that municipalities have accumulated as previously, each network extension or significant alteration required a new or amended ECA.

As part of the CLI Permissions Approach, municipalities must consolidate all existing ECAs into two consolidated ECAs; one for municipal sanitary collection and one for stormwater management (SWM) system works (storm sewers and SWM facilities).

The City's CLI ECAs were approved in December 2022. Each ECA contains several conditions for additional materials/documentation to be undertaken and submitted to the Minister of the MECP, along with each condition's associated deadline. Both approvals are due for renewal by October 15th, 2026.

Analysis:

The approvals are extensive and outline several conditions that must be met to comply with the approval. They include obvious items such as a requirement that the City maintain an up-to-date infrastructure map, when and to whom notifications are to be made under various scenarios, the need for an Erosion and Sedimentation Control Plan for all construction projects, and that all projects must be in conformance with the newly-updated MECP "*Design Criteria for Sanitary Sewers, Storm Sewers and Forcemains for Alterations Authorized under Environmental Compliance Approval (v.1.1 July 28, 2022)*", hereafter referred to as "Design Criteria."

In addition, several other conditions outline additional documentation requirements and the timeframes for submission for each. Some of these

requirements will have financial or operational impacts due to the effort and cost of implementation. Whatever can be done in-house will be. However, some support from an engineering consultant may be required.

These notable requirements are:

Sewage Works

Annual report – Similar to what Staff already provides for the water and wastewater systems, an annual performance report is to be submitted to the MECP by **March 31st** of each year, covers the period of January 1st to December 31st of the preceding calendar year and shall be made available to the public on the City's website by **June 1st** of the same year.

Sampling - Within six (6) months of **November 21, 2022**, representative water samples must be taken at every Combined Sewage Overflow (CSO) point and sewage tank. Additional testing may be triggered.

CSO Volume Procedures – due **May 21, 2023**, the City must submit procedures to estimate or measure volumes for any CSO.

Source water protection – due **May 21, 2023**, the City must prepare a "Significant Drinking Water Threat Assessment Report for Proposed Alterations" for the Authorized System, which must be updated annually.

Compliance – due **November 21, 2023**, the City must assess conformance of the Authorized System to Procedure F-5-1 or Procedure F-5-5, as applicable, to be prepared by a Licensed Engineering Practitioner.

O&M Manual – due **May 21, 2023**, the City must submit an Operations & Maintenance (O&M) Manual

Signage – due **May 21, 2025**, the Owner shall establish signage to notify the public at the nearest publicly accessible point(s) downstream of any Combined Sewage Overflow (CSO) outfall location that shall include, at minimum, the type of CSO, identification of potential hazards, limitations of water use, ECA number, Asset ID, and Owner contact information.

Model – A new/updated Sewer model must be completed by **December 15, 2025**.

Pollution Prevention – due **May 21, 2027**, the City must submit a Pollution Prevention and Control Plan (PPCP), updated every ten (10) years.

Stormwater Works

Annual report – Similar to what Staff already provides for the water and wastewater systems, an annual performance report is to be submitted to the MECP by **April 30th** of each year, covers the period of January 1st to December 31st of the preceding calendar year and shall be made available to the public on the City’s website by **June 1st** of the same year.

O&M Manual – due **May 21, 2023**, the City must submit an Operations & Maintenance (O&M) Manual.

Source water protection – due **May 21, 2023**, the City must prepare a “Significant Drinking Water Threat Assessment Report for Proposed Alterations” for the Authorized System, which must be updated annually.

Monitoring Plan - Due **May 21, 2024** (or within twenty-four (24) months of the publication of the Ministry’s monitoring guidance, whichever is later), the Owner shall develop and implement a monitoring plan for the Authorized System shall be updated annually.

Signage – due **May 21, 2025**, signage to be installed to notify the public at any Stormwater Management Facility (SWMF) that the site contains an SWMF, potential hazards, water use limitations, purpose, ECA number, Asset ID, and Owner contact information.

Inventory - due **May 21, 2025**; the City must submit a list of the storm sewer sheds and classify them by Tables E1 and E2 in the ECA. It shall be updated to identify the storm sewer sheds for each outlet and their level of Stormwater management.

Review

In addition to the above conditions, the new framework includes the delegation of approval authority that historically has been undertaken by the MECP Review and Approvals Branch. This downloading of review authority will require the City to review and approve all City and Developer-led wastewater and stormwater management infrastructure projects within specific parameters. The City is expected to review the designs for conformance with the recently updated MECP Design Criteria. Before the Design Criteria update, that document was referred to as Design Guidelines used by the industry as best practices (“should dos”). In contrast, the update frames the information as a compliance document (“must dos”). The Design Criteria update has included the addition of several additional considerations that the City has not typically considered essential in the management of

these infrastructure systems on a blanket basis; for example, groundwater balance calculations and methods, additional calculations and specifications relating to groundwater table elevation, water tightness/pressure testing of sewer main, specifications and requirements relating to waterproof covers on sanitary maintenance holes, and the need for additional monitoring maintenance holes at the downstream limit of new subdivisions for water sampling and flow-monitoring purposes. While the intentions are admirable, these amendments pose two primary challenges for the City:

1. Staffing

While some review and approval overlap the study already undertaken by City Staff and their delegated consultants, the additional review requirements will increase the workload of existing Engineering Services Division Staff, straining already lean resources. Furthermore, some new requirements may be outside the in-house staff's expertise. Staff will monitor the impact on staffing and workloads as the transition is made. Still, a solution to these issues will likely include some combination of additional staffing, education/training, and consulting engineers. If the need arises for other supports, it will be added to the typical budgeting process for approval before any commitment to new expenses. Staff also intend to develop a fee schedule for Council approval to soften the impact of this additional burden on the taxpayer, with user-pay review fees similar to those downloaded from the MECP. It is expected that a separate policy with rationale and stakeholder input will be required.

2. Capital Cost

The additional requirements from the perspective of background documentation, other capital assets (i.e., monitoring manholes), and more expensive materials (i.e., thicker-walled watertight pipe) will impact the City's capital project budget. It will also affect Developments, potentially rendering specific projects non-viable or raising the base costs of housing and building projects; these higher costs may ultimately be passed on to the end customer.

Financial Implications:

Relating to the additional submissions that must be completed as part of the ECA conditions in 2023, Staff is seeking a quote to prepare the following deliverables that are due on May 21, 2023:

- Drinking Water Threat Assessment
- Assessment of Conformance to Procedures F-5-1 and F-5-5

The Significant Drinking Water Threat Assessment appears to be a report that documents each upcoming water, storm and wastewater alteration construction project for a given timeframe that lays out the justification for whether each project poses a threat to the source water of the drinking water system. The cost for the Drinking Water Threat Assessment for the construction projects named on the 2023-2024 capital program is estimated at \$9,000 plus non-refundable HST. This cost can be accommodated in the 2023 Capital Budget while leaving available funding for other aspects of the ECA conditions.

The cost for this report in subsequent years may vary depending on each project's scope, nature and location. A subsequent report will be prepared if any component requires approval or notification of Committee/Council under the Purchasing Policy. Otherwise, the activities resulting from implementing the CLI ECAs will be incorporated into the Department's Operating or Capital Budgets, as appropriate.

Concerning the review and approval role that the City is expected to take on, it is anticipated that some of the additional workloads can be borne by current staff and budgetary constraints. However, if significant impacts (i.e. cost, staffing or expertise) become apparent, this will be reflected in future Budget proposals for Council's deliberation and approval.

Staff also intend to review the staff time and overhead costs arising from the Department's various application reviews to ensure that development pays for itself. A fee structure shall be prepared with input from industry stakeholders and presented to Committee for approval.

Communication Strategy:

As the conditions of the approvals require additional technical review of infrastructure designs and reference to new MECP Design Guidelines, the City's Engineering Standards and associated fees will need to be updated. This will be communicated with the development community to ensure they

are aware and provided the opportunity to provide input in the resulting policies before they are implemented.

Consultation:

The MECP local staff have been consulted in part on this subject. As further progress is made in the implementation of this initiative, further subject matter expert advice will be sought from internal departments and external agencies, including potential engineering consultant support. Committee and Council will be consulted before any unbudgeted expenses are incurred.

Attachments:

None.

Recommended by:

Lara Widdifield, Director of Public Works and Engineering

Submission approved by:

Tim Simmonds, City Manager

For more information on this report, please contact Lara Widdifield, Director of Public Works and Engineering, at lwiddifield@owensound.ca.