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September 3, 2020

Municipal Water and Wastewater Division
Environmental Permissions Branch
Environmental Assessment and Permissions Division
Ministry of the Environment Conservation and Parks
40 St. Clair Ave. West, 2nd Floor
Toronto, Ontario
M4V 1M2

Attention: Aziz S. Ahmed, P.Eng.

Re: ERO 019-1080 Proposed changes to environmental approvals for municipal sewage collection works

The City of Peterborough would like to thank the MECP for the opportunity to provide comments on the draft Consolidated Linear Infrastructure ECA for sanitary and stormwater systems, as well as, the Draft Design Criteria.

Overall, the City is supportive of this new concept for consolidated sanitary and stormwater ECAs and believes it has the potential to streamline our own infrastructure projects, as well as development approvals. The enhanced framework and requirements for approvals, operations, monitoring and maintenance will further bolster the City's desire to maintain and enhance the natural environment.

The proposed changes do however present significant operational, capital and financial implications for the City. As such, City staff have undertaken a thorough review of the draft documents and provided a list of comments, questions and suggested revisions below. Our comments are organized into four sections; General Information, Design Criteria, Stormwater ECA, and Sanitary ECA.

1.0 General Information

1.1 The City would be capable of transitioning to the new consolidated ECA for both Sanitary and Storm Systems within one to two years after the new process comes into place. Full compliance of all the terms and conditions contained in the new ECA would be contingent on increased capital and operating funds and may require additional time.

In particular, the monitoring requirements specified in the new ECA represent a substantial increase in effort compared to those contained in our existing ECAs. Furthermore, the increased responsibility placed on the City to administer, enforce compliance, and document or report on its system may require an increase to existing staffing levels and operational funding.

2.0 Design Criteria

2.1 Section 1.1.1.1 - The definition of *Uncommitted Reserve Hydraulic Capacity* in the document refers to treatment plants, but the requirement applies to the sewage collection system and the treatment plants. Although the intent of the requirement is apparent, some rewording should be considered for further clarification.

2.2 Section 1.1.2 – The City would like clarification that this section sets the precedence to require a detailed hydraulic model for its storm sewer system (computer model).

2.3 Section 1.2.5 - In the City of Peterborough, it is not always possible to avoid the placement of sanitary sewers in areas of high groundwater or flooding. While effort is made to avoid these areas and measures such as waterproof lids are used, the areas of high groundwater and flooding (especially high groundwater) is quite prevalent so to avoid all these areas just isn't feasible. Further clarification or re-wording of this requirement would be appreciated.

2.4 Section 2.9.1 - It appears the word 'below' is missing in Section 2.9.1. It is not clear if the 0.5m below the SHGWT applies to Sections 2.9.2, 2.9.3, and 2.9.4.

2.5 Section 2.9.2 - Clarification on the aspects of forcemain design to be used for sanitary sewers below the SHGWT should be noted.

2.6 Section 2.9.3 - Does the wrapping refer to the entire manhole or just the joints of the pre-cast manhole?

2.7 Section 2.9.4 - The purpose of watertight lids in areas of high groundwater is unclear. Watertight lids in areas of surface flooding is certainly a good design practice, but where the high groundwater table is below the lid of the manhole, the purpose of the watertight lids is not known.

2.8 Section 2.12.5 - The City of Peterborough does not currently require clean outs on the property line for sanitary (or storm) service connections. The

wording uses the word *'should'*. Does that mean that clean outs on sewer connections are mandatory or just deemed to be good practice? The small lots in newer subdivisions leave little space for a cleanout that doesn't conflict with the driveways.

2.9 Section 3.13.3 - What if there is no wastewater pipe in the vicinity of the forcemain?

2.10 Section 5.4.1 - Do the minimum and maximum velocities refer to flow velocities at design depth or full depth?

2.11 Section 5.4.3 - In flatter areas of the City, providing the initial storm sewer at a minimum slope of 1.0% could potentially reduce frost cover on the pipe. Will a minimum pipe slope of 1.0% be required in all cases?

3.0 Stormwater ECA

Schedule A

3.1 Section 1.1 – It is not clear why the MECP is requesting the City's Municipal Wastewater System Profile Information form. Can the MECP please confirm why this document is required?

3.2 Section 3.0 – This section leaves a placeholder for an Asset Management Plan, Stormwater Master Plan, and a Watershed/Subwatershed Plan. Will these documents be a requirement of the ECA? How will the recommendations of these plans be integrated into the ECA, will they take precedence over other criteria, or will the ECA create the policy/requirements to adhere to certain recommendations from these documents?

Schedule B

3.3 Section 1.2.3 – It would be beneficial to also include a table template for the information required as part of Section 1.2.3.

3.4 Section 1.3.6 – The City would request that further clarification be provided regarding the "sewersheds for each outlet". Is this simply the total catchment area at the outlet, or are individual catchments required for each pipe segment?

3.5 Section 1.3.8 – Further clarity should be provided on what the MECP requires for identifying stormwater works that receive sanitary overflows. Is this simply the areas where a pumping station may discharge when it is

over capacity or identifying all possible sanitary overflows during extreme rain events?

Schedule C

3.6 Section 1.2 – The Table 5 referenced in this section should refer to table 4.

Schedule D

3.7 Definitions – There is no definition provided for a “Third Pipe System”.

3.8 Definitions – The term “Routine Maintenance” is used throughout Schedule D. It would be helpful to define what is, and what is not routine maintenance within the document.

3.9 Section 4.1.1 – Item (h) under this section states that the design of a storm sewer, ditch or culvert be part of a stormwater treatment train approach. It is not clear what this means or what implications this has for City reconstruction projects. Is this simply stating that projects must adhere to the requirements of Schedule A? Many reconstruction projects would not necessarily follow the traditional “treatment train approach”.

3.10 Section 4.1.3 –The sections states that an alteration shall not result in a deemed impairment to the natural environment or an adverse impact on the approved effluent quality. While the City is supportive of this approach and will take every effort to ensure there is no adverse impact, the City would like clarity on; how a “deemed impairment” is defined or determined, and who and how the approved effluent quality and quantity is determined. Would it be deemed NOT to be an impairment if all works have met the specified design criteria?

3.11 Section 4.1.8 – This section requires the owner to verify the requirements are met for sections 4.1.2 to 4.1.7. The City would request that it be a requirement of the Owner AND the Design Engineer to verify the requirements of Section 4.1.2 and 4.1.3.

3.12 Section 4.2.5 – It would be helpful if the level of water quality treatment is specifically defined for a rural road conversion so that it becomes an authorized project under the ECA. Would this simply refer to Appendix A for a Retrofit Scenario?

3.13 Section 4.2.8 – For clarity, if a project increases the hydraulic capacity of a sewer but does not increase existing stormwater flow (e.g. flood reduction type projects) the City must also provide water quality control in accordance with Appendix A (Retrofit Scenario Item iii)) to adhere with the

ECA authorizations? It would be helpful if items like this that have major financial implications are clearly defined.

3.14 Section 5.2.3 – It is not entirely clear what this item means, please provide more clarity on what defines co-benefits, diminished functionality and efficiency of the SWMF.

3.15 Section 5.2.6 – The City believes that the MECP needs to clearly define what the acceptable “legal instruments” are to comply with this condition.

It is now becoming common to incorporate private works at the lot level to achieve the overall SWM strategy and water balance. This may include rear yard swales, modified grading and soil amendments, infiltration chamber, etc. Is it the intent of the MECP that the City be responsible for all operation and maintenance of these facilities if they are part of the overall SWM strategy?

The City would suggest that the MECP provide an acceptable means for the City to protect these features without placing all responsibility for operation and maintenance back on the City. At this time, the City does not believe the Drainage Act would be a suitable instrument.

3.16 Section 5.3.4 – In the opinion of the City, the MECP should increase the drainage area to a SWMF for approvals under Section 5.1. The 15ha cut-off is relatively small, as most new and existing SWMFs being constructed or modified in our City would exceed this drainage area.

3.17 Section 6.1.1 – Can the MECP clarify what is meant by the “reuse” of stormwater from a Third Pipe Collection System? Would the use of stormwater from a third pipe system for groundwater/wetland recharge or maintaining a water balance be an acceptable use?

Schedule E

3.18 Section 2.1 – This section states that, among other things, the owner shall maintain “adequate funding” to ensure proper operation and maintenance of its stormwater system. The City supports the need to adequately fund its stormwater management system, however, the City believes it would be beneficial if the MECP defined its expectations for adequate funding. It is unlikely that many Ontario Municipalities would concede that their current funding levels are sufficient for the long-term operation and maintenance of its stormwater system.

3.19 Section 4.1.1 – It would be beneficial if the MECP defined what it deems to be an “excessive build-up of sediment”. Past practice has defined an

excessive build-up of sediment to occur when a facilities sediment removal efficiency drops by 5%.

3.20 Section 4.1.2 – This section indicates an inspection is required “within three years” but does not specify if this is within 3 years of construction, assumption, the date of execution of the ECA, or within every three years of operation; please confirm.

3.21 Section 5.1.2 – In regard to the third-party peer review of the monitoring plan; if a monitoring plan is developed by a consultant as part of a Watershed Plan or Subwatershed Plan would this be acceptable to satisfy the condition, or would an additional peer review be required?

3.22 Section 5.5.6 – It is assumed that the conditions of Section 5.5.6 could be satisfied through the completion of a Watershed/Subwatershed Plan or a Stormwater Master Plan. Can the MECP please confirm that if an existing monitoring plan exists as part of one, or more of these plans that it would be acceptable to satisfy the conditions of Section 5.5.6?

Part c) indicates that water level measurements shall be measured, are these to be continuous or static measurements, and at what frequency are they required?

3.23 Section 9.1 (Table 5) – If an outfall is defined as the point at which stormwater discharges to a creek or natural feature; in many circumstances only partial stormwater management would be achieved in the sewershed. It is therefore recommended that an additional column be provided to indicate the percentage of treatment in the sewershed (e.g. 25% Level A and 75% Level B within the sewershed of Outfall 101.)

Appendix A

3.24 Table 3 – The second and third columns of this table are identical, precluding the need for two land size categories. It is also not clear what the requirements would be when the land size is greater that 15ha, can the MECP please confirm and provide more clarity?

4.0 Sanitary ECA

Schedule B

4.1 Section 1.2.1 - It is unclear what format Column 1 of Table 1 is to consist of. Are all of the City’s sewers to be labeled and identified in a single document? Are all new components of the municipal sewer collection system after the column 2 date to be listed, or just those approved under

Schedule C? Perhaps an example(s) of what Table 1 is intended to contain would be helpful.

Schedule D

4.2 Section 4.2 - Do the conditions noted in Schedule D, Section 4.2 require Director Approval under Schedule C?

Schedule E

4.3 Section 4.1.1 – The City currently operates on a six-year cycle for the maintenance and inspection of its sewage collection system. Would this be acceptable to the MECP or would the City need to increase capacity to adhere to a five-year cycle?

4.4 Section 4.1.4 – It is not clear what format is required for the inspection records. Does the MECP require digital CCTV records or are hard copies acceptable?

4.5 Section 4.2.1 – Depending on the detail required, the City may require more than the specified 12 months to complete the Operation and Maintenance Manual.

4.6 Section 8.3 - Are there any standards or technical requirements for the sanitary sewer model noted in Section 8.3?

The city welcomes the opportunity to discuss any of our comments and concerns listed above. If you would like to discuss further, please contact the undersigned.

Sincerely,

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