

Municipality of Lakeshore – Report to Council

Operations

Engineering and Infrastructure



To: Mayor & Members of Council

From: Marco Villella, P.Eng., Division Leader – Engineering & Infrastructure

Date: September 29, 2023

Subject: Town and Country Mobile Home Park – Municipal Responsibility Agreement (MRA)

Recommendation

Direct the Clerk to read By-law 83-2023, being a By-law to Execute a Municipal Responsibility Agreement (MRA) with Town & Country Communities Limited (the Owner), during the Consideration of By-laws as presented at the October 10, 2023 Council meeting.

Background

The Town and Country is a Community Mobile Home Park located at 226 East Pike Creek Road that consists of 218 mobile home units and a community center. The site is serviced by both communal water and wastewater systems located within private property, that are privately owned and operated.

The site is serviced by Lakeshore's municipal water system from a watermain located along East Pike Creek Road.

There is currently no sanitary outlet to the site. The communal wastewater system is a private system that consists of a lagoon and a sub-surface leaching bed that was installed around 1975.

The private on-site wastewater system failed in early April 2022 and the property owner has been pumping waste from the lagoon and transporting it to an approved treatment facility in Windsor (Lou Romano Treatment Plant).

In May 2023, it was identified that a more aggressive hauling plan was required to keep up with the volume of wastewater generation, therefore Operations provided approvals to the owner to permit the use of an existing dead-end roadway on Croft Drive to increase the hauling capacity with the use of larger tankers. This permitted the owner to utilize access off Croft Drive, in lieu of the original plan which was the use of access through the park with smaller trucks for hauling. The use of this approved access was

the only viable option for reducing the volume in the lagoon until a new proposed system was approved and put into operation.

Operations staff have had multiple discussions and meetings with the Ministry of Environment, Conservation, and Parks (MECP), the Owner (Town & Country Communities Limited) and their Consultant (GM Blue Plan Engineering Ltd) regarding options for a more permanent solution since the system's failure in April 2022.

Based on the above discussions and meetings, the Owner has proposed a new tertiary system. The system will be comprised of the following:

- Lagoon effluent pumping station;
- Two (2) equalization tanks;
- Primary and secondary sludge storage tanks;
- Primary and secondary clarifier;
- Moving bed bioreactors;
- Floc reactor;
- Secondary and final effluent tank;
- Aeration blowers;
- Tertiary filtration system;
- Effluent UV disinfection; and
- Prefabricated control building (contain blowers, control panels, chemical dosing equipment, and UV disinfection units).

This system will continue to utilize the existing collection system, pumping station, and lagoon; however, the existing lagoon outlet will be modified from the original location (the existing leaching bed) to a new effluent pump station and intake structure that will direct effluent to the new tertiary treatment system. The existing leaching bed will be abandoned in place.

During the warmer months, raw sewage will be pumped to the lagoon or to the new tertiary treatment system based on time of year (temperature dependent). During the colder months, raw sewage can fully or partially bypass the lagoon and be pumped directly to the equalization tanks of the tertiary treatment system.

Primary treatment is performed using the primary sludge storage tank that provides settling and storage of primary solids followed by the primary clarifier tank that provides additional settling and conditioning of the wastewater.

Secondary treatment is accomplished through the moving bed biofilm reactors (MBBR) process. The system undergoes enhanced secondary treatment (phosphorous removal) by using a chemical dosing pump that calculates the amount of coagulant inside the floc reactor tank.

Wastewater is then discharged to the tertiary filtration and disinfection system where enhanced (tertiary) phosphorous reduction and filtration is achieved using pressurized

media filter system to reduce any suspended solids and total phosphorous to the required effluent criteria.

The final treatment passes through the UV disinfection units and subsequently stored into the final effluent tank where it is discharged at a maximum release rate of 113.4 L/min into the Webbwood Drain, that ultimately outlets to Pike Creek.

The majority of the above components will be placed at grade level on a 42 meter by 25 meter footprint within the privately owned property that also includes a proposed 10 square meter prefabricated control building.

Since the proposed system includes a building, the Site Plan Approval Process has been triggered and is currently underway. This process will provide Administration with the opportunity to further comment on the details of the site to address any additional concerns.

The design was required to meet stringent effluent quality requirements set out by MECP that includes meeting dry ditch effluent quality criteria. In consultation with a municipal drainage engineer, N, J. Peralta Engineering Ltd., and Essex Region Conservation Authority (ERCA) it was determined that the receiving Webbwood Drain can accommodate the additional flows from the treated effluent. No physical upgrades to the Webbwood drain are required to be made.

This is the first known private wastewater system throughout the Municipality that will be directly discharging treated effluent into a municipal drain system. Other private wastewater systems normally contain a private septic bed system that naturally leaches into the ground and the system's entire footprint is within private lands. Some examples within Lakeshore of privately owned communal treatment systems that do not outlet to a municipal system, drain or natural water course are included below:

- Comber (Tamerlane) Mobile Home Park located at 11408 County Road 46; and
- Suncrest Community Mobile Home Park located at 264 County Road 42.

Comments

As required by the MECP, the owner is required to obtain (and maintain) an amended Environmental Compliance Approval (ECA) that outlines the proposed system's description, operation, maintenance, monitoring, and reporting requirements. The amendment also includes decommissioning of the existing system.

In addition, the amended ECA includes a condition that the owner is required to enter into a Municipal Responsibility Agreement (MRA) with the Municipality.

The MRA requirements have been summarized below:

- Owner's responsibility to pursue (and maintain) an amendment to the environmental compliance approval (ECA) for the construction of the wastewater treatment system;
- Defines the operation and maintenance requirements of the system as required by the Owner;
- Allows for inspection of the system by the Municipality, upon request;
- Outlines that both quality and quantity reporting are required to be provided to the Municipality;
- Includes provisions for any default of the system in the event the Owner is unable to continue to provide sewage service then the Municipality may be required to assume ownership and operate of the proposed new system (may be temporary in nature); and
- Confirms the requirement of the Owner to provide financial securities to the Municipality (as outlined below in the financial impacts).

The MRA is currently in draft and undergoing the final stages of legal reviews. It is expected to be finalized as soon as possible to assist with facilitating the final approvals for this to proceed.

Others Consulted

The Ministry of Environment, Conservation, and Parks (MECP), Essex Regional Conservation Authority (ERCA), GM Blueplan Engineering Ltd, and N.J. Peralta Engineering Inc. were consulted as part of this process.

Financial Impacts

There are no financial impacts to the Municipality based on the proposed system at this time.

The MRA includes the requirement for the Owner to provide financial securities in the amount of \$305,740 which is equal to one hundred (100%) percent of the estimated costs to operate, maintain, repair, and manage the wastewater system for a period of three (3) calendar years. This amount is required to be provided by the Owner to the Municipality within thirty (30) days of Substantial Completion as defined under subsection 2(1) in the *Construction Act*.

Report Approval Details

Document Title:	Town and Country Mobile Home Park - Municipal Responsibility Agreement.docx
Attachments:	
Final Approval Date:	Oct 5, 2023

This report and all of its attachments were approved and signed as outlined below:

Prepared by Marco Vilella

Submitted by Krystal Kalbol

Approved by Justin Rousseau and Truper McBride