

# Sanitary Grit Residuals Facility at Gold Bar Wastewater Treatment Plant

## Environmental Impact Assessment and Site Location Study

### Recommendation:

That Executive Committee recommend to City Council:

1. That the Environmental Impact Assessment and Site Location Study, as outlined in Attachments 1 and 2 of the February 23, 2016, Sustainable Development report CR\_3229, be approved.
2. That the location of the Sanitary Grit Residuals Facility, as outlined in the Site Location Study (Attachment 2) of the February 23, 2016, Sustainable Development report CR\_3229, be deemed essential and approved.

### Report Summary

**In accordance with the North Saskatchewan River Valley Area Redevelopment Plan, City Council approval is required for the Environmental Impact Assessment and Site Location Study (Attachments 1 and 2) for the construction of a Sanitary Grit Residuals Treatment Facility on the Gold Bar Wastewater Treatment Plant site; and that the location be deemed essential.**

### Report

The location of the proposed development was rezoned from (A) Metropolitan Recreation Zone to (PU) Public Utility Zone at the August 24, 2015, City Council Public Hearing to permit the installation of utilities including water, sewage disposal, waste management and drainage. On October 29, 2015, Financial Services and Utilities report CR\_2933 was approved at the Utility Committee meeting along with terms of agreement with EPCOR Water Services for the Sanitary Grit Residuals Treatment Facility.

The Sanitary Grit Residuals Facility will be an innovative facility at the Gold Bar Wastewater Treatment Plant that will receive grit slurry from the City's sewer system by hydrovac trucks. The grit slurry will be washed in an enclosed bay and the waste water effluent will be returned to the Gold Water Treatment Plant for its treatment and disposal. As required by the *North Saskatchewan River Valley Area Redevelopment Plan*, a Site Location Study and Environmental Impact Assessment were completed for the Sanitary Grit Residuals Facility.

The construction of the new facility will ensure a more environmentally sound method for processing the grit slurry than the practice of disposal currently implemented at the Clover Bar Biosolids Storage Lagoons. Through the Environmental Impact Assessment and Site Location Study, EPCOR evaluated several options to address the handling and treatment of the wastewater at the Gold Bar Wastewater Treatment Plant as well as

**Please retain this report for future meetings**

## Sanitary Grit Residuals Facility at Gold Bar Wastewater Treatment Plant - Environmental Impact Assessment and Site Location Study

other locations in the City that may be appropriate for the facility. The Environmental Impact Assessment examined:

- the construction of the Sanitary Grit Residuals Facility at the Gold Bar Wastewater Treatment Plant within the existing fence line
- the operations to occur at the sanitary grit residuals facility
- includes a summary of the project impacts and recommended mitigation measures.

The Environmental Impact Assessment assessed the anticipated impacts to the environment resulting from the construction of the facility. The assessment concluded that if the recommended mitigation measures are adhered to, the project will not result in any significant adverse effects on the environment or to the public. The mitigation measures are minor in nature and are generally captured within an environmental construction operations plan which includes mitigation for weed control, erosion and sedimentation control and a spill response plan.

The Site Location Study supported the location of the Sanitary Grit Residuals Facility and examined financial, environmental, institutional, and social constraints. The location of the Sanitary Grit Residuals Facility within Gold Bar Wastewater Treatment Plants represents a balanced approach to ensure the treatment of sanitary grit is taken care of sustainably as it takes advantage of existing facilities and other amenities to maximize their efficacy. As well, the facility is designed to handle and treat the grit in an environmentally sound manner and the reuse of the material will be investigated. For example, the proposed facility eliminates the transportation of reject water which reduces costs and infrastructure requirements.

The proposed facility is within an existing fence area which helps to maintain the current character of the park and minimizes environmental impacts. Traffic is estimated to increase by two trucks per day, although, the increase will be seasonal and related to sewer cleaning operations. Potential noise impacts have been mitigated by incorporating noise modelling of the systems into the facility design. Odour will be mitigated by ensuring the hydrovac trucks are enclosed when receiving and processing the grit, and an odour control unit is part of the facility design to ensure there are no anticipated effects to neighbours. Mitigation measures and best management practices outlined in the Environmental Impact Assessment to address environmental considerations will be adhered to during the detailed design and construction process. The site is heavily disturbed and is within a fenced location therefore any wildlife in the vicinity of the project would be well habituated to human activity.

### **Policy**

*North Saskatchewan River Valley Area Redevelopment Plan:*

- Section 3.5: Major Facility and Natural Resource Development.

*The Way We Grow, Edmonton Municipal Development Plan:*

- 7.1.1: Protect, preserve and enhance a system of conserved natural areas with a functioning and interconnected ecological network.
- 7.1.1.11: Require new development, adjacent to natural areas, to demonstrate that they have incorporated ecological design best practices to mitigate negative consequences.
- 7.3.3: Mitigate the impact of development upon the natural functions and character of the North Saskatchewan River Valley and Ravine System.
- 7.3.3.1: New development within the North Saskatchewan River Valley and Ravine System will be planned according to, and will demonstrate that it embodies, the following priorities:
  - Conservation and protection of natural area and the connections that link them, from and within the North Saskatchewan River Valley and Ravine System
  - Public utilities installations, services and facilities
- 7.3.3.3: Require development projects within the North Saskatchewan River Valley and Ravine System to undertake an Environmental Impact Assessment as specified in the North Saskatchewan River Valley Area Redevelopment Plan (Bylaw 7188).

### **Corporate Outcomes**

The report contributes to the corporate outcomes “The City of Edmonton’s operations are environmentally sustainable” and “Edmonton is an environmentally sustainable and resilient city” as it proposes to construct a facility with mitigation measures in place to ensure conservation and protection of the North Saskatchewan River Valley.

### **Budget/Financial Implications**

It is intended that the costs of the Sanitary Grit Facility will be included in the Performance Based Regulation Plan for 2017-2021 pursuant to City Bylaw 15816 – EPCOR Water Services and Wastewater Treatment Bylaw. However, if such costs are not approved by City Council to be included in EPCOR's Performance Based Regulation Plan, then the City agrees that it will pay EPCOR an annual fee related to the design, construction, financing, own, operation and maintenance of the Sanitary Grit Facility on the same basis as if the costs were included in the Performance Based Regulation Plan.

As the Performance Based Regulation Plan has not been approved there is a possibility that the costs of the Sanitary Grit Facility will need to be factored into Utility Rates. The current Utility Budget does include expenditures related to the Sanitary Grit Facility.

### **Legal Implications**

The *North Saskatchewan River Valley Area Redevelopment Plan* Bylaw 7188 requires City Council approve the Environmental Impact Assessment and a Site Location Study and to deem the location of the facility within the River Valley essential before this project may be constructed.

### Justification of Recommendation

1. Approval of the Environmental Impact Assessment and Site Location Study is required to meet the requirements set out under the *North Saskatchewan River Valley Area Redevelopment Plan*.
2. In accordance with the *North Saskatchewan River Valley Area Redevelopment Plan*, the location of the facility must be deemed essential in order to proceed with the project

### Attachments

1. Sanitary Grit Residuals Treatment Facility Environmental Impact Assessment Located Within Edmonton, Alberta
2. Sanitary Grit Residuals Treatment Facility Site Location Study, Edmonton, Alberta

*(Note: Both of these attachments are available at [www.edmonton.ca/meetings](http://www.edmonton.ca/meetings). Due to their size, Administration has not printed individual copies but will have copies available for public viewing at the Office of the City Clerk, 3<sup>rd</sup> Floor, City Hall, and at the meeting)*

### Others Reviewing this Report

- R. Smyth, Acting General Manager, Community Service
- D. Wandzura, General Manager, Transportation Services
- T. Burge, Chief Financial Officer and Treasurer