8. GREENBANK ROAD WATERMAIN CLASS ENVIRONMENTAL ASSESSMENT STUDY

ÉTUDE D'ÉVALUATION ENVIRONNEMENTALE DE PORTÉE GÉNÉRALE LIÉE AU PROJET DE LA CONDUITE D'EAU PRINCIPALE DU CHEMIN GREENBANK

COMMITTEE RECOMMENDATION

That Council receive the Class Environmental Assessment Study for the Greenbank Road Watermain Project, as detailed in Document 1, and direct staff to proceed with filing the Notice of Study Completion for a 30-day public review period in accordance with the Ontario Municipal Class Environmental Assessment Schedule "B" process.

RECOMMANDATION DU COMITÉ

Que le Conseil prenne acte de l'étude d'évaluation environnementale de portée générale dans le cadre du projet de la conduite d'eau principale du chemin Greenbank, comme l'explique en détail le document 1, et demande au personnel de procéder au dépôt d'un avis d'achèvement de l'étude ouvrant une période d'examen public de 30 jours, conformément à la procédure prévue à l'Annexe « B » de l'Évaluation environnementale municipale de portée générale de l'Ontario.

DOCUMENTATION/DOCUMENTATION

1. Director's report, Infrastructure Services, Planning, Infrastructure and Economic Development Department, dated 13 September 2017 (ACS2017-PIE-IS-0012)

   Rapport du Directeur, Planification de l'infrastructure, Direction générale de la planification, de l'infrastructure et du développement économique daté le 13 septembre 2017 (ACS2017-PIE-IS-0012)

2. Extract of draft Minutes, Planning Committee, 24 October 2017

   Extrait de l'ébauche du procès-verbal, Comité de l'urbanisme, le 24 octobre 2017

Report to
Rapport au:

Planning Committee / Comité de l'urbanisme
October 24, 2017 / 24 octobre 2017

and Council / et au Conseil
November 8, 2017 / 8 novembre 2017

Submitted on September 13, 2017
Soumis le 13 septembre 2017

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Ward: BARRHAVEN (3) **File Number**: ACS2017-PIE-IS-0012

SUBJECT: Greenbank Road Watermain Class Environmental Assessment Study

OBJET: Étude d'évaluation environnementale de portée générale liée au projet de la conduite d'eau principale du chemin Greenbank

REPORT RECOMMENDATION

That the Planning Committee recommend Council receive the Class Environmental Assessment Study for the Greenbank Road Watermain Project, as detailed in Document 1, and direct staff to proceed with filing the Notice of Study

Completion for a 30-day public review period in accordance with the Ontario Municipal Class Environmental Assessment Schedule "B" process.

RECOMMANDATION DU RAPPORT

Que le Comité de l'urbanisme recommande au Conseil de prendre acte de l'étude d'évaluation environnementale de portée générale dans le cadre du projet de la conduite d'eau principale du chemin Greenbank, comme l'explique en détail le document 1, et de demander au personnel de procéder au dépôt d'un avis d'achèvement de l'étude ouvrant une période d'examen public de 30 jours, conformément à la procédure prévue à l'Annexe « B » de l'Évaluation environnementale municipale de portée générale de l'Ontario.

BACKGROUND

The City of Ottawa has identified the need for a new 610-millimetre diameter watermain on Greenbank Road from Market Place to the south side of the Jock River. The requirement for this new watermain was identified in the 2013 City of Ottawa Infrastructure Master Plan to meet water supply capacity and reliability needs in the Nepean Town Centre and Barrhaven South development areas under future development conditions. In 2006 the City completed the Greenbank Road Class Environmental Assessment (EA) Environmental Study Report with the recommendation to widen and realign Greenbank Road from Strandherd Drive to Cambrian Road, including a new bridge structure over the Jock River. The design and construction of the full extent of the 610-millimetre diameter transmission watermain will be coordinated with the Greenbank Road widening and realignment project. The road realignment project has been deferred a number of years. It has also been determined that the watermain project can be deferred without risk to service levels as development proceeds in the Barrhaven South area. However, there is a need to plan for one or more phases of the watermain to be constructed in coordination with anticipated development north of the Jock River in advance of the road realignment project implementation.

A Municipal Class Environmental Assessment (MCEA) Study was required to support the construction of the proposed Greenbank Road watermain project, following a "Schedule B" process. It has been completed and is detailed in Document 1.

DISCUSSION

The City of Ottawa will complete Phases 1 and 2 of the MCEA process and prepare a Functional Design of the preferred watermain alternative.

The project will require a crossing of the Jock River, in conjunction with the new bridge construction. For this assignment, trenchless construction strategies and traditional open-cut methods were investigated. The selection of a trenchless technology would allow this project to proceed based on Schedule A+ of the MCEA process. However, if a portion of the watermain project were to proceed ahead of the Greenbank Road widening and realignment, there could be a requirement to acquire property and a construction easement for that phase of the project. (Property will otherwise be acquired as part of the road project.) As a result of the potential property requirement, the Greenbank watermain project was completed as a Schedule 'B' process, in accordance with MCEA requirements. The Environmental Assessment has reached the point of Notice of Completion. The purpose of this report is to seek Council approval to post the project's Notice of Study Completion for 30-day public review period giving the public the opportunity to review the details and request the Ministry of the Environment and Climate Change for Part II order. The functional design for the preferred alternative (solution) will be finalized following the completion of the Class EA process.

The location of this project is within the future Greenbank Road corridor from Market Place to south side of the Jock River. Figure 1 shows the study area, including the two alternative alignments considered as part of this Class EA.

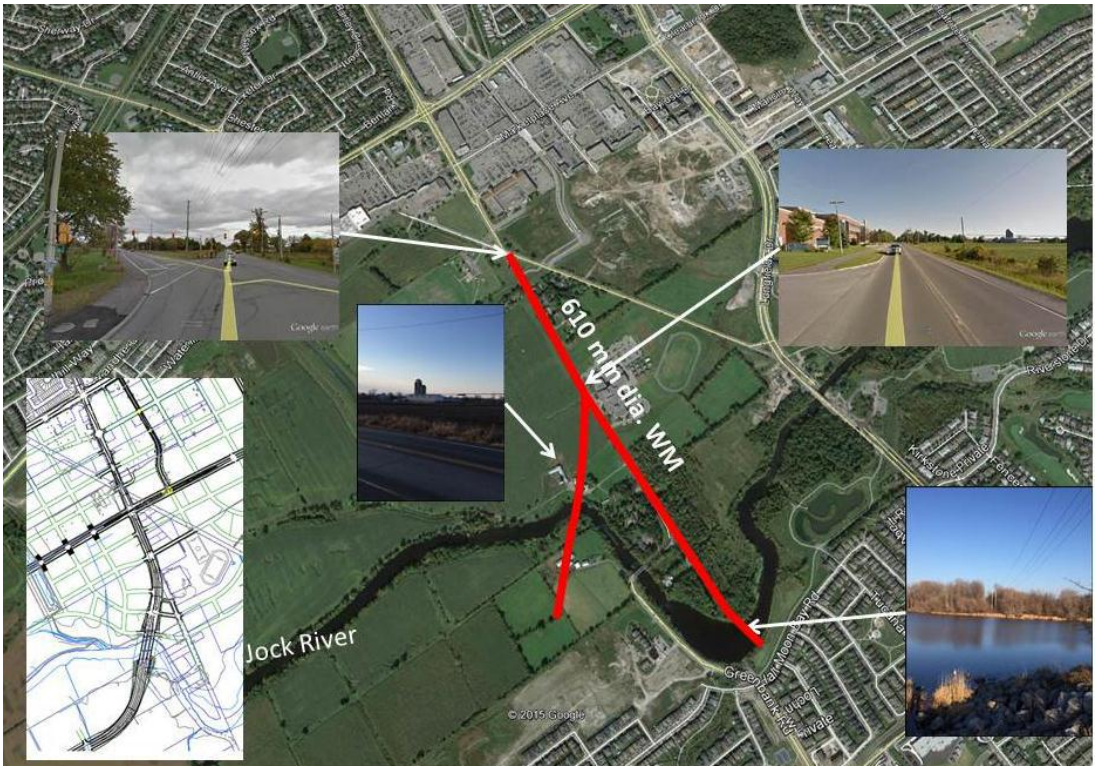

Figure 1: Study Area and Potential Alignments

Existing land use within the study area consists of a mix of agricultural, residential developments, rural residential and transportation corridors. The prominent institutional facility is St. Joseph High School located on the existing alignment of Greenbank Road, 400 metres south of Jockvale Road. South of the Jock River, the existing land use consists of new and developing residential land. North of the Jock River, the existing agricultural land will be developed as part of the Nepean Town Centre Development Area.

In 2006 the City of Ottawa completed the Greenbank Road – Malvern Drive to Cambrian Road Class Environmental Study Report. The proposed roadway design elements include four vehicular lanes and two transit lanes, transit platforms, transit stations and three new bridge structures crossing the Jock River. The MCEA and functional design for the road project accounted for the proposed watermain, from Market Place to Cambrian Road, but did not include an evaluation of alternative watermain alignments or river crossing methodologies.

Watermain alignment alternatives were developed as part of this Greenbank Watermain Class EA Study for various sections of the watermain. However, two fundamental alternatives emerged for this project:

- Alignment within the future Greenbank Road and adjacent to the proposed Jock River bridge crossing.
- Alignment of the northern portion of the main within the existing Greenbank Road, and extending south across the Jock River to Half Moon Bay drive.

Alternatives for crossing the Jock River were also considered, including:

- Trenchless construction
- Open cut through the river channel
- Attaching the watermain to the proposed Greenbank Bridge

The project alternatives were evaluated based on a range of criteria related to: impacts on the social and natural environment; physical constraints; technical merit; and capital costs.

Based on the results of the evaluation, the preferred alternative follows the east side of the future Greenbank Road Right-of-Way, using a trenchless construction technique (horizontal directional drilling) at the Jock River crossing. It was determined that crossing the Jock River by open-cut methods would be problematic, due to geotechnical

and environmental concerns. Although micro-tunnelling was not chosen as the preferred alternative, it is considered to be a feasible alternative that could be given further consideration at the detailed design stage. There would be no need to amend the Class EA if micro-tunnelling is found to be preferred at that stage.

The Class C estimate for the preferred solution is $11.3 million (in 2017 dollars) including allowances for engineering, property acquisition, utility relocations.

These estimates will be reviewed and updated as part of the preliminary and final design processes. The total project costs estimates have changed since the 2013 Infrastructure Master Plan (IMP) and development change background study. The new requirements will be reflected in upcoming updates to both documents

The project is expected to proceed in two or more phases. The initial phase(s) north of the Jock River would be in coordination with anticipated development, and the last phase (including the river crossing) implemented in coordination with the future Greenbank Road realignment project.

There is a need to ensure funding is provided to support the requirements of the initial phase(s) north of the river in coordination with development. These costs have been estimated to be in the order of $4.78M.

There is existing available authority of $1.13 million under internal Order 907467-Greenbank Road Watermain and an additional $3.65 million is identified in the City's 2019 forecast as part of the 2018 capital budget. The combined requirement of $4.780M is within the projected costs identified in the last development charge background study. Any additional funding requirements will be brought forward through the capital budget process allowing for the project to proceed in stages in order to coordinate with and support suburban development.

RURAL IMPLICATIONS

There are no rural implications associated with this report.

CONSULTATION

During the course of the study, a variety of communications and consultation methods were undertaken to engage the project stakeholders. The stakeholders include various City of Ottawa business units, external government review agencies, the Rideau Valley Conservation Authority, adjacent property owners, and interested members of the

public. Steps were taken to inform these stakeholders study, obtain their input, and address comments and concerns that arose through the process.

A notice of project commencement was published to inform interested parties of the project. Two Technical Advisory Committee meetings were held to seek the input on the planning of this project. A project website was created as the primary point of contact for the project and to inform the public of the study. Stakeholders were also provided with project updates via e-mail.

One public open house was held on March 21, 2016 at the Walter Baker Sports Complex. The alignment and crossing method options were presented, along with measures to mitigate the impacts of the project. An outline of the next steps was also provided. The public was encouraged to comment on the project by filling out a comment sheet or by emailing the City's Project Manager.

The majority of stakeholders, including the public, strongly supported the selected alignment and the use of trenchless methods to cross the Jock River.

Consultation has taken place with the industry on the proposed approach and they are supportive.

COMMENTS BY THE WARD COUNCILLOR

Councillor Harder is aware of this report.

LEGAL IMPLICATIONS

There are no legal impediments to the adoption of the recommendation in this report.

RISK MANAGEMENT IMPLICATIONS

Implementation of the project will reduce the risk of water supply interruptions (due to infrastructure failure) to residents and business in the Nepean Town Centre and Barrhaven South development areas.

ASSET MANAGEMENT IMPLICATIONS

The recommendations documented in this report are consistent with the City's Comprehensive Asset Management (CAM) Program objectives.

The Class Environmental Assessment Study for Greenbank Road Watermain Project, supports a forward looking approach to meet future challenges, including growth, legislative and environmental factors. Undertaking the construction of the new 610-

millimetre diameter watermain in conjunction with the future widening and realignment of Greenbank Road from Strandherd Drive to Cambrian Road while providing capacity to fund development driven portions pending the overall realignment project is an effective, efficient and affordable approach to project delivery.

FINANCIAL IMPLICATIONS

The Class C estimate for the preferred solution is $11.3 million (in 2017 dollars) including allowances for engineering, property acquisition, utility relocations. The project is expected to proceed in two or more phases.

Estimates for the initial phase are $4.78 million (in 2017 dollars). $1.13 million is available within 907467 SUC Greenbank, and an additional $3.716 million ($3.65 million plus inflation) has been identified in the 2019 forecast within the 2018 Draft Capital Budget.

ACCESSIBILITY IMPACTS

There are no accessibility implications associated with this report.

ENVIRONMENTAL IMPLICATIONS

Potential environmental impacts associated with the Greenbank Road watermain project have been identified through the Class EA "Schedule B" process. Archeological (done as a part of the Greenbank Road realignment EA), natural environment, and geotechnical assessments were completed to support the assessment of impacts and the identification of mitigation measures. As the project is to be located within the future Greenbank Road alignment, many of the environmental implications were addressed in the EA supporting the road project. Impacts associated with the Jock River crossing will be limited as a result of applying trenchless construction techniques. Potential adverse environment impacts and mitigation measures for the preferred solution will be investigated further during the preliminary and detailed design phase of the project.

TERM OF COUNCIL PRIORITIES

This project addresses the following Term of Council Priorities:

EP2 – Support growth of local economy.

ES1 – Support an environmental sustainable Ottawa.

ES2 – Reduce long term cost through planned investment and staging of diversion and conservation strategies.

SUPPORTING DOCUMENTATION

Document 1 Greenbank Road Watermain Municipal Class Environmental Assessment Summary Report – Robinson Consultants Inc. Consulting Engineer – October 2017 (distributed previously and held on file)

DISPOSITION

Once the Greenbank Road Watermain Class EA report is received by Council, the document will be placed on public record for a 30-day public review period. The public will be notified through the posting of a 'Notice of Completion' which will be published in local newspapers and on the City's website dedicated to this study. The Notice of Completion is issued to complete the screening requirements for this Schedule B project.

If no request for Part II Order is received within the review period specified in the Notice, the City will proceed to design and phased construction of the project.