



**City of Kingston
Report to Council
Report Number 15-269**

To: Mayor and Members of Council
From: Jim Keech, President and CEO, Utilities Kingston
Resource Staff: Mark Van Buren, Director of Engineering
Date of Meeting: June 16, 2015
Subject: John Counter Boulevard – Progress to Construction

Executive Summary:

Construction of the road widening for John Counter Blvd commenced in 2012 with the section from Division Street to Sir John A Macdonald Blvd widened from 2 to 4 lanes, which was completed in 2013. Staff are currently preparing for the completion of the remainder of the project which includes road widening from 2 to 4 lanes for the section from Sir John A Macdonald Blvd to Princess Street and the construction of a new bridge to span the CN Rail tracks. The remaining phases of the project received budget approval from Kingston City Council as part of the 2015-2018 multi-year infrastructure program. Phase 3 of the project is expected to commence in the third quarter of 2015 and will include land clearing, grubbing and preloading of embankment areas to support the future bridge abutments. This phase of the project will also include wetland and floodplain compensation to create new flood storage and wetland areas to offset the losses associated with the embankment construction. Phase 3 is expected to take approximately 36 months to complete. There are two components to the project that require Council approval in order for the Phase 3 work to proceed. These include the completion of a legal agreement with Canadian National Railway Company to define responsibilities and cost apportionment associated with the construction and on-going maintenance of the new bridge crossing, and retaining an engineering consulting firm via a single source contract to provide construction management services for Phase 3 construction.

Recommendation:

That the Mayor and Clerk be authorized to sign an agreement to the satisfaction of the Director of Legal Services, that establishes a new grade separation agreement between the City of Kingston and Canadian National Railway Company for the planned bridge spanning the CN Rail tracks at John Counter Boulevard; and

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That the Mayor and Clerk be authorized to enter into an agreement, to the satisfaction of the Director of Legal Services, for the purpose of amending the existing contract with the consulting firm MMM Group to provide construction management services for John Counter Boulevard Widening – Phase 3 (JCB Embankment Construction).

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Authorizing Signatures:

ORIGINAL SIGNED BY PRESIDENT & CEO, UTILITIES KINGSTON

Jim Keech, President & CEO, Utilities Kingston

ORIGINAL SIGNED BY CHIEF ADMINISTRATIVE OFFICER

Gerard Hunt, Chief Administrative Officer

Consultation with the following Members of the Corporate Management Team:

Cynthia Beach, Corporate & Strategic Initiatives

Lanie Hurdle, Community Services

Not required

Denis Leger, Transportation, Facilities & Emergency Services

Not required

Desiree Kennedy, Chief Financial Officer & City Treasurer

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Options/Discussion:

Background

Investment in municipal infrastructure continues to be a strategic priority for the City of Kingston. The road widening of John Counter Blvd from 2 to 4 lanes through the entire corridor from Division Street to Princess Street is a key infrastructure project that was first supported by Council in 2004 as part of the “Group of 7 Community Priorities”. The project was also identified by Council as part of the strategic planning work that was embedded into the Kingston Strategic Plan (2011-2014). Most recently, Council has prioritized the completion of the John Counter Blvd project as part of strategic priorities that have been identified for the current term of Council.

John Counter Blvd is a critical east/west transportation corridor and the need to expand the road from 2 to 4 lanes was identified as part of the Kingston Transportation Master Plan (KTMP) originally prepared in 2004 and reconfirmed as part of the KTMP updates in 2009 and 2014/15. Staff completed a municipal class environmental assessment for the widening of John Counter Blvd which received approval from the Ontario Minister of Environment and Climate Change in March 2006. The Environmental Study Report (ESR) concluded that the John Counter Blvd corridor would include (i) a grade separated (bridge) crossing of the railway and Little Cataraqui Creek, (ii) adequate vehicular capacity throughout the corridor through the provision of 4-lane urban cross section with common left turn lane through large sections to facilitate access/egress from adjacent business, (iii) provision of sidewalks on both sides of the roadway throughout the corridor, (iv) provision of dedicated cycling lanes on both sides of the roadway throughout the corridor, and (v) improvements to overall transportation safety.

In December 2005, Council approved \$8.3 million in the 2006 capital budget to initiate the project implementation recommendations that were listed in the approved ESR. The implementation recommendations included preliminary design, property negotiations for land acquisition, environmental permitting, and detailed design work including construction drawing and specifications. In reference to the recommendations and conclusions of the ESR, the detailed design includes a bridge over the railway and watercourse, replacement of underground sewer and gas infrastructure, new street lighting and traffic signals, a new municipal road with signalized entrance to the VIA station, relocation of William Hackett Park, signalized intersection for realigned Portsmouth Avenue, and the increased accommodation for pedestrians, cyclists, transit users, and automobile traffic. Due to the overall length and varying nature of the 3.6 km corridor from Division to Princess Street, the project design work was divided into 5 distinct phases.

In November 2011, Council approved \$17.4 million in funding to complete the construction of Phase 1 and 2 of the overall project.

Phase 1 – Road Widening (Division Street to Leroy Grant Drive) – **completed in 2013**

Phase 2 – Road Widening (Leroy Grant Drive to Sir John A MacDonald Blvd) – **completed in 2013**

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In January 2015, Council approved \$63 million in funding, as part of the 2015-2018 multi-year infrastructure program, to complete the construction of the remaining Phases 3, 4 and 5 of the overall project.

Phase 3 – Preloading for Bridge Abutments; Wetland & Floodplain Compensation

This phase of the project includes land clearing, grubbing and preloading of embankment areas for the future bridge abutments. The work will also include wetland and floodplain compensation which involves the creation of new flood storage and wetland areas to offset the losses associated with the embankment construction. The majority of work associated with this phase of the project will occur north of the existing JCB alignment on either side of the CN rail crossing and involves building an east and west embankment using a substantial amount of rock fill. Phase 3 is expected to commence in 2015 (Q3) and take approximately 36 months to complete.

Phase 4 – Road Widening (Sir John A Macdonald Blvd to Indian Road)

This phase of the project includes a road widening from Sir John A Macdonald Blvd to Indian Road. Construction includes typical roadway elements (street lighting, signals, sidewalk, cycling lanes, turn lanes), utility relocations, and the implementation of a stormwater management pond. A condition of the Minister's Approval requires that Phase 4 construction must be completed within the same year it is initiated. Construction is currently planned to commence in 2016 (Q2), however there is flexibility in the overall project schedule to allow for construction to commence as late as 2017 (Q2). In either case, meeting the Minister's condition will not be an issue in regards to completion within the same year.

Phase 5 – Bridge Construction; Portsmouth Avenue Realignment; and Road Widening (Indian Road to Princess Street)

This phase of the project includes construction of a berm on the existing William Hackett Park, bridge construction, road widening from Indian Road to Princess, realignment of Portsmouth Avenue through former William Hackett Park, and relocation of William Hackett Park to the west of the realigned Portsmouth Avenue. The existing John Counter Blvd and Portsmouth Avenue will continue to serve as main roads during construction. The realignment of Portsmouth Ave and relocation of William Hackett Park results in the loss of a full sized soccer field in this area. As compensation, and as part of the \$8.3 million dollar budget, the development of Markers Acres Park was completed in 2009 to offset the future loss of the full sized soccer field in this area. It is expected that Phase 5 would commence in 2018 and take 24 months to complete.

Detailed design work has been completed for the remaining project phases. Environmental approvals and permits are complete with the exception of Ontario Ministry of Environment and Climate Change Certificate of Approvals for sanitary and storm sewers that are part of Phases 4 and 5. These outstanding items to be completed are not anticipated to conflict with the construction schedule detailed later in this report. Staff from Real Estate & Land Development continues to lead with land acquisition requirements along the John Counter Blvd corridor. The current funds remaining in the original \$8.3 million budget will be sufficient to complete the remainder of the purchase and sale agreements for remaining land acquisition requirements. It

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is anticipated that the remaining land acquisition requirements will not affect the schedule for construction.

At present, staff are preparing for the release of a Request for Proposal (RFP) to procure a contractor to undertake construction of Phase 3 which includes land clearing, grubbing and preloading of embankment areas to support the future bridge abutments. The RFP terms of reference also include adherence to various requirements such as appropriate train safety regulations, construction traffic control, appropriate insurance, environmental protection, etc. Staff anticipates that Phase 3 will commence in the third quarter of 2015.

There are two components to the project that require Council approval in order for the project to proceed: (A) the completion of an agreement with Canadian National Railway Company and (B) retaining consulting services to provide onsite construction management for Phase 3 construction.

(A) Grade Separation Agreement

The Canadian Transportation Act stipulates that road authorities and railway companies can negotiate crossing agreements for any aspect of a crossing between road and rail corridors. Due to repeatable nature and predictability of rail/road crossing projects, several guideline documents have been developed and issued by the Canadian Transportation Agency (CTA). These guidelines provide assistance for proponents of various road/rail crossings in developing responsibility and cost apportionments associated with the construction and on-going maintenance of road/rail crossings throughout Canada. Cost sharing and maintenance provisions for the new bridge crossing on John Counter Blvd was based upon the guideline entitled "*Apportionment of Costs of Grade Separations: A Resource Tool*". This guideline provides several pre-determined cost sharing categories in which applicable selection is dependent on a proponent's benefit from the project. Staff has reviewed each of these categories and had discussions with our design consultants and CN officials in order to evaluate the appropriate and fair cost share apportionment for this project. For projects due primarily to road development, as is the case with the widening of John Counter Blvd, the construction costs for a new grade separation are apportioned as 85% to the road authority and 15% to the railway company.

CN Rail has been party to numerous rail/road crossing agreements with municipalities across Canada and as such has developed a model agreement. The main tenets of the model agreement include (i) requirements of each party to fulfill their respective obligations under the Railway Safety Act, (ii) cost apportionment of shareable costs associated with rail/road crossing projects, (iii) responsibilities of the parties during construction, (iv) decommissioning of any level crossings, and (v) responsibilities of the parties post-construction and for on-going maintenance.

CN Rail presented staff with this model agreement in late 2014 and through various discussions between CN Rail and staff the model agreement has been tailored to reflect the project specifics of John Counter Blvd such as site location, engineering drawings and specifications, geotechnical monitoring requirements, and includes all works required under both Phase 3 and Phase 5 (embankment and bridge construction).

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A requirement of CN Rail is that no construction adjacent to CN Right of Way can commence prior to the new grade separation agreement being finalized between the City of Kingston and CN Rail. In order to maintain efficiency and progress to construction, staff requests that the Mayor and Clerk be authorized to sign the agreement as soon as it is finalized since (i) the tenets of the draft agreement are typical in nature for this type of project, (ii) the cost share apportionment for 85% Road to 15% Rail is fair and appropriate for this project, (iii) the agreement will be subject to the satisfaction of the Director of Legal Services, (iv) it allows the release of the RFP to procure contractor services in order to allow the construction of Phase 3 to commence by third quarter of 2015. If, during the finalization, the agreement is significantly altered, staff will seek appropriate guidance from Legal Services and if required, approach Council for further direction.

(B) Construction Management Services

The construction of Phase 3 involves excavation, fill placement, and the installation of wick drains to facilitate consolidation settlement to create embankment areas for the future bridge abutments. The latter component of the construction work is very specialized and requires careful inspection, monitoring and evaluation by experienced professionals to ensure geotechnical requirements are being satisfied. Due to the specialized nature of the embankment construction work, staff is recommending a single source procurement under the City's purchasing bylaw and that the City amend the existing contract with MMM Group, the current engineering consultant, to provide construction management services for Phase 3 construction.

The City's purchasing policy enshrines a competitive process to ensure public value for the good and services received and to maintain integrity, openness and transparency in the procurement of good and services. The purchasing policy only permits single source procurements over \$50,000 to be completed via a resolution of Council. Single source procurements over \$50,000 are very infrequent and are only recommended by staff under extenuating circumstances. The City's purchasing policy defines "single source" as either (i) there is more than one source in the open market but for reasons of function, service, unique technology or proprietary interest only one Vendor is recommended for consideration of the particular goods and/or services, or (ii) there is only one known source of supply of particular goods or services. In this case, there is more than one source of construction management services in the market-place, however, staff contends that there are several important advantages to utilize the construction management services of the same engineering consulting team that has been involved in the overall project design work:

- Maintain continuity and efficiency from the design through to the construction;
- Reduce potential for risk management issues considering MMM Group has an in-depth knowledge and understanding of the geotechnical conditions and design requirements that will be vital to ensure the appropriate preparation of embankments to support the future bridge crossing;

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- Increase safeguards against the potential for rail track movements during construction and the risks associated with disruption to rail service along the CN Rail corridor;
- Reduce risk of hiring a consultant that does not have a thorough and detailed knowledge and understanding of the project background, design elements, and construction requirements which may be very difficult to discern if a RFP was used to evaluate proposals;

MMM Group has provided a price proposal totaling \$583,000 for the aforementioned construction management services for Phase 3. Staff has been able to evaluate both the labour rates and time estimates associated with Phase 3 construction and believe that the proposal from MMM Group represents a fair and reasonable price for construction management services offered. Therefore staff recommends that the existing contract with MMM Group be amended to provide for construction management services that includes (i) contractor proposal evaluation, (ii) construction site inspection including materials quality/quantity measurements, and geotechnical monitoring and evaluation, and (iii) contract administration.

Existing Policy/By Law:

By-Law 2015-30 – 2015 Multi-Year Capital Budget

By-Law 2000-134 - A By-Law to Establish Purchasing Policies and Procedures

Kingston Transportation Master Plan (draft 2015)

Cycling and Pathway Study (2003)

Development Charge/Impost Fee Background Study (2014)

Notice Provisions:

Not applicable.

Accessibility Considerations:

The John Counter Boulevard road widening includes accessible sidewalks, para-ramps, pedestrian countdown devices and audible pedestrian traffic devices in conformance with the requirements of provincial Accessibility for Ontarians with Disabilities Act (AODA). This report is available in alternate formats by request directed to the City Clerk.

Financial Considerations:

Completion of construction of the John Counter Blvd project has already received Council approved funding in the amount of \$63 million, as part of the 2015-2018 multi-year infrastructure program. In regards to the legal agreement between the City of Kingston and Canadian National Railway Company, details on cost apportionment for construction work related to Phase 3 and 5 of the overall project will be finalized based on final invoices for completed works in both Phases

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3 and 5. With respect to the single source procurement of MMM Group, there are sufficient funds within the approved project budget to extend the existing contract with an upset price limit of \$583,000 for construction management services associated with Phase 3 construction.

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Mark Campbell, Construction Manager 613-546-4291, ext. 3139

Other City of Kingston Staff Consulted:

Alan McLeod, Senior Legal Counsel

Peter Huigenbos, Manager, Real Estate & Land Development

Exhibits Attached:

Exhibit A – Sketch of John Counter Boulevard Construction Project

