



City of Kingston Third Crossing of the Cataraqui River -
Parks Canada Environmental Impact Analysis
Detailed Impact Analysis Report - Section 7

Project Report

December 2, 2019

**City of Kingston Third Crossing of the
Cataraqui River
Parks Canada Environmental Impact
Analysis**

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7. Public and Indigenous Peoples' Consultation

During the pre-design Project phase, a comprehensive consultation plan was implemented to facilitate meaningful input from the public, Indigenous communities and various regulatory agencies; receive and consider input in the Project design; and document what was heard and how it was considered throughout the development of the Project.

7.1 Public and Stakeholder Consultation

Extensive public and stakeholder consultation has occurred as part of the Project since the Municipal Class EA process concluded. This will continue into the final design and construction phases of the Project.

Public consultation during the pre-design Project phase was facilitated through:

- Three Public Open Houses on the west and east sides of the community (complete with advance public notifications of the events), which were held at the following key Project milestones. A total of 538 people attended these Public Open Houses:
 - ♦ On September 29, 2016 at the LaSalle Secondary School, which provided background information on the Project and the progress of the pre-design work to date.
 - ♦ On April 26, 2017 at the Loyalist College and Vocational Institute (LCVI), and on April 27, 2017 at the École Sir John A. Macdonald. These Public Open Houses presented the recommendations from the pre-design Project phase.
- A City-wide survey was posted on the Project website from July 25 to August 19, 2016 which sought input pertaining to residents' priorities regarding sustainability; bridge aesthetics; engineering and innovation; and construction procurement and Project delivery models. A total of 1,144 people participated in the survey.

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Stakeholder consultation during the pre-design Project phase was facilitated through:

- A Sustainability Charrette, which was held on September 8, 2016 with staff from Queen’s University, various City Departments and senior Project Team members¹. The charrette focused on sustainability-specific design considerations for the Project, including safety, access and mobility; community values; innovation; local economy; life cycle efficiency; biodiversity; waste diversion; energy use and emissions; and material selection.
- Technical briefings with City staff and the local media on May 18, 2016 and April 20, 2017, which provided updates on the pre-design Project phase and the Business Plan.
- A Technical Advisory Committee, which provided technical guidance during the pre-design Project phase, and acted as a sounding board for technical decision making. The TAC was comprised of staff from: PCA, DFO, MNRF, MOECP, CRCA, various City Departments and senior Project Team members. There were eight committee meetings during the pre-design Project phase.
- Engaging in consultations on specific Project issues with:
 - ◆ Utilities Kingston (UK) staff on February 24, 2016 to discuss the status of the Kingston Water Master Plan Update, as it related to potential water servicing accommodations within the Project corridor.
 - ◆ Kingston Hydro staff on February 26, 2016 and Hydro One Networks Inc. staff on March 29, 2016 regarding long-term strategic planning for the three (3) Hydro One marine electrical cables [3-phase 44 kilovolt (kV) line] that currently cross the Cataraqui River in the Project corridor area.
 - ◆ UK staff on March 7, 2016 to discuss street, traffic and bridge lighting design issues and requirements.

¹ Representatives from St. Lawrence College and all potentially interested or affected Indigenous communities were invited to participate.



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- ◆ Kingston Transit staff on March 9, 2016 regarding current and long-term strategic planning for public transit within the Project Location.
- ◆ Senior staff with the City's Public Works Department on March 9, 2016 to discuss future bridge maintenance requirements.
- ◆ Cogeco Cable Canada Inc. staff on April 14, 2016 to discuss Cogeco's current and long-term utility distribution network planning within the Project Location.
- ◆ PCA staff on April 15, 2016 regarding the pre-design work plan and activities undertaken to date.
- ◆ Infrastructure Ontario staff on June 9, 2016 to discuss the Business Plan.
- ◆ Senior staff with the City and UK on June 23, 2016 regarding the pre-design work plan and activities undertaken to date.
- ◆ PCA staff on July 15 and 27, 2016 to discuss the Scoping Document in support of the Federal EIA.
- ◆ Senior staff with the City's Parks and Recreation Department on July 22, 2016 regarding current and long-term parks and recreation planning within the Project corridor.
- ◆ Infrastructure Ontario staff on August 25, 2016 as part of a Risk Workshop in support of the Business Plan.
- ◆ A representative of the City's Municipal Accessibility Advisory Committee on September 19, 2016 to discuss accessibility and the City's FADS relating to the Project.
- ◆ The following business and community organizations, which involved 445 people:
 - St. Thomas More Elementary School on December 13, 2016
 - Greater Kingston Chamber of Commerce on January 16, 2017
 - Kingston Community Health Centre on February 3, 2017
 - Queen's University (School of Engineering) on February 9, 2017

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- Kingston Region Seniors' Association on April 7, 2017
- Rotary Club of Kingston on April 19, 2017
- Walk 'n' Roll Active Transportation Master Plan TAC on April 19, 2017
- Friends of Kingston's Inner Harbour / The McBurney Park Association / Wellington X Group on April 24, 2017
- Imagine Kingston on April 25, 2017
- CFB Kingston on April 26, 2017
- Kingston Economic Development Corporation / Tourism Kingston on May 8, 2017
- Kingston Accommodation Partners / Downtown Business Improvement Association on May 10, 2017
- Rotary Club of Cataraqui - Kingston on May 16, 2017
- Community Response to Neighbour Concerns on May 16, 2017
- Coalition of Kingston Communities (a group representing over 25 sub-community groups) on May 25, 2017.
- ♦ The following stakeholders on focused Project issues:
 - Meetings with PCA staff regarding bridge constructability, on-shore and in-water compensation related to bridge construction activities, and bridge design matters on November 29, 2016; February 2 and 16, 2017; and March 14 and 27, 2017. A meeting took place on October 4, 2018 to discuss comments from Parks Canada's review of the Draft DIA, next steps regarding submission of the DIA, and permitting for the supplemental geotechnical investigations. On October 22, 2018 a follow up meeting took place to present the preliminary construction means and methods for the Project. A two-day workshop was held on November 5 and 6, 2018 in Gatineau, Quebec to discuss updates to the bridge design, construction means and methods, vegetation management and consultation, create of a workplan to complete the DIA, and plan next steps to move the Project out of the validation phase to construction within

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the budget and schedule, and in accordance with PCA's standards and regulations. A workshop was held on November 16, 2018 to review the updated bridge design and construction means and methods in response to PCA's comments at the November 5 and 6 workshop. Weekly review calls were held, taking place on November 23, November 30, and December 7, 2018 to confirm outstanding details and edits to be made to the DIA prior to the submission of the Final Draft DIA. A workshop was held on April 4, 2019 in Gatineau, Quebec to present changes to the construction methodology and discuss next steps for DIA submission and hold a follow-up workshop to discuss comments and DIA submission requirements in Kingston, Ontario on July 10, 2019.

- A meeting with representatives of the Kingston Rowing Club on March 29, 2017 to discuss bridge design and constructability as well as rowing matters within the Project corridor. A second meeting was held on October 23, 2018 to discuss the current geotechnical investigations, existing vegetation conditions, the functional requirements of the rowing club, the permanent configuration options in relation to the rowing lanes, and the temporary configuration options of the rowing lanes during construction.
- Meetings with a representative from the CRCA on March 21, 2017 and April 26, 2017 to discuss bridge design and constructability matters as well as proposed on-land and in-water protection, restoration and enhancement measures. An additional meeting was held on December 6, 2018 to receive feedback from the CRCA on the revised design and construction means and methods, address any outstanding concerns raised during prior consultation, and confirm permitting and approval requirements.
- DFO representatives were also in attendance at the PCA workshop on November 5 and 6, 2018 in Gatineau, Quebec. A follow up meeting was held on November 21, 2018 to further present the refined bridge elements, hybrid construction approach, planned updates to the DIA, Project schedule and to confirm the Project's *Fisheries Act* Authorization requirements.

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- A meeting was held on December 4, 2018 with the MNRF to review the revised design, to provide an update regarding the species at risk investigations conducted and the findings of these investigations, and to confirm the potential permitting and approval requirements of the MNRF in relation to overall Project schedule.
- An ECCC representative was also in attendance at the PCA workshop on November 5 and 6, 2018 in Gatineau, Quebec, the workshop on November 16, 2018 in Gatineau, and the Parks Canada weekly calls.
- Meeting with City staff and 'No Third Crossing' representatives in December 2016.
- Meeting with City staff and 'Build the Bridge' representatives in April 2017.
- Door-to-door outreach by City staff on May 18, 2018 with residents, property owners and business owners within the Project corridor, which focused on Project design components as well as property acquisition and other potential Project requirements and impacts.
- ♦ The Proponent engaged PCA (Ontario Waterways) in early 2019 regarding the operational clearances and channel alignment for the proposed bridge. During these discussions it was determined that operational clearances should be established based on a high-water level of 75.7 masl, based on the high-water datum used for the Highway 401 bridge. In light of this, and the height of the largest vessel identified to use the Rideau Canal, the Kawartha Voyager, it was determined that vertical clearance of 6.7 m was required above the 75.7 masl high water level. To accommodate operational clearances, Project design and anticipated increasing high water levels, the IPD team met with Ontario Waterways representatives on July 8, 2019 to propose realignment of the navigation channel. During this meeting the IPD team proposed an option that required the navigational buoys to be shifted approximately 4.3 m and provided navigational channel clearance of 15 m horizontally and 6.7 m vertically. Ontario Waterways provided confirmation that proposed realignment was acceptable and the City was required to: confirm the bathymetry to perform this

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realignment; coordinate navigation chart changes with Transport Canada; and carry-out any changes required to the aids to navigation.

- ◆ Maintaining an up-to-date Project website at www.cityofkingston.ca/third-crossing, which provides information on the Project, details on the public consultation program, a 'Bridge Buzz' section for updates, and an online forum for residents to post comments and questions. By the end of the pre-design Project phase:
 - ◆ The website had received 13,678 visits by residents and other stakeholders.
 - ◆ Over 60 comments had been posted on the online forum.
- A dedicated Project email address, which provided a single point of contact for residents to provide comments and questions for review and response by City staff. By the end of the pre-design Project phase, over 350 emails had been received and responded to by City staff.
- Regular media releases, which were posted on the City Facebook and Twitter accounts to increase public awareness of the Project; notify the public about upcoming Project outreach events; and direct people to the Project website for updated information.
- The preparation of a 'Third Crossing Public Engagement Report', which documented all the feedback received during the pre-design and Business Plan Project phases and how it was considered.

The City is committed to continuing its consultation efforts with residents, affected Indigenous communities and other stakeholder groups and agencies during the validation design phase and into the future detail design phase. The consultation and anticipated consultation activities will include, but will not necessarily be limited to, the following:

- Continuing to use the Project website and other social media to facilitate public access to Project information and activities.
- Issuing newsletters and targeted lists to those impacted by construction.
- Delivering work notices to near neighbours who may be impacted by construction activity and meeting with key stakeholders to inform them of any updates.

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- Hosting near neighbour meetings, open houses and targeted stakeholder meetings.
- Public meetings that have taken place during the validation phase include:
 - ◆ October 2018:
 - October 4: Meeting with the No Third Crossing Group.
 - October 18: Launch of planned road work and Third Crossing survey.
 - October 23: East side near neighbours community information drop-in meeting about early work activity.
 - October 23: Meeting with Kingston Rowing Club.
 - October 24: West side near neighbours community information drop-in meeting about early work activity.
 - October ongoing: Continuing Q&A on City of Kingston Get Involved page so that residents can ask questions to the Third Crossing Project Team.
 - ◆ November 2018:
 - November 2: Queen's University meeting with Geo-Engineering students as part of "Geocolloquium".
 - November 22: Meeting with No Third Crossing Group.
 - ◆ January 2019:
 - January 22: Project staff attended the Riverpark Condo Board Annual General meeting.
 - ◆ February 2019:
 - February 11: West side near neighbour meeting to discuss findings from early work in the fall and upcoming site work, including tree management planning, site mobilization, site safety, and more.
 - February 13: Mark Van Buren, Project director, spoke at a construction forecast event providing updates on upcoming planned construction Projects, including the Third Crossing.

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- ◆ March 2019:
 - March 5: East side near neighbour meeting discussing findings from early work in the fall and upcoming site work, including tree management planning, site mobilization, site safety, and more.
 - March 6: Project Team staff spoke at the River Park board meeting and detailed the latest information on laydown areas, early work studies and next steps.
 - March 27: Discussion and meeting with Imagine Kingston about the Project.
- ◆ April 2019:
 - April 8: Riverpark condo board meeting: Met with Riverpark board to discuss noise mitigation for properties whose backyards are along John Counter Boulevard.
 - April 15: Mark Van Buren, Project Director, presented to a tech class at Regiopolis-Notre Dame Catholic High School.
 - April 25: Mark Van Buren, Project Director, presented to two geography classes at Regiopolis-Notre Dame Catholic High School.
 - April 30: Two meetings with east side near neighbours whose backyards are along Gore Road to discuss noise mitigation.

7.1.1 Key Consultation Themes

Table 7.1 provides an overview of the key themes from the public input received during the pre-design Project phase (relative to the scope of the DIA²), and how this input was considered by the City and Project Team.

² Other public consultation themes focused on cost-benefit and economic analyses; bridge funding and project financing; and construction procurement and project delivery models.

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Table 7.1: Key Consultation Themes

Public Input Theme	What Was Heard	Pre-Design Response
The Project is needed.	<p>It will reduce traffic congestion on the LaSalle Causeway; car idling time; and the City’s carbon footprint.</p> <p>It will encourage active transportation, and public transit use.</p> <p>It will accommodate future tourism and planned urban growth and revitalization through improved access.</p> <p>The increased tax base will support future public works.</p> <p>It is needed for emergency response services.</p>	<p>The need for the bridge was confirmed in the KTMP and updates thereto (2004, 2009 and 2015); and the 2013 Municipal Class EA.</p> <p>The need for a 2-lane bridge was confirmed in the 2015 KTMP.</p>
The Project is not needed.	<p>It is not supported by future traffic needs and projected population growth.</p> <p>It overlooks the role of Highway 401; the expansion of Highway 15; and the optimization of signal timings at the Highway 15-Highway 2 intersection for addressing current and future traffic congestion.</p> <p>It will support reliance on the automobile at the expense of other forms of transportation.</p> <p>It is only going to benefit those who live in the east end of the City.</p> <p>It will cause negative environmental impacts.</p> <p>It will encourage more urban sprawl.</p>	<p>The need for the bridge was confirmed in the KTMP and updates thereto (2004, 2009 and 2015); and the 2013 Municipal Class EA.</p> <p>The need for a 2-lane bridge was confirmed in the 2015 KTMP.</p>
A 2-3-or-4-lane bridge?	<p>There are mixed opinions regarding the need for a 2-3-or-4-lane bridge.</p>	<p>The need for a 2-lane bridge was confirmed in the 2015 KTMP.</p>

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Public Input Theme	What Was Heard	Pre-Design Response
<p>The design should be aesthetically appealing and enhance user experience.</p>	<p>There is support for the inverted u-frame-pier-with-arch design in regard to its elegance; reduced visual impacts (profile, s-curve); functionality; and constructability.</p> <p>In terms of enhancing user experience, there is support for: the multi-use pathway, look-out areas and bench seating on the bridge; and the pathway connections for active travel, public transit connections, landscaping, observation areas, and wildlife micro-habitats on-shore.</p>	<p>The current design balances aesthetic values, user needs, capital cost and environmental impacts.</p>
<p>Protect the natural environment.</p>	<p>There is support for: eliminating or reducing the impacts of the Project life cycle on the natural environment; and restoring and enhancing the east and west side lands post-construction.</p>	<p>The intent of the temporary work bridge³ and the other aforementioned mitigation measures during the pre-operation phases and the operation phase of the Project is to eliminate or reduce the impacts of the bridge life cycle on the environment. The intent of the landscape designs is to restore and enhance the east and west side lands post-construction.</p>

³ As described in Section 1, the Project is now proposed to be constructed using a rock causeway for the majority of the construction access with a temporary work bridge being used for the main steel span work.



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Public Input Theme	What Was Heard	Pre-Design Response
Sustainability.	There is support to minimize carbon emissions during the pre-operation phases of the Project.	The strategies in the LCA will be reviewed during the future detail design phase.
Potential impact of traffic on nearby neighbourhoods.	Traffic lights at the Ascot Lane-John Counter Boulevard intersection would negatively affect east-and-west-bound traffic flow. Traffic lights are needed at the Ascot Lane-John Counter Boulevard intersection in order to provide easier access onto John Counter Boulevard and to the riverfront park by those living in the Village on The River apartments or River Park subdivision. Short-cutting through the Point St. Mark neighbourhood would negatively affect pedestrian and cycling safety in the community.	The Ascot Lane-John Counter Boulevard intersection could be signalized in response to future conditions. Implementing traffic calming options through the Point St. Mark neighbourhood will be further reviewed during the future detail design phase.
Optimize the Project life cycle.	There is support for minimizing the cost of building, operating, and maintaining the Project.	The current design optimizes construction costs, reduces environmental impacts, and extends the design life of the Project. Additional life cycle options and protocols in support of the O&M Manual will be reviewed further during the future detail design phase.

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7.2 Indigenous Peoples' Engagement

The history of Indigenous peoples in the Kingston region is complex in that the establishment of a European presence occurs far earlier here, in comparison to most other cities in Ontario. The City takes the duty to consult with Indigenous Peoples as a serious obligation, due in no small part to the City's interest in understanding the rich and complex historic and continuing experience of Indigenous Peoples as part of its overall cultural awareness and growth.

The City has prepared a Report on Indigenous Consultation which is included as Appendix Q and provides the basis for consultation during and after the EA phase as well as the results to date. This report includes the following:

- Introduction to Indigenous Consultation.
- The Respective Roles of Crown and Municipalities in Indigenous Consultation.
- The Lower Cataraqui - Kingston Indigenous Context.
- The Scope of Consultation and Indigenous Interests.
- Consultation during the Third Crossing Environmental Assessment.
- Consultation during the Third Crossing Preliminary Design.
- Consultations during the Third Crossing Post–Preliminary Design Detailed Design and Construction Phases.

Consistent with its commitment to Indigenous Peoples, the City undertook engagement through:

- Document sharing with the following Indigenous communities⁴:
 - ◆ Ardoch Algonquin First Nation.
 - ◆ Mississaugas of Alderville First Nation.
 - ◆ Mohawk Nation Council of Chiefs.

⁴ Information packages on the project were sent to affected Indigenous communities and associated government agencies in May, July and October 2016; and in April and May 2017.

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- ◆ Mohawks of the Bay of Quinte.
- ◆ Shabot Obaadjiwan First Nation.
- ◆ Huron-Wendat Nation.
- ◆ Algonquins of Ontario.
- ◆ Algonquins of Pikwàkanagàn.
- ◆ Mohawk Council of Akwesansne.
- ◆ Metis Nation of Ontario.
- ◆ Six Nations Grand River.
- Document sharing with the following government agencies:
 - ◆ Crown-Indigenous Relations and Northern Affairs Canada
 - ◆ Ontario Ministry of Indigenous Affairs.
- Archaeological monitoring of the in-water geotechnical fieldwork by representatives of the Huron-Wendat First Nation⁵.

On February 21, 2018, responsibility for the Project was transferred to the City's Major Projects Office. It is in process of retaining a number of Indigenous consultancies with specific areas of expertise to enhance consultation with affected Indigenous communities. These include Amber Adams, PhD, on eastern Great Lakes botany on naturalization and native planting, and Shyra Barberstock, president of Okawaho Equal Source, on innovation and entrepreneurship from an indigenous perspective.

The hiring of these consultants reflects the interest of the City of Kingston to address the duty to accommodate, which has been confirmed as being associated with the duty to consult, by appellate level courts in cases such as the SCC 2017 ruling in *Clyde River (Hamlet) v. Petroleum Geo-Services Inc.* and that of the FCA *Tsleil-Waututh Nation v. Canada (Attorney General)* in 2018. Based on those cases, the City of Kingston seeks to ensure that its discussions with the appropriate Indigenous groups reflect both the depth of consultation and meaningfulness in accommodations that the courts now

⁵ Representatives from all affected Indigenous communities were invited to participate.

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require. The City is undertaking these processes in harmonization with Indigenous resident interests in the nearby Belle Park Master Plan development, as well as protection and management of Belle Island site of late woodland burials co-owned with Mohawk Nation Council of Chiefs (MNCC).

Additional Indigenous engagement as part of the validation Project phase took place through:

- Confirmation of fieldwork and accommodation opportunities as well as discussion regarding the role of accommodation within consultation with engaged Indigenous communities.
- Providing updates regarding status of the Project, and field investigations via mail outs, emails and telephone communications.
- Discussion of opportunities for community participation and to incorporate narrative design.
- Monitoring of marine geotechnical study by representatives of Huron-Wendat First Nation, Tyendinaga First Nation, Wendaki First Nation, Mohawks of the Bay of Quinte First Nation.
- Meeting with Chief Marsden of Alderville First Nation to discuss folklore literature, tree inventory, and consultation opportunities during detailed design.
- Meeting with Paul Williams, MNCC representative and Amber Adams to review Parks Canada permit process and review landscaping and native botany.
- Meetings with Shrya and Rye Barberstock from the Indigenous entrepreneurship consultancy Okwaho to assist with accommodations.

7.2.1 Indigenous Interests

City of Kingston seeks to ensure that its discussions with the appropriate Indigenous groups reflect the both depth of consultation and meaningfulness in accommodations. The City is undertaking these processes also in harmonization with Indigenous interests in nearby Belle Park Master Plan development as well as protection and management of Belle Island, site of late woodland burials co-owned with Mohawk Nation Council of Chiefs.



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As discussed in Appendix Q, consultation and engagement was initiated during the Third Crossing environmental assessment process, which commenced in 2009. Over the course of approximately 10 years, the Third Crossing team has been working to understand and evaluate any concerns raised by Indigenous communities to determine the potential effect of the Project on the environment and to develop and incorporate mitigation measures to reduce or limit adverse environmental effects.

The following table provides a summary of communications occurring during Post-Preliminary Design (2017 – present) where comments, relevant to this DIA have been raised. These have been summarized, along with the Project response (i.e. how these concerns have been addressed), identifying specific outcomes related to Third Crossing Indigenous Duty to Consult and Accommodate processes.

In addition to the communications described below, a meeting was held with representatives of Alderville First Nation on October 16, 2019. The meeting was attended by representatives of the Project Team and various Federal Agency Representatives, including the City of Kingston, Parks Canada Department of Fisheries and Oceans Canada, Transport Canada, Kiewit and Hatch. Major topics of discussion included steps taken by the Project team to fulfill the Duty to Consult, and the bridge design as it pertains to archaeological resources. Other major discussion topics included short- and long-term environmental impacts of the Project, and construction plans.

A meeting was held with representatives from the Mohawks of the Bay of Quinte on October 22, 2019. The meeting was attended by representatives of the Project Team and various federal agency representatives, including the City of Kingston, Parks Canada Department of Fisheries and Oceans Canada, Transport Canada, Kiewit and Hatch. The major topics of discussion included the steps taken by the Project team to fulfill the Duty to Consult, discussion of the potential for archaeological resources within the Project footprint and the environmental considerations of the Project. Construction plans were also reviewed.

If any new, undisclosed, or unforeseen issues should arise that present the potential to impact any Treaty or Aboriginal rights, Indigenous groups will be notified.

Table 7.2: Indigenous Interests Expressed during the DIA Process

Date	Communication	Comment/Concern	Project Response
23 Aug 2017	Telephone call with Paul Williams, Mohawk Nation Council of Chiefs.	Raise opportunity to link Belle Island re-naturalization to Third Crossing through resourcing landscaping aspect.	In this particular discussion, was the hiring of Amber Adams, ethno-botanist, to give advice both professionally and as a representative of the MNCC on the question of native plantings.
6 Oct 2017	Telephone call with Paul Williams, Mohawk Nation Council of Chiefs.	Native plantings nursery opportunities	The opportunity to have a native planting nursery remains one potential mechanism to be further explored later on.
3 Nov 2017	Telephone call with Paul Williams, Mohawk Nation Council of Chiefs.	Discussion on Third Crossing through resourcing landscaping aspect. Discussion of Ktunaxa Nation v. British Columbia (Forests, Lands and Natural Resource Operations), 2017 SCC 54 and religious belief.	The continuation of the discussions from the previous phone calls, Aug 23 and Oct 6, 2017.
28 Feb 2018	Telephone call with Paul Williams, Mohawk Nation Council of Chiefs. Discussion of recent Williams Lake 2018 SCC 4 ruling from SCC as well as role of accommodation within consultation.	Accommodation within Consultation	The progression of topics such as the nature of consultations through general discussions have contributed to relationship building between the City and the Mohawk Nation Council of Chiefs
8 Mar 2018	Email from Paul Williams, Mohawk Nation Council of Chiefs on accommodation requirements.	Accommodation within Consultation	The progression of topics through general discussions have contributed to relationship building between the City and the Mohawk Nation Council of Chiefs
12 Mar 2018	In response to the City's reach out on March 1 regarding the posting of the RFP for the design and construction of the Third Crossing. Followed up with a telephone call with Maxime Picard, Project Coordinator, Ontario, Huron-Wendat Nation confirming 2018 fieldwork opportunities as well as role of accommodation within consultation.	Discussed RFP and Maxime Picard indicated the community has a partnership in construction field and would review possible bidding on entire project.	The City reached out to Huron Wendat regarding which project opportunities they would be interested in participating in. Had a phone call to discuss not only the consultation and its next steps but to explore business opportunity. The City provided HW with the RFP info in the event Wendake Construction was interested in bidding on the Third Crossing project. HW received RFP information and would follow up with the City if they had more questions. Consultation progression ongoing.
20 Mar 2018	Email from Skye Anderson, Lands and Resources Communications Officer, Alderville First Nation.	Request for more information on the City of Kingston's Duty to Consult process for the Project and the "Indigenous Mail Out" sent to Alderville's Chief.	The City received a request for more information regarding the Third Crossing project. The City did not provide a response regarding the Third Crossing until the City reached out on Sept 17, 2018.
22 Mar 2018	Email from Maxime Picard (Huron Wendat).	Confirmed that they will not be bidding on the project. Would like to progress consultation discussions.	The City continued with the RFP process throughout the summer and reached out to Huron Wendat with Mailout 7 on Sept 15, 2018 regarding project update and consultation progression.
5 Jun 2018	Email to Paul Williams, Mohawk Nation Council of Chiefs as well as Curtis Lazone, Environment Officer,	Removal of small footpath bridges nearby to Third Crossing project.	The connectivity between the Third Crossing and Belle Island was discussed and providing notice of adjacency between the two locations as a courtesy as co-owners of Belle Island with the MNCC.



Date	Communication	Comment/Concern	Project Response
	Akwasasne First Nation and others on neighbouring co-owned Belle Island.		
14 Aug 2018	Receipt and review of final draft of report on Indigenous resident community input related to adjacent Belle Park Master Plan, prepared by Terri-Lynn Brennan, Phd. of Inclusive Voices Incorporated for City of Kingston, Recreation and Leisure.	Adjacency of Belle Island to the Third Crossing	The connectivity between the Third Crossing and Belle Island was discussed and providing notice of adjacency between the two locations as a courtesy as co-owners of Belle Island with the MNCC.
17 Sept 2018	Email from Maxime Picard, Project Coordinator, Ontario, Huron-Wendat Nation confirming receipt of Mail Out #7.	Asking to discuss next steps by further telephone call.	Discussion included logistics coordination with Huron Wendat to participate in the Geotechnical in-water archaeology monitoring for the pier investigations. Huron Wendat will participate, and a series of logistics calls/emails followed over the course of Fall 2018.
17 Sept 2018	Email from Chief James Marsden Alderville First Nation.	Desire to rekindle personal participation in discussions and also confirming ongoing work with City of Kingston Culture Department.	Shared two records related to the Mississauga of Alderville identified in City of Kingston research: (i) explorer Charlevoix travel record from 1720 including notes from observations of Mississauga present at Fort Frontenac and (ii) 1888 anthropological article which included include information provided from residents at Alderville. A series of emails followed to set up a meeting between Alderville and the City to continue consultations. Meeting was set for October 19, 2018.
2 Oct 2018	Telephone conference call and email follow up with Maxime Picard, Project Coordinator, Ontario, Huron-Wendat Nation.	Marine geotechnical monitoring, incorporation of narrative design, coordination with Wendake Construction and other specific accommodation opportunities. Confirmed monitors will be present for this fall's geotechnical study.	Huron Wendat expressed the usefulness of the Third Crossing mailouts to keep them informed and that the relations between the City and Huron Wendat can be used as examples to assist other agencies/gov'ts of this consultation tool (mailouts). Geotech/Archaeology logistics info shared; offered to extend Kingston's expertise on terrestrial archaeology when west side archaeology would commence later in the project; opportunities for when the tree management plan would be executed later in the project; discussed commercial opportunities for Wendake Construction based on skill set and resources later on in the project.
3 Oct 2018	Telephone conference call with Amy Brant, Mohawks of the Bay of Quinte.	Marine geotechnical monitoring and other specific accommodation opportunities. Confirmed monitors will be present for this fall's geotechnical study.	Logistics coordination for Mohawk Bay of Quinte archaeology monitor to participate in in-water geotech arch monitoring work.
17 Oct 2018	Meeting with Paul Williams, MNCC representative, and Amber Adams at Six Nations, Osheeken, Ontario.	Review Parks Canada permit process and review of landscaping and native botany.	Continuation of the discussions regarding native plantings and the Third Crossing



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9 Oct 2018	Meeting with Chief James Marsden, Alderville First Nation, City Hall, Kingston. Joined by Brian Osborne, Professor Emeritus, Queens. University.	Reviewed research to date, discussed recent Alderville FN settlement outcomes, historic records, opportunities for Alderville community participation.	The City informed a list of upcoming work activities to Alderville. Alderville may express interest on which activities they would like to participate in. The listing of activities is summarized in the periodic mailouts and the City's website. The City will continue seeking the work activities that best align with Aldervilles resources and present them as the project progressed such as trees, promoting native plantings, turtle management plans, employment and training opportunities, and environmental management plans once those activities were in a state of info sharing/coordination. The City has offered that Alderville can request more info and project updates at any time to help take advantage of Alderville scheduling openings to progress consultation activities. Alderville was interested in the native planting opportunities for the Third Crossing. The City provided Alderville with the 1888 anthropological article which included native plant and use information provided from residents at Alderville in the 1880s. The City also provided the 1888 report to Amber Adams who took it into account in her native plantings strategy report which would be shared with the project team for incorporation into detailed design. The City will continue providing information and mailouts to Alderville in the midst of a potential change in leadership in Alderville with Chief Marsden stepping down and having the interim chief focused on local election matters. Once the leadership was formalized, Alderville would reach out to Kingston to reconnect with the Third Crossing project.
Oct and Nov 2018	Barge located monitoring of marine geotechnical study by representatives of Huron-Wendat Nation as well as Mohawks of the Bay of Quinte.	Ensure logistics and coordination was maintained at a high level between the project team and Huron Wendat and the Mohawk Bay of Quinte.	Ongoing logistics, coordination and frequent updates was maintained with Huron Wendat and Mohawk Bay of Quinte throughout the in-water geotech program.
25 Oct 2018	Email from Maxime Picard, Project Coordinator, Ontario, Huron-Wendat Nation.	Marine geotechnical monitoring on geotechnical study status.	Logistics and coordination for Huron Wendat to assist with in-water archaeology coordination.
29 Oct 2018	Emails to and from Chief James Marsden, Alderville First Nation.	Tree management plan - Tree survey	As a follow up to Oct 19 meeting regarding tree management plan. Offered if Alderville could participate in Tree survey field work but their resources were not available at this time. Instead, Alderville indicated they would be fine to read the arborist report when it was ready.



Date	Communication	Comment/Concern	Project Response
29 Oct 2018	Emails to and from Maxime Picard, Project Coordinator, Ontario, Huron-Wendat Nation.	Tree management plan - Tree survey	As a follow up to Oct 2 meeting regarding tree management plan. Offered if HW could participate in Tree survey field work but their resources were not available at this time. Instead, HW indicated to keep them informed if the duration of work was more than two weeks long which was not the case.
29 Oct 2018	Emails to and from Amy Brant, Mohawk Bay of Quinte.	Tree management plan - Tree survey	Offer to Mohawk Bay of Quinte occurred to participate in tree survey but they were interested in receiving the arborist report when available.
28 Nov 2018	Emails to and from Maxime Picard, Project Coordinator, Ontario, Huron-Wendat Nation.	Marine geotechnical monitoring on geotechnical study status, and terrestrial archeology on west shore.	Logistics and coordination for Huron Wendat to assist with the onshore Stage 2 archaeology work on west shore lands; maintained in-water coordination.
12 Dec 2018	Telephone conversation with Paul Williams and follow up emails, MNCC representative.	Project update and electricity demand of bridge.	Paul recited the MNCC list of EA commitments regarding the bridge to be energy neutral which would be further explored as the project progresses.
14 Dec 2018	Emails to and from Maxime Picard, Project Coordinator, Ontario, Huron-Wendat Nation.	Archaeological study	The City offered the Stage 2 archaeology assessment of 630 and 646 John Counter to Huron Wendat. They reviewed the report and agreed with the content.
14 Dec 2018	Email to Amy Brant, Mohawk Bay of Quinte.	Archaeological study	The City offered the Stage 2 archaeology assessment of 630 and 646 John Counter to Mohawk Bay of Quinte for their info/review.
3 Jan 2019	Email to Paul Williams, MNCC.	Setting up MNCC EA Order letter review meeting, context sensitive design and cultural aspects of finishing work.	The MNCC list of EA commitments discussion needed to get rolling now that validation phase is progressing. If cultural aspects of finishing work were to be performed in the correct manner, it would have to be genuine and initiated earlier rather than later on in the design phase.
5-8 Jan 2019	Emails with Amber Adams, consultant and MNCC.	Food and ecology guide study, species list review and comments on Indigenous consultation report.	Continuation of the discussions regarding native plantings and the Third Crossing
6 Jan 2019	Email from Paul Williams, MNCC.	Cultural finish and unsuccessful past efforts on MTO project.	The MNCC list of EA commitments discussion needed to get rolling now that validation phase is progressing. If cultural aspects of finishing work were to be performed in the correct manner, it would have to be genuine and initiated earlier rather than later on in the design phase.
15 Jan 2019	Emails with Amber Adams, consultant and MNCC	Eastern Shore Tree Inventory	Continuation of the discussions regarding native plantings and the Third Crossing



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15 Jan 2019	Email to Chief Marsden, Alderville First Nation	On tree inventory, tree removal program and lumber sharing opportunity. Also request time to meet to discuss internship training opportunities.	As a follow up to Oct 19, 2018 meeting, the tree inventory was provided to Alderville for their review. The City informed possible tree cutting activity to occur in March. The City requested Alderville to review the inventory for any trees of interest and which ones Alderville would like to receive for any number of purposes. The City also requested a time that Alderville could host a visit from the project team to see the Black Oak Savanna and to discuss student and internship opportunities.
28 Jan 2019	Emails from Maxime Picard, Project Coordinator, Ontario, Huron-Wendat Nation	Acknowledging receipt of 2018 archaeological report and expressing expectation to continue work on project.	The City offered the Fall 2018 in-water archaeology monitoring report to Huron Wendat. They offered to review the report and provide any comments.
4 Feb 2019	Arborist Report Received from Amber Adams, consultant and MNCC	Eastern Shore Tree Inventory	A continuation of earlier discussions on native planting opportunities. Amber Adams provided comments and recommendations for the project team to consider and include into the tree management plan and detailed design documents. The project team received the report and would follow up with the Mohawk Nation Council of Chiefs.
27 Mar 2019	Meeting with Okwaho Equal Source	Potential tree replanting lumber delivery to neighbouring FN communities.	Alan - can't find my notes. We were asking Okwaho to reach out to their business directory to see which Indigenous vendors could be part of the replanting needed from the Tree management plan. The City explained some potential scenarios if Okawho could connect us with those types of folks.
17 Apr 2019	Meetings with Paul Williams, MNCC on Belle Island and associated projects including Third Crossing.		The progression of topics such as the nature of consultations through general discussions have contributed to relationship building between the City and the Mohawk Nation Council of Chiefs
24 May 2019	Email to Paul Williams, MNCC, providing update to the project and inviting him to the meet with Project Clusters on detail design.	Update on IPD project phases and tools and changes from the EA and preliminary design phases.	The City provided an update on the validation and detailed design phases of the IPD project. Introduced the discipline cluster group weekly meetings and an invite for the MNCC to participate in any of the clusters. If any of the clusters were aligned with the MNCC, the City offered for the MNCC to attend the environmental cluster which would provide opportunity to review and update the MNCC list of EA commitments and their progress.
4 Jun 2019	Paul Williams meeting with Dan Franco and members of project team at offices of Kiewit, Oakville. Paul Williams joined team foundation and environmental	Discussion topics included: - IPD model, target cost, profit at risk model Bridge design has changed which helped with target cost achievement;	Paul Williams attended the structures cluster and permit/environmental cluster. Conversations were genuine and flowed freely between all participants. The City took notes of the meeting which would be later

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	clusters, reviewed MNCC list of consultation objectives set out in EA.	<ul style="list-style-type: none"> - Kingston Rowers were consulted and had to split the lanes with a pier; - Above-deck arch was removed and replaced with an under-deck arch (smaller span); - Understanding of cable stay towers has progressed (ice issues in Port Mann); - Discussed history of projectile weaponry, Swedish metallurgy, and times in France; - MNCC expressed interested in Archaeology Monitoring process; - Participated in structures cluster and permit/ environmental cluster; - Discussed concrete permeability and experience from dam projects and repair work; - MNCC is interested if they can bring value to the project; - Real opportunity lies in culture, shoreland landscaping (Jones/Jones workshop); - Resourcing MNCC to help out – future discussion - Went over the MNCC list of EA commitments (captured on attached spreadsheet, work in progress). 	shared with the MNCC on June 10, 2019. Follow up discussions (parking lot items) were acknowledged and would follow in the future.
6 Jun 2019	Alan McLeod emails with Amber Adams	Public Open Houses in late June 2019 and survey of plant species for inclusion in denaturalization planning.	Logistics and coordination of Amber attending a future open house for the project. Also discussed status of the preliminary report of plant species being prepared by Amber which could then be shared with the project team for review.
7 Jun 2019	Dan Franco received telephone call from Maxime Picard, Project Coordinator, Ontario, Huron-Wendat Nation	Interest indicated in subcontracting, construction labour, archaeological monitoring.	The City offered a list of procurement opportunities that the Huron Wendat may be interested in. Also discussed the trucking and amount of rock that would be needed, and that the Huron Wendat would think about it. The City also offered if the Huron Wendat could supply construction labour. Huron Wendat expressed interest in any future archaeology monitoring work that is needed.
10 Jun 2019	Dan Franco email to Paul Williams	Updated MNCC EA list of commitments, durability proposal, noise reports, DIA information.	As offered on June 4, the City provided the discussion points and supplemental information (durability and noise info) and update MNCC list of EA commitments to Paul for the MNCC's review.



Date	Communication	Comment/Concern	Project Response
22 Jul 2019	Mark Van Buren emails with Maxime Picard, Project Coordinator, Ontario, Huron-Wendat Nation	Huron Wendat archaeology monitor onsite for continuation of stage 3.	Logistics and coordination for Huron Wendat to assist with the onshore Stage 2 archaeology work on west shore lands 612 John Counter Blvd
2 Aug 2019	Dan Franco email to MBQ and Huron Wendat regarding tree salvage opportunities commencing in two weeks.	Tree management plan - tree removal and salvage opportunity	The City offered opportunity tree cutting and tree salvage opportunities.
6 Aug 2019	Dan Franco email to Alderville FN regarding tree salvage opportunities commencing in two weeks	Tree management plan - tree removal and salvage opportunity	The City offered opportunity tree cutting and tree salvage opportunities. The City also provided the arborist report for Alderville's review as a follow up to the tree inventory list from January 15, 2019.
9 Aug 2019	Maxime Picard (Huron Wendat)	Tree management plan - tree removal and salvage opportunity	Huron Wendat expressed interested in the tree salvage opportunity and that they need time on their end to review logistics.
13 Aug 2019	Maxime Picard (Huron Wendat)	Tree management plan - tree removal and salvage opportunity	City spoke with Maxime (HW) about more logistics and planning coordination. Maxime is supposed to get back to the City with more information.
16 Aug 2019	City spoke with Paul Williams, MNCC	MNCC list of EA commitments. Focus on landscape design for the shorelands.	The City had discussion regarding the opportunity for landscape for the Third Crossing. Bring Jones and Jones in for a 1- or 2-day workshop would be a good idea. Paul will see if he has some folks on his end that could attend the workshop and inform the City accordingly. Paul also requested the inventory list for the artifacts that have been recovered as part of the Stage 3 archaeology on 612 John Counter Blvd for his review. List was sent in subsequent emails.
20 Aug 2019	City had phone call with Paul Williams, MNCC	Tree management plan - tree removal and salvage opportunity, and restoration.	City provided update on the landscape workshop with Jones/Jones and that there will be upcoming public open houses. discuss the tree management plan including trees that are impacted by construction and the restoration plan for both the over and understory of the forest and the wildlife habitat opportunity that the project presents. Also discussed the upcoming environmental management plan process for ongoing monitoring and back-up plans to make sure restoration is successful. The project will help reduce the city's overall carbon footprint once in service due to distance and time savings.



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7.2.1.1 Recommendations on the Development of the Project from the Mohawk Nation Council of Chiefs, 2011

In response to consultations undertaken with the Mohawk Nation Council of Chiefs, the City of Kingston provided resources requested to prepare the following reports which included 22 recommendations for the development of the Project:

- Preliminary Report, Cataraqui River Crossing, September 6, 2011
- Tsi Nionkwahskoten – Cataraqui River: Proposed Third Crossing, November 2011.

Table 7.3 presents the 22 recommendations from the MNCC along with the updated Project response, current as of the date of this report along with the current status of the recommendations.



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Table 7.3: Mohawk Nation Council of Chiefs 2011 Recommendations, Project Response and Current Status

Original List of Commitments (2011)	Project Response Since 2012 ESR	Current Status as of November 2019
<p>The bridge should be designed to have a life cycle of at least 120 years.</p>	<p>The CHBDC has a specified 75-year design life for all load factors however the Project team has hired a durability consultant to review 100-year service life strategies. The durability scope of work was forwarded to MNCC for their review/input in early June 2019. MNCC is interested in seeing what the strategies for extending service life for the Project. MNCC expressed that the goal in Europe 120 years. The Project team explained that if Kingston used 120 as a starting point during the preliminary design phase, it wouldn't have been affordable within the \$180M budget and instead had to set the bar to 100 years for exploration during the detailed design phase. One of the main goals is to find a balance of capital cost and operational/maintenance cost which is relatable to the return on investment.</p>	<p>Ongoing</p>
<p>Bridge design should be guided by principles of context sensitive design: the bridge should be considered a guest, a visitor to the river and the land, not an owner or overlord.</p>	<p>MNCC suggested that Jones and Jones Architects from Seattle be involved to assist with context sensitive design for the shore land works. They will consider Indigenous cultural aspects and historical aspects as part of their assignment. Perhaps include turtle conversation in the Project area. It was agreed between the Project team and MNCC that Jones and</p>	<p>Ongoing</p>



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Original List of Commitments (2011)	Project Response Since 2012 ESR	Current Status as of November 2019
	<p>Jones facilitate a workshop in Kingston (tentatively scheduled for September 2019). The City is currently working on preparing workshop logistics. Stakeholder invite list is being generated and the Project team has invited all Indigenous groups on the Project list if they are interested in attending.</p>	
<p>Natural Materials should be used as much as possible in bridge and supporting areas design and construction.</p>	<p>The Project team is proposing to use a rock causeway to facilitate construction for the permanent bridge. The causeway will be made from shot rock and will be clean prior to being strategically placed in the river. Once the causeway's use is no longer needed, the rocks will be partially removed in a careful manner from the river and repurposed on the shore lands for embankment construction. MNCC agreed that we need to balance the natural material against the amount of service life it provides. If a natural material is the same cost and as durable, it should be selected for use in the Project. This logic was applied to the noise wall on both shore lands which will be made of a majority of wood. When compared to the former full trestle working bridge concept, the MNCC liked the idea of repurposing the rock to save on materials which limits the amount of throwaway material (like trestle). The majority of the bridge will be made of concrete with the main</p>	<p>Ongoing</p>



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Original List of Commitments (2011)	Project Response Since 2012 ESR	Current Status as of November 2019
	span being steel. The landscape reinstatement plan will be all-natural materials where possible except the asphalt pathways and street furniture. The Project team is also exploring the use of an embankment retaining wall that will be vegetated (green wall).	
Local materials should be used as much as possible. One useful criterion is to avoid any materials from than 800 km away.	The Project team is also interested in using as many local suppliers, materials, and labour force as possible for several reasons such as local knowledge, take advantage of local supply chain relationships, inject business to the local community, reduce the amount of unnecessary trucking, all of which helps build relations and provides value and cost savings. All the shot rock for the berm (and repurposed for the embankments) and granular will be sourced from just north of the Project site, the plastic concrete supplier is also local, the rebar supplier is local, the concrete girders and precast panels are from Greater Toronto Area, and steel girders from Hamilton, all within 500 km of the Project site. Several of the sub-contractors Kingston based businesses who purchase their materials from Kingston businesses. A complete list of major materials and their localness will be generated as part of the Project as it progresses.	Ongoing



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<p>The bridge should be designed to have an eventual capacity of four lanes of traffic, but it initially consist of two traffic lanes and the other lanes, on a separate track, would be used by cyclists and pedestrians.</p>	<p>The City continues to work towards shifts in transportation modes from single occupant vehicle trips to sustainable forms of transportation including transit and active transportation. Continued efforts will also be focused on transportation demand management (reduce trips and/or trips in off-peak travel periods) and transportation systems management (increase capacity of existing transportation network). These efforts in combination with anticipated population and employment growth in Kingston and advances in transportation technology related to autonomous and connected vehicles will allow for the City to accommodate future travel demand within a 2-lane bridge. It is also reasonable to anticipate that vehicles will be smaller in size in which car lane widths could be reduced thus being able to keep the same asphalt width but having more narrower lanes in the future. MNCC expressed that this makes sense.</p>	<p>Closed</p>



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Original List of Commitments (2011)	Project Response Since 2012 ESR	Current Status as of November 2019
<p>Bridge deconstruction must be planned and confirmed at the same time as construction is approved. This includes plans to dismantle and recycle the bridge and its materials, and to restore the land and the river afterwards. The cost of deconstruction must be included in the life cycle assessment of the bridge.</p>	<p>MNCC originally introduced the concept of including a decommissioning plan during the EA phase. The Project team appreciated the suggestion and has proposed the following plan: Since technologies and construction practices will be different in 100 years' time, the Project team should aim to have a high level (say 5 page) document that explains how to disassemble the bridge in a sequenced effort. MNCC suggested that as part of the plan, the Project team should specify how the disassembled components could be repurposed/salvaged. MNCC suggested that we can rely on today's disassembly and repurposing best practices since the Project team has limited knowledge of what the long-range future could be.</p>	<p>Ongoing</p>
<p>Bridge design should include monitoring systems for the state of health of the bridge, to supplement visual monitoring.</p>	<p>The City intends to work with researchers at Queen's University to employ the use of real-time fibre optic sensing of critical structural members of the bridge. The fibres would be installed on the bridge once it is constructed and sampled to understand the behaviour of the bridge under different climate conditions. Additionally, a vehicle tracking system could be installed on the bridge so that the data from the fibre optic sensors can be correlated with the loading. A "Smart</p>	<p>Ongoing</p>



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	<p>Crossing” app would allow users to view historic data from the sensors as well as an explanation of what the data means in terms of structural behaviour. Thus, users could both see novel sensors results and learn about bridge engineering at the same time.</p>	
<p>Consideration should be given to the bridge incorporating its own renewable energy sources.</p>	<p>The incorporation of renewable energy sources into the bridge design was posed as a question to the public as part of the engagement process. Approximately 40% of the respondents indicated that this was "somewhat important" and that there needed to be a strong business case to support, while also noting that there are other City locations that may yield better opportunities for inclusion of renewables. There was also concern with use of wind turbines and solar panels impacting the overall architectural design and negating efforts to maintain a bridge design that will be low and unimposing on the surrounding natural landscape. MNCC would like to have the bridge be energy neutral. When explained to MNCC, they suggested that we still look into LED lighting and solar powered lights. The City explained that all lighting will be LED as such is the City policy. The use of solar power lights is ongoing as the design progresses. Keeping in mind that the</p>	<p>Ongoing</p>



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	lighting system must be hardwired in the event the solar energy is insufficient to meet roadway lighting standards for safety. MNCC understands the possible limitation of solar energy and the need for hardwired lighting. Solar could always be added as a retro-active measure.	
A Life Cycle Assessment must be part of the analysis of each alternative bridge design.	One of the main goals is to find a balance of capital cost and operational/maintenance cost which is relatable to the return on investment. The Project team completed a life cycle assessment during the preliminary design in 2017. The Project team may consider updating the Life Cycle Assessment during the detailed design and construction phases.	Ongoing
Bridge design and construction should take waste management into account. Winter waste from the bridge should not be allowed to run into the river. Rapid response from dedicated crews will reduce this waste: the rest should be gathered and recycled. Rainwater, as well, must be collected and	Storm systems on the bridge deck are being designed to convey water to the shore, to be treated, and then released back into the river. MNCC wants the Project team to not only look into removal of solids but to consider removal of chemicals. The Project team will look into this consideration. MNCC was interested in reviewing the ice study when it is ready.	Ongoing



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recycled, and runoff into the river must be prevented.		
Ultra High-Performance Pavement would result in lighter, more durable road beds, and would permit more flexibility in design. It could incorporate solar heating elements within the pavement to melt winter ice.	The City has been using an advanced asphalt cement on City roads for over 5 years with a lead researcher from Queen's chemistry dept. A monitoring program has been developed to measure how the advanced Asphalt cement is performing. MNCC mentioned the use of light weight pavement in Europe which may help with dead load weights. The Project team needs to consider waterproofing protection and the size of aggregates that will be used in the pavement matrix. The Project team doesn't think the solar technology is advanced enough to be feasible for incorporation for the Project. Very expensive at this point in time.	Ongoing
The bridge, as well as the traffic on it, will reverberate along the river and its valley, including in the riverbed. Sound control and damping will reduce noise and vibration.	The Project team shared the in-water noise assessment with MNCC for their review.	Ongoing
Prior to commencing the construction of the Third Crossing	Although the Project is no longer proposing dredging for construction, the Project team is having discussions with	Ongoing



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<p>of the Cataraqui River, the City of Kingston shall:</p> <p>i. Contact the District Supervisor and/or the Senior Environmental Officer in the Ministry of the Environment’s Kingston District Office to arrange a meeting to consult with the District Office on the dredging in the Cataraqui River, construction protocols, mitigation measures, monitoring, and required ministry approvals and permits; ii. Follow any written directions provided by the Ministry of the Environment staff in respect of the matters discussed under Condition 1(a).</p>	<p>Agencies on the means and methods and permanent bridge impacts of the Project through the DIA process. The Project team shared the DIA report with the MNCC for their review. The Project team have invited the MNCC to participate in the development of the list of environmental management plans for the Project.</p>	



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Original List of Commitments (2011)	Project Response Since 2012 ESR	Current Status as of November 2019
<p>The bridge should respond to actual and planned needs, and not to pressure from those who would develop the lands east of the river, in ways inconsistent with Kingston’s urban planning.</p>	<p>The City continues to work towards shifts in transportation modes from single occupant vehicle trips to sustainable forms of transportation including transit and active transportation. Continued efforts will also be focussed on transportation demand management (reduce trips and/or trips in off-peak travel periods) and transportation systems management (increase capacity of existing transportation network). These efforts in combination with anticipated population and employment growth in Kingston and advances in transportation technology related to autonomous and connected vehicles will allow for the City to accommodate future travel demand within a 2-lane bridge. It is also reasonable to anticipate that vehicles will be smaller in size in which car lane widths could be reduced thus being able to keep the same asphalt width but having more narrower lanes in the future. MNCC expressed that this makes sense. In addition, if the City of Kingston is following their policy documents for urban growth, various master plans, the MNCC are satisfied with the City managing their growth.</p>	<p>Closed</p>



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<p>While the bridge should be designed to carry four lanes of traffic, conversion from two to four lanes, when proposed by the City, must be fully justified, and not only in terms of pressure for eastward development.</p>	<p>The City continues to work towards shifts in transportation modes from single occupant vehicle trips to sustainable forms of transportation including transit and active transportation. Continued efforts will also be focussed on transportation demand management (reduce trips and/or trips in off-peak travel periods) and transportation systems management (increase capacity of existing transportation network). These efforts in combination with anticipated population and employment growth in Kingston and advances in transportation technology related to autonomous and connected vehicles will allow for the City to accommodate future travel demand within a 2-lane bridge. It is also reasonable to anticipate that vehicles will be smaller in size in which car lane widths could be reduced thus being able to keep the same asphalt width but having more narrower lanes in the future. MNCC expressed that this makes sense. In addition, if the City of Kingston is following their policy documents for urban growth, various master plans, the MNCC are satisfied with the City managing their growth.</p>	<p>Closed</p>



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We suggest supplementing our knowledge about the impact of a permanent trench and water main on the river environment.	The Project is no longer considering dredging but rather a rock causeway and trestle access. The Project team have invited the MNCC to participate in the development of the list of environmental management plans for the Project.	Ongoing
Accelerated bridge construction techniques will reduce environmental impact, cost and waste, and speed up construction.	The Project team is aiming to have as much repeatability as possible and looking for efficiencies. Casings are extended to pier caps. Rebar cages for pier caps will be preassembled on ground and installed as much as feasible. Steel girders and precast panels are used for main span. MSE walls will be used for retaining walls. The use of pre-cast NU concrete girders and just in time delivery is proposed for the Project, all of which is part of accelerating bridge construction. The Project team invites MNCC to attend a presentation on the means and methods of construction being proposed for the Project.	Ongoing
High performance materials in all aspects of the bridge's design and construction would lead to cost savings, environmental benefits and would allow more attractive bridge designs.	One of the main goals is to find a balance of capital cost and operational/maintenance cost which is relatable to the return on investment. The Project team completed a life cycle assessment during the preliminary design in 2017. The Project team may consider updating the Life Cycle	Ongoing



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	Assessment during the detailed design and construction phases.	
To enable the bridge to be built with lightweight construction materials, heavy commercial vehicles should be routed into Kingston over the Highway 401 crossing, and not over the bridge.	The City may in the future consider load restrictions, but we would need to wait to the operation phase to allow for data being generated via monitoring the bridge for the types of vehicles that use it. Also, we may have to work with MTO for 401 detouring options which may need to have heavy loads during emergency events. In addition, the bridge code needs to be met which requires that heavy vehicles need to be accommodated.	Closed
To extend the bridge's life, as well as for environmental benefits, any public transportation route using the bridge should employ lightweight vehicles.	The City may in the future consider load restrictions, but we would need to wait to the operation phase to allow for data being generated via monitoring the bridge for the types of vehicles that use it. Also, we may have to work with MTO for 401 detouring options which may need to have heavy loads during emergency events. In addition, the bridge code needs to be met which requires that heavy vehicles need to be accommodated. It is also reasonable to anticipate that vehicles will be smaller in size in which car lane widths could be reduced thus being able to keep the same asphalt width	Closed



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Original List of Commitments (2011)	Project Response Since 2012 ESR	Current Status as of November 2019
	but having more narrower lanes in the future. MNCC expressed that this makes sense.	
To reduce the bridge’s electrical consumption, the bridge should incorporate LED and other low-burden lighting. The bridge lighting should have as little impact on the night sky and possible.	The City has been using LED for all their light fixtures for several years now throughout Kingston. The City performed a LED replacement program to switch to LED. Only LED will be used for the street lighting on this Project. Directional lighting to limit the amount of impact on the night sky is also a design criteria that is being met in the design.	Closed
Pedestrian and cycling lanes, especially in their approaches to the bridge, should be designed to provide variety and be as natural as possible – avoiding the rigidity of straightness and flatness.	Cycling lanes and multi use pathways will be implemented as part of the Project. Accessible design will also be a design parameter that needs to be met (FADS). In addition, the workshop facilitated by Jones and Jones can look into the active transportation infrastructure.	Ongoing
A cable stay design with a single pylon would be economical, would reduce the bridge’s footprint in the river, and would respect the values of the Haudenosaunee by incorporating the symbols of the turtle and the Tree of Peace.	The Project team is no longer proposing any above deck structural elements (IE: the arch over the navigation channel).	Closed



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7.3 Consultation During the Public Review Period

Consultation during the public review period included posting of this DIA document for a 30-day review period for public review from September 13, 2019 through October 12, 2019. The Proponent provided mechanisms to receive feedback. These mechanisms included e-newsletters, a “Get Involved” page on the City website, updates to the Kingston Third Crossing Project website information, outreach to Project stakeholders, updates/information to Mayor and Council, MP and MPP, and media availability. The City of Kingston also hosted two separate public information sessions where members of the public were invited to learn more about the Project, including important elements of the DIA and interact with the Project team and various subject matter experts.

All comments and questions received in-person, in-writing, and/or on-line have been captured and recorded in a public comment log, and revisions to this DIA made as required. A summary of the comments and questions received with corresponding Project responses is included as Appendix R of this DIA.