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

# Appendix R ..... Engagement Summary ..... (Hatch - 2019)



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City of Kingston Third Crossing of the Cataraqui River - Parks Canada Environmental Impact Analysis  
Engagement Summary - November 18, 2019

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



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- Attachment A DIA Information Summary in English and French
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- Attachment F Public Open House Display Boards
- Attachment G Comment/Response Log



## 1. Introduction

The objectives of the consultation process have been to identify issues and address concerns raised by members of the public, minimize construction-related effects, discuss environmental protection measures, and collect public input for incorporation into the Detailed Impact Analysis (DIA) of the Project. The DIA was released for public review on September 13, 2019 for a 30-day review period ending on October 12, 2019.

During the 30-day review period more than 1,100 people visited the City's webpage where the DIA is located. A total of 231 people downloaded documents and 27 people contributed to 10 topic forums. The most visited pages were the Introduction; Project Scope and Description of Environmental Components.

Throughout the 30-day review period, the Project team received 213 comments via email. A total of 50 comment cards were submitted during the Public Open Houses and 103 verbal comments were recorded. A total of 402 comments were received in total, with regard to the bridge design (70 comments); construction (37 comments); connectivity (53 comments); the environment (184 comments) and Project development (58 comments).

The following sections provide descriptions of the consultation activities undertaken in engaging with members of the public. These activities included local advertisement of the release of the DIA for public review, various notifications of consultation opportunities, contributions to several news articles via media interviews, and hosting of various community meetings including two Public Open Houses.

## 2. Summary of Engagement Activities

### 2.1 City of Kingston Get Involved Engagement Platform

The DIA was released for public review on September 13, 2019 via the City of Kingston's Get Involved platform. All of the DIA documents and appendices remain live on the website for residents to view or download at: <https://getinvolved.cityofkingston.ca/third-crossing-environmental>. Residents were able to comment directly online and continue a conversation through a discussion forum.

The website also includes an information summary which is available in English and French. These summaries are included as Attachment A.

### 2.2 Local Advertisements and Community Notifications

A wide variety of local advertising and community notification methods were employed to increase the amount of public awareness about the Project and ensure that interested

community members were able to participate in the consultation process. These are described in the following sections.

### **2.2.1 Project Website**

The Project website (<https://thirdcrossing.cityofkingston.ca/>) was created by the Project team in June of 2018, and provides up-to-date information about the development of the Project, opportunities for engagement, information on the bridge design and location and details about the construction process. The website was also used to post Project documents as they became available.

### **2.2.2 Social Media Presence**

A targeted social media campaign was undertaken by the City of Kingston on both Twitter and Facebook to provide periodic updates on the Project, as well as to advertise the release of the DIA for the 30-day public comment period. All Twitter posts remain available online @cityofkingston and can be found by using the hashtag #ThirdCrossing. This account has more than 43,400 followers who receive notifications.

Additionally, events were created on the City of Kingston Facebook Page ([www.facebook.com/TheCityofKingston](http://www.facebook.com/TheCityofKingston)) for both Public Open Houses to provide specific notifications to the approximately 18,000 people who follow this account.

### **2.2.3 City of Kingston E-Newsletter**

The City of Kingston maintains a regular digital newsletter distribution which reaches 6,718 subscribers. Information regarding the release of the DIA for the 30-day review period was provided in the September 20, 2019 as well as the October 9, 2019 issues. Copies of these issues of the newsletter are included as Attachment B.

### **2.2.4 Targeted Email List for East and West Shore Residents**

Near neighbours were invited to join a targeted email list for east and west shores to receive upcoming work notices. This could be done by emailing the Project team at [thirdcrossing@cityofkingston.ca](mailto:thirdcrossing@cityofkingston.ca). and residents can sign-up at all near-neighbour meetings and Public Open Houses.

### **2.2.5 Notification Regarding the Installation of the Aquatic Exclusion and Turbidity Curtain**

On September 3, 2019, the City of Kingston provided public notice that a submission has been added to the Common Project Search, Navigation Protection Program, pursuant to the *Canadian Navigable Waters Act*. Pursuant to paragraph 4(1) and 9(1), The City of Kingston has deposited with the Minister of Transport, The City of Kingston on the on-line Common Project Search (<http://cps.canada.ca/>) and under registry number 53, a description of the following work: Installation of a turbidity curtain and turtle fencing in the Great Cataraqui River from west shore (John Counter Blvd) to the east shore (Gore Road) in Kingston, Ontario. The

navigation channel will remain open with a clearance of 75 m on either side of the navigation channel in the Cataraqui River. All public notifications posted on the City website can be found online at: <https://thirdcrossing.cityofkingston.ca/home>.

Additionally, notification of the installation of the Aquatic Exclusion and Turbidity Curtain was provided to the Kingston Rowing and Canoe Club on September 3, 2019.

### **2.2.6 Third Crossing e-newsletter**

The Project team maintains regular distribution of a Project digital newsletter for the latest information related to the bridge, including progress updates, FAQs, work activity and more. Members of the public are able to subscribe to receive the Third Crossing newsletter by joining a general subscription. Currently there are more than 800 subscribers to the e-newsletter. E-newsletters remain available to read at <https://thirdcrossing.cityofkingston.ca/info-centre/newsletter>.

E-newsletters were delivered at important milestones (monthly at a minimum) to notify the public about upcoming Project activities (communicating the Project's Tree Management Plan, notice of the installation of the turbidity curtain, invitation to future open houses, etc.). The following E-Newsletters were distributed, relevant to the release of the DIA for public review:

- September 4, 2019: Installation of the Aquatic Exclusion and Turbidity Curtain and forthcoming public release of the DIA.
- September 13, 2019: Announcement of the commencement of the 30-day DIA Public Review Period.
- September 23, 2019: Information regarding the upcoming Public Open Houses.

### **2.2.7 Curbex Signage**

The Public Open Houses were advertised through community Curbex boards placed on Highway 15 and Van Order Drive from Sept 24, 2019 through September 27, 2019. A copy of these signs is provided in Attachment C.

### **2.2.8 Newspaper Notification, Kingston This Week**

The notice of the release of the DIA for public comment was published on September 26, 2019. A copy of the advertisement is included as Attachment D.

### **2.2.9 Riverpark Condo Newsletter Contribution**

On September 4, 2109 the City of Kingston contributed to the Riverpark Condo Newsletter (residents on the west side) to provide notification of the upcoming 30-day DIA public engagement period, upcoming construction activities and advising how to get in touch with the Project team.

### **2.2.10 City of Kingston News Releases**

The City of Kingston issued a news release on Sept 13, 2019, launching the 30-day DIA public review period; including notification of the upcoming Public Open Houses on September 25 and 26, 2019; and providing a reminder of the conclusion of the 30-day public review period, respectively. Copies of the news release is included as Attachment E.

### **2.2.11 Friends of Kingston Inner Harbour Newsletter Contribution, Email Notification**

On September 23, 2019 and October 6, 2019, the City of Kingston contributed to the Friends of Kingston Inner Harbour Newsletter to provide notification of the DIA public engagement period, upcoming Public Open Houses, upcoming construction activities and advising how to get in touch with the Project team.

The City of Kingston also provided an email notification that the 30-day engagement for the environmental considerations of the Project has begun (including timelines and Public Open House dates) to the Friends of Kingston Inner Harbour on September 25, 2019.

### **2.2.12 City of Kingston Updates to Council**

As part of the City's commitment to keep Council updated, every Friday, City departments provide written updates on items that are being considered, including engagement-related activity and information on decisions made. As part of the Third Crossing Council updates, the Project team provided information about the DIA engagement before it launched, during engagement and after. Council will continue to receive regular updates about permit approvals, construction activity and other Project-related information.

### **2.2.13 Stakeholder Outreach**

During the 30-day review period the Project team also liaised with stakeholders, keeping them informed regarding the environmental considerations, construction details and mitigation efforts. Those interactions included emails, calls, meetings with Kingston City Councillors and community associations like the Friends of Kingston's Inner Harbour, SPEAKkingston, the River Park Condo Board, Kingston Rowing Club and the Kingston Public Library – Pittsburgh Branch.

## **2.3 Community Meetings and Public Open Houses**

### **2.3.1 Public Open House, September 25, 2019**

In addition to the required 30-day engagement the City of Kingston hosted two Public Open Houses, above and beyond regulatory requirements to allow for greater opportunity for residents to provide comments in-person and speak with the Project team.

The first drop-in Public Open House was held on September 25, 2019, from 5:30 -7:30 p.m. at LaSalle Secondary School, 773 Highway 15, Kingston, Ontario, on the east side of the Cataraqui River to facilitate access by community members at the east end of the Project

Location. This Public Open House was structured around the following five stations at which the public could review Project information and ask questions of Subject Matter Experts:

- How We Got Here
- Bridge Design
- Construction
- Connectivity
- Environment.

A total of 92 people were recorded to have attended the first open house. Detailed Project information was included on display boards at each station. Copies of these boards are provided as Attachment F.

During the open house, questions were answered by members of the Project team. This included representatives from the City of Kingston, Hatch, Kiewit, and SYSTRA. A total of 20 Project representatives were present during the meeting to engage with members of the public.

Feedback was obtained during the first open house by written comment cards as well as verbally. A total of 25 comment cards were submitted by the public, of these, nine were submitted at the Connectivity Station, eight were submitted at the Bridge Design Station, six were submitted at the How We Got Here Station, and one was submitted at each of the Environment and Construction stations respectively. Verbal comments were also recorded by the Project team at each station.

### **2.3.2 Public Open House, September 26, 2019**

The second Public Open House was held in drop-in format on September 26, 2019, from 5:30 - 7:30 p.m. at the Loyalist College and Vocational Institute, 153 Van Order Drive, Kingston, Ontario, on the west side of the Cataraqui River to facilitate access by community members at the west end of the Project Location. This Public Open House was also structured around the five stations described above, and the same display boards were presented (Attachment F).

A total of 28 visitors were recorded to have attended the second Public Open House.

Feedback was obtained through both written comment cards at each of the five stations, as well as through verbal communication between community members and the Project team. A total of 26 comment cards were submitted at the second Public Open House. Of these, eleven were submitted at the Bridge Design Station, five were submitted at the Connectivity Station, five were submitted at the Environment Station, three were submitted at the



Construction Station, and two were submitted at the How We Got Here Station. Verbal comments were also recorded by the Project team at each station.

### **2.3.3 Presentation to St. Lawrence by Revera, October 10, 2019**

The City of Kingston met with the residents of the St. Lawrence by Revera retirement residence to discuss the Project as well as the recent engagement with Federal Agencies. A total of nine people were in attendance.

### **2.3.4 Presentation to the Riverpark Condo Board, October 15, 2019**

The City of Kingston made a presentation to the Riverpark Condo Board to provide and update regarding the Parks Canada engagement, upcoming construction work on the west side.

## **2.4 Indigenous Engagement**

The City of Kingston values the relationship with Indigenous Nations and the Project team has continued the process of the Duty to Consult and Accommodate with Indigenous Nations for the Third Crossing since 2009. City staff has consulted with a number of Indigenous Nations via email, mail outs, face-to-face meetings, participation in field studies and telephone conversations.

Mailouts 7, 8 and 9 provided DIA updates to Indigenous Nations and also provided advance notice of the DIA release for the 30-day review period. The City provided a courtesy notice on September 12, 2019 to Indigenous Nations that the DIA was posted in the public realm.

The list of the Duty to Consult Indigenous Nations include:

- Algonquins of Ontario
- Algonquins of Pikwàkanagàn
- Ardoch Algonquin First Nation
- Huron-Wendat Nation
- Métis Nation of Ontario
- Mississaugas of Alderville First Nation
- Mohawks of the Bay of Quinte
- Mohawk Council of Akwesansne
- Mohawk Nation Council of Chiefs
- Shabot Obaadjiwan First Nation.



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.

### **3. Record of Public Comments**

During the 30-day engagement, opportunities to comment and ask questions about the Project were provided through the City of Kingston's online engagement platform, a public email address where the public could email questions about the project or the DIA, and by means of written comment cards available at open house events. The Project team also took note of and recorded verbal comments received from conversations with the public at the open houses.

All comments received from the public online, via email, during the Public Open Houses, through comment cards and in-person have been recorded. These comments, as well as a summary of the Project responses, including a description of how these comments were considered in the development of the Project, if applicable, are presented in Attachment G.

**HATCH**

**SYSTRA**  
INTERNATIONAL  
BRIDGE  
TECHNOLOGIES

 **Kiewit**



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# **Attachment A**

## **DIA Information Summary in English and French**

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H357883-83-240-0025, Rev. 0

**HATCH**

**SYSTRA**  
INTERNATIONAL  
BRIDGE  
TECHNOLOGIES

 **Kiewit**



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## Background Information

The City of Kingston - Third Crossing of the Cataraqui River Project (hereinafter referred to as “the Third Crossing” or “the Project”) involves the construction of a new bridge spanning the Cataraqui River, which forms part of the historic Rideau Canal. At this location, the Cataraqui River forms part of the Rideau Canal, a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site, National Historic Site of Canada, Canadian Heritage River, and a Federally regulated navigable waterway.

The Project consists of two lanes for vehicle traffic that extend over the Cataraqui River and continue on John Counter Boulevard on the west shore and Gore Road on the east shore; widening of roadway approaches to connect the bridge with the land, accommodate active transportation and provide appropriate turning lanes that connect Montreal Street with Highway 15. Approximately 800 m of roadway, intersection and shoreland improvements will form the roadway component of the Project.

After a thorough Request for Proposals and evaluation phase, the City chose an Integrated Project Delivery model (IPD). This model is similar to a design-build model with the exception that all partners work within the defined \$180M budget and share the risk and reward to deliver the best possible bridge. The IPD project team develops shared goals and accept responsibilities as equal partners.

In September 2018, the City of Kingston brought on Peter Kiewit Sons ULC (Kiewit), Hatch Engineering Ltd. (Hatch) and SYSTRA International Bridge Technologies (SYSTRA) to be part of the IPD team. The IPD team is also supported by industry experts Brownlie Ernst and Marks (BEaM), Vertechs Designs, Moon-Matz, Tulloch and Bergmann. The Project team has developed the full Detailed Impact Assessment (DIA) report which was released for public comment on September 1, 2019.

From September through to December 2018 the IPD team also performed early site preparation and conducted additional environmental and geotechnical investigations to inform the work with Parks Canada.

Environmental consideration of the natural and cultural landscape surrounding the bridge is a critical priority for the project team. This summary is intended to provide residents with a high-level overview of the DIA, the technical and environmental considerations in designing and building the bridge and how the Project team intends to mitigate any potentially adverse effects as a result of the construction or operation of the

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## Project.

Parks Canada Agency has been identified as the lead agency in the federal Environmental Impact Analysis, and their directive has been used to guide this process. Accordingly, a Detailed Impact Analysis is required for the Project. Transport Canada and Fisheries and Oceans Canada will jointly review and approve the DIA while Environment and Climate Change Canada will provide expert advice.

## Project Description – what are we intending to build?

The Third Crossing involves the construction of a new, two-lane bridge spanning 1.2 km over the Cataraqui River and extending approximately 750 meters on land to the east and west. The bridge includes shared and active transportation links such as:

- A multi-use pedestrian and bike pathway with rest areas;

Sidewalks and cycle lanes on the road approaches;

- And connections to waterfront trails on either side of the Cataraqui River, providing increased opportunities for walking and cycling for residents and visitors to Kingston.

The Project consists of two 3.2 m lanes and 2 m shoulders for vehicle traffic that extend over the Cataraqui River and continue on John Counter Boulevard on the west shore and Gore Road on the east shore; widening of roadway approaches to connect the bridge with the land, accommodate active transportation and provide appropriate turning lanes that connect Montreal Street with Highway 15. Approximately 800 meters of roadway, intersection and shoreland improvements will form the roadway component of the Project. Those include:

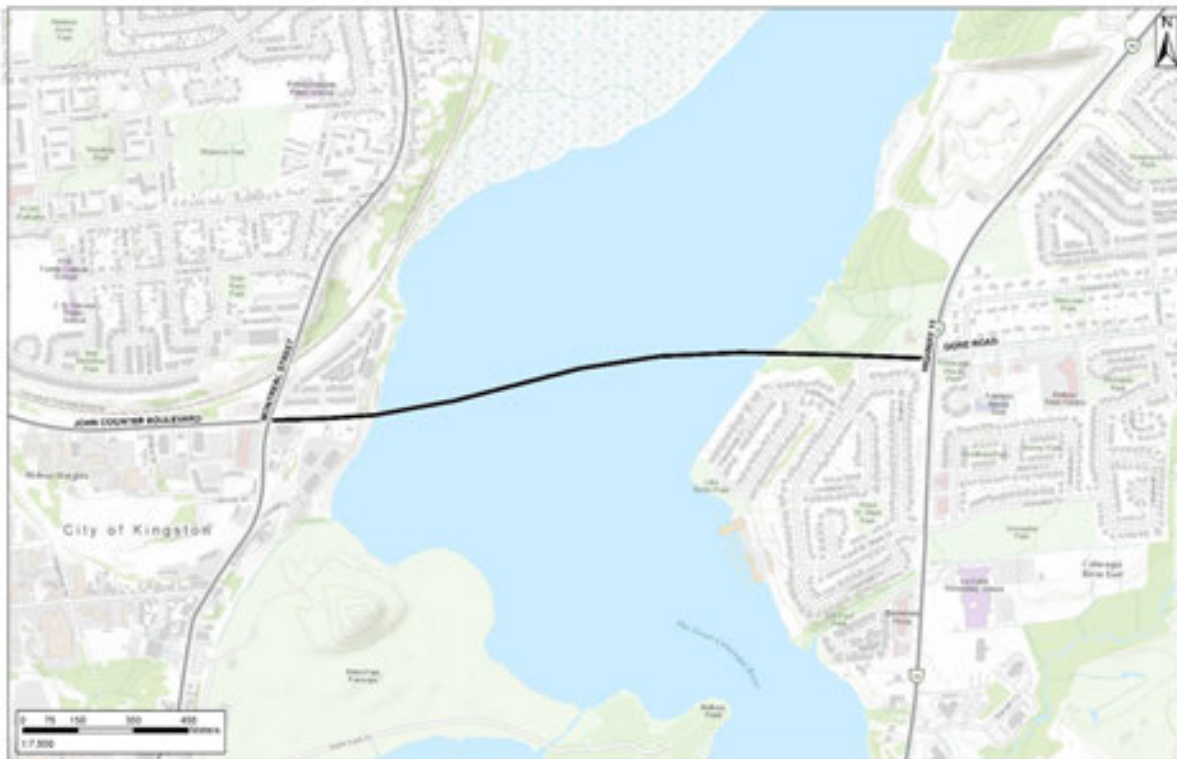
- Approximately 350 m of roadway from the bridge abutment on the west shore to the intersection at John Counter Boulevard and Montreal Street.
- Approximately 400 m of roadway from the bridge abutment on the east shore to the intersection at Gore Road and Highway 15.
- 4 m multi-use pathway(s) provided along the south side of the bridge deck for active transportation and look-out and interpretive areas. These pathways will span the bridge deck and end at the intersections of John

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Counter Boulevard and Montreal Street to the west and Gore Road and Highway 15 to the east.

- Barriers for public safety to separate the vehicle traffic and the multi-use path.
- Public viewing areas on the east and west alignments of the bridge.



**Figure 1: View of Project area**

## **Background – how did we get here?**

The concept of a Third Crossing has a long history that dates back more than 50 years with discussions and early studies for a new bridge crossing on the Cataraqui River between Highway 401 and the LaSalle Causeway dating back to the early 1960s. A transportation study completed by the City in 1980 made a recommendation for a new transportation link across the River that would join Elliott Avenue and Gore Road. As a

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result, a proposed crossing was incorporated in the Official Plans for both the City of Kingston and Pittsburgh Township.

The Kingston Transportation Study, completed in 1992, considered the need and proposed route for a new bridge crossing of the Cataraqui River, and was undertaken as a transportation route and functional design study. The study reconfirmed the need for additional transportation capacity across the Cataraqui River as well as the preferred solution. In January 2009, the City started the Municipal Class EA process for the Third Crossing in accordance with Ontario's Environmental Assessment Act. The Class EA was divided into two stages:

**Stage 1** focused on the need and justification for additional transportation capacity across the Cataraqui River as well as the preferred structure and location. This work reconfirmed the need and justification for the Project and continued to show the preferred location for a new bridge that would link John Counter Boulevard and Gore Road.

1. **Stage 2** focused on the conceptual design for the new bridge crossing, including the road approaches and other shore land improvements. Stage 2 also considered various environmental effects and recommended measures to eliminate or mitigate potentially adverse effects.

The Environmental Study Report prepared as part of the Class EA process was approved in 2013 by the Province of Ontario. Following the provincial EA approval, the City developed the *Third Crossing Action Plan* in February 2015 to provide direction on the next steps of the Project, specifically:

- **Phase 1:** The completion of the Development Charges By-Law update and the 2015 Kingston Transportation Master Plan (KTMP).
- **Phase 2:** The completion of the Preliminary Design Project phase.
- **Phase 3:** The completion of a Business Plan with a cost-benefit and economic impact analysis of the Project; Project funding sources; and a preferred Project delivery model.
- **Phase 4:** The preparation of the final design for the Project and the securing of requisite permits and approvals prior to construction.



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## Relationship with the Federal Government

The riverbed within and next to the Project Location is owned by the Federal Government and managed by Parks Canada. They are required to make a determination on whether the Project is likely to cause significant adverse environmental effects. Parks Canada's 'Directive on Impact Assessment' outlines the legislative and policy requirements and accountabilities for the assessment of impacts of proposed Projects within Parks Canada protected heritage places, which includes the Rideau Canal. The Parks Canada's Environmental Impact Assessment process examines how a Project may lead to adverse effects on:

- Natural resources, including Species at Risk, air, ground and surface water, soils, habitat features, as well as plants and animals found in the vicinity of a Project or otherwise potentially affected by the Project.
- Cultural resources, including potential adverse effects to heritage value and character defining elements of known cultural resources, and risks to areas with high potential to contain cultural resources where no inventory has yet been completed.
- Adverse effects to characteristics of the environment important to key visitor experience (how the Project is anticipated to affect activities and/or visitors' enjoyment and connection to place, in relation to defined objectives for the protected heritage place).
- Adverse effects to health and socio-economic conditions of Indigenous peoples and non-Indigenous communities.
- Adverse effects to Indigenous peoples' current use of lands and resources for traditional purposes.

The description of the environmental components of the Project is based on extensive background research, engagement with Indigenous communities, members of the public and various regulatory bodies as well as fieldwork conducted by subject matter experts both prior to and during the provincial Environmental Assessment, the Preliminary Design, and the Validation Project phases.

## Bridge Construction – how are we building it?

In terms of construction methodology, the provincial Environment Assessment (EA) considered three central options to provide Construction Access to the Bridge:

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- Dredging of a channel to facilitate in-water construction barge access
- Construction of a temporary earthen berm; and
- Construction of a temporary work bridge (commonly referred to as a trestle).

Although dredging of a channel was selected as the preferred option during the provincial EA process, based on the invasive nature of the works and high cost of this construction method the Project team has considered and engineered additional options to better protect the rich diversity of wildlife and the vegetation in the Rideau Canal and a fourth option was added for analysis in the DIA.

### **The Causeway-Trestle Solution – preferred construction access option**

The hybrid construction approach (termed the Causeway-Trestle Solution (CTS)) analyzed within the DIA has been found to be the most viable solution to construct the bridge in consideration of the natural environment, the wildlife that inhabit the area, and in providing the best possibility for eliminating or reducing potentially adverse effects.

The CTS involves a combination of temporary causeways and a temporary bridge (trestle) to access the piers and superstructure. A ferry barge or lifting span bridge will be used to transport equipment and material over the navigable channel.

The Causeway-Trestle Solution addresses a number of Project challenges presented by the depth to bedrock and shallow water, while minimizing in-water work duration. The Causeway-Trestle Solution will also reduce the adverse effects to the Canal. Mitigation measures in the Causeway-Trestle Solution are proposed to include the following:

- The causeway will use locally sourced screened quarry rock which may be reused for the east approach embankment after removal from the river.
- A turbidity curtain will be installed and maintained during causeway construction and removal to exclude fish from the construction area as well as to maintain turbidity levels below acceptable limits.
- Upon removal of the causeway material, a 100 mm trough or depression below the existing river bed level will be created to allow deposition of sediment and accelerate the re-establishment of different types of aquatic vegetation.

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- Trestle will be employed in the areas adjacent to the navigation channel where water levels are deeper and bedrock depth is shallower, to provide reliable construction access while maintaining public access to the navigation channel (as opposed to a span of causeway which would require sloped embankments affecting the navigation channel).



**Figure 2 View of Proposed Third Crossing Navigation Channel Span (North)**

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**Figure 3 Example of Construction Method (A25 – Quebec)**

## **Environmental Considerations and Proposed Mitigation Measures**

Protecting wildlife and their habitat is a key part of conserving Kingston's biodiversity and the Project Team is dedicated to protecting the ecosystem within the Project Area. Experts have and will continue to conduct surveys of plants and wildlife around the Third Crossing Project area.

To determine the potential for adverse effects to Species at Risk and their habitat; the Study Area has been extensively investigated. The full DIA provides a list of Species at Risk species potentially occurring within the Study Area. The following provides a summary of environmental considerations and mitigation measures proposed to eliminate or reduce potentially adverse effects to the environment, including to Species at Risk.

### **Blandings, Snapping, Map, Painted and other Turtles**

To protect against adverse effects to turtles who may utilize the Project Area, in-water construction activities have been scheduled to take place outside of sensitive timing windows such as October through March when overwintering takes place,

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and from late May through early July, during nesting. The IPD team is currently working with regulatory authorities to ensure that design criteria, construction methods and adequate mitigation measures, are agreed upon to ensure the protection of these sensitive species.

Turtle exclusion fencing has been installed along the terrestrial portion of the proposed construction footprint as of early June to prevent turtles from nesting within areas which will be disturbed. Further, turtle exclusion fencing will be installed along the causeway in advance of the 2020 nesting season. Daily visual surveys will be conducted by on site personnel to ensure that fencing is effective, and turtles are protected from harm from construction activities and equipment on shorelines and causeway surface. The Project team will also have a plan in place to relocate turtles if necessary.

To prevent turtles from overwintering within the area of the proposed causeway, an Aquatic Exclusion and Turbidity Curtain (AETC) will be installed. A turbidity curtain is a flexible, impermeable barrier to contain sediment in water. These curtains are generally weighted at the bottom to ensure sediment doesn't travel under the curtain and is supported at the top through a floatation system. A turtle fence has been specially designed to attach to the turbidity curtain to prevent turtles from entering the construction areas. This AETC will be installed surrounding the entire Project Location with ends tied to five causeway eco-passages opening to direct aquatic wildlife and fish towards the openings or the main causeway opening and provide connectivity upstream/downstream.

The Project team continues to hear and learn from community groups and residents about the importance of this work.

### **Bats**

In considering the potential for adverse effects to bats as a result of tree clearing, four bat houses have been installed on the east shore in the north side of the meadow on the Pittsburgh Library property. Another 18 bat houses are planned to be installed to offset the removal of snag trees within the east approach. The location of these houses will be determined as part of the landscape planning for the bridge. A portion of the additional bat houses may be installed in other locations in Kingston where space onsite does not accommodate them.

In total, 22 standard and maternity bat houses are planned to be installed to offset

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the potential effects to bats as a result of 2.2 ha of tree clearing; a ratio of 10 bat houses per hectare of tree clearing within the woodlands.

### **Migratory Birds**

The active season for many migratory birds is April 15 through August 15. Accordingly, no Project works which may disturb these species or their habitat will take place in vegetated areas unless a biologist searches the areas for active nests prior to the commencement of the works. If active nests are identified, those areas will be buffered and left undisturbed until the nest is no longer active. Nest searches will take place within 24-hours prior to the works.

### **Vegetation**

Removal of some vegetation will be required during the construction of the Project. To accommodate this vegetation removal the following measures will be undertaken:

- Surveys will be done in advance of excavation activities to assess for any sensitive vegetation and tree species, which if identified, will then be avoided or relocated to other suitable locations;
- As feasible and appropriate; the removal of shoreline vegetation will be minimized to the extent possible;
- The landscape improvement works will be seen as an opportunity for a degree of ecological restoration on the west side lands and ecological compensation on the east side lands;
- A Natural Heritage Protection and Enhancement Plan will be prepared and include detailed design measures related to wetland restoration, aquatic habitat enhancements as well as stabilizing and rehabilitating the shoreline shallows.

### **Fish Habitat**

The primary mitigation measure to prevent disturbance of fish during critical reproductive periods is to constrain the timing of in-water disturbance to avoid the critical fish reproductive periods. To address this no in-water work will be done between April 1 and June 30 of each year. The team will also implement additional mitigation measures during the construction phase to prevent or reduce the potential

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for adverse effects to aquatic habitat. These measures will include erosion and sedimentation control and spill prevention and response.

### **Monitoring**

Ongoing monitoring will be conducted to confirm effectiveness of mitigation measures.

Following construction, proposed offsetting measures will be implemented to compensate for permanent loss of and alteration to fish habitat, namely shoreland and in-water restoration as well as habitat creation. Following construction of the Project the former Music Marina seawall area will be naturalized to provide compensation for the portion of the bridge structure that is in-water. In addition, a vegetation monitoring program will be proposed, aimed at the recolonization of the area affected by temporary in-water works. The goal will be to achieve 50-70% coverage of the affected area within six years.

The potential for adverse effects to the natural and social environment, have been thoroughly evaluated by subject matter experts working on the project and those federal officials reviewing the studies and environmental work associated with the DIA. The team has heard from the public in previous phases of the project on the importance of environmental protection and the team is proposing these mitigation measures to either eliminate or reduce the negative effects the bridge may have. Below is a look at the proposed mitigation measures.

### **Pre-construction and Construction Mitigation Measures**

The Project Team is committed to being environmental stewards during the pre-construction and construction of the Project, including implementing a series of plans and procedures to ensure the proposed activities are reflective of the City's responsibility to protect and preserve lands and waters within the Project Area.

The following mitigation measures are proposed to be implemented, which will help reduce the potential negative effects from Project activities on identified natural and cultural heritage resources:

- Dust and emissions management.
- Development and implementation of an Erosion and Sediment Control Plan and Materials Management Plan.
- Scheduling of activities to avoid confirmed or assumed habitats as well as breeding/spawning seasons and over-wintering.

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- Minimizing tree and vegetation removal.
- Monitoring surface water upstream and downstream of the project.
- Installation of a 15 m buffer around Archeological Site BbGc-127 on the east side lands to mitigate the risk of damaging this resource.
- Conducting an analysis for potentially contaminated sediment in the vicinity of the causeways.

The following studies are proposed to be undertaken prior to completion of the Project:

- A Scour Study will be undertaken to determine the effects of scour on the bridge piers based on local bed conditions as well as refinements to the proposed pier design, pier construction and riverbed restoration techniques.
- An Ice Loading Study will be undertaken to identify mitigation measures to minimize the effects of ice loading on the pier footing.
- The City and Point St. Mark residents will continue to explore traffic calming options.
- As part of the Project's geotechnical program, riverbed sediments within the area of disturbance will be sampled prior to construction.
- The team will also continue coordinating near neighbour meetings with residents on the east and west approaches to keep them informed of construction related activities.

During construction, the following mitigation measures will be employed to eliminate or reduce the potential for adverse environmental effects as a result of Project activities on identified natural and cultural heritage resources:

- Implementation of Operations and Maintenance procedures to maintain the Third Crossing through its lifespan.

## **Communications and Public Engagement**

The Third Crossing has been a topic of discussion, debate and examination within the Kingston community dating back to the 1960s. Consistent communication and engagement with the public and other stakeholders has and will continue to be a vital component of the DIA and construction process.





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During the Preliminary Design phase, a comprehensive consultation plan was implemented to facilitate meaningful input from the public, Indigenous Peoples and various agencies; receive and consider input in the Project design; and document what was heard from communities and how this information was considered.

Extensive consultation and engagement with members of the public, stakeholders and Rights holders has occurred as part of the Project since the start of the Municipal Class EA. This will continue into the final design and construction phases of the Project.

The team continues to meet regularly with near neighbours on the east and west shores of the Project. Parks Canada requires the Project team to post the DIA for 30 days of public review and comment. Given the importance of the environmental considerations of the project the team is also hosting two public open houses on September 25 and 26 to walk residents through the environmental work conducted to date, as well as the results of the DIA.

After the 30 day review period, the Project team will be compiling all the comments and feedback and how they were considered and addressed into a public feedback report attached to the DIA document. Residents are also encouraged to connect with the team at [thirdcrossing@cityofkingston.ca](mailto:thirdcrossing@cityofkingston.ca).

## **Indigenous Peoples' Consultation and Engagement**

The City will continue to take the Duty to Consult with Indigenous communities 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. Guided by both federal and provincial directives in fulfillment of this Duty, the City will continue to engage Indigenous communities as an integral component of this Project.

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.

Consultation and engagement was initiated during the provincial environmental assessment process, which commenced in 2009. Over the course of approximately 10



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years, the Project 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.

Over the course of the last 10 years (with the exception of a period from Dec 2013 to Sept 2015), staff of the City of Kingston have consulted with a number of Indigenous communities regarding this Project via email, mail outs, face-to-face meetings, and telephone conversations. First Nations, Indigenous communities and other interested parties/stakeholders that have been consulted to date either through meetings or regular mailings include the following:

- . Algonquins of Ontario,
- . Algonquins of Pikwàkanagàn
- . Ardoch Algonquin First Nation
- . Huron-Wendat Nation
- . Métis Nation of Ontario
- . Mississaugas of Alderville First Nation
- . Mohawks of the Bay of Quinte
- . Mohawk Council of Akwesansne
- . Mohawk Nation Council of Chiefs
- . Shabot Obaadjiwan First Nation

The Project team has also retained Indigenous consultant Amber Adams, PhD, with expertise in eastern Great Lakes botany on naturalization and native planting.

## **Conclusion**

The Project team has been working on the DIA submission to Parks Canada for close to a year to provide the necessary data from subject matter experts, engineers, biologists, and many others involved with the Project. The team looks forward to the public engagement on this phase of the Project and answering questions on the environmental approach and considerations for the critical importance of protecting the natural and cultural landscape of this part of our city.

**HATCH**

**SYSTRA**  
INTERNATIONAL  
BRIDGE  
TECHNOLOGIES

 **Kiewit**



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## Renseignements contextuels

La ville de Kingston - Projet du troisième pont de la rivière Catarauqui (ci-après nommé « le troisième pont » ou « le projet » implique la construction d'un nouveau pont enjambant la rivière Catarauqui, qui fait partie de l'historique canal Rideau. En cet endroit, la rivière Catarauqui fait partie du canal Rideau, site du patrimoine mondial de l'Organisation des Nations Unies pour l'éducation, la science et la culture (UNESCO), lieu historique national du Canada, rivière du patrimoine canadien et voie navigable réglementée par le gouvernement fédéral.

Le projet consiste en deux voies de circulation automobile qui s'étendent par-dessus la rivière Catarauqui et se poursuivent sur le boulevard John Counter sur la rive ouest et le chemin Gore sur la rive est; un élargissement des voies d'accès pour relier le pont à la terre ferme, pour permettre le transport actif et offrir des voies de virage appropriées reliant la rue Montréal à l'autoroute 15. Environ 800 mètres d'améliorations de la chaussée, de l'intersection et du rivage constitueront la composante routière du projet.

Suite à une phase d'appel d'offres et d'évaluation approfondie, la Ville a choisi un modèle d'exécution de projet intégré (EPI). Ce modèle s'apparente au modèle conception-construction à l'exception que tous les partenaires travaillent dans les limites du budget défini de 180 millions de dollars et partagent les risques et les avantages afin de construire le meilleur pont possible. L'équipe d'EPI élabore les objectifs communs et accepte les responsabilités en tant que partenaires égaux.

En septembre 2018, la ville de Kingston a invité Peter Kiewit Sons ULC (Kiewit), Hatch Engineering Ltd. (Hatch) et SYSTRA International Bridge Technologies (SYSTRA) à faire partie de l'équipe d'EPI. L'équipe d'EPI a également le soutien des experts de l'industrie, Brownlie Ernst and Marks (BEaM), Vertechs Designs, Moon-Matz, Tulloch and Bergmann. L'équipe de projet a élaboré le rapport complet de l'évaluation détaillée de l'impact (EDI), qui a été présenté le 1<sup>er</sup> septembre 2019 pour observations du public.

De septembre à décembre 2018, l'équipe d'EPI a également effectué une préparation préliminaire du site et mené des enquêtes environnementales et géotechniques supplémentaires afin de faciliter les travaux avec Parcs Canada.

L'équipe de projet, a comme priorité essentielle la prise en compte de l'environnement, son paysage naturel et culturel entourant le pont. Le présent résumé a pour but d'offrir aux résidents une vue d'ensemble des travaux entourant l'EDI, des considérations techniques et environnementales lors de la conception et de la construction du pont, et



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de la façon dont l'équipe du projet entend atténuer les effets potentiellement négatifs de la construction ou de l'exploitation du projet.

L'Agence Parcs Canada a été désignée comme l'organisme responsable dans l'analyse d'impact sur l'environnement du gouvernement fédéral et sa directive a été utilisée pour orienter ce processus. Par conséquent, une analyse d'impact détaillée est requise pour le projet. Transport Canada et Pêches et Océans Canada examineront et approuveront conjointement l'EDI, tandis qu'Environnement et Changement climatique Canada fournira des avis d'experts.

## **Description du projet. Qu'avons-nous l'intention de construire?**

La troisième traversée de 1,2 km enjambant la rivière Catarqui implique la construction d'un pont à deux voies se prolongeant d'environ 750 mètres de part et d'autre à l'est et à l'ouest. Le pont comporte des liens communs accroissant le transport actif tels que :

- Un sentier polyvalent pour piétons et vélos comportant des aires de repos;
- Des trottoirs et des pistes cyclables aux abords de la route;
- Et des accès vers les sentiers riverains de chaque côté de la rivière Catarqui, offrant aux résidents et aux visiteurs de Kingston davantage d'occasions de pratiquer la marche et le cyclisme.

Le projet comprend deux voies de 3,2 m et des accotements de 2 m pour la circulation automobile qui s'étendent sur la rivière Catarqui et se poursuivent sur le boulevard John Counter sur la rive ouest et le chemin Gore sur la rive est; un élargissement des voies d'accès pour relier le pont à la terre ferme, pour permettre le transport actif et offrir des voies de virage appropriées reliant la rue Montréal à l'autoroute 15. Environ 800 mètres d'améliorations de la chaussée, de l'intersection et du rivage constitueront la composante routière du projet. Ces derniers incluent :

- Environ 350 m de chaussée, de la culée du pont sur la rive ouest à l'intersection du boulevard John Counter et de la rue Montréal.
- Environ 400 m de chaussée, de la culée du pont sur la rive est à l'intersection du chemin Gore et de l'autoroute 15.

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- Un sentier polyvalent de 4 m aménagé le long du côté sud du tablier du pont pour les zones de transport actif, de surveillance et d'interprétation. Ce sentier traversera le tablier du pont et se terminera aux intersections du boulevard John Counter et de la rue Montréal à l'ouest du chemin Gore et de la route 15 est.
- Pour la sécurité publique, des barrières sépareront la circulation automobile du sentier polyvalent.
- Les points d'observation publics sur les tracés est et ouest du pont.

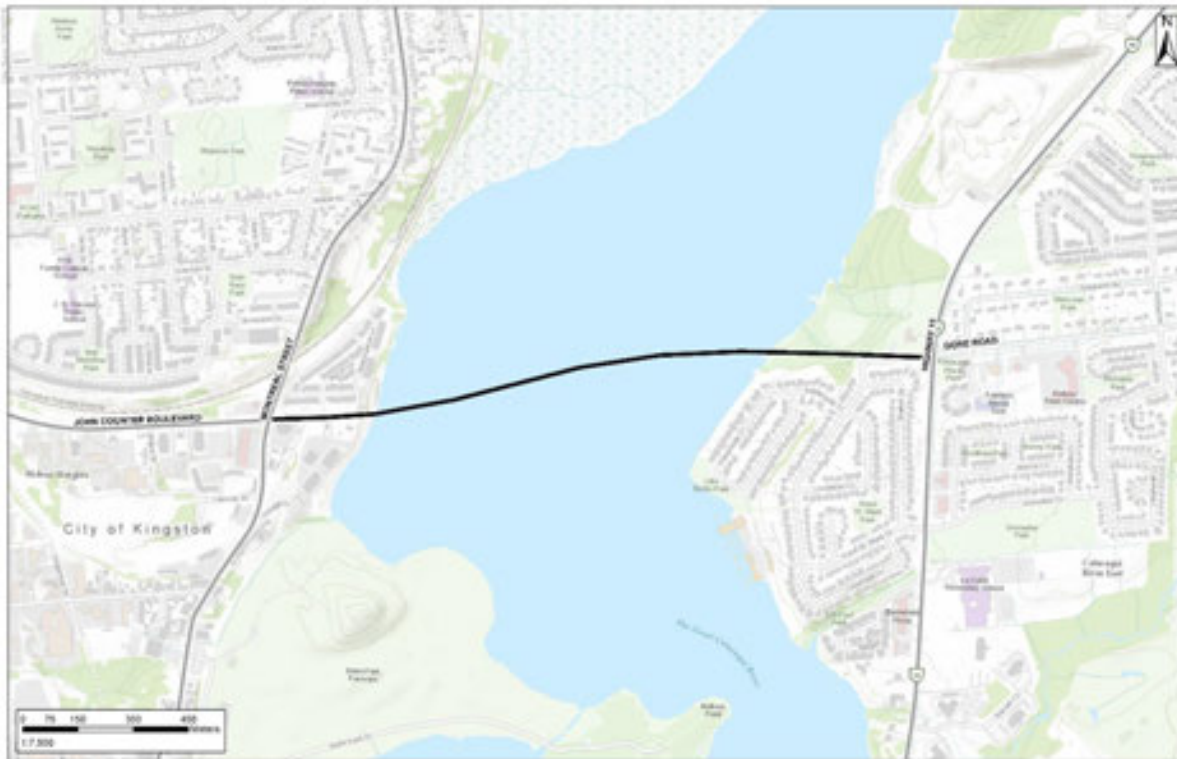


Figure 1 : Vue du périmètre du projet

## Historique. Comment en sommes-nous arrivés là?

Le concept de troisième traversée a une histoire datant de 50 ans, dont les discussions et les études préliminaires sur la construction d'un nouveau pont sur la rivière Cataraqui entre l'autoroute 401 et le pont-jetée LaSalle remontent au début des années 1960. Une étude en transports réalisée par la Ville en 1980 recommandait une nouvelle

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traversée sur la rivière qui rejoindrait l'avenue Elliott et le chemin Gore. En conséquence, la traversée proposée a été intégrée aux plans officiels de la ville de Kingston et du canton de Pittsburgh.

L'*étude des transports de Kingston*, achevée en 1992, s'est penchée sur la nécessité et le tracé proposé d'un nouveau pont traversant la rivière Catarauqui et elle a été considérée à titre de voie de transport et d'étude de conception fonctionnelle. L'étude a reconfirmé la nécessité d'accroître la capacité de transport sur la rivière Catarauqui, ainsi que la solution privilégiée. En janvier 2009, la Ville a lancé le processus d'évaluation environnementale (ÉE) municipale pour la troisième traversée, conformément à la *Loi sur les évaluations environnementales* de l'Ontario. L'ÉE municipale a été divisée en deux étapes :

1. **L'étape 1 de l'étude s'est consacrée à la nécessité et au bien-fondé** d'accroître la capacité de transport sur la rivière Catarauqui, ainsi que la solution privilégiée et l'endroit. Ces travaux ont reconfirmé la nécessité et le bien-fondé du projet et ont continué de démontrer l'emplacement idéal d'un nouveau pont reliant le boulevard John Counter au chemin Gore.
2. **L'étape 2 de l'étude s'est concentrée sur la conception** du nouveau pont, y compris les approches et les améliorations apportées aux terrains riverains. L'étape 2 s'est également penchée sur les divers effets environnementaux et sur les mesures recommandées pour éliminer ou atténuer les effets potentiellement négatifs.

Le rapport d'*étude environnementale* préparé dans le cadre du processus d'ÉE de portée générale a été approuvé en 2013 par la province de l'Ontario. À la suite de l'approbation de L'ÉE provinciale, la Ville a élaboré le *plan d'action de la troisième traversée* en février 2015 afin de fournir une orientation sur les prochaines étapes du projet, notamment :

- **La phase 1** : L'achèvement de la mise à jour du règlement sur les redevances d'aménagement et du plan directeur des transports de Kingston de 2015.
- **La phase 2** : L'achèvement de la phase de conception préliminaire du projet.
- **La phase 3** : L'achèvement du plan d'affaires avec une analyse coûts-avantages et une analyse d'impact économique du projet; des sources de financement du projet; et un modèle d'exécution de projet privilégié.

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- **La phase 4** : La préparation de la conception finale du projet et l'obtention des permis et autorisations nécessaires avant la construction.

## Relation avec le gouvernement fédéral

Le lit de la rivière à l'intérieur et autour de l'emplacement du projet appartient au gouvernement fédéral et est géré par Parcs Canada. Ils doivent déterminer si le projet est susceptible d'entraîner des effets négatifs importants sur l'environnement. La « Directive sur l'évaluation d'impact » de Parcs Canada décrit les obligations législatives et politiques ainsi que les responsabilités en matière d'évaluation des impacts des projets soumis au sein de lieux patrimoniaux protégés de Parcs Canada, y compris le canal Rideau. Le processus d'évaluation de l'impact sur l'environnement de Parcs Canada examine en quoi le projet peut mener à des effets indésirables sur :

- Les ressources naturelles, y compris les espèces en péril, l'air, les eaux de surface et souterraines, les sols, les caractéristiques de l'habitat, de même que les plantes et les animaux trouvés à proximité du projet ou autrement potentiellement affectés par le projet.
- Les ressources culturelles, y compris les effets négatifs potentiels sur la valeur patrimoniale et les éléments caractéristiques des ressources culturelles connues, et les risques pour les zones à fort potentiel de limitation des ressources culturelles pour lesquelles aucun inventaire n'a encore été réalisé.
- Les caractéristiques environnementales importantes répondant aux besoins des visiteurs (les effets prévisibles du projet sur les activités ou l'agrément, et l'accès des visiteurs à un lieu par rapport à des objectifs définis pour le lieu patrimonial protégé).
- La santé et les conditions socio-économiques des peuples autochtones et des communautés non autochtones.
- L'utilisation présente des terres et des ressources par les peuples autochtones à des fins traditionnelles.

La description des composants environnementaux du projet repose sur une recherche historique approfondie, un engagement envers les communautés autochtones, les citoyens et divers organismes de réglementation, ainsi que sur les travaux menés sur le terrain par des experts en la matière avant et pendant l'évaluation environnementale provinciale, les phases de conception préliminaire et la validation du projet.



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## **La construction du pont. Comment le construisons-nous?**

En ce qui a trait à la méthodologie de construction, l'évaluation environnementale (EE) provinciale a examiné trois options importantes afin de fournir un accès de construction au pont :

- Le dragage d'un canal pour faciliter l'accès des barges de construction dans l'eau
- La construction d'un talus de terre temporaire; et
- La construction d'un pont de travail temporaire (communément appelé tréteau).

Bien que le dragage d'un canal ait été retenu comme option privilégiée lors du processus d'évaluation environnementale provinciale, en raison de la nature envahissante des travaux et du coût élevé d'une telle méthode de construction l'équipe de projet a envisagé et conçu d'autres options afin de mieux protéger la riche diversité de la faune et de la végétation du canal Rideau et une quatrième option s'est ajoutée pour analyse dans l'EDI.

### **La solution de pont-jetée - option privilégiée à la construction**

L'approche de construction hybride (appelée solution de pont-jetée (SPJ)) analysée au cours de l'EDI s'est avérée représenter la solution la plus viable pour construire le pont en tenant compte de l'environnement naturel, de la faune qui peuple la région et en offrant la meilleure possibilité d'éliminer ou de réduire les effets indésirables potentiels.

La SPJ comporte une combinaison de chaussées temporaires et un pont temporaire (tréteau) pour accéder aux piliers et à la superstructure. Un ponton de transbordement ou un pot à hayon serviront au transport de l'équipement et du matériel sur le chenal navigable.

La solution pont-jetée et tréteau répondait à un grand nombre de défis que présentait le projet de par la profondeur du socle rocheux et les eaux peu profondes, tout en réduisant la durée des travaux effectués dans l'eau. La solution pont-jetée et tréteau réduira également les effets indésirables sur le Canal. Les mesures d'atténuation de la solution pont-jetée et tréteau prévoient d'inclure :

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- le pont-jetée utilisera des roches de carrière tamisées provenant de sources locales qui pourront être réutilisées pour le remblai d'approche est, après leur retrait de la rivière.
- Un rideau de turbidité sera installé et entretenu pendant la construction et l'enlèvement du pont-jetée afin de tenir les poissons à l'écart de la zone de construction et de maintenir des niveaux de turbidité inférieurs aux limites acceptables.
- Au moment du retrait des matériaux du pont-jetée, un creux de 100 mm ou une dépression sous le niveau existant du lit de la rivière sera créé pour permettre le dépôt des sédiments et accélérer le rétablissement des divers types de végétation aquatique.
- Des tréteaux seront utilisés dans les zones adjacentes au chenal de navigation où les niveaux d'eau sont plus profonds et la profondeur du substrat rocheux moins profonde, afin de fournir un accès fiable aux travaux de construction tout en maintenant l'accès public au chenal de navigation (par le canal de navigation).



**Figure 2. Vue de la troisième traversée du chenal de navigation proposée (au nord)**

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Figure 3. Exemple de méthode de construction (A25 - Québec)

### Considérations environnementales et mesures d'atténuation proposées

Protéger la faune et son habitat constitue un élément clé de la conservation de la biodiversité à Kingston et l'équipe de projet se consacre à la protection de l'écosystème dans la zone du projet. Les experts ont mené et continueront de mener des études sur les plantes et la faune autour de la zone du projet de la troisième traversée.

Afin d'établir les effets indésirables potentiels sur les espèces en péril et leur habitat; la zone d'étude a fait l'objet de nombreuses recherches. L'EDI complète fournit une liste des espèces en péril potentiellement présentes dans la zone d'étude. Le texte qui suit résume les considérations environnementales et les mesures d'atténuation proposées pour éliminer ou réduire les effets potentiellement négatifs sur l'environnement, y compris sur les espèces en péril.

#### **Les tortues mouchetées, serpentines, géographiques, peintes et autres**

Afin de protéger les tortues susceptibles d'emprunter la zone du projet contre les effets néfastes, des activités de construction dans l'eau ont été prévues en dehors de créneaux horaires sensibles tels que d'octobre à mars lorsque l'hivernage a lieu

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et de la fin mai au début juillet pendant la nidification. L'équipe d'EPI collabore actuellement avec les autorités de réglementation pour faire en sorte que les critères de conception, les méthodes de construction et les mesures d'atténuation appropriées soient convenus de manière à protéger ces espèces sensibles.

Des clôtures anti-tortues ont été installées dès le début de juin le long de la portion terrestre de l'empreinte de construction proposée, afin d'empêcher les tortues de nidifier dans les zones qui seront perturbées. D'autres clôtures anti-tortues seront installées à l'avance, le long du pont-jetée, pour la saison de nidification 2020. Le personnel sur place effectuera des contrôles visuels quotidiens pour veiller à ce que la clôture soit efficace et que les tortues soient à l'abri des préjudices des activités de construction et des équipements sur les rives et sur le pont-jetée. L'équipe de projet disposera également d'un plan pour déplacer les tortues au besoin.

Un rideau d'exclusion et de confinement aquatique (RECA) sera installé pour empêcher les tortues d'hiverner dans la zone du pont-jetée proposée. Le rideau de confinement est une barrière souple et imperméable destinée à contenir les sédiments dans l'eau. Ces rideaux sont généralement lestés au bas pour veiller à ce que les sédiments ne passent pas sous le rideau et sont soutenus à leur sommet par un système de flottaison. Une clôture à tortues a été spécialement conçue pour se fixer au rideau de turbidité afin d'empêcher les tortues de pénétrer dans les zones de construction. Ce RECA sera installé autour de la totalité du site du projet avec des extrémités reliées à cinq écopassages de chaussée-jetée s'ouvrant de sorte à orienter la faune aquatique et les poissons vers les ouvertures ou la principale ouverture du pont-jetée et offrant un lien d'amont en aval.

L'équipe de projet continue d'être à l'écoute et d'en apprendre de la part des groupes communautaires et des résidents sur l'importance de ce travail.

### **Chauves-souris**

En tenant compte du potentiel d'effets néfastes sur les chauves-souris dû au déboisement, quatre abris à chauves-souris ont été installés sur la rive est du côté nord du pré sur la propriété de la bibliothèque de Pittsburgh. L'installation de 18 autres abris à chauve-souris est prévue afin de compenser l'enlèvement des arbres perchoirs au sein de l'approche est. L'emplacement de ces abris sera déterminé dans le cadre de la planification paysagère du pont. Une partie des abris à chauves-souris supplémentaires peuvent être installés en d'autres endroits de Kingston lorsque l'espace sur le site ne permet pas de les accueillir.

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Au total, il est prévu d'installer 22 abris à chauves-souris standard et de maternité pour compenser les effets potentiels sur les chauves-souris de la suppression de 2,2 ha d'arbres; un ratio de 10 abris à chauves-souris par hectare de déboisement d'espaces forestiers.

### **Les oiseaux migrateurs**

La saison active de nombreux oiseaux migrateurs a lieu du 15 avril au 15 août. En conséquence, dans le cadre du projet, les travaux susceptibles de perturber ces espèces ou leur habitat auront lieu dans des zones de végétation, à moins qu'un biologiste ne cherche des nids actifs dans ces zones avant le début des travaux. Si des nids actifs sont repérés, les zones en question seront protégées par une zone tampon et laissées intactes jusqu'à ce que le nid ne soit plus actif. Les recherches de nids auront lieu dans les 24 heures précédant les travaux.

### **La végétation**

L'enlèvement d'une partie de la végétation sera nécessaire au cours de la construction du projet. Afin de permettre cet enlèvement de végétation, les mesures suivantes seront mises en œuvre :

- des prospections seront effectuées avant les activités d'excavation pour l'évaluation des espèces de végétation et d'arbres sensibles qui, si elles sont identifiées, seront ensuite évitées ou déplacées vers d'autres emplacements appropriés;
- Dans la mesure du possible et de l'adéquat; l'enlèvement de la végétation riveraine sera minimisé le plus possible;
- Les travaux d'amélioration du paysage seront considérés comme une occasion d'apporter une certaine restauration écologique sur les terres du côté ouest et une compensation écologique pour les terres du côté est;
- Un plan de protection et de mise en valeur du patrimoine naturel sera préparé et comprendra des mesures de conception détaillées relatives à la restauration des zones humides, à l'amélioration de l'habitat aquatique ainsi qu'à la stabilisation et à la réhabilitation des bas-fonds littoraux.

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Ville de Kingston - Troisième pont traversant la rivière Catarqui -  
Analyse d'impact environnemental de Parcs Canada  
Résumé de l'évaluation détaillée de l'impact

### **Habitat du poisson**

La principale mesure d'atténuation visant à prévenir les perturbations des poissons pendant les périodes de reproduction critiques consiste à limiter le moment de la perturbation dans l'eau afin d'éviter les périodes critiques de reproduction des poissons. Pour remédier à ce problème, les travaux dans l'eau seront effectués entre le 1er avril et le 30 juin de chaque année. L'équipe mettra également en œuvre des mesures d'atténuation supplémentaires pendant la phase de construction afin de prévenir ou de réduire le potentiel d'effets néfastes sur l'habitat aquatique. Ces mesures comprendront le contrôle de l'érosion et de la sédimentation, ainsi que la prévention et l'intervention en cas de déversement.

### **Surveillance**

Une surveillance continue sera effectuée pour confirmer l'efficacité des mesures d'atténuation.

Après la construction, les mesures de compensation proposées seront mises en œuvre pour compenser la perte permanente et la modification de l'habitat du poisson, à savoir la restauration des rives et à l'intérieur des eaux, ainsi que la création de l'habitat. Après la construction du projet, l'ancienne zone de la digue Music Marina sera restaurée afin de compenser la portion de la structure du pont qui est immergée. En outre, un programme de surveillance de la végétation sera proposé et axé à reconstituer la zone touchée par des travaux temporaires dans l'eau. L'objectif sera d'atteindre une couverture de 50 à 70% de la zone touchée d'ici six ans.

Le potentiel d'effets indésirables sur l'environnement naturel et social a été minutieusement évalué par les experts en la matière travaillant sur le projet et les responsables fédéraux chargés de la revue des études et des travaux environnementaux associés à l'EDI. Au cours des phases précédentes du projet, l'équipe a entendu parler de l'importance de la protection de l'environnement. Elle propose ces mesures d'atténuation afin d'éliminer ou de réduire les effets négatifs que le pont pourrait avoir. Vous trouverez ci-dessous un aperçu des mesures d'atténuation proposées.

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Ville de Kingston - Troisième pont traversant la rivière Cataracti -  
Analyse d'impact environnemental de Parcs Canada  
Résumé de l'évaluation détaillée de l'impact

## Mesures d'atténuation avant et pendant la construction

L'équipe de projet s'engage à faire de la gérance environnementale pendant les phases de pré-construction et de construction du projet, notamment en mettant en œuvre une série de plans et de procédures pour faire en sorte que les activités proposées reflètent la responsabilité de la Ville de protéger et de préserver les terrains et l'eau se trouvant dans la zone du projet.

La mise en œuvre des mesures d'atténuation suivantes est proposée, ce qui contribuera à réduire les effets négatifs potentiels des activités du projet sur les ressources du patrimoine naturel et culturel identifiées :

- Gestion de la poussière et des émissions.
- Élaboration et mise en œuvre d'un plan de contrôle de l'érosion et des sédiments et d'un plan de gestion des matériaux.
- Calendrier des activités visant à éviter les habitats confirmés ou présumés, ainsi que les saisons de reproduction ou de frai et l'hivernage.
- Minimiser le retrait d'arbres et de végétation.
- Surveiller les eaux de surface en amont et en aval du projet.
- Aménagement d'une zone tampon de 15 m autour du site archéologique BbGc-127 sur les terrains du côté est afin d'atténuer le risque d'endommager cette ressource.
- Effectuer une analyse des sédiments potentiellement contaminés à proximité des chaussées.

Les études suivantes sont suggérées avant la fin du projet :

- Une étude sera effectuée pour déterminer les effets de l'affouillement sur les piliers du pont en fonction des conditions de lit locales, de même que sur les améliorations à apporter à la conception des piliers, à la construction des piliers et aux techniques de restauration du lit de la rivière proposées.
- Une étude sur la charge de glace sera entreprise pour identifier les mesures d'atténuation permettant de minimiser les effets de la charge de glace sur les semelles des piliers.
- Les résidents de la ville et de Point St Mark poursuivront leur collaboration sur les options de modération de la circulation.

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Ville de Kingston - Troisième pont traversant la rivière Cataracti -  
Analyse d'impact environnemental de Parcs Canada  
Résumé de l'évaluation détaillée de l'impact

- Dans le cadre du programme géotechnique du projet, les sédiments du lit de la rivière dans la zone de perturbation seront échantillonnés avant la construction.
- L'équipe poursuivra également la coordination à proximité des réunions avec les résidents des approches est et ouest pour les tenir informés quant aux activités liées à la construction.

Pendant la construction, les mesures d'atténuation suivantes seront utilisées pour éliminer ou réduire le potentiel d'effets environnementaux négatifs résultant des activités du projet sur les ressources du patrimoine naturel et culturel identifiées:

- La mise en œuvre des procédures d'exploitation et d'entretien pour entretenir le troisième pont pendant sa durée de vie.

## **Communications et implication du public**

La troisième traversée est un sujet de discussion, de débat et d'examen au sein de la communauté de Kingston depuis les années 1960. Une communication et une implication constantes avec le public et les autres parties prenantes ont été et resteront une composante essentielle de l'EDI et du processus de construction.

Au cours de la phase de conception préliminaire, un plan de consultation complet a été mis en place pour permettre une contribution significative du public, des peuples autochtones et de divers organismes; accueillir et prendre en compte les commentaires dans la conception du projet; et documenter ce que les communautés ont entendu et la manière dont cette information a été prise en compte.

Une vaste consultation et une mobilisation importante auprès du public, des parties prenantes et des détenteurs de droits ont eu lieu dans le cadre du projet depuis le début de l'ÉE municipale de portée générale. Cela se poursuivra tout au long des phases finales de conception et de construction du projet.

L'équipe continue de rencontrer régulièrement les voisins des rives est et ouest du projet. Parcs Canada demande à l'équipe de projet d'afficher l'EDI pendant 30 jours pour que le public puisse en prendre connaissance et la commenter. Compte tenu de l'importance des considérations environnementales du projet, l'équipe organise également deux journées portes ouvertes les 25 et 26 septembre afin d'informer les résidents sur le travail effectué à ce jour au plan environnemental, de même que sur les résultats de l'EDI.





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Ville de Kingston - Troisième pont traversant la rivière Cataract -  
Analyse d'impact environnemental de Parcs Canada  
Résumé de l'évaluation détaillée de l'impact

Suite à la période d'examen de 30 jours, l'équipe de projet compilera tous les commentaires et les réactions, ainsi que la façon dont ils ont été pris en compte et traités dans un rapport sur la rétroaction du public joint au document de l'EDI. Les résidents sont également invités à communiquer avec l'équipe à [thirdcrossing@cityofkingston.ca](mailto:thirdcrossing@cityofkingston.ca).

### **Consultation et implication des peuples autochtones**

La Ville continuera d'assumer son devoir de consulter les communautés autochtones à titre d'obligation sérieuse, en raison, notamment de son intérêt à comprendre la riche et complexe expérience historique et continue des peuples autochtones dans le cadre de l'ensemble de sa prise de conscience et de sa croissance culturelles. Guidée par les directives fédérales et provinciales dans l'accomplissement de cette obligation, la Ville continuera à impliquer les communautés autochtones en tant que parties prenantes intégrales de ce projet.

La ville de Kingston veille à ce que ses discussions avec les groupes autochtones concernés reflètent à la fois la profondeur de la consultation et la portée des mesures d'accommodements. La Ville entreprend également ces processus en harmonie avec les intérêts autochtones dans le cadre de l'élaboration du plan directeur de Belle Park, ainsi que de la protection et de la gestion de Belle Island, ancien site de sépultures en terrain boisé détenu en copropriété avec le Conseil des chefs de la nation Mohawk.

La consultation et la mobilisation ont été amorcées lors du processus d'évaluation environnementale provincial, qui a débuté en 2009. Sur une période d'environ 10 ans, l'équipe de projet s'est efforcée de comprendre et d'évaluer toutes les préoccupations exprimées par les communautés autochtones afin de déterminer les effets potentiels du projet sur l'environnement et de mettre au point et d'intégrer des mesures d'atténuation pour réduire ou limiter les effets environnementaux négatifs.

Au fil des 10 dernières années (à l'exception de la période allant de décembre 2013 à septembre 2015), le personnel de la ville de Kingston a consulté un certain nombre de communautés autochtones sur ce projet par courrier électronique, par la poste, en face à face lors de rencontres et lors d'entretiens téléphoniques. Les Premières nations, les communautés autochtones et les autres parties ou intervenants intéressés qui ont été consultés à ce jour, que ce soit lors de réunions ou de courriels réguliers, incluent les suivants :

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Ville de Kingston - Troisième pont traversant la rivière Cataracti -  
Analyse d'impact environnemental de Parcs Canada  
Résumé de l'évaluation détaillée de l'impact

- . Algonquins de l'Ontario
- . Algonquins de Pikwàkanagàn
- . Première nation Ardoch Algonquin
- . Nation huronne-wendat
- . Nation Métis de l'Ontario
- . Première nation des Mississaugas d'Alderville
- . Mohawks de la baie de Quinte
- . Conseil Mohawk d'Akwesansne
- . Conseil des chefs de la nation mohawk
- . Première nation Shabot Obaadjiwan

L'équipe de projet a également retenu les services de la consultante autochtone Amber Adams, Doctorante, spécialiste de la botanique de l'est des Grands Lacs sur la naturalisation des espèces indigènes.

## Conclusion

L'équipe de projet travaille depuis près d'un an à la soumission de l'évaluation détaillée de l'impact à Parcs Canada afin de fournir les données nécessaires venant d'experts en la matière, d'ingénieurs, de biologistes et de nombreux autres impliqués dans le projet. L'équipe de projet attend avec impatience l'implication du public dans cette phase du projet et répond aux questions quant à l'approche environnementale et aux considérations relatives à l'importance cruciale de la protection du paysage naturel et culturel de cette partie de notre ville.

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City of Kingston Third Crossing of the Cataraqui River - Parks Canada Environmental Impact Analysis  
Engagement Summary - November 18, 2019

## **Attachment B**

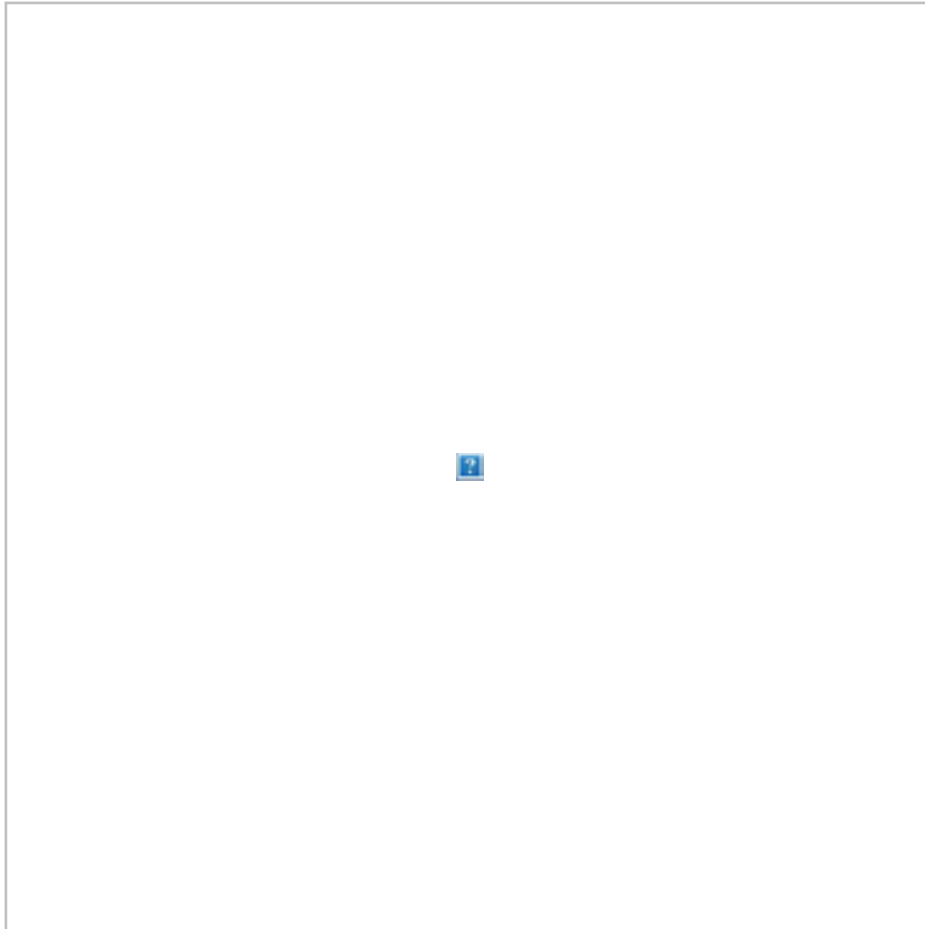
# **City of Kingston Newsletter**

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H357883-83-240-0025, Rev. 0

**From:** [City of Kingston](#)  
**To:** [Bartlett, Marie](#)  
**Subject:** Get Involved: Third Crossing DIA, Red Light Cameras & Waste Strategies  
**Date:** Friday, September 20, 2019 14:20:13

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## Offer your input now

There are several new opportunities to give input on [getinvolved.cityofkingston.ca](http://getinvolved.cityofkingston.ca)!

Third Crossing - Environmental Considerations



**Third Crossing - Environmental Considerations**

Review the information and provide comments or ask questions about the Detailed Impact Assessment.

**Provide your input by October 12.**



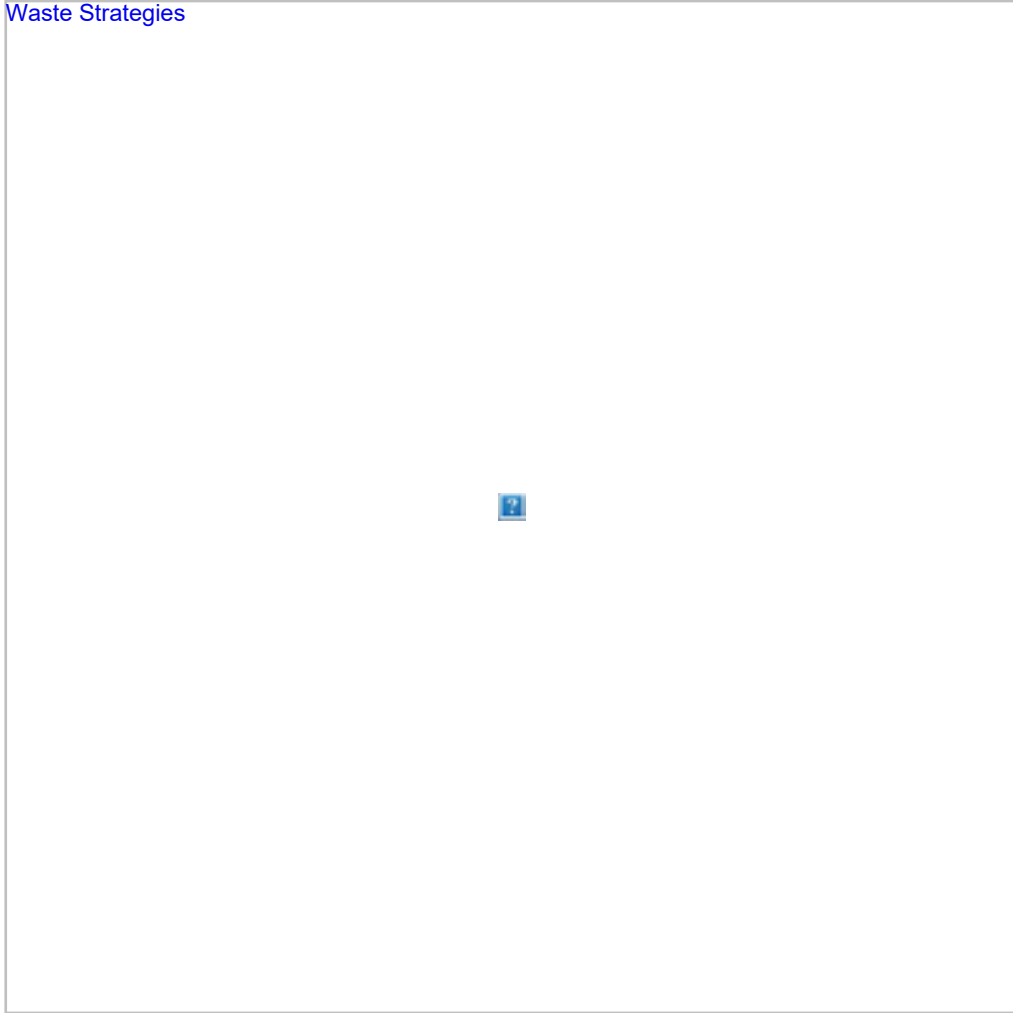
**Vision Zero - Red Light Cameras**

Read the FAQ's and ask questions about the red light camera program that is part of the Vision Zero Road Safety Plan.

**Ask a Question before October 11.**



[Waste Strategies](#)



### **Waste Strategies**

Offer your input on the waste diversion strategies aimed at getting more recyclables and organic material out of Kingston's household garbage.

**Take the survey by October 18.**

[Learn More](#)



### Upcoming engagement events

- [Sept 24 - Open House - Waste Strategies - East](#)
- [Sept 25 - Open House - Third Crossing DIA](#)
- [Sept 26 - Open House - Third Crossing DIA](#)
- [Sept 30 - Open House - Red Light Cameras Information Session](#)
- [Sept 30 - Open House - Sir John A. 360 Discussion Panel](#)
- [Oct 1 - Open House - Waste Strategies - Central](#)
- [Oct 4 - Smart Kingston Symposium](#)
- [Oct 9 - Open House - Waste Strategies - North](#)

### Other opportunities

- [Wake Up Kingston](#)
- [Sir John A. 360](#)
- [Mid-Rise and Tall Building Policy](#)
- [Your Stories, Our Histories](#)
- [Mayor's Task Force on Housing](#)

Kind regards,

The Project Team

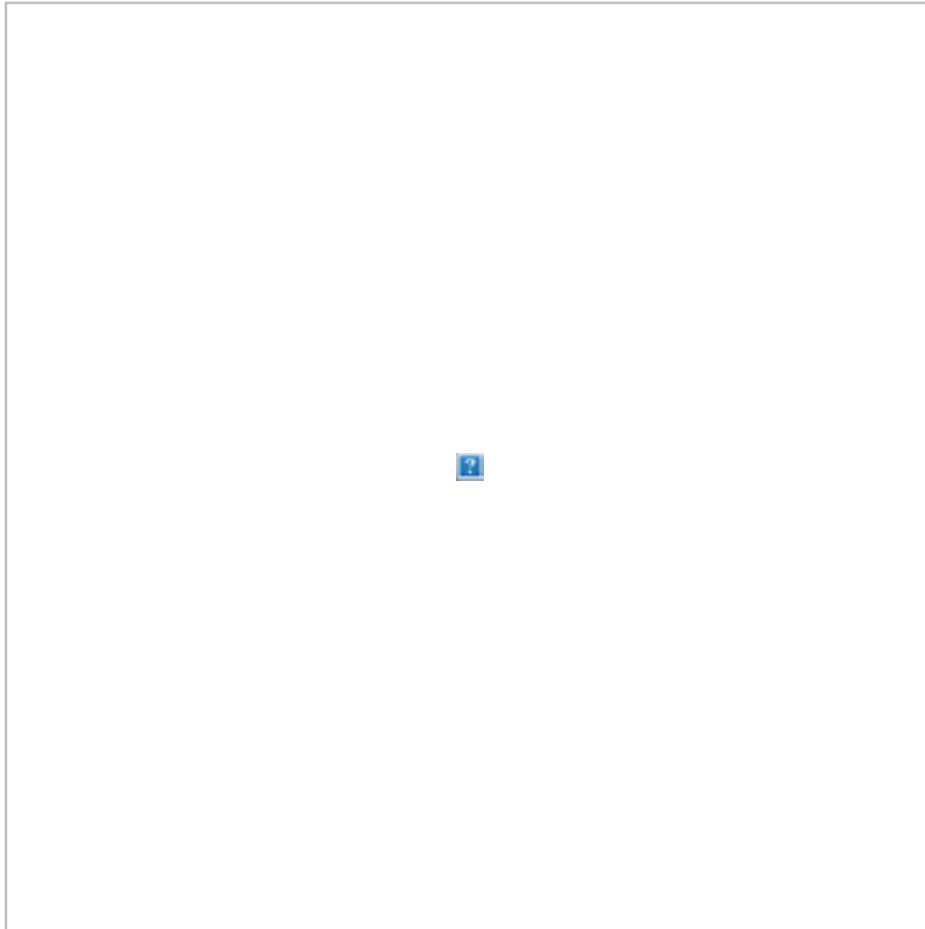
You're receiving this email because you are a registered participant on Get Involved Kingston.

Powered by [EngagementHQ](#)

[Unsubscribe](#)

**From:** [City of Kingston](#)  
**To:** [Bartlett, Marie](#)  
**Subject:** Get Involved: Transit Accessibility, Third Crossing, Red Light Cameras & Waste Strategies  
**Date:** Wednesday, October 9, 2019 10:09:22

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## Offer your input now

There are several new opportunities to give input on [getinvolved.cityofkingston.ca](http://getinvolved.cityofkingston.ca)!



Third Crossing - Environmental Considerations



**Third Crossing - Environmental Considerations**

Review the information and provide comments or ask questions about the Detailed Impact Assessment.

**Provide your input by October 12.**

## Red Light Cameras



### Red Light Cameras

Read the FAQ's and ask questions about the red light camera program that is part of the City's Road Safety Plan.

**Ask a Question before October 11.**



Waste Strategies



/a>

### **Waste Strategies**

[Offer your input on the waste diversion strategies aimed at getting more recyclables and organic material out of Kingston's household garbage.](#)

**[Take the survey by October 18.](#)**

[Learn More](#)



[Kings ton Transit Accessibility](#)

### **Kingston Transit Accessibility**

Provide your feedback about the accessibility of transit services

Take the survey by October 9.

#### Upcoming engagement events

- [Oct 9 - Open House - Waste Strategies - North](#)
- [Oct 16 - Open House - Sir John A. 360](#)
- [Oct 17 - Open House - Sir John A. 360](#)
- [Oct 17 - Open House - Sir John A. 360](#)

#### Public engagement summaries

- [Vision Zero](#)
- [Belle Park Master Plan](#)

#### Other opportunities

- [Wake Up Kingston](#)
- [Sir John A. 360](#)
- [Mid-Rise and Tall Building Policy](#)
- [Your Stories, Our Histories](#)
- [Mayor's Task Force on Housing](#)

Kind regards,

The Project Team

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City of Kingston Third Crossing of the Cataraqui River - Parks Canada Environmental Impact Analysis  
Engagement Summary - November 18, 2019

## **Attachment C Curbex Signage**

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H357883-83-240-0025, Rev. 0

[ThirdCrossing.CityofKingston.ca](http://ThirdCrossing.CityofKingston.ca)



# Open Houses

**Sept. 25** LaSalle  
Secondary School

**Sept. 26** L.C.V.I  
Secondary School

**DROP IN FROM 5:30PM-7:30PM**

Learn about our environmental considerations on the project.

[ThirdCrossing.CityofKingston.ca](http://ThirdCrossing.CityofKingston.ca)

Curbex<sup>®</sup>Media

ALWAYS OUT FRONT<sup>®</sup>

Curbex<sup>®</sup>Media

**Mini B<sup>®</sup> Concept**  
(Ad Panel - 58" h x 96" w)  
(Topper - 12" h x 58" w)

PLEASE check this proof carefully for errors and omissions. Your approval constitutes acceptance of full responsibility for all errors, omissions and legal and ethical compliance in this document. DESIGNER will not accept liability for errors overlooked at this stage of proofing. Any changes from your previously approved copy will be charged extra according to both time and materials.



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City of Kingston Third Crossing of the Cataraqui River - Parks Canada Environmental Impact Analysis  
Engagement Summary - November 18, 2019

## **Attachment D**

# **Advertisement in Kingston This Week**

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H357883-83-240-0025, Rev. 0

# Environmental Considerations

**Comment online until Oct. 12**

Learn about our environmental work and how we're going to build the bridge. Our Detailed Impact Assessment (DIA) document is online now for feedback.

**[GetInvolved.CityofKingston.ca](http://GetInvolved.CityofKingston.ca)**

A graphic on the right side of the page features the text "THIRD CROSSING" in a bold, sans-serif font. "THIRD" is in a light blue color, and "CROSSING" is in a yellow color. The text is set against a dark teal circular background. This circle is part of a larger composition of overlapping circles. One circle shows a bridge over water, another shows a landscape with trees and a body of water, and a third shows a close-up of a tree branch. The background of the entire graphic area is a light blue color with a faint, stylized leaf or tree icon in the upper right corner.

**THIRD**  
**CROSSING**



**HATCH**

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City of Kingston Third Crossing of the Cataraqui River - Parks Canada Environmental Impact Analysis  
Engagement Summary - November 18, 2019

# **Attachment E**

## **City of Kingston News Release**

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H357883-83-240-0025, Rev. 0

**From:** [City of Kingston - Communications](#)  
**To:** [Withdraw, Sarah](#)  
**Subject:** Third Crossing launches engagement on environmental considerations  
**Date:** Friday, September 13, 2019 16:21:35

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## Third Crossing launches engagement on environmental considerations

KINGSTON, ONT./Sept. 13, 2019 – The Third Crossing project team is starting public consultation for the federal environmental assessment of the Third Crossing, known as a Detailed Impact Assessment (DIA), by posting the document online for public review starting today, Sept. 13, until 4 p.m. on Saturday, Oct. 12 at [GetInvolved.CityofKingston.ca](http://GetInvolved.CityofKingston.ca).

As part of the 30-day engagement the project team will also be hosting two open houses – one on the east and one on the west shore of the Cataraqui River. The open houses details are:

- Sept. 25 at LaSalle Secondary School at 773 Highway 15
- Sept. 26 at L.C.V.I at 153 Van Order Dr.

“Preserving the natural environment and protecting the Cataraqui River are key priorities for us in building this project,” said Mark Van Buren, Deputy Commissioner, Major Projects. “Through our work with Parks Canada, and in our DIA submission, we are ensuring the bridge is well designed to avoid or reduce any potential impacts while protecting the environment – and building a bridge the community can be proud of for years to come.”

Required for complex projects, the DIA is the most intensive form of review required by Parks Canada’s regulatory process. This comprehensive analysis shows the environmental considerations, impacts and proposed mitigation strategies for the project.

After consultation on the DIA, the City will compile the questions and comments received into a report, which will be submitted along with the DIA for Parks Canada’s review. Residents will be able to see the public consultation review on the [project website](#) as well as the City’s Get Involved site.

The Detailed Impact Assessment report is available in alternate formats upon email request to [thirdcrossing@cityofkingston.ca](mailto:thirdcrossing@cityofkingston.ca).

### Additional links

- More detail on environmental work associated with the Third Crossing, including the 2013 Environmental Assessment, is available at [ThirdCrossing.CityofKingston.ca/Engagement/Environmental-Work](http://ThirdCrossing.CityofKingston.ca/Engagement/Environmental-Work).
- Join the Third Crossing email list on the Third Crossing microsite at [ThirdCrossing.CityofKingston.ca/Engagement](http://ThirdCrossing.CityofKingston.ca/Engagement).

### Background

The DIA process was selected by Parks Canada to meet regulatory requirements for all levels

of government and fulfill its mandate to protect the environment and foster public understanding, appreciation and enjoyment. In 2013, an Environmental Assessment (EA) for the Third Crossing was approved by the Ministry of the Environment and Climate Change. Construction of the Third Crossing, joining Gore Road to John Counter Boulevard over the Cataraqui River is expected to be complete by early 2023.

Share. Participate. Engage. – <https://GetInvolved.CityofKingston.ca/>

### **About the City of Kingston**

Kingston's vision of being a smart, livable and leading city is fast becoming reality. History and innovation thrive in our dynamic city located along the beautiful shores of Lake Ontario, an easy distance from Toronto, Ottawa and Montreal, in the heart of eastern Ontario. With a stable and diversified economy that includes global corporations, innovative startups and all levels of government, Kingston's high quality of life offers access to world-class education and research institutions, advanced healthcare facilities, affordable living and vibrant entertainment and tourism activities.

Twitter – @CityofKingston

Facebook – [www.facebook.com/TheCityofKingston](http://www.facebook.com/TheCityofKingston)

–30–

**Media contact:** For more information contact the communications and customer experience department at 613-546-4291, ext. 2300 or [communications@cityofkingston.ca](mailto:communications@cityofkingston.ca).

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City of Kingston Third Crossing of the Cataraqui River - Parks Canada Environmental Impact Analysis  
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# **Attachment F**

## **Public Open House Display Boards**

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H357883-83-240-0025, Rev. 0



# Welcome to the Kingston Third Crossing Open House

**THIRD**  
CROSSING

**HATCH**

**SYSTRA**



**Kiewit**

# Purpose of this Public Open House

**The City of Kingston, along with Kiewit, Hatch and SYSTRA have formed an Integrated Project Delivery Team to design and build the Third Crossing and to prepare the Detailed Impact Analysis (DIA).**

## Steps in our DIA consultation process

- Public Review of Draft DIA - September 13 through October 12, 2019
- Open Houses Wednesday, September 25 and Thursday, September 26, 2019
- Incorporation of Public Comments into Final DIA and Project Design
- Review and Approval of Final DIA by federal departments and agencies (Parks Canada, Transport Canada, Fisheries and Oceans Canada and Environment and Climate Change Canada)

## Project Contact Information

Email:  
**[thirdcrossing@cityofkingston.ca](mailto:thirdcrossing@cityofkingston.ca)**

Website:  
**[ThirdCrossing.CityofKingston.ca](http://ThirdCrossing.CityofKingston.ca)**

### The purpose of this meeting is to :

- Provide information about the Kingston Third Crossing Bridge Project and Project Team
- Provide information about the environmental assessment and permitting process, including the release of the Detailed Impact Analysis
- Respond to comments about the Project

### How can you participate?

- Sign in to receive updates about the Project and future meetings
- Visit each station to find information on the Project
- Ask questions and provide comments to the Project Teams
- Please complete and submit a comment card **we value your feedback!**

### How will we use your feedback?

Comments received throughout the comment period will be posted on the City website, along with responses on behalf of the Project. All comments and responses will be compiled into a summary report for submission for agency review and will also be posted to the City website following conclusion of the comment period.





# THIRD CROSSING

Station 1

# How We Got Here

Please provide your comments on the comments cards supplied at each station. Comment cards can be taken home and returned to the City or comments can be provided online via the project website.

[www.ThirdCrossing.CityofKingston.ca](http://www.ThirdCrossing.CityofKingston.ca)

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**SYSTRA**



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# Project Description

The Third Crossing involves the construction of a new, two-lane bridge spanning 1.2 km over the Cataraqui River, which forms part of the historic Rideau Canal; a National Historic Site, Canadian Heritage River and UNESCO World Heritage Site.

The bridge includes shared and active transportation links such as:

- a multi-use pedestrian and bike pathway with rest areas
- sidewalks and cycle lanes on the road approaches;
- connections to waterfront trails on either side of the Cataraqui River, providing increased opportunities for walking and cycling for residents and visitors to Kingston.
- two lanes for vehicle traffic that extend over the Cataraqui River and continue on John Counter Boulevard on the west shore and Gore Road on the east shore

- Approximately 350 meters of roadway from the bridge abutment on the west shore to the intersection at John Counter Boulevard and Montreal Street.
- Approximately 400 meters of roadway from the bridge abutment on the east shore to the intersection at Gore Road and Highway 15.
- 4 m multi-use pathway(s) provided along the south side of the bridge deck for active transportation and look-out and interpretive areas. These pathways will span the bridge deck and end at the intersections of John Counter Boulevard and Montreal Street to the west and Gore Road and Highway 15 to the east.
- Barriers for public safety to separate the vehicle traffic and the multi-use path; and
- Public viewing areas on the east and west shores.





# Consultation

The City of Kingston's ongoing commitment to working with Indigenous communities will ensure the health of the Cataraqui watershed for generations to come. The City has been discussing the Third Crossing with interested Indigenous communities since the Environment Assessment in 2009. City staff has consulted with a number of Indigenous communities via email, mail outs, face-to-face meetings, participation in field studies and telephone conversations.

The list of Indigenous communities consulted include:

- Algonquins of Ontario,
- Algonquins of Pikwàkanagàn
- Ardoch Algonquin First Nation
- Huron-Wendat Nation
- Métis Nation of Ontario
- Mississaugas of Alderville First Nation
- Mohawks of the Bay of Quinte
- Mohawk Council of Akwesansne
- Mohawk Nation Council of Chiefs
- Shabot Obaadjiwan First Nation

The project team values the relationship with Indigenous communities and we will continue to consult and engage with Indigenous communities throughout the project.

## Community engagement

Since the announcement of the successful project team in August 2018, the city continues to connect with the broader community with the latest project updates and developments.

### Since September 2018, the City has had:



over **25** public meetings  
(near neighbours, stakeholders)

met with over  
**690** residents



over  
**50** media



articles covering the  
Third Crossing project

sent out **11** e-newsletters  
to the **755** residents who  
have subscribed to the  
project newsletter.



**Sign up for our newsletter for more information on the project at <https://thirdcrossing.cityofkingston.ca/>**

### Upcoming engagement opportunities

After our engagement on the Detailed Impact Assessment (DIA) the next phase of public engagement on the project will be around some of the design elements of the bridge.

We look forward to hearing your feedback on elements like lighting, landscaping, and bridge features like seating and public art opportunities. We will also be launching our public engagement around the name of the bridge.

Stay tuned for more information on these elements in the coming months.



# City of Kingston Timeline

**1967**

Kingston's Mayor Fray gives inaugural address that references need for Rideau River crossing from Pittsburgh Township.

**1978**

Kingston Transportation Study (1978-1993) proposes new bridge connecting Elliott Avenue and Gore Road.

**1993**

Updated Kingston Transportation Study proposes new bridge connecting Elliott Avenue and Gore Road.

**1996**

Ontario Government announces intent to amalgamate municipalities to reduce the number of them from roughly 700 to 444.

**1996**

City of Kingston and municipalities within County of Frontenac begin process to reform local governance. It is proposed net savings from amalgamation should be applied to new 'second bridge crossing' over the Cataraqui River.

**1998**

City officially amalgamates and includes documents that reference need for new 'second bridge crossing' as part of new City of Kingston.

**2004**

The Kingston Transportation Master Plan update proposes new bridge connecting Elliott Avenue and Gore Road.

**2007-2008**

City Council approves capital budget to start Municipal Class EA for a new bridge crossing over Cataraqui River. Stakeholder and public engagement begins.

**2009-2010**

City Council approves commencement of the Municipal Class EA.

**2012**

City Council endorses the completed Municipal Class EA for the Third Crossing Project.

**2013**

The Municipal Class EA is approved by the Ontario Ministry of the Environment, Conservation and Parks.

**2015**

The Third Crossing Action Plan is created to move the Project forward in four stages:  
Phase 1 - Updates to the Transportation Master Plan and Development Charges By-Law;  
Phase 2 - Preliminary Design and Cost Estimates;  
Phase 3 - Business Plan and  
Phase 4 - Pending Council Direction.

**2017**

The province of Ontario commits one-third (\$60M) investment towards the Third Crossing Project.

**2017**

City Council approves Phases 2 and 3 of the Third Crossing Action Plan, allocating a one-third municipal contribution (\$60M) to start construction, conditional on funding from the Province of Ontario and Federal Government.

**2018**

Federal Government commits one-third (\$60M) investment for the Third Crossing Project.

**2019-2023**

Construction

# Completed Studies

1. Fisheries Background Review (Bowfin Environmental Consulting, 2009)
2. Preliminary Ecological Constraints Analysis (Ecological Services, 2009)
3. Fisheries Results and Impact Analysis (Bowfin Environmental Consulting, 2011)
4. Hydrotechnical Analysis (HCCL, 2011)
5. Phase 1 Environmental Site Assessment (Golder Associates, 2011)
6. Terrestrial Ecological Assessment and Analysis (Ecological Services, 2011)
7. Environmental Noise Assessment (RWDI, 2012)
8. Environmental Study Report under the provincial Municipal Class EA process (2013)
9. Phase 1 Environmental Site Assessment Report (Golder Associates, 2016)
10. Excess Soil and Sediment Management Report (Golder Associates, 2017)
11. In-Air Noise Impact Assessment Report for Birds and Reptiles (JASCO, 2017)
12. Natural Environment Assessment Report (Golder Associates, 2017)
13. Natural Heritage Protection and Enhancement Plan Report (Golder Associates, 2017)
14. Preliminary Geotechnical Investigation Design and Factual Data Reports (Golder Associates, 2017)
15. Stormwater Management Report (JL Richards, 2017)
16. Underwater Noise Modelling Report of Impact Pile Driving (JASCO, 2017)
17. Arborist Report (Hatch, 2019)
18. Environmental Noise Impact Assessment (Hatch, 2019)
19. Geotechnical Investigation Report: Factual Data Report (Tulloch Engineering, 2019)
20. Hydraulics Assessment (Hatch, 2019)
21. Species at Risk Bat Survey (Hatch, 2019)

# Current Studies

## Federal Environmental Impact Analysis

- Updated bridge design and construction methodology of the Project developed during the validation phase.
- The first draft of the DIA was submitted to PCA in 2018. A major change to construction methods occurred in April 2019.
- Prepared to meet the legal obligations set out in the *Canadian Environmental Assessment Act 2012*.
- Parks Canada Agency has been identified as the lead agency in the environmental assessment process, and their directive has been used to guide this process. Accordingly, a Detailed Impact Analysis is required for the Project.
- Transport Canada and Fisheries and Oceans Canada will jointly review and approve the DIA while Environment and Climate Change Canada will provide expert advice.
- Outlines the following:
  - Refinements to the preferred bridge, roadway and landscape concept from the Municipal Class EA.
  - A review of potential environmental interactions, environmental effects, and mitigation measures associated with the construction and operation of the project in accordance with the Parks Canada Environmental Impact Analysis framework.

# Project Schedule

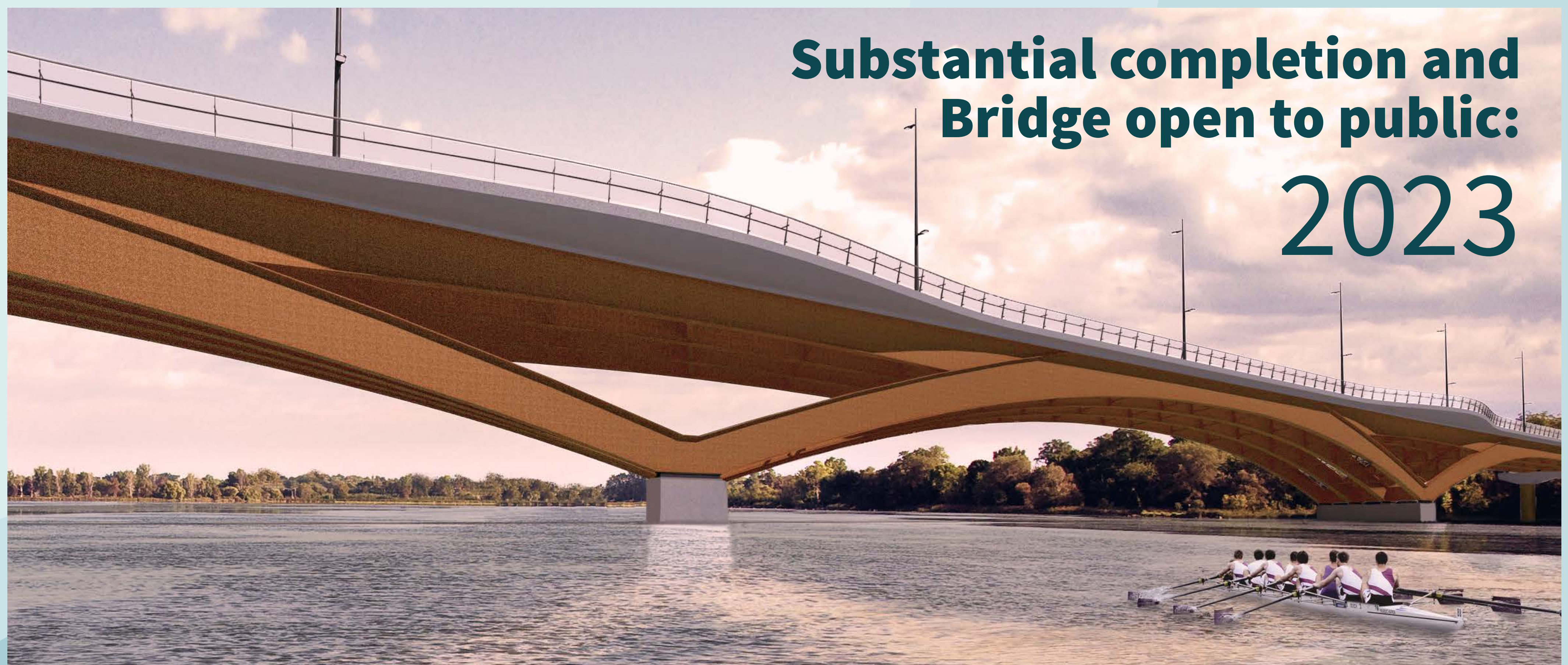
**Phase 1:  
Validation  
2018-2019**

**Phase 2:  
Detailed Design  
2019-2020**

**Phase 3:  
Construction  
2019-2023**

	2019	2020		2021		2022	
In-Water Schedule	July - Dec	Jan - Jun	July - Dec	Jan - Jun	July - Dec	Jan - Jun	July - Dec
<b>Construction Access</b>							
Build Causeway West							
Build Causeway East							
Trestle							
Remove Causeway Mainline							
<b>Foundations &amp; Piers</b>							
Foundations Casing, Cage, Concrete							
Pier Rebar, Forms, Concrete							
<b>Superstructure</b>							
NU Girder Erection							
Steel Feature Spans Erection							
Deck							

Regulatory application pending - intended to permit construction activities during Fish Restricted Timing Window





# THIRD CROSSING

Station 2

# The Bridge Design

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**HATCH**

**SYSTRA**



**Kiewit**

# Design Changes

Criteria	Environmental Assessment	Preliminary Design	Current Design
Main Span	Structural arch above navigation channel	Structural arch above navigation channel (150 m span length)	Simplified under arch design (95 m span length)
Approach Span	Steel girders	Steel girders	Concrete girders
High Point of Bridge	Approximately 17 m above water	Approximately 17 m above water	Approximately 12 m above water
Piers	V - piers on both approach and main span	V - piers on main span with inverted u - piers on approach spans	Simplified shorter vertical piers on approach spans with low profile piers at main span to support under arch and back spans

## Design Change Rational

Design review in consultation with various agencies has led to changes to the Main and Approach Spans, High Point of the Bridge and Piers as the design evolved from that presented during the conceptual design process, during the preliminary design and through to the current design. These design changes were necessitated by the following considerations:

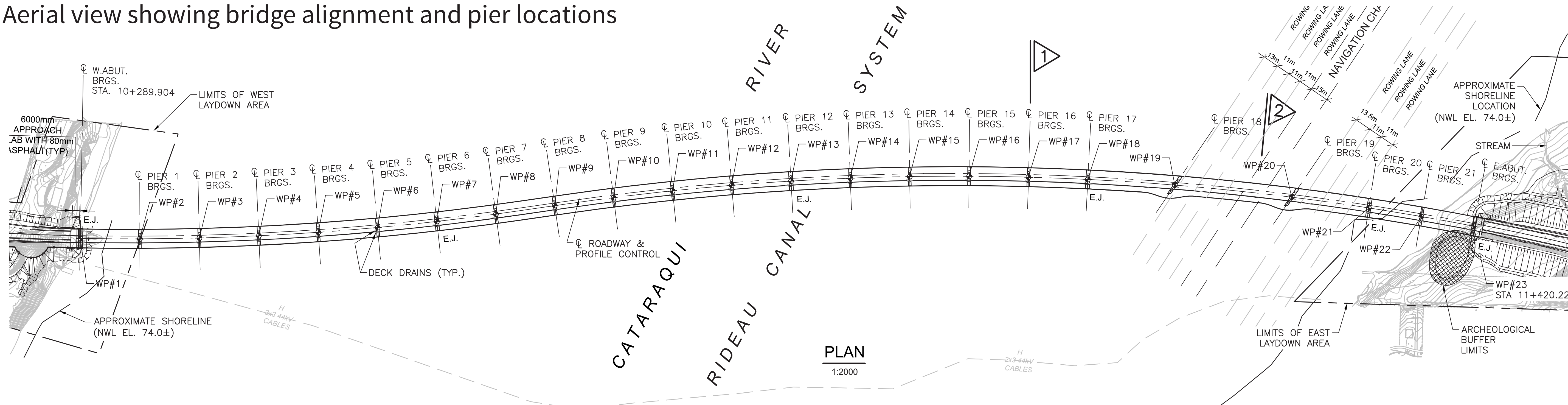
1. Respect for the natural environment and cultural heritage
  - a. Reduce the overall in-water footprint of the bridge
  - b. Minimize the visual impact on the Rideau Canal
2. Design optimization
  - a. No need for structural arch
  - b. Able to reduce navigation span
  - c. Simple span with under arch design
  - d. Minimize long-term operation and maintenance costs

3. Price certainty
  - a. Risk associated with steel pricing and 2018/2019 steel tariffs
  - b. Concrete girders for approach, spans – stable pricing
4. Accelerated construction techniques optimized



# Plan Layout

Aerial view showing bridge alignment and pier locations



# Safety

Railings, barriers, and lighting will be designed to ensure safety of those travelling on or underneath the bridge.

Ontario Ministry of Transport standard concrete barriers, with embedded ducts for lighting, will be used for the roadway section of the bridge for driver safety, and will accommodate a railing fastened on top to protect cyclists.

Lighting design will provide safe, effective illumination that is focused on the roadways, multi-use pathway and navigation channel (including the adjacent rowing lanes).

# Stormwater Management

Stormwater management both on the bridge and at the approaches is an important aspect of bridge design, and something the City has heard is important to local residents.

Stormwater management will entail several water treatment measures, including:

- Grassed swales for quantity control of runoff
- Oil grit separators (e.g. stormceptors) for quality control at the outlet of swales
- Stormwater piping with rip rap protection conveying runoff from the approach and bridge to the enhanced grass swales
- Peak flow control where major event flows will flow overland to the Cataraqui River or dry pond facility
- Catch basins and sewers

All stormwater runoff from the bridge will be conveyed to either shore and treated before being discharged back to the River.

# Bridge Maintenance

Snow and ice on the bridge will be managed according to the City of Kingston's Winter Operations Level of Service Policy.

The Public Works department will strive to provide safe and passable winter road and sidewalk conditions for vehicles/cyclists and pedestrian traffic.

The City will apply pre-treatments in the form of Direct Liquid Application to roads in advance of snowfall events to prevent and/or treat ice formation.

The bridge design will incorporate the following:

- Bridge deck including shoulders adjacent to the vehicular lanes that will provide for temporary snow storage and drainage;
- Durable materials to withstand snow plow wear;
- No obstructions on the roadway or multi-use pathway to impede the efficient removal of snow from the bridge deck; and
- Multi-use pathway sloped towards the center barrier to facilitate the flow of snowmelt to the deck drains.





# Noise Provisions

The use of sound barriers will achieve the required 5 dB reduction in traffic noise levels resulting from the operation phase.

## Considerations for layout and design

- Effectiveness (meet the noise reduction requirements)
- Sight lines and visual appearance
- Safety
- Access to above and underground utility infrastructure
- Property lines, right of way and easements

### West side noise fence and east side from Point St. Mark Dr to Hwy 15

- Wood design
- 2.3 metres high
- Engineer designed
- Same as noise wall on Montreal and John Counter Blvd.



### East side – Point St. Mark Dr. onto bridge

- Engineer designed
- 100 % recycled (recycled material and recycled hardwood and softwood fibres)
- Constructed of posts and panels
- Ability to modify texture and tint



# Acoustic Environment

Several noise studies have been performed for both the construction and the operation phases of the Project. The study area includes the regions immediately around each end of the bridge, as well as the bridge itself. Where required, permanent and temporary noise controls are proposed based on the anticipated construction zones; latest traffic models; detailed design process; and surrounding road modifications (such as the Highway 15 widening). These studies predict and evaluate the changes in the noise environment due to the Third Crossing Bridge at construction completion and into operation.

Upon applying a combination of proposed permanent and supplementary temporary barriers during the construction phase, the change in noise environment during construction will be minimized to the extent possible.

## Acoustic Assessment Mapping

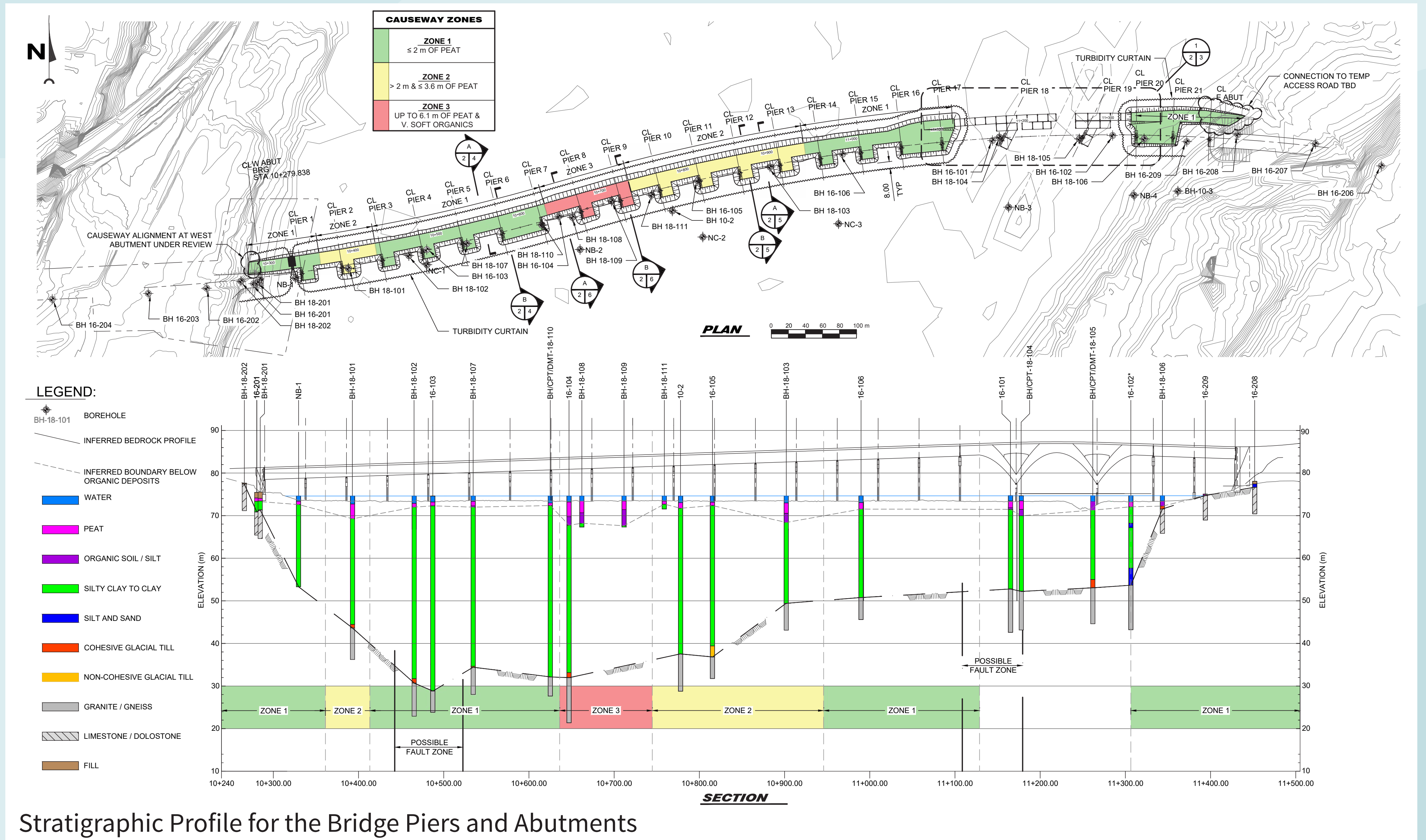


To address permanent noise control, two (2) acoustic barrier layout options have been proposed and evaluated. Both options are viable and will meet acoustic requirements.

# Geotechnical Investigations

Tulloch Engineering conducted a subsurface investigation to support the validation phase. The investigation consists of 11 marine boreholes for the bridge and 5 on-land boreholes for the west approach.

The geotechnical characteristics of the riverbed are consistent, in terms of water depth, peat layer thickness, clay overburden and rock profile, confirming the adequacy of the bridge foundation designs with respect to lateral capacity.



Stratigraphic Profile for the Bridge Piers and Abutments

Kingston, Ontario is located in a stable continental region within the North American Plate and, consequently, has a relatively low rate of earthquake activity. The area of the proposed Project is not within a seismically active area.

The Third Crossing of the Cataraqui River at Kingston bridge and approach roadways have been designed in accordance with the Canadian Highway Bridge Design Code (CHBDC) and Canadian Standards Association and a site-specific seismic response analysis has been conducted to ensure design adequacy.

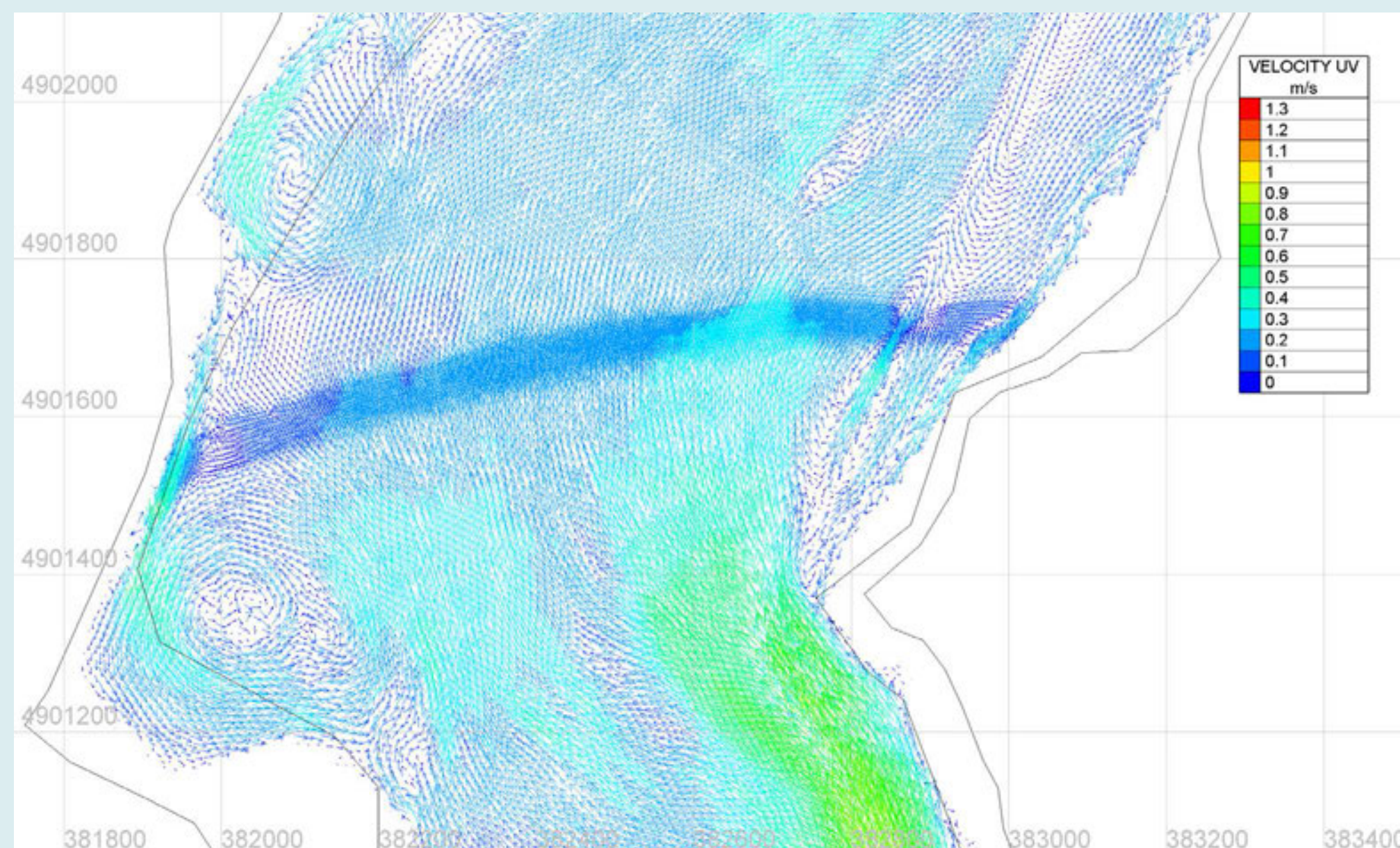
During the detailed design phase, a site-specific assessment of the ground, which includes a site-specific seismic response analysis, was conducted to estimate the seismic response of the site subjected to representative earthquake acceleration time histories for Eastern Canada, which has determined the seismic requirements and loads for this specific site. As part of industry best practice, certain bridge elements and connection details, although not required by the CHBDC, will be implemented to improve strength, durability and performance in the event of an earthquake.

# Hydrotechnical Analysis

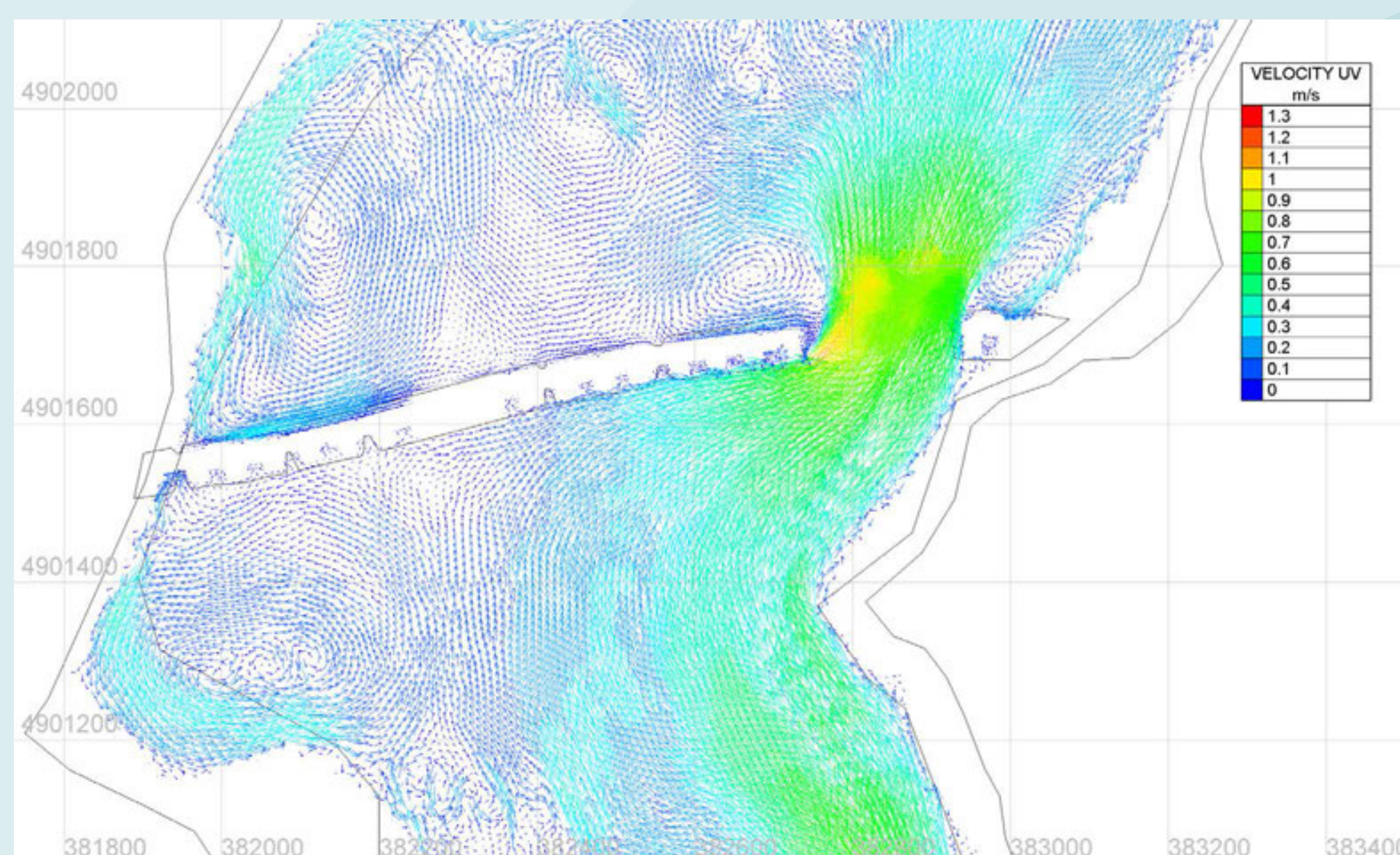
An analysis of river hydraulics was conducted by Hatch in 2019 to quantify potential changes specifically to water velocities, water depths, sediment erosion and transport, and river ice and spring flooding.

## The analysis concluded the following:

- Wind is the primary driver of water movement with lake surge having a significant, yet secondary influence.
- Potential changes to water level and velocity are estimated to be relatively small under open water conditions during post-construction with little to no change in location and magnitude.
- Bed material is easily mobilized at very low velocities and the disturbance of bed material is equally likely with or without causeway or bridge in place owing to the very loose organic silty peat material occupying the bed surface.
- The presence of the causeway will temporarily change the hydraulic regime of the study area under open water conditions.
- Under design conditions, the presence of the causeway will increase velocity in the navigation channel beyond what is normally experienced and potentially increase erosion of the channel bed. The magnitude of these velocities is estimated to be small.
- Based on the low velocities and lack of supply ice due to Kingston Mills upstream, the potential for ice jam flooding during either the temporary works or post-construction cases is low.



Velocity Vector Plot of 50-year Design Scenario with No Causeway



Velocity Vector Plot of 50-year Design Scenario with Causeway in Place

# Design Changes



**Municipal Class Environmental Assessment Bridge Design Concept (2013)**



**Preliminary Design (Refined Arch) (2017)**



The Bridge Design

# Current Design



[ThirdCrossing.CityofKingston.ca](http://ThirdCrossing.CityofKingston.ca) - [thirdcrossing@cityofkingston.ca](mailto:thirdcrossing@cityofkingston.ca)

**HATCH**

**SYSTRA**

 **Kiewit**



An aerial photograph of a residential neighborhood with a large dark green circle overlaid in the center. Inside the circle, the word "THIRD" is written in large, light blue, sans-serif capital letters, and the word "CROSSING" is written in smaller, yellow, sans-serif capital letters below it.

# THIRD CROSSING

## Station 5

# Connectivity

Please provide your comments on the comments cards supplied at each station. Comment cards can be taken home and returned to the City or comments can be provided online via the project website.

[www.ThirdCrossing.CityofKingston.ca](http://www.ThirdCrossing.CityofKingston.ca)

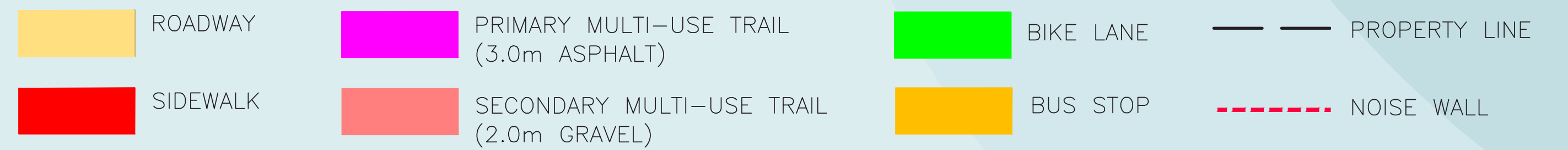
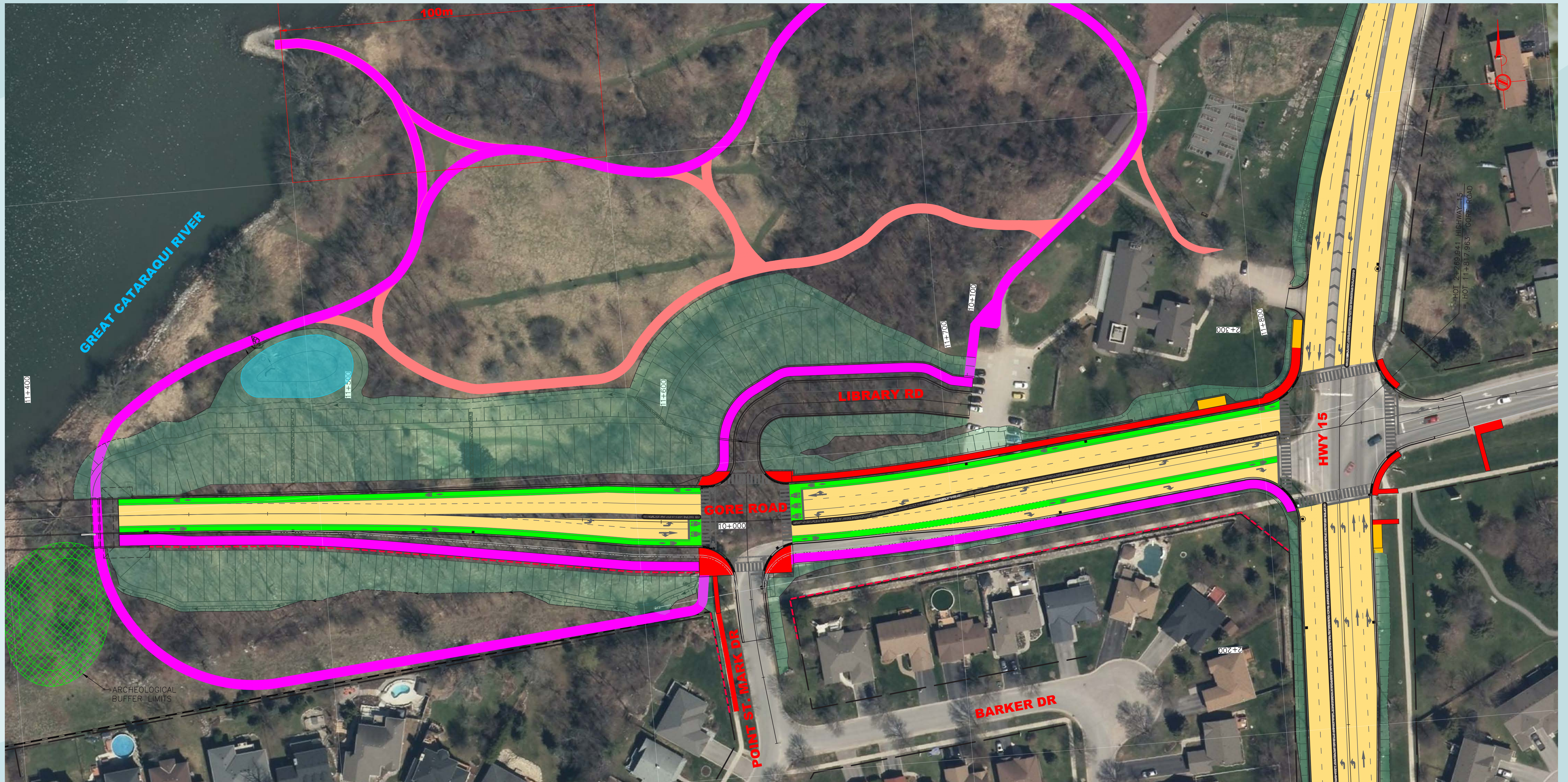
**HATCH**

**SYSTRA**

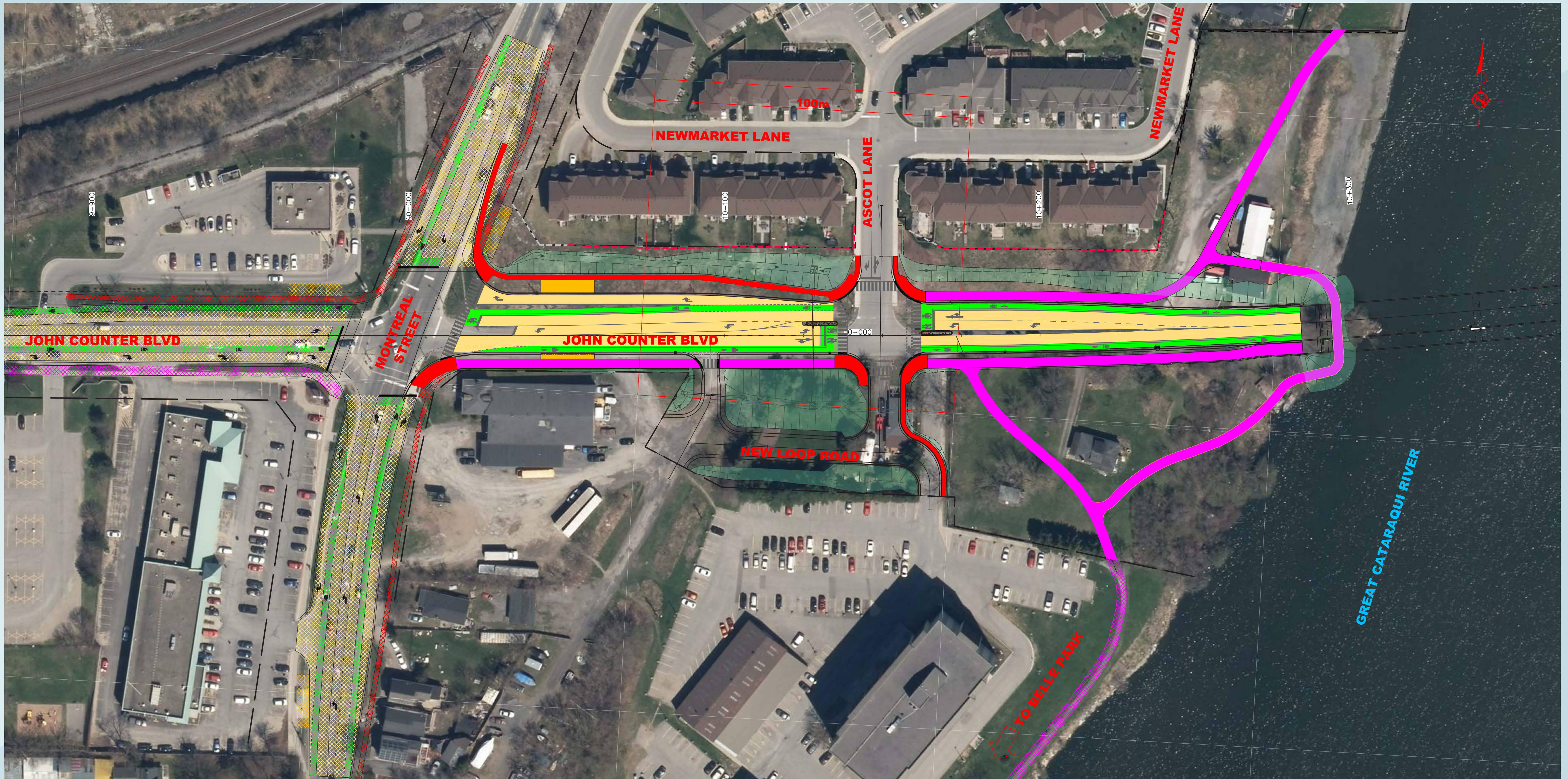





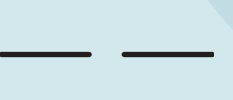

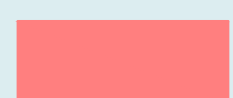


**Kiewit**

# Draft Concept East Shore



# Draft Concept West Shore



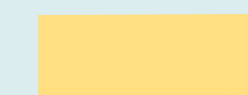




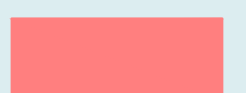

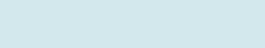
- |  |   |   |   |
|--|---|---|---|
|  ROADWAY  |  PRIMARY MULTI-USE TRAIL (3.0m ASPHALT)  |  BIKE LANE |  PROPERTY LINE |
|  SIDEWALK |  SECONDARY MULTI-USE TRAIL (2.0m GRAVEL) |  BUS STOP  |  NOISE WALL    |





# Draft Concept West Shore



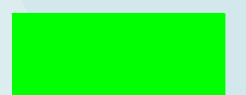


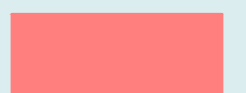




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|--|--|---|---|
|  ROADWAY  |  PRIMARY MULTI-USE TRAIL<br>(3.0m ASPHALT)  |  BIKE LANE |  PROPERTY LINE |
|  SIDEWALK |  SECONDARY MULTI-USE TRAIL<br>(2.0m GRAVEL) |  BUS STOP  |  NOISE WALL    |



# Draft Concept West Shore



- |  |  |   |   |
|--|--|---|---|
|  ROADWAY  |  PRIMARY MULTI-USE TRAIL<br>(3.0m ASPHALT)  |  BIKE LANE |  PROPERTY LINE |
|  SIDEWALK |  SECONDARY MULTI-USE TRAIL<br>(2.0m GRAVEL) |  BUS STOP  |  NOISE WALL    |





# THIRD CROSSING

## Station 4 **Construction**

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**HATCH**

**SYSTRA**

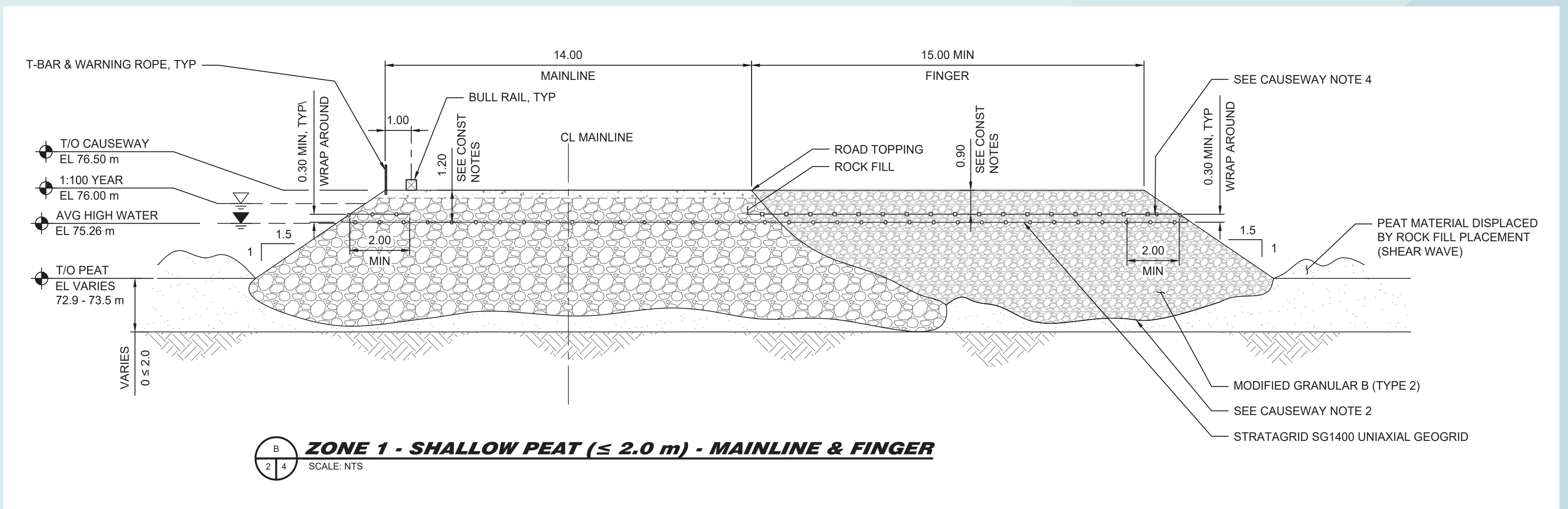


**Kiewit**

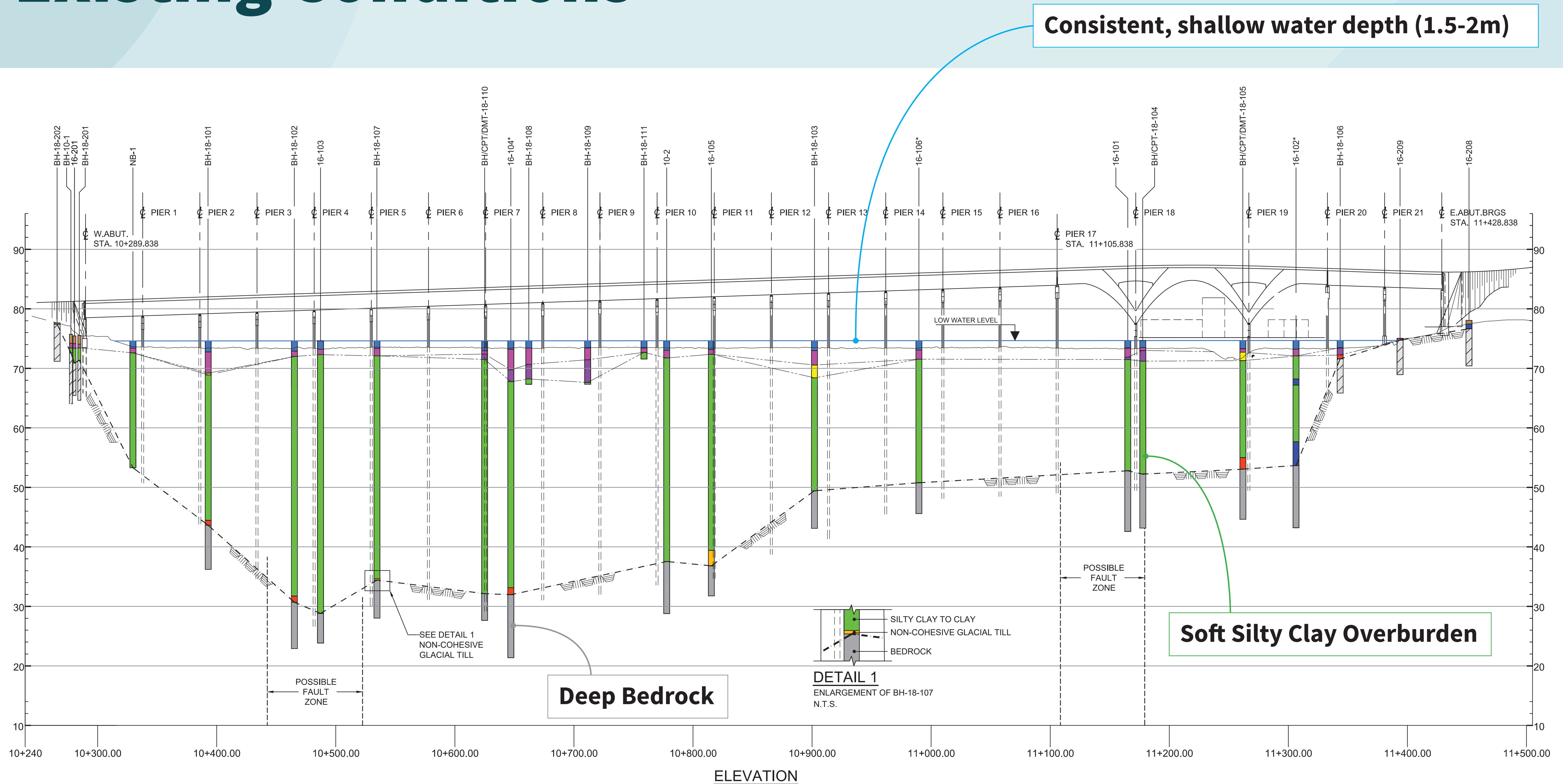
# Construction Method and Access

The selection of the preferred construction method was based on a number of technical studies, including Geotechnical Studies as well as Hydrotechnical Analysis.

- The preferred construction method is the Causeway-Trestle Solution (CTS), a hybrid construction approach.
- The CTS involves a combination of temporary causeways and a temporary work bridge (trestle) to access the piers and superstructure.
- A ferry barge or lifting span bridge will be used to transport equipment and material over the navigable channel.
- Based on the peat layer thickness of the river bed of a specific section of causeway, the causeway area has been classed into three zones where three causeway designs are proposed to be utilized.
- The causeways would to be progressively placed until the end of 2019 and would be progressively removed between 2020 to 2021.



# Existing Conditions

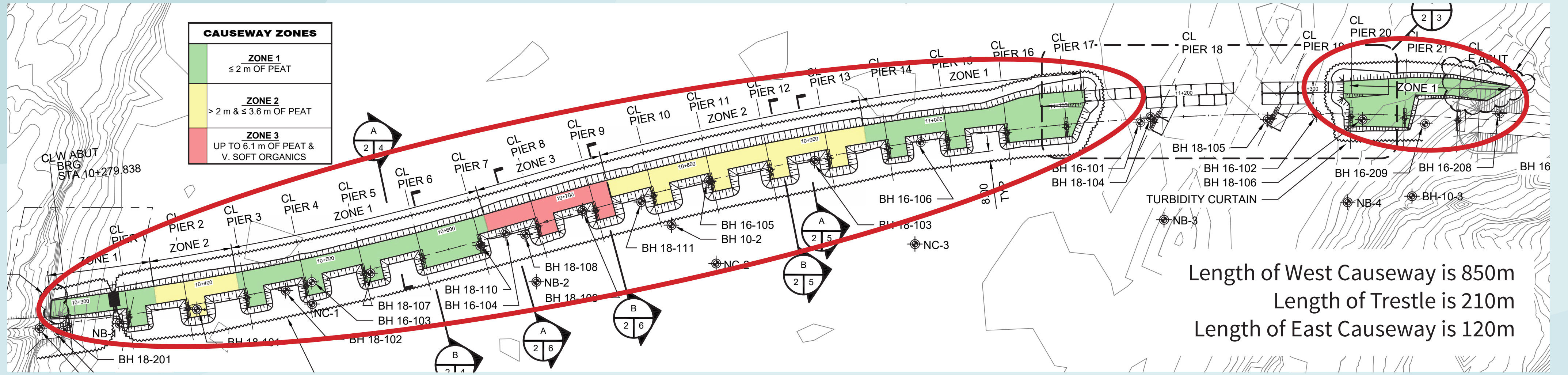


**Additional Geotechnical Investigations in Fall 2018 Findings:**

- Confirmation that permanent design for bridge foundations adequate (with respect to lateral capacity)
- Very deep bedrock on west
- Determination that Silty Clay overburden does not have capacity to support vertical loads of piles (trestle or permanent)



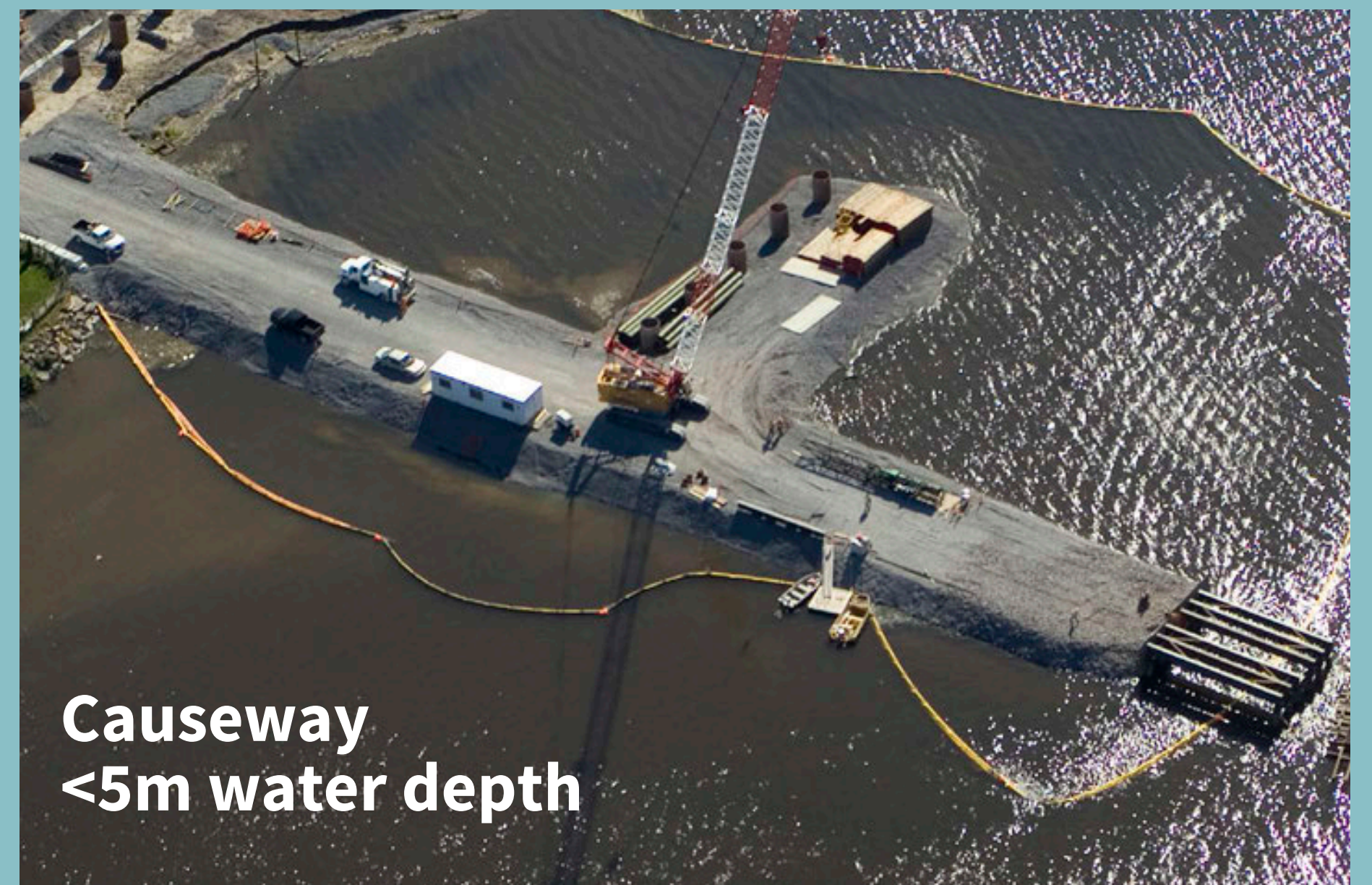
# Causeway Zone



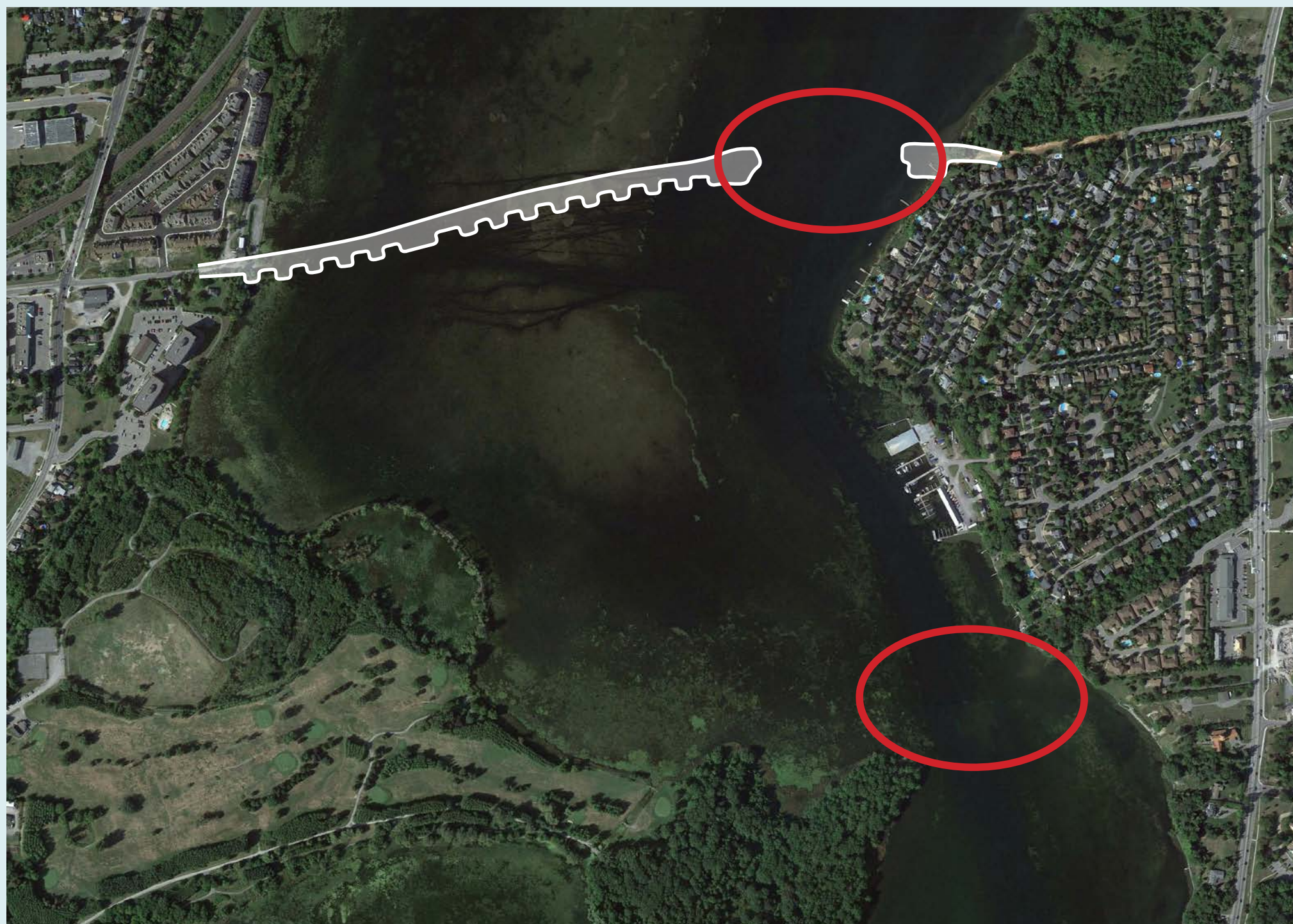
## Causeway Access

- The causeway consists of the main causeway access and fingers that will allow access to the piers
- Consistent, shallow water depth (1.5-2m)
- Use of locally sourced rock fill material is available and re-used on project
- Safety during construction

## Determining the Right Access Method

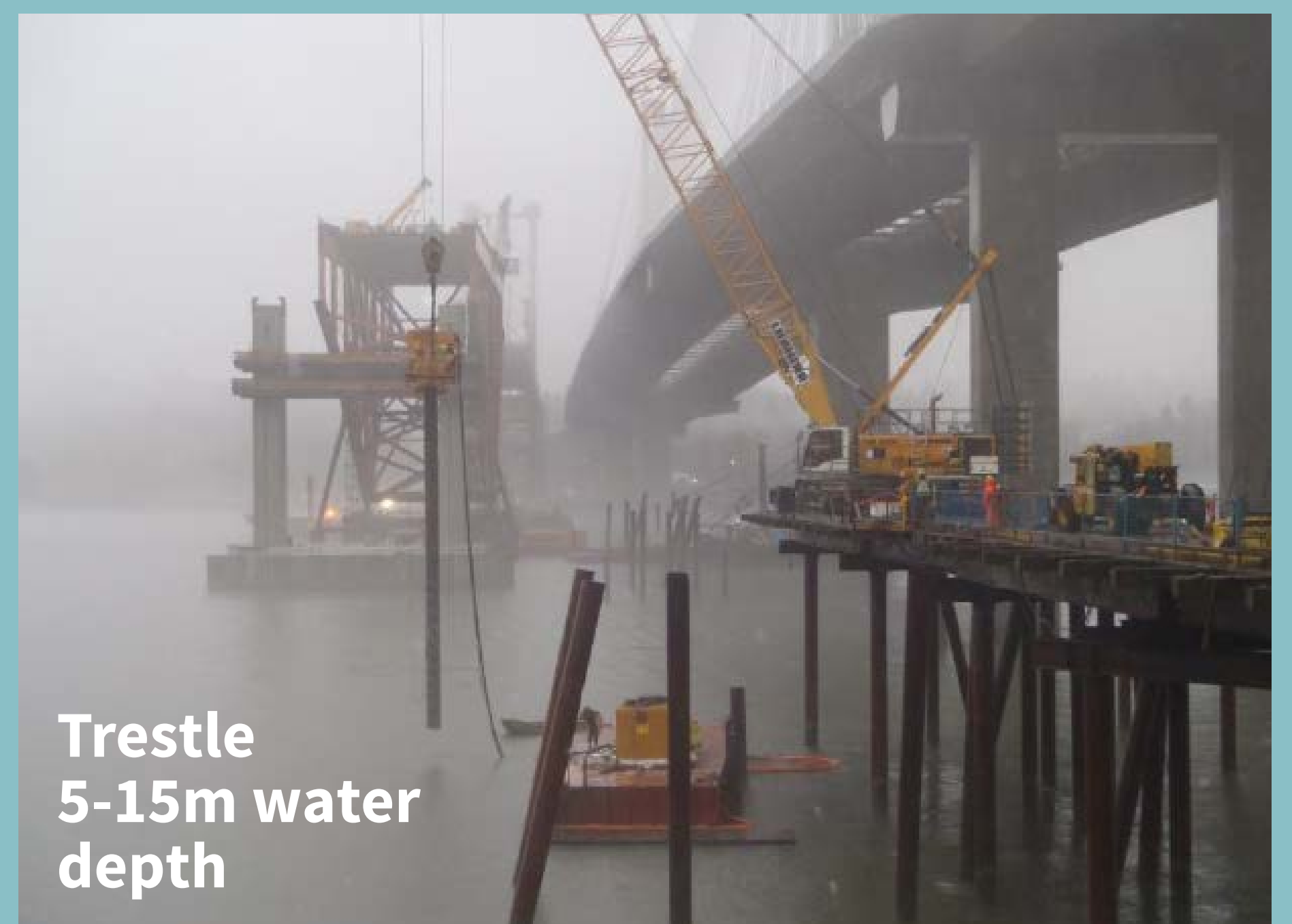


## Trestle Zone



## Trestle Access

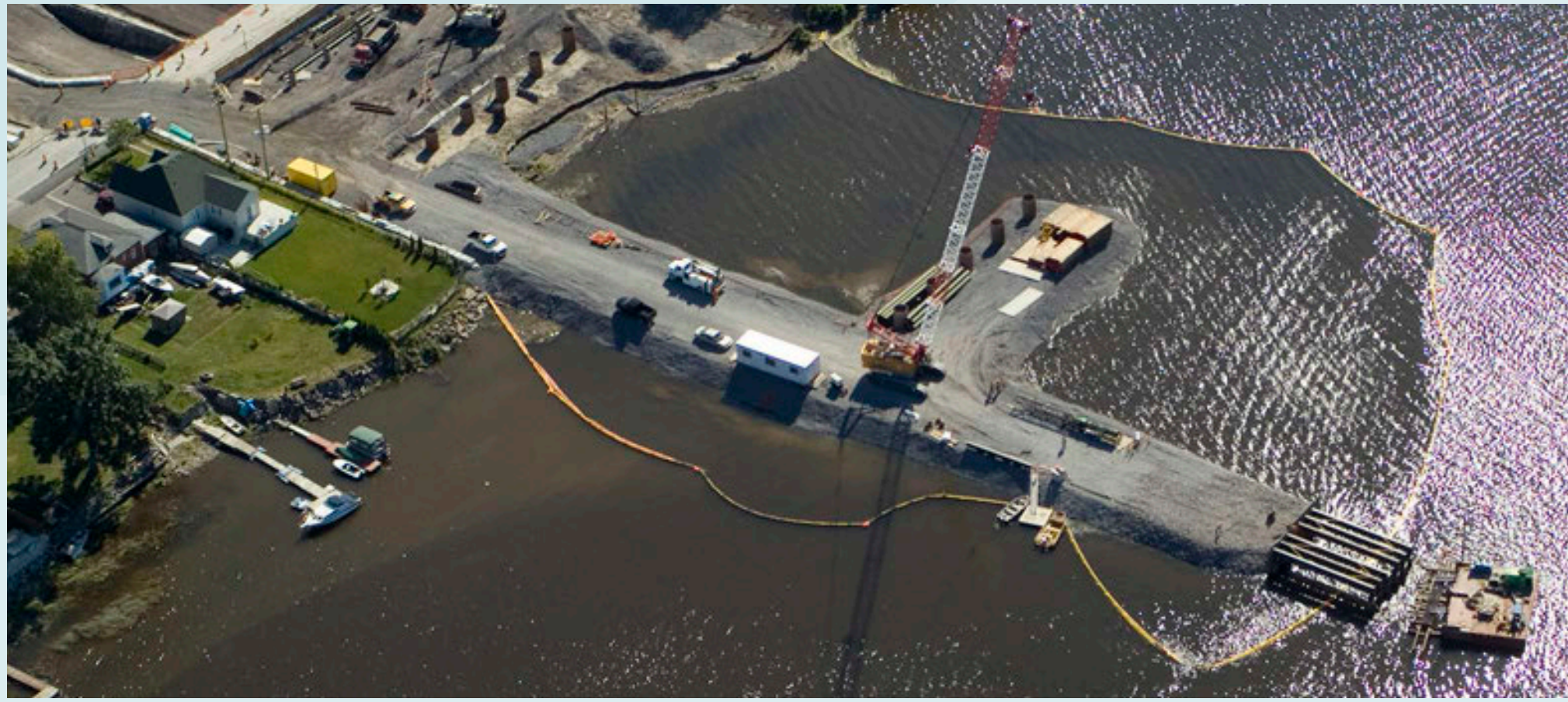
- Trestle consists of the main trestle spans and fingers that allow access to the Piers
- Suitable rock depth for piles (20m)
- Same open dimension as Cataraqui River at Belle Island (same hydraulic conditions)



# Considerations

## Water Quality

- Turbidity curtains and water quality monitoring established during causeway installation and removal



## Vegetation

- Milfoil is an invasive species and a hardy propagator, and after removing rockfill causeway to 100mm below original elevation, natural re-deposition and regrowth will occur rapidly



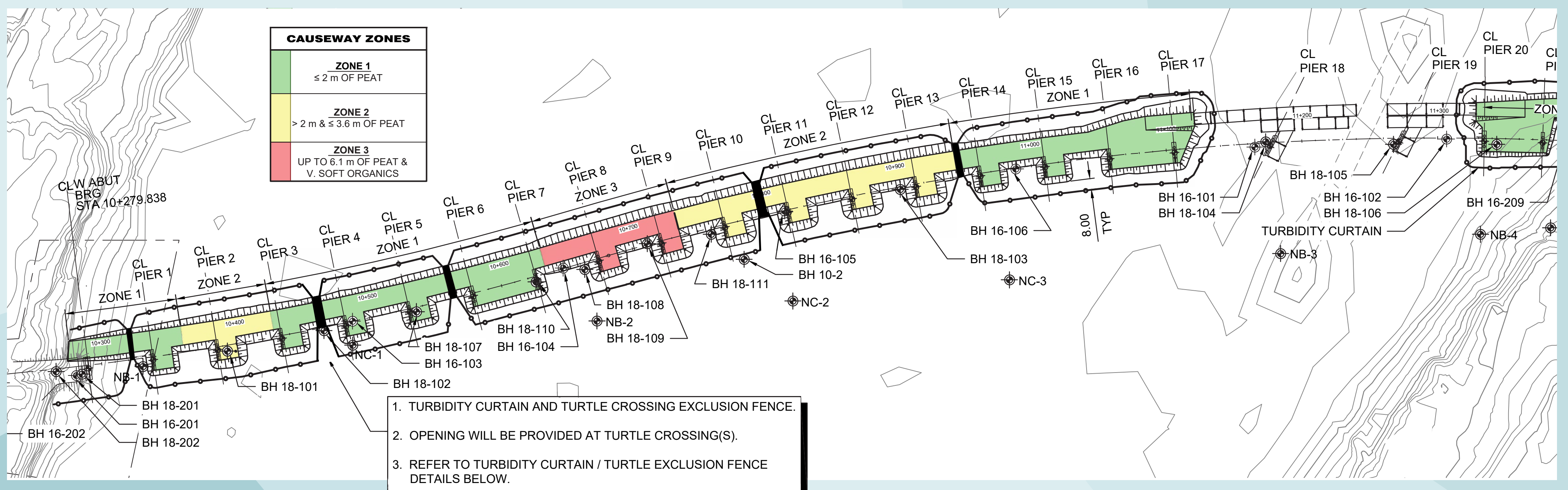
## Benthic Community

- Existing benthic fauna is relatively impoverished in the fine silty sediments of the Cataraqui River
- The remnant causeway materials will enhance benthic diversity in the short term until redeposition returns it to the existing condition



## Connectivity

- The passage open with trestle is as wide as the Cataraqui River is at Belle Island and this is where the flow passes
- Five additional passageways will be constructed in case any species wish to pass north to south



# Construction Methods

## Foundations



Installation of steel casing and drilling out inside the casing. After a rock socket is formed, reinforcing steel will be installed and concrete will be poured in the casing.

## Caps

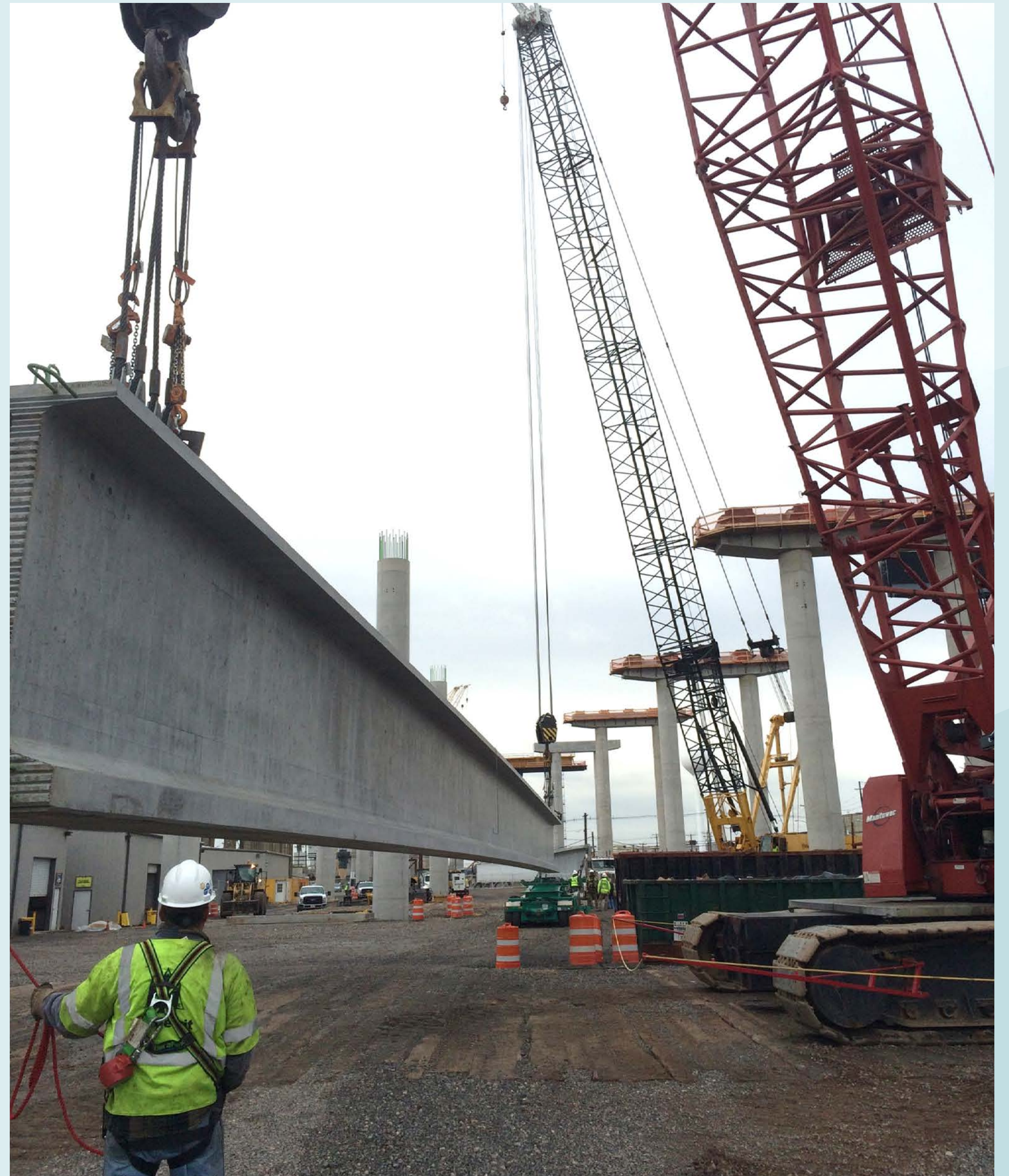


Prefabricated reinforcing steel cage, and formwork for Pier Caps.



# Construction Methods

## Approach Concrete Girders, Steel Girder Main Span and Deck Construction



Partial depth precast concrete deck panel placement, precast concrete girder erection, and steel girder erection.



# THIRD CROSSING

Station 3

# The Environment

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**HATCH**

**SYSTRA**



**Kiewit**

# Study Area



Generally, the Study Area is bounded by the following:

- The LaSalle Causeway-Highway 2 corridor, which crosses the Cataraqui River at the most southern confluence of the Cataraqui River and Lake Ontario in Kingston's downtown;
- The Highway 401 corridor, which crosses the Cataraqui River approximately 6 km north of the LaSalle Causeway;
- Montreal Street and the Canadian National Railway line to the west; and
- Highway 15 to the east .

## Significant Features within the Vicinity of the Project Area

Significant features include environmental and cultural heritage features considered by the Project team during the development of the Detailed Impact Analysis, including:

### The Cataraqui River

a slow-moving channel which flows into Lake Ontario within the federally regulated navigable channel extending from the LaSalle Causeway northwards as part of the Rideau Canal.

### Greater Cataraqui Marsh

south of Highway 401 the Study Area includes a natural landscape dominated by a visible cattail portion of the Greater Cataraqui Marsh Provincially Significant Wetland and the river valley's sloped physiography, near continuous overhanging tree canopy and shrub understory.

### Rideau Canal

the Project Area crosses the Rideau Canal, which is a 202 km long waterway linking the Ottawa River to Lake Ontario. Constructed between 1826 and 1832, the canal provided a secure alternate supply route in the event of a military blockade by the Americans.

# Soil and Sediment Management

An Excess Soil and Sediment Management Report prepared by Golder Associates in 2017 assessed soil and sediment and materials management options for excess materials that will potentially be generated from the construction of the Project.



## Potential Effects and Mitigation Measures

- Soils with chemical parameters that meet Ministry of Environment, Conservation and Parks (MECP) standards may be re-used on land at the Project site and/or within the City of Kingston right of way network.
- If reuse is not possible due to the level of contamination, the material may be considered waste and would require to be disposed of at a licensed waste disposal site.
- Soil excavated at depths 1.3 to 2.8 m below mudline and brought to land would need to be evaluated under the MECP soil standards and dewatered.
- Sediment with high organic carbon content should be treated and handled.
- Minor excess material (<3000 m<sup>3</sup>) is expected to be generated from the construction of the bridge, but may be dealt with as soil and dewatered.



Sediment sampling locations

# Terrestrial Environment Potential Effects and Mitigation Measures

## Bats and Bat Habitat

- A Species at Risk review was conducted on the East and West Approaches
- Baseline studies by Golder in 2018 including Bat snag and acoustic monitoring surveys (Species at Risk Bat Survey, Hatch 2019) were incorporated
- Acoustic monitoring confirmed little brown myotis (*Myotis lucifugus*) and northern myotis (*Myotis septentrionalis*) within the study area, although not recorded tri-colored bat (*Perimyotis subflavus*) may also utilize the woodland for maternal roost habitat.
- Four bat houses were installed on April 30, 2019 on the east shore of the Cataraqui River
- Areas of installation were carefully selected so that the bat houses have the best chance of attracting native bats.
- A mix of standard and nursery bat houses were installed in the north side of the meadow on the Pittsburgh Library property
- A future 18 bat houses are also planned to offset the removal of the 35 snag trees within the east bridge approach.
- The location of these future bat houses will be developed as part of the landscaping plans
- The bat houses are planned on a replacement ratio of 10 bat houses per hectare of impacted woodlands



2018 Bat Snag Survey findings

# Terrestrial Environment

## Potential Effects and Mitigation Measures

Protecting wildlife and their habitat is a key part of conserving Kingston's biodiversity and the Project Team is working hard to protect the ecosystem within the Project Area. Experts are continuing to conduct surveys of plants and wildlife, including Species at Risk (SAR) and SAR habitat.



### Migratory Birds

The active season for many migratory birds is March 31 to August 28. Accordingly, no Project works which may disturb these species or their habitat will take place in vegetated areas unless a biologist searches the areas to be cleared for active nests prior to the commencement of the works. If active nests are identified, those areas will be buffered and left undisturbed until the nest is no longer active. Nest searches will take place within 24-hours prior to the works.

# Terrestrial Environment

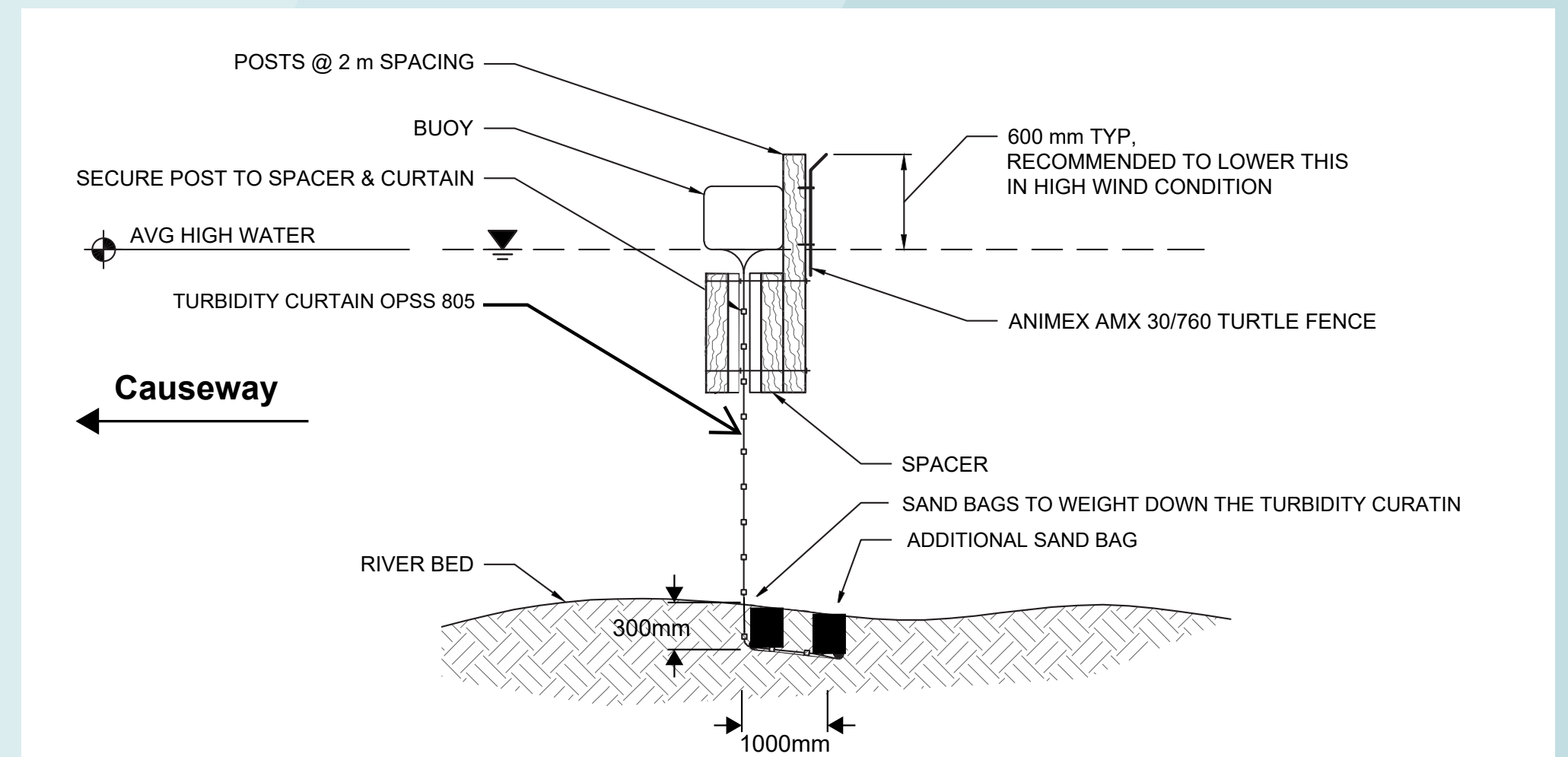
## Potential Effects and Mitigation Measures

### Blandings and Other Turtles

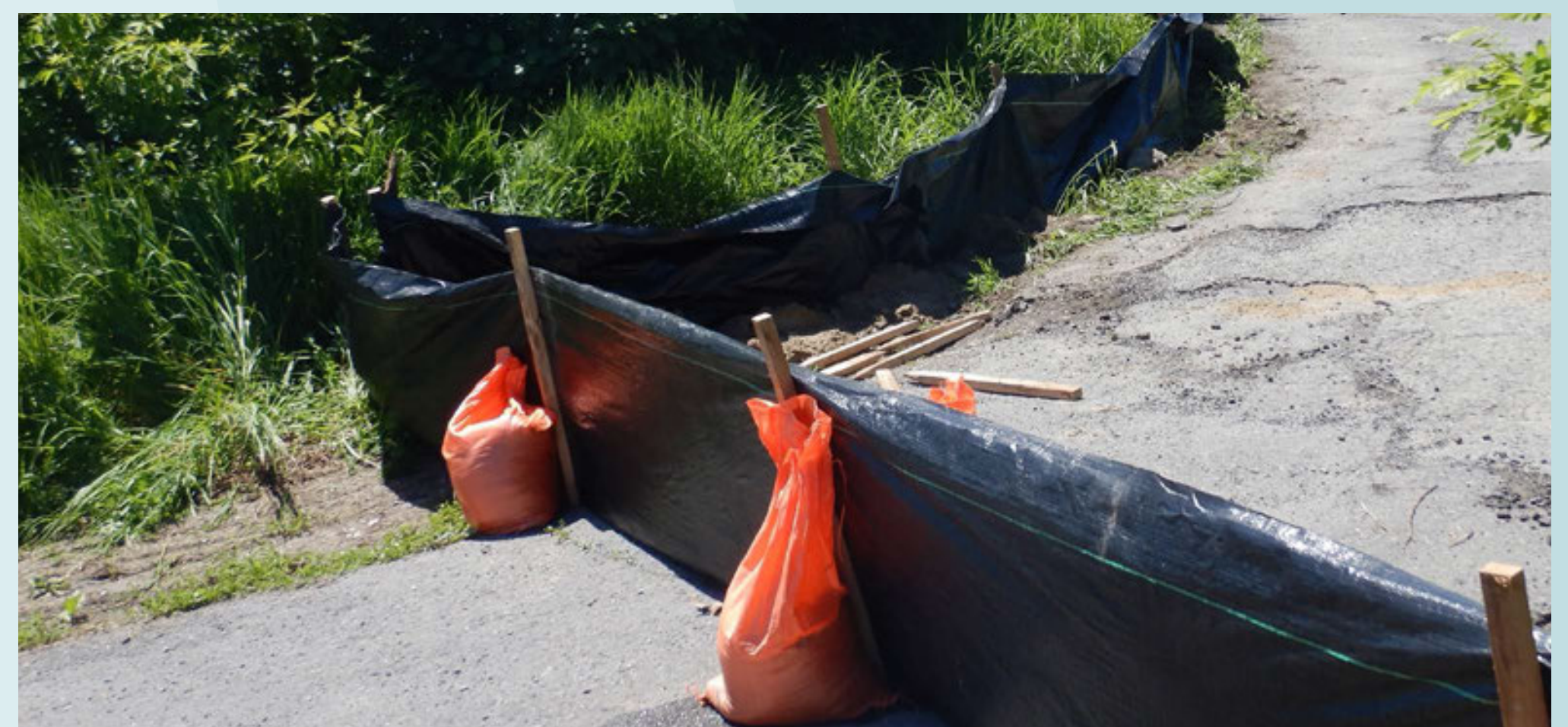
- To protect turtles an Aquatic Exclusion and Turbidity Curtain (AETC) will be installed in the river
- A turbidity curtain is a flexible, impermeable barrier to contain sediment in water. These curtains are generally weighted at the bottom to ensure sediment doesn't travel under the curtain and is supported at the top through a floatation system. The curtain will be installed completely around the work area.
- A turtle fence has been specially designed to attach to the turbidity curtain to prevent turtles from possibly entering the construction areas.
- A typical cross-section of the installation is shown herein. This AETC will be installed surrounding the entire Project Location with ends tied to five causeway eco-passages opening to direct aquatic wildlife and fish towards the openings or the main causeway opening.
- The ultimate intent of installing the AETC within the fall of 2019 is to exclude turtles from overwintering within the causeway footprint, in order to mitigate potential harm during winter installation.

### Other mitigation measures:

- Construction activities will be coordinated to either occur outside of certain times of the year or have protection measures in place to allow work to occur during sensitive times of the year
- The team will monitor the effectiveness and general conditions of the turtle fence and turbidity curtain in the River.
- Visual surveys will be done by on site personnel to ensure the turtle fencing is effective, and turtles are protected.
- Protocols will be in place to relocate turtles back into the river if necessary.
- After any significant weather event (such as high winds or heavy rain) the turbidity fence and turtle fence will be inspected to ensure they are functioning as intended.



Cross-Section of Aquatic Exclusion and Turbidity Curtain



# Terrestrial Environment

## Potential Effects and Mitigation Measures

### Field Investigations

- Terrestrial Ecological Assessments and Analyses were undertaken by Ecological Services in 2011
- Analyses found that the east side lands are of greater ecological value than the west and that the various construction options (temporary earth berm, dredging, and temporary work bridge) will have similar effects to wetland features.
- An Arborist Report was prepared in 2019 to collect a tree inventory, assess the impact of the Third Crossing Bridge construction and make tree protection recommendations.



### Cataraqui River Vegetation

Vegetation removal will be required during the construction of the Project. Although there are no significant Ecological Land Classification community types on the west side lands, vegetation along the Cataraqui River warrants robust protections to be implemented during construction. Accordingly, the following measures will be undertaken:

- surveys will be undertaken in advance of excavation activities to assess for any sensitive vegetation and tree species, the removal of shoreline vegetation will be minimized to the extent possible
- the landscape improvement works will be an opportunity for ecological restoration on the west side lands and ecological compensation on the east side lands
- a Natural Heritage Protection and Enhancement Plan will be prepared and include detailed design measures related to wetland restoration, aquatic habitat enhancements as well as stabilizing and rehabilitating the shoreline shallows.





# Terrestrial Environment Potential Effects and Mitigation Measures

## Tree Management

The tree management plan considers the use of cut trees by offering them to Indigenous nations as well as working with the past president of the Ontario Woodland Association to provide them with a limited number of trees.

As part of the tree management plan:

- the project team has been able to reduce the impact area and number of trees to be removed
- as part of the tree restoration plan, for every healthy tree taken down at least one, if not more, trees will be planted as compensation.

With respect to permits for this work, we have already received approval from the Ontario Ministry of Natural Resources & Forestry (MNR).

## Tree removal on the east approach

Since we started early works for the project:

- We have communicated with near neighbours on the east shore and interested residents on tree removal, tree management and restoration
- The project team met with about 15 residents to go on a guided walk to inform residents about tree removal on the east approach, the tree management plan, wildlife management, the development of our tree restoration plan and to provide a better understanding of the connectivity and paths on the east side.



# Aquatic Environment

## Potential Effects

Main Impacts assessed during the DIA process:

- Spawning Habitat loss or avoidance
- General / Feeding Habitat loss or avoidance
- Fish movement and migration patterns
- Entrapment or Mortalities because of Construction Activities

Impacted Habitat Primarily shallow, heavily vegetated habitat. Popular and sought-after fish species include; Panfish, Esoxs and Gars, and Largemouth Bass.

Majority of the Impacts Expected to be short term ( 2-3) years, during and immediately following construction:

- Temporary Loss of 3.26 ha of Aquatic Area as a result of the construction Causeway and trestle spans
- Permanent Loss of 225 m<sup>2</sup> of Aquatic Area as a result of Bridge Piers and Abutments



## Offsetting Measures

To reduce or offset the impacts, the project is:

- Creating 437 m<sup>2</sup> of shoreline habitat through the decommissioning and removal of the Music Marina Seawall, excavation of the sediment build-up on the western shore,
- Decommissioning the boat launch.
- The project has also committed to studying a portion of the adjacent Little Cataraqui Creek Watershed to identify future fish or fish habitat improvement locations.

The Construction footprint expected to return to similar state by 2028. To ensure long term goals are achieved 6 years of monitoring is planned with contingency measures built into legal permit requirements. Monitoring includes, fish usage, aquatic and shoreline vegetation recovery, tracking the return of the food web (i.e Benthic Invertebrates) as well as sediment and water quality monitoring.



# Proposed Plans, Additional Studies and Monitoring Measures

The Project Team is committed to being environmental stewards during the construction of the Project. Plans, procedures and monitoring measures have been developed to measure compliance with regulatory requirements and assist in avoiding or minimizing potentially adverse environmental effects.

## The following plans and procedures will be prepared during the detail design phase of the Project

- Feedback reports to document consultation efforts with the public, potentially affected Indigenous communities and other stakeholders;
- Review and approval of work plans by regulatory agencies will be prepared for any additional on-land and in-water fieldwork proposed within the Project Area;
- An offsetting plan will be prepared for an Authorization under the Fisheries Act along with contingency measures and reporting requirements;
- An aquatic vegetation post-construction monitoring program will be developed in consultation with DFO and Parks Canada.

## In addition, the following studies are proposed prior to construction of the Project

- A Scour Study will be undertaken to determine the effects of scour on the bridge piers based on local bed conditions as well as refinements to the proposed pier design, pier construction and riverbed restoration techniques;
- An Ice Loading Study will be undertaken to identify mitigation measures to minimize the effects of ice loading on the pier footing;
- The City and Point St. Mark residents will continue collaborations on traffic calming options;
- Riverbed sediments within the area of disturbance will be sampled prior to construction;
- Specific Project design elements will be further developed with stakeholders, members of the public and interested Indigenous communities. These will include the bridge and approach roadway design, design of the permanent bridge pier and deck, navigation channel span and, bridge lighting.

# Next Steps

## Additional Environmental Permits and Approvals

In addition to approval of the Municipal Class EA by the MECP in 2013 and the pending approval of the Detailed Impact Analysis (expected in 2019), the following additional permits and approvals are anticipated to be required for the Project and will be obtained prior to construction.

Permit/Approval	Responsible Authority
Authorization to Perform Work in/on/over/under the bed of the Rideau Canal pursuant to the Historic Canals Regulation	Parks Canada
Fisheries Act Authorization	Fisheries and Oceans Canada
Navigation Protection Act Notice of Works	Transport Canada
Permit to Take Water	Environment, Conservation and Parks
Environmental Compliance Approval	Environment, Conservation and Parks
Development, Interference with Wetlands and Alterations for Shorelines and Watercourses Permit	Cataraqui Region Conservation Authority

## Proposed Environmental Management Plans

Twenty-six Environmental Management Plans will be compiled and submitted for approval by relevant regulatory bodies, as appropriate.

Plans	Description
Environmental Management	Details the integration of all environmental management activities required for the construction of the Project into a single, coordinated, communicable plan
Air Quality and Dust Management	Identifies the air quality and potential dust requirements of the Project construction activities. The plan describes potential air quality issues and corresponding mitigation measures including dust control
Site Dewatering and Wastewater	Provides a description on how wastewater from dewatering operations will be managed and mitigated on-site
Spill Prevention and Emergency Response	Provides prevention measures, a spill response protocol, as well a monitoring and reporting procedure in the event of a release to the environment
Environmental Training and Awareness	Outlines the training program that will be implemented and associated training topics
Fire Protection	Provides procedures and communication protocol in the event of a fire onsite
Aquatic Resources Management	Outlines the impacts and required mitigation measures for the construction activities in the Project Area to protect aquatic species and their respective habitats
Fuel Management	Outlines how fuel will be stored and managed on site. It will also outlines measures to be implemented for the proper handling, storage and transfer of fuel to prevent any adverse impacts to the natural environment in the Project area
Hazardous Materials Management	Provides methods and procedures for the management, storage and disposal of hazardous materials on-site
Heritage and Archaeological Resource	Provides information on the heritage resources that are known within the Project Location, as well as to provide procedures on identifying and protecting heritage resources
Invasive Species Management	Outlines the invasive species known onsite and provide procedures for the management of invasive species onsite
Noise, Vibration, and Ambient Light Management	Outlines potential impacts to the environment resulting from noise, vibration and ambient light, as well as describes the site-specific mitigation measures
Site Restoration	Provides mitigation measures and procedures for all areas of the site that will be restored
Species at Risk Management	Identifies Species at Risk and their habitat, as well as provide strategies on how to protect and manage the species on site
Surface Water and Erosion and Sediment Control	Provides a description of the mitigation measures related to surface water erosion and sediment control, as well as the best management practices to be employed during Project construction. This plan will also provide a monitoring program to ensure measures are effective
Vegetation Protection	Describes the vegetation communities that are present within the Project Location and outlines mitigation measures for the protection of vegetation with the construction limits
Transportation Management	Provides a general overview of how transportation and traffic will be managed onsite and surrounding the site during construction. As well as federal, provincial and municipal guidelines
Waste Management	Provide Project objectives and procedures regarding how waste will be managed, stored and disposed of offsite
Wildlife Protection and Management	Outlines the Project activities that have the potential to affect wildlife and their respective habitat and describes mitigation and monitoring requirements, maintenance, and a monitoring program
Lighting	Supports Project lighting design. Specifically, to ensure Project operational requirements are met while minimizing adverse effects to wildlife, navigation and visitor experience
Turtle Management	Documents the measures and procedures that will be taken to prevent adverse effects to turtle species during Project construction
Monitoring and Offsetting	Outlines the mitigation, monitoring and offsetting requirements of the Project's Authorization under the <i>Fisheries Act</i>
Stormwater Management	Outlines the strategy and detailed design of the stormwater management works for the land features of the bridge crossing, which include the east and west roadway approaches, bridge structure and Highway 15 intersection improvements
Community Action	Establishes protocols for use by the City for notifying the general public of any service interruptions, and addressing public issues and concerns arising from bridge construction activities and the subsequent use and maintenance of the bridge
Visitor Safety	Establishes measures and procedures to ensure visitor safety during the construction phase of the Project
Soil Management	Outlines the soil management procedures of the Project.

**HATCH**

**SYSTRA**  
INTERNATIONAL  
BRIDGE  
TECHNOLOGIES

 **Kiewit**



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City of Kingston Third Crossing of the Cataraqui River - Parks Canada Environmental Impact Analysis  
Engagement Summary - November 18, 2019

# **Attachment G**

## **Comment/Response Log**

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H357883-83-240-0025, Rev. 0

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
1	7/4/2019	Email	Bridge Design	Is the 3rd crossing still on budget at \$180 million? If so, what cost reductions have been implemented? The switch from steel to concrete saved the contractor 25 percent- what other elements have been removed?	<p>Email Response: I am speaking with our project manager about this today and will have a more fulsome response this afternoon but some notable changes include:</p> <p>removing the structural arch toward the east approach, creating a visual under arch feature to highlight the canal, moving from steel to concrete in some of the pier locations, efficiencies in the road design moving from one lookout area on the east approach to two lookouts for more recreation opportunities.</p> <p>This is fully flushed out with Parks Canada but we're also considering some changes with respect to lighting on and under the bridge Greater connectivity with the pathway systems on either shore More turtle passage ways during construction Moving to a causeway trestle construction method - this isn't so much bridge design as how were going to do it.</p> <p>A lot of these changes are as a result of our on-going conversations with Parks Canada about our Detailed Impact Assessment. Is this the kind of information you were looking for? I will touch base again this afternoon with any more relevant information.</p>
2	9/19/2019	Email	Bridge Design	I would like to know what is meant by efficiencies in Road design is removing bike lanes narrowing of lanes or shoulders and the assessment if this is a safety impact The lookouts are they off the bridge as this was a selling feature in the Provincial ea / What at are the savings of all the changes vs impacts on safety or increase in environmental impacts on wetlands for construction is there more wetland impacted or less and how much more impacts. Lighting under the bridge I assume there will be only navigational aides for boating / on surface what are the impacts on drivers with removal of street lighting with respect to driver safety / how much is saved for removal / does lighting removal cause drivers to be impacted by lighting at each end ? le does the driver focus on the community lighting and become distracted and thus accident prone? What EA impacts and whether MOE are on board with the reductions given they approved the original concepts and mitigation / environmental mitigation measures	<p>By road efficiencies I am referencing to material, widths of lanes, etc. These things are all things being considered and explored with the project team. There are two look out areas on the east approach of the bridge and we are looking at one on the west approach as well. To your question on changes vs impacts, we're still very much in the environmental design phase so we are working on those elements in real time. We plan to have a report to Council in the fall with an update on the project overall with related information. To your question on lighting again this is an element we're working on with the team right now in consultation with Parks Canada. We will also have information on this aspect at our open house tonight from 5:30 - 7:30 pm at LCVI or if you can't make that time we will be posting the boards from the open house on our website for people to review as well.</p> <p>Again I am happy to coordinate a meetin in person or arrange a phone call with a technical person on our team to help further answer your questions here.</p>
3	9/14/2019	Email	How We Got Here	I am interested in the [open house] at LaSalle HS on Sept. 25. Can you please tell me what time it is at?	<p>Thank you for your email. Both open houses for the Detailed Impact Assessment of the bridge are drop-in and open to the public from 5:30 – 7:30 p.m. As a reminder the locations and dates are below.</p> <ul style="list-style-type: none"> <li>•Sept. 25 at LaSalle Secondary School at 773 Highway 15</li> <li>•Sept. 26 at L.C.V.I at 153 Van Order Dr.</li> </ul>
4	9/14/2019	Email	How We Got Here	Could you please provide the time of the public meetings at Lasalle SS and LCVI?	As a reminder the locations and dates are below.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
5	9/17/2019	Email	How We Got Here	I am in receipt of your 13 Sept. email notice. To fully understand the scope and complexities of the DIA, and in order to identify points worthy of clarification or suggestion, I should like a hard copy of the document. Please advise where I can collect one. As it is not mentioned in your email notice, I should also like to know the time of day you plan to hold your two open houses, in order I can schedule my day accordingly.	Thank you for the note, hope you've had a good summer always seems to go by too quickly. We appreciate the interest in the DIA and have received additional requests for printed copies as well. We are going to make printed copies available at City Hall and 1211 John Counter Blvd vs printing personal copies. Given the size of the document, 500 for the main section and appendices over 1,000 it wouldn't be prudent for us to print personal copies. You may recall we did this during the preliminary design as well. JCB may be an easier option for you because you can 'sign' the document out and review in a board room there for as long as you need. Sorry we're not able to accommodate a personal copy. In terms of timing, both open houses will be 5:30 pm - 7:30 pm.
6	9/17/2019	Email	How We Got Here	Could you please advise what time the the "3rd Crossing Open House" is taking place? Sept. 25 at LaSalle Secondary School at 773 Highway 15 > Time?	Email Response: "Thanks for your email. Both sessions are drop-in and open to the public from 5:30 – 7:30 p.m. As a reminder the locations and dates are below. •Sept. 25 at LaSalle Secondary School at 773 Highway 15 •Sept. 26 at I. C. V. I. at 153 Van Order Dr."
7	9/18/2019	Email	Connectivity	I am concerned at the resulting increased volume of traffic at the Point St Mark Drive-Hwy 15 intersection if the Gore Rd intersection is permanently closed under the new bridge design. This will dump increased traffic on the Point St Mark Drive- Hwy 15 intersection, already very busy at certain times with school buses, foot traffic to La Salle School and the strip malls, and motorists trying to beat the traffic lights. A very dangerous traffic hazard could be created, not to mention a possible development of the marina at Point St Mark Drive. Please keep me informed, so that concerns can be identified and addressed.	I wanted to follow up with you on our colleagues in transportation for the traffic monitoring. Most recently, transportation services monitored the AM peak traffic on Hwy 15 and Grenadier Dr. on September 24 from 6:55 a.m. until 8:20 a.m. and would not propose any changes to the traffic signal timings at this time. Although the traffic patterns have changed as a result of the Gore Road closure, the intersection of Hwy 15 @ Grenadier still meet the City's level of service standards that is comparable to many other intersections of this nature in Kingston. Please let me know if you have any further comments.
8	9/20/2019	Get Involved Site	Bridge Design	Keep it moving the more the delays the more its going to cost . Should have been build 20 years ago when it 25% of the cost it is now.  Disagrees: 1 Agrees: 6	Comment noted
9	9/20/2019	Get Involved Site	Environment	Yes all that is important but we need this built now not delayed !!!  Disagrees: 1 Agrees: 2	Comment noted.
10	9/20/2019	Get Involved Site	Environment	Air Quality going to be about the same cause the number of cars travelling across the rideau going to be the same just spread out over three crossing not two now  Disagrees: 1 Agrees: 1	It is expected that the addition of the Third Crossing will result in less traffic congestion, and hence idling of cars, and is expected to reduce GHGs due to transportation by reducing both travel time and travel distance. More information can be found in the Third Crossing Business Plan from 2017.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
11	9/21/2019	Get Involved Site	Environment	As we have just heard that we have lost 30% of our bird population in North America, it seems sad that we are taking away more of their habitat to suit human beings. Jane Jacobs also said to expand road ways means to expand the number of people who use cars. I know that it is frustrating for people driving to work, but it is disappointing that expanding on wet lands is our chosen solution.  Disagrees: 1 Agrees: 2	The creation of the bridge will in turn result in an increase in bird habitat for species such as barn swallows which nest on anthropogenic structures. The reduction in bird habitat within the woodlands (loss of 1.93 ha) and meadow/grassland areas (loss of 0.2 ha) is not expected to have a significant residual effects to the area as there is abundant retreat/alternative habitat within the Study Area that the 129 various bird species can utilize
12	9/20/2019	Get Involved Site	Environment	The birds will adapt to it and my even use it to nest and rest on.  Disagrees: 1 Agrees: 2	Comment noted.
13	9/20/2019	Get Involved Site	Environment	I believe the wildlife will adapt to the bridge after it is built. For about two years it will probably affect some of the wildlife but they will only move farther down or up away from the construction.  Disagrees: 1 Agrees: 2	Comment noted.
14	9/20/2019	Get Involved Site	Construction	Have to keep moving forward. Not wasting anymore time. The cost keep going up we do not want to have this slow it down or my cost cost over runs.  Disagrees: 1 Agrees: 1	Comment noted
15	9/20/2019	Get Involved Site	Construction	Keep it moving!! Wasting time is the worst thing we can do for this project. Governments change funding can be lost.  Disagrees: 1 Agrees: 1	Comment noted
16	9/19/2019	Email	How We Got Here	Can you please advise what format your open houses will take. Will there be a formal presentation similar to those taking place in the Fire Hall, or will it take the format of the table layouts presented at LSS for the design stages of the bridge?	Email Response: "It will be a similar format to the open houses we had during the preliminary design phase of the project, with different stations and opportunities for people to walk around, talk with the team, ask questions and provide your comments written and verbal. This open house we will largely be talking about our environmental work, construction method and mitigation efforts. We will also be talking about the bridge design evolution from EA to now however the finer elements of the design like the hand rail, lighting options and other more aesthetic details will be part of a separate community wide engagement on design features in the winter."
17	9/19/2019	Get Involved Site	Connectivity	Just wanted to let you know how very happy we are to see the start of the construction. We worry for our elderly neighbours with the congestion of the causeway and we can corroborate the decades worth of transportation studies that the third crossing is needed. Wishing you smooth sailing on the construction.	Email: Thank you so much for your email. It is always good to hear from residents about their excitement for the bridge.
18	9/20/2019	Email	How We Got Here	I received the media release concerning the Detailed Impact Assessment. However, despite looking for the past 45 minutes, I could not locate the DIA on the 3rd Crossing website. Could you send me the link to the DIA? In terms of alternate formats, what do I need to do to get a printed copy of the DIA. Also, I want to attend the public meeting but the media release did not include the times for the meeting. I looked for this on the 3rd Crossing website but could not find the times. It has been a week since the media release came out. Why are the times not listed on the website? I look forward to receiving a response.	Email Response: Time of meetings, links to documents online, and details regarding hard-copy pick up communicated.



Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
19	9/20/2019	Email	How We Got Here	Hoping I can pick up a borrower's copy of the DIA asap? I can't figure out what's online.	Email Response: "Thanks for the note. I have left a copy for you at the front desk of city hall with your name on it. If we get other requests for print versions I will need to ask for it back to give others an opportunity to review."
20	9/20/2019	Email	How We Got Here	I would like to review the Detailed Impact Assessment report. I understand it is approximately 1500 pages and would appreciate it in PDF format.	Email Response: Online location of PDF communicated. Email Response: Apologies for the delayed email here. There is an Appendix K, we were awaiting approval from Parks Canada to post the document. We received that approval late this afternoon so we will be posting the document tomorrow.
21	9/20/2019	Email	How We Got Here	Not wanting to be pedantic, but it's always been troubling to see the phrase 'Third Crossing'. It's simply not correct. This project will be a fourth crossing of the Great Cataraqui River within Kingston municipal boundaries.	Thanks for your comment. There will be a bridge naming campaign coming in the future that may interest you.
22	9/20/2019	Email	Environment	Concerning the report itself, Section 8, Monitoring and Follow-Up, we note under the majority of items detailed in Table 8-1, Completion Timing, it is stated 'To be approved by PCA prior to construction'. Can you please clarify what the current approval status is?	The Environmental Management Plan and Component Environmental Management Plans have been prepared based upon the DIA and have been submitted to Parks Canada for review.
23	9/20/2019	Email	How We Got Here	The hard copy you have provided does not include any of the Appendices, A to O. Thus we referred to the online versions you have posted, and note the Appendix K is missing. Is this an oversight, or is there no Appendix K?	Apologies for the delayed response. There is an Appendix K, we were waiting to get approval from Parks Canada to post it. We received that this afternoon and will be posting it tomorrow.
24	9/23/2019	Email	How We Got Here	Could I be added to the third crossing email list. I have been looking to see if the City has the layout of the project on line. Can you let me know if there is a site to visit.	Thank you for your email. I have signed you up for the project email list. I can also sign you up for an east or west side near neighbour specific list that informs residents living close to project construction about upcoming neighbourhood impacts. If you are interested in being on one of those lists, please let me know. I have also attached our latest newsletter informing residents about our current engagement and open houses that are this week.  In terms of layout for the project, those will be part of our open houses being held this week, Wednesday and Thursday. If you have a chance it would be great if you could come by and learn more about the project and meet the team.
25	9/25/2019	Open House Comment Card	Connectivity	Post picture boards on website please!	The open house boards are posted on the project website and can be downloaded for viewing here <a href="https://thirdcrossing.cityofkingston.ca/engagement/past-engagement">https://thirdcrossing.cityofkingston.ca/engagement/past-engagement</a>
26	9/25/2019	Open House Comment Card	Construction	The John Counter Street between Montreal Road and ASCOT Lane is <u>not</u> safe. Suggest filling the ditch to create more space and having school buses come in the Riverpark neighbourhood to pick up/drop off kids.	Comment noted. Pedestrian access along JCB is being addressed with the city.
27	9/25/2019	Open House Comment Card	Environment	I don't know how the City of Kingston will afford its portion of the Third Crossing Project. It scares me as a resident that we will inherit a huge debt and deficit as construction costs balloon due to unforeseen circumstances. The K-Rock Centre Project never achieved the financial targets for revenue that would have made it financially viable as proposed when designed and approved by City Council. I do not trust that the Third Crossing will come in on budget, just like the K-Rock Centre didn't. We will pay for the bridge for years and years.	The capital project funding for the bridge is based on an equal contribution from the federal, provincial, and municipal governments. The Government of Canada, the Province of Ontario and the City of Kingston are each contributing \$60 million. The City's contribution is \$60 million, of which \$30 million will be funded from development charges and \$30 million from municipal taxes. Many stress tests and risk assessments have been applied to make sure Kingston has the capability to handle this big financial project. The project will be monitored and assessed by the City through a Project Management Committee that will steer the project towards a successful completion.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
28	9/25/2019	Open House Comment Card	How We Got Here	If they build it... people will come.	Thank you for your comment.
29	9/25/2019	Open House Comment Card	How We Got Here	Please do as much myovision traffic data gathering and analytics on Highway 15/Gore/Point St. Mark traffic flow and direction as possible!	The City's Traffic Division will perform an appropriate amount of traffic monitoring to acquire data necessary for future decision making.
30	9/25/2019	Open House Comment Card	Bridge Design	We would like to cast a vote for full and open access at the end of Pt. St. Mark onto the bridge. Left, right onto and off the Bridge please! Not closed at all.	Comment noted
31	9/25/2019	Open House Comment Card	Connectivity	Please put more images on the website- including the draft concept east shore. Thanks.	The open house boards are posted on the project website and can be downloaded for viewing here <a href="https://thirdcrossing.cityofkingston.ca/engagement/past-engagement">https://thirdcrossing.cityofkingston.ca/engagement/past-engagement</a>
32	9/25/2019	Open House Comment Card	Connectivity	Right turn only on Point St. Mark Drive heading north seems like the best solution to avoid traffic increase in that community. The idea of a third crossing was not to increase traffic on point St. Mark.	The right turn only on Point St Mark Drive is one of the options that the project team will consider. The City will be closely monitoring the traffic patterns in the PSM area throughout the construction duration. The City will continue gathering data to support whether or not this closure will be permanent. The City will be reaching out to the residents and emergency services for feedback on the shortcutting options if this entrance is to be re-opened after construction is completed.
33	9/25/2019	Open House Comment Card	Bridge Design	I wholeheartedly support the bridge. My family is active and the connection for biking and running is going to be great. It will also be nice to relieve Hwy 15 and downtown causeway congestion.	Comment noted
34	9/25/2019	Open House Comment Card	Connectivity	Would prefer Point St. Mark to remain permanently closed and have emergency access only. Would like Highway 15 expanded to 4 lanes from 2 to 401 or at least add a lane going north from innovation(?) to 401.	Permanently closing Point St Mark Drive is one of the options that the project team will consider. The City will be closely monitoring the traffic patterns in the PSM area throughout the construction duration. The City will continue gathering data to support whether or not this closure will be permanent. The City will be reaching out to the residents and emergency services for feedback on the shortcutting options if this entrance is to be re-opened after construction is completed. Information regarding the widening of Hwy 15 from Hwy 2 to the 401 can be found at the City's website
35	9/25/2019	Open House Comment Card	Connectivity	Will there be stop lights at the intersection of John Counter and Ascot Lane for turning left?	Yes. There are traffic signals planned to be installed on Ascot Lane. This will provide full turning movements for the River Park subdivision, Village on the River, 917 Montreal Street and 646 John Counter Blvd.
36	9/25/2019	Open House Comment Card	Connectivity	Like to see Highway 15 wider to accept the amount of traffic that exists. Also would be great to close the Gore Road and Point St. Mark drive.	Permanently closing Point St Mark Drive is one of the options that the project team will consider. The City will be closely monitoring the traffic patterns in the PSM area throughout the construction duration. The City will continue gathering data to support whether or not this closure will be permanent. The City will be reaching out to the residents and emergency services for feedback on the shortcutting options if this entrance is to be re-opened after construction is completed. Information regarding the widening of Hwy 15 from Hwy 2 to the 401 can be found at the City's website
37	9/25/2019	Open House Comment Card	Connectivity	The design of the Point St. Mark Drive/Gore Road intersection is one of the most important traffic decisions related to the Third Crossing Project. Please ensure due diligence is done with this decision to prevent short-cutting and speeding cars on Point St. Mark Drive.	The City will be closely monitoring the traffic patterns in the PSM area throughout the construction duration. The City will continue gathering data to support whether or not this closure will be permanent. The City will be reaching out to the residents and emergency services for feedback on the shortcutting options if this entrance is to be re-opened after construction is completed.
38	9/25/2019	Open House Comment Card	Bridge Design	Thank you to all the teams for their friendly access... very interesting/informative! Can't wait to be one of the first to cross.	Comment noted.
39	9/25/2019	Open House Comment Card	Bridge Design	Build it now! We need it.	Comment noted
40	9/25/2019	Open House Comment Card	Bridge Design	Good Presentation. Get 'er done.	Comment noted
41	9/25/2019	Open House Comment Card	Bridge Design	Excellent open house. I'm happy with it all.	Comment noted
42	9/25/2019	Open House Comment Card	How We Got Here	So glad you are saving the lovely old trees and stone wall on Gore Road. Good presentations tonight and consultants and city staff patient to answer questions.	Thank you for your comment.

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43	9/25/2019	Open House Comment Card	Connectivity	What about a roundabout at Highway 2 and Highway 15? Less idling! Please. Thanks.	A roundabout was an option that was explored as part of the Hwy 15 environmental assessment and preliminary design. Please visit the City's website for more information on Hwy 15.
44	9/25/2019	Open House Comment Card	Connectivity	I understand that Highway 15 from Gore Road to Highway 2 is recommended to be widened to 5 lanes (2 each way <u>plus</u> a centre turning lane). This is going before Council shortly and I want Councillor Buhman (?) [probably Councillor Ryan Boehme] to speak out loudly for this to occur!	The Hwy 15 environmental assessment and preliminary design has suggested the implementation of a 5 lane roadway from Gore Road to Hwy 2. Councillor Boehme has advocated for the widening to be carried out. Please visit the City's website for more information about Hwy 15.
45	9/25/2019	Open House Comment Card	How We Got Here	I wish to commend the city for how they have communicated with residents in an open and transparent way at every juncture and on a continuing basis about this Project which is so very important to the city as a whole.	Thank you for your comment.
46	9/25/2019	Open House Comment Card	How We Got Here	Safety concerns with west side. Kids jumping over cement barriers.	The project team is looking to increase the safety of the west shore area that is frequented by pedestrian activity. Thank you for sharing your concerns with us to address to work with the contractor to remedy.
47	9/25/2019	Open House Comment Card	Bridge Design	Is the parkland to the north going to remain untouched?	Both shores will have elements of landscaping applied which will be presented to the community in 2020.
48	9/25/2019	Open House Comment Card	How We Got Here	Glad to see the various indigenous groups who have been consulted so far... BUT- what about consulting local indigenous people <u>living in</u> Kingston- a [Cataraqui] Grandmother!	The Federal Duty to Consult and Accommodate process has been progressing between leaders of Indigenous Nations and the City for the duration of the Third Crossing Project. The project is nearing the time to begin involving more of the local indigenous voice in conjunction with Indigenous Nation leaders voices for elements that help tell the cultural and historical stories of the project area. The project team looks forward to welcoming the local voice as we begin working on the shore land elements.
49	9/26/2019	Open House Comment Card	Connectivity	The bridge will increase congestion. Montreal St. is backed up all the way to downtown and this will just make it much worse.	The Third Crossing traffic studies that were completed in 2017 determined that the Level of Service for Montreal Street will meet the City's standard for traffic congestion. Please visit the City's Third Crossing document library for more information.
50	9/26/2019	Open House Comment Card	Construction	When is the Wolfe Island Ferry work happening?	Please contact the Ministry of Transportation regarding this inquiry since it's not a City of Kingston project.
51	9/26/2019	Open House Comment Card	Connectivity	Two concerns: 1) Combining bicycles and pedestrians is very dangerous to pedestrians. Kingston cyclists rarely warn of their approach. 2) Exiting 722 and 766 John Counter requires a traffic light at Maple St. Thank you.	Thank you for your concerns. The project team will share these suggestions with the Active Transportation department and the Traffic Division for consideration.
52	9/26/2019	Open House Comment Card	Bridge Design	I am very concerned re: snow removal and preventing salt and sand from getting into the water. No one at this station can answer the question.	Typically plowing will occur to maintain level of service of both the roadway and the multi-use path. Traffic portion of the bridge is between concrete barriers. Once snow accumulates over time/days, the City of Kingston department of Public Works will use removal techniques to physically remove snow and send it to the City's existing snow dump location. Current drainage system will contain all de-icing chemicals. On the multi-use path snow will be removed to concrete barrier where there is drainage system on it that will contain de-icing chemicals used for melting snow.
53	9/26/2019	Open House Comment Card	Environment	It's not just the nesting phase of migrating birds that's a concern. It is not uncommon to see 200-300 migrating waterfowl on the river for a number of days and usually [approximately] 75 swans hang around the bridge area for 2-3 weeks in October.	Migratory waterfowl monitoring is planned for the fall of 2019 and the spring of 2020 after ice melt to document the usage of the study area in the vicinity of the bridge.

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54	9/26/2019	Open House Comment Card	Environment	<p>What about the people who live along the river?</p> <p>-Noise has a huge impact on mental health.</p> <p>-What about dust from the dumping of rock?</p>	<p>Noise modelling was conducted for both construction noise and operations noise. The noise barrier currently under construction are intended to help with construction related noise and will be used for operations noise.</p> <p>Dust is noted as a concern, an Air Quality and Dust Management Plan has been developed based upon the mitigation measures identified in Section 4 of the DIA. The plan includes reduction of equipment idling, control of fugitive dust emissions from materials through covers on stockpiles and trucks, wetting of surfaces, controlling vehicle and equipment speeds, and cleanliness of site road and adjacent city streets.</p>
55	9/26/2019	Open House Comment Card	Environment	<p>I do not understand how snow and ice will be removed from the bridge without spillage.</p> <p>-How can snow be stored on the pathway?</p> <p>-Can pedestrians and cyclists access the bridge all year?</p>	<p>The DIA Appendix B Section 5.1.1 has the winter design provisions and Section 5.1.2.3 has the winter operations plan.</p> <p>Essentially the bridge deck is designed to allow efficient snow removal from both the road and multi use path. The bridge deck is sloped towards drains at the concrete barrier between the road and the MUP to direct snowmelt to the onshore stormwater management facilities. Snow on the pathway can be removed by blowing over the barrier into trucks for removal off the bridge.</p> <p>Pedestrians and cyclist will be able to access the bridge year round</p>
56	9/26/2019	Open House Comment Card	Environment	<p>What about traffic calming measures on the west side? Over 800 people live near the construction site.</p>	<p>Staging of the west approach will maintain the existing movements on Montreal Street and John Counter Blvd. on the approaches to the construction site. John Counter Blvd east of Montreal Street will include single lane movement to/from Ascot Lane and new access to the apartments on the south side as well as access for construction vehicles to the west approach to the new crossing. Construction traffic will be oriented to/from the north via Montreal St for the most part to access the highway. Additional movements of materials and/or excavation/fill materials may be required from time to time that may require trucks to use alternate routes. The City will be advised of these requirements in advance during construction and additional signage and road maintenance may be undertaken as required by the City. Advisory signage is being provided on the Montreal St and John Counter Boulevard approaches to the work zone to advise of construction zone ahead and truck turning movements.</p>
57	9/26/2019	Open House Comment Card	Environment	<p>Truthfully how much animal mortality will there be?</p>	<p>It is difficult to say if and how many animals may be affected by the construction. The IPD has developed an Environmental Management Plan, along with Component Environmental Management Plans, that address exclusion of wildlife from the construction area, timing of works to reduce the chance of wildlife mortality due to construction activities, monitoring of our site on water and on land to locate and remove wildlife, in accordance with established best management practices, to reduce the chance of wildlife mortality.</p>
58	9/26/2019	Open House Comment Card	How We Got Here	<p>I have been concerned re: "meaningful" consultation- public meetings have been informational and "sales jobs" all the way along the process. Public concerns are hushed off and feel token.</p>	<p>As part of the Detailed Impact Assessment process residents were able to submit comments over 30 days either online, in-person, at the open houses, over the phone or through email. All comments that are received by the City are reviewed and considered by the project team and will be posted publicly for residents to see how we considered and/or addressed them.</p>

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59	9/26/2019	Open House Comment Card	Construction	River Park- City does not plow or maintain our streets in River Park (owners responsible). Traffic has increased as Kingstonians are wanting to view what is going on re: Bridge.	Comment noted
60	9/26/2019	Open House Comment Card	How We Got Here	Coming from River Park to continue on Counter, a small access for sidewalk has been made of stones etc. It is not user friendly for a walker pushing in dirt from bus stop etc. Was using roadway (paved).	The City is making preparations to install a walkway to help increase the safety of pedestrians along John Counter Blvd throughout the duration of construction.
61	9/26/2019	Open House Comment Card	Connectivity	Bicycle/Pedestrian Trail (K8P). -Make anti-car gates more bicycle friendly, centre the bike access in the middle of the path, put the car/truck gate off to the side since maintenance vehicles go past the gate far more rarely than pedestrians, bikes.	Thank you for your concerns. The project team will share these suggestions with the Active Transportation department for consideration and possible implementation into the Third Crossing project.
62	9/26/2019	Open House Comment Card	Connectivity	Great communication and visual session!!! Thank you!!	Thank you for sharing your comments with the project team.
63	9/26/2019	Open House Comment Card	Connectivity	Great information on connectivity, would be interested in more information on bus routes.	The development of transit routes that will be using the Third Crossing are underway. It is anticipated that transit express and conventional transit service will be using the Third Crossing as part of their service delivery. Please continue to visit the City's webpage for more information as the transit route development continues in the future.
64	9/26/2019	Open House Comment Card	Construction	Rock dust is toxic. I was told no plans to wash rocks in aggregate before they are put in river.	<p>Rockfill for the third crossing project is sourced locally, and the rock that will be used occurs naturally along the existing shoreline of the Cataraqui River and Lake Ontario. This rock used is not toxic.</p> <p>The rockfill material for the mainline of the causeway (which represents the majority of material required for Causeway Construction), will be quarried, crushed in a primary crusher (jaw run) to eliminate everything above 150mm, and screened to reduce fines, and transported to the project. Gradation testing will be carried out at the Quarry to ensure consistency of product. Placement methods on site consist of delivery and dumping the quarried material on to the Causeway (above the water), and the dozer will work the material out and through the end of the causeway to avoid end dumping in water. End dumping in water would allow segregation of the rockfill material resulting in poor geotechnical performance. This method of placement working the material through the embankment has proven to be effective at maintaining turbidity levels within the specified limits during embankment construction even with unprocessed shotrock.</p> <p>The rockfill for the causeway will be sourced locally. The rockfill has been designed to:</p> <ol style="list-style-type: none"> <li>1. ensure stability of the causeway under various load conditions,</li> <li>2. to facilitate the piling operation (temporary and permanent casings will be installed through the causeway finger material)</li> <li>3. to ensure that turbidity limits are always met by minimizing the introductions of fines into the river</li> <li>4. to meet the specification of fill on the project such that the material can be reincorporated into the on shore approaches</li> <li>5. to be not too oversized to present a challenge achieving a precise excavated level when the causeway is removed</li> </ol> <p>The rockfill for the fingers in the area around the drilled shafts will be quarried, crushed in a primary crusher (jaw run) to eliminate everything above 150mm, crushed in a secondary (cone) to eliminate everything above 50mm, screened to reduce the fines, and transported to the project.</p>

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65	9/26/2019	Open House Comment Card	Bridge Design	Different bridge design needs to be addressed. The straight concrete beams are limited by the compressive strength of concrete.	Various options were considered and the selected NU precast concrete girders address the structural requirements that are needed for the bridge.
66	9/26/2019	Open House Comment Card	Bridge Design	Re: Walking Trail Is there enough room under the 401 bridge (overpass) to add walk trails to expand trail to the north of the 401 (between Montreal St. and Highway 15)?	The 401 is owned and managed by the Government of Ontario. The height underneath the 401 bridge provides 6.7 meters of vertical clearance.
67	9/26/2019	Open House Comment Card	Bridge Design	Love the protected multi-use pathway open to bikes. Great idea!!! So important to encourage active transport.	Comment noted.
68	9/26/2019	Open House Comment Card	Bridge Design	The road traffic and pedestrian/cyclist traffic need to be separated vertically. Allowing the full 15.6m width for road traffic allowing 3 to 4 lanes.	Separating pedestrian and vehicular traffic as double decker bridge was explored in earlier phases of the project. Kingston City Council determined in 2017 that the Third Crossing will be two lanes of car traffic along with a separated multi-use pathway. The City's 2017 Third Crossing Business Plan provides more information regarding roadway capacity and future technologies such as <u>autonomous vehicles</u> .
69	9/26/2019	Open House Comment Card	Bridge Design	Making the concrete barrier on the bridge deck moveable, will allow future changes possible.	Having a movable traffic barrier was explored in earlier phases of the project. Kingston City Council determined in 2017 that the Third Crossing will be two lanes of car traffic along with a separated multi-use pathway. The City's 2017 Third Crossing Business Plan provides more information regarding roadway capacity and future technologies such as autonomous vehicles.
70	9/26/2019	Open House Comment Card	Bridge Design	The temporary causeway for construction needs to be revised to get a better method of pier construction.	The project team reviewed many different variations of construction methodologies. The depth of bedrock, amount of overburden and the shallow water all pointed to the rock causeway as being <u>the best method for construction</u> .
71	9/26/2019	Open House Comment Card	Bridge Design	The pedestrians and cyclists should be elevated under or above the main automobile deck. Under the main deck provides additional protection from the elements and automobile tire splash.	Separating pedestrian and vehicular traffic as double decker bridge was explored in earlier phases of the project. Kingston City Council determined in 2017 that the Third Crossing will be two lanes of car traffic along with a separated multi-use pathway. The City's 2017 Third Crossing Business Plan provides more information regarding roadway capacity and future technologies such as <u>autonomous vehicles</u> .
72	9/26/2019	Open House Comment Card	Bridge Design	Surface splash from automobiles and motorized vehicles, snowplows need to be adequately addressed for pedestrians.	Traffic barrier is separating pedestrians from vehicle traffic. Public Works is cognizant of snow clearing splash during their operations.
73	9/26/2019	Open House Comment Card	Bridge Design	The number of spans is excessive with the 48m concrete beams. Steel/concrete combinations can make the spans longer so less piers, less habitat disruption.	The project team reviewed many different variations of span versus pier spacing and sizing. Larger spans increase the size of the piers which increases the size of heavy equipment to be used for installation. The heavier the equipment and girder lengths, the larger the in-water rock causeway
74	9/26/2019	Open House Comment Card	Bridge Design	The use of composite materials for surface and sub-surface structural elements needs to be considered.	For the main span there is a composite section (steel/concrete) used.
75	9/26/2019	Open House Verbal Comment	Connectivity	Concern with short-cutting traffic within Point St. Mark neighbourhood.	The City will be closely monitoring the traffic patterns in the Point St. Mark area throughout the construction duration. The City will continue gathering data to support whether or not this closure will be permanent. The City will be reaching out to the residents and emergency services for feedback on the shortcutting options if this entrance is to be re-opened after construction is completed.
76	9/26/2019	Open House Verbal Comment	Connectivity	Request to have limited access at intersection of Point St. Mark and Gore Rd.	The City will be closely monitoring the traffic patterns in the Point St. Mark area throughout the construction duration. The City will continue gathering data to support whether or not this closure will be permanent. The City will be reaching out to the residents and emergency services for feedback on the shortcutting options if this entrance is to be re-opened after construction is completed.

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77	9/26/2019	Open House Verbal Comment	Connectivity	Request for additional signage on Highway 15 to avoid traffic entering Gore Rd. which is currently closed.	we thanked this resident for their comment and mentioned that additional signage has been installed on Hwy 15. One additional sign was installed on Hwy 15 north of Gore Rd and one south of Gore Rd. If we continue to hear from residents we will look into putting another sign.
78	9/26/2019	Open House Verbal Comment	Construction	Concern with dust within Riverpark subdivision.	<p>Rockfill for the third crossing project is sourced locally, and the rock that will be used occurs naturally along the existing shoreline of the Cataraqui River and Lake Ontario. This rock used is not toxic.</p> <p>The rockfill material for the mainline of the causeway (which represents the majority of material required for Causeway Construction), will be quarried, crushed in a primary crusher (jaw run) to eliminate everything above 150mm, and screened to reduce fines, and transported to the project. Gradation testing will be carried out at the Quarry to ensure consistency of product. Placement methods on site consist of delivery and dumping the quarried material on to the Causeway (above the water), and the dozer will work the material out and through the end of the causeway to avoid end dumping in water. End dumping in water would allow segregation of the rockfill material resulting in poor geotechnical performance. This method of placement working the material through the embankment has proven to be effective at maintaining turbidity levels within the specified limits during embankment construction even with unprocessed shotrock.</p> <p>The rockfill for the causeway will be sourced locally. The rockfill has been designed to:</p> <ol style="list-style-type: none"> <li>1. ensure stability of the causeway under various load conditions,</li> <li>2. to facilitate the piling operation (temporary and permanent casings will be installed through the causeway finger material)</li> <li>3. to ensure that turbidity limits are always met by minimizing the introductions of fines into the river</li> <li>4. to meet the specification of fill on the project such that the material can be reincorporated into the on shore approaches</li> <li>5. to be not too oversized to present a challenge achieving a precise excavated level when the causeway is removed</li> </ol> <p>The rockfill for the fingers in the area around the drilled shafts will be quarried, crushed in a primary crusher (jaw run) to eliminate everything above 150mm, crushed in a secondary (cone) to eliminate everything above 50mm, screened to reduce the fines, and transported to the project.</p>
79	9/26/2019	Open House Verbal Comment	Connectivity	Concern with volume of construction traffic and impact on access to Riverpark subdivision.	Access to Riverpark will be open throughout the duration of construction. There will be increased traffic on John Counter during construction activity. The contractor's traffic plan has accounted for priority to be given to Riverpark residents to limit impact of construction activity. There may be times of temporary shutdowns during certain activities such as paving or line painting.
80	9/26/2019	Open House Verbal Comment	Environment	Request to limit the number of tree removals necessary to support construction on east side of Cataraqui River.	Through development of the design the limits of construction have been reduced from what was shown during the preliminary design to limit the number of trees removed. In particular, trees along the south side of the east approach will be retained and the access to the east approach is placed within the footprint of the permanent bridge approach.
81	9/26/2019	Open House Verbal Comment	Construction	Request to investigate possibly submerged vehicle or boat upstream of the project area. Concern that object could impact future bridge.	Comment Noted. The project area has been reviewed and no submerged vehicle has been observed

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82	9/25/2019	Open House Verbal Comment	Connectivity	Request to post display boards online.	In-person response: Yes, the City is making preparations to upload the boards on the website as soon as possible.
83	9/25/2019	Open House Verbal Comment	How We Got Here	Discussion with a resident regarding indigenous consultation on the display board (see comment #61). Resident wanted to know why the local groups haven't been consulted, and why the Cataraqui Grandmothers group isn't on the boards. Local groups want to be invited to discuss opportunities for the Third Crossing, aside from Federal processes.	Explained that team has been following the Federal process and that it is up to the government structures of each nation on how they communicate duty to consult info with their neighbours. The Third Crossing team has been in discussion with the culture department and are looking to increase the engagement opportunities with local residents and groups. The Project team has been focusing on DIA and technical elements for 2019 and once the DIA is processed, the focus can shift to user experience and public engagement opportunities. The resident was encouraged to write their comments and submit for the team's review.
84	9/25/2019	Open House Verbal Comment	Connectivity	Residents have expressed short cutting concerns when the bridge opens coming from the west and from Hwy 15 north leg. Residents have observed a reduction of traffic in the PSM area since Gore Road closure because cars coming south on Hwy 15 can no longer use PSM to bypass the stretch of Hwy 15 between Gore and Grenadier.	In-person response: The City will be closely monitoring the traffic patterns in the PSM area throughout the construction duration. The City will continue gathering data to support whether or not this closure will be permanent. The City will be reaching out to the residents and emergency services for feedback on the shortcutting options if this entrance is to be re-opened after construction is completed. Haven't noticed traffic issue at Grenadier traffic signals.
85	9/25/2019	Open House Verbal Comment	Connectivity	Expressed a need for frequent traffic counting in neighbourhood to test if closure will be permanent.	The City will be closely monitoring the traffic patterns in the Point St. Mark area throughout the construction duration. The City will continue gathering data to support whether or not this closure will be permanent. The City will be reaching out to the residents and emergency services for feedback on the shortcutting options if this entrance is to be re-opened after construction is completed.
86	9/25/2019	Open House Verbal Comment	Connectivity	Request for more info and what the process will be for answering the question of whether Gore Rd. will be permanently closed.	The City will be closely monitoring the traffic patterns in the Point St. Mark area throughout the construction duration. The City will continue gathering data to support whether or not this closure will be permanent. The City will be reaching out to the residents and emergency services for feedback on the shortcutting options if this entrance is to be re-opened after construction is completed.
87	9/25/2019	Open House Verbal Comment	Connectivity	Request to keep the stone wall along the sidewalk.	The stone wall will remain in place and the required noise wall will be installed on the north side of the existing stone wall as well as the majority of trees in this boulevard.
88	9/25/2019	Open House Verbal Comment	Connectivity	Going under bridge on MUP could be uncomfortable for some folks at night time.	Thanks for expressing your concern about going under the bridge may not be comfortable for some folks. The pathway system is designed to have a secondary route that leads to the intersection of Point St Mark at Gore Road. The current design is proposing a set of traffic signals where pedestrians can cross Gore Road safely. Asked about archaeology area on the east shore and whether the trees will remain in that area.
89	9/25/2019	Open House Verbal Comment	Connectivity	Asked about archaeology area and whether the trees will remain in that area.	Yes. The trees will be remaining in the known archaeology area as a method of preservation of the site.
90	9/25/2019	Open House Verbal Comment	Connectivity	A few questions about west shore at Ascot- are there signals?	Yes. There are traffic signals planned to be installed on Ascot Lane. This will provide full turning movements for the River Park subdivision, Village on the River, 917 Montreal Street and 646 John Counter Blvd.



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91	9/25/2019	Open House Verbal Comment	Connectivity	When is Highway 15 going to be widened? Current traffic on Highway 15 is very congested and the widening needs to happen.	The Hwy 15 EA is still under review and has not been presented to Kingston Council. There is incentive to waiting for the Third Crossing to be implemented so that new transit and active transportation services can be utilized to help reduce traffic on Hwy 15. The residents were encouraged to submit their concerns on the comment cards.
92	9/26/2019	Open House Verbal Comment	Connectivity	Question about traffic flow on west side, and wanting to confirm traffic signal is being installed on JCB at Arscott.	Yes. There are traffic signals planned to be installed on Ascot Lane. This will provide full turning movements for the River Park subdivision, Village on the River, 917 Montreal Street and 646 John Counter Blvd.
93	9/26/2019	Open House Verbal Comment	Connectivity	Several comments agreeing with the need for MUPs linking to K&P on the west side. Questions about the timing of construction and implementation.	Residents were advised that the designs are currently in the concept stage and that when designs are completed budgets will be prepared and submitted to Council in 2021, with construction to follow approval.
94	9/26/2019	Open House Verbal Comment	Connectivity	Many comments and concerns about cut through traffic via Point St. Mark and the need to prevent this.	Asked that they submit their comments in writing with the materials provided.
95	9/26/2019	Open House Verbal Comment	Bridge Design	Several comments supporting the need for paths to and around the bridge.	Pathway connections on both the east and west shores will be part of the overall connectivity of the project area. Elements of the Waterfront Master Plan will be the starting point for incorporation for the trail network.
96	9/26/2019	Open House Verbal Comment	Connectivity	Several questions and comments related to the need for additional lanes on Highway 15 both north and south of Gore. People are using Point St. Mark Drive due to congestion on Highway 15.	Discussed/advised them of the current EA process and that the results of the EA had not yet been presented to Council. I informed them that staff wanted to determine the impact (positive) that the 3 <sup>rd</sup> crossing bridge may have on HWY 15 traffic and that the updated traffic counts would need to be considered prior to sending to Council which of course would be after there was traffic history with the bridge in place.
97	9/26/2019	Open House Verbal Comment	Connectivity	Most of the interest related to traffic impacts to Point St. Mark Drive.	I asked that they submit their comments in writing with the materials provided
98	9/25/2019	Open House Verbal Comment	Environment	When are the other 18 bat houses being installed?	In-person response: Bat houses will be installed before next May 1st. We are working with the landscape design to locate those within the library lands and with the CRCA for alternative locations in the Kingston area that would benefit from bat houses.
99	9/25/2019	Open House Verbal Comment	Environment	Two beavers spotted in the river along the east shore south of the bridge alignment that are felling trees on private property.	Comment noted. The DIA addresses impacts to semi-aquatic mammals in Section 3 as well as mitigation measures in Section 4 for all wildlife to reduce the impacts on these species. It is not expected for construction activities to encourage beavers.
100	9/25/2019	Open House Verbal Comment	Environment	Number of compliments received regarding the reduction of east approach footprint area to reduce the number of trees removed both south of the bridge alignment and in the library lands.	Comment noted.
101	9/25/2019	Open House Verbal Comment	Environment	Questions on the location and design of the east approach stormwater management facilities.	The east stormwater management facility will be on the north side of the east approach and will consist of a "train treatment" approach with wide vegetated ditches, a dry pond, and an oil grit separator.
102	9/25/2019	Open House Verbal Comment	Environment	Compliments on how through the Environmental background, mitigation, and monitoring plans are presents, the commenter's concerns were dissipated and they were satisfied by the level of focus on the environment.	Comment noted.
103	9/25/2019	Open House Verbal Comment	Environment	Question with respect to use of lighting that reduces light off the bridge?	In-person response: Yes, full cutoff luminaries with LEDs for the road/MUP lighting.
104	9/26/2019	Open House Verbal Comment	Environment	Several questions looking for clarification on the noise wall, causeway material, and reduction of footprint.	In-person response: Explained that the noise walls are being installed first to help attenuate construction noise in addition to noise mitigation during operation. Causeway material will be reused for the east approach, and as the design has progressed the overall footprint has shrunk, which has reduced the number of trees to be removed.

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105	9/26/2019	Open House Verbal Comment	Environment	Question about the turtle protection on the west shore. Noted that the turtles nest north of the site.	In-person response: Talked about the fence installed in may to restrict turtles from entering the construction site.
106	9/26/2019	Open House Verbal Comment	Environment	Questions regarding timing of the arborist report and the tree removals.	In-person response: Clarified that the arborist report was complete in January 2019, removals began in March 2019.
107	9/26/2019	Open House Verbal Comment	Environment	Will the project continue to go ahead if the Liberals do not win the election?	In-person response: Project is fully funded by all three levels of government.
108	9/26/2019	Open House Verbal Comment	Bridge Design	Roadway width should have been wider to allow for future (>50 years) traffic projection, plus use of pedestrian path under deck.	In-person response: Communicated that the number of lanes was based on traffic projections.
109	9/26/2019	Open House Verbal Comment	Bridge Design	Design of the main span piercap should have a sloped face for ice loads.	In-person response: True having a sloped face for the main bridge would allow to reduce ice force transferred to shafts. We said that this is under discussion internally and geometry of main bridge piercap is still under review.
110	9/26/2019	Open House Verbal Comment	Bridge Design	Questions about the design life of the elastomeric bearings.	In-person response: Elastomeric bearings are to be replaced approximately every 35 years.
111	9/26/2019	Open House Verbal Comment	Bridge Design	Causeway stability with the peat layer.	In-person response: commenter was directed to the construction station.
112	9/26/2019	Open House Verbal Comment	Connectivity	Did the project team consider roundabouts?	Yes, the project team looked at placing roundabouts at Ascot Lane, Point St Mark, and Highway 15. All three locations did not meet the design criteria for safely using roundabouts. The major reason was limited land area since all three locations are near private property and existing houses.
113	9/26/2019	Open House Verbal Comment	Connectivity	There are going to be a lot of dump trucks and dust being generated.	There will be many trucks to bring in rock material to build the rock causeway in the water. The contractor will use best efforts to minimize the dust from the causeway construction but there will still be dust.
114	9/26/2019	Open House Verbal Comment	Connectivity	Is the Wellington Street extension being proposed south of the Railway?	The WSE was deliberated at Kingston Council where they decided that the WSE south of railway was not necessary. Made mention of the recent North King's Town study and objectives of that study.
115	9/26/2019	Open House Verbal Comment	Connectivity	When are all the trails and connection to Belle park and the KP going to happen?	The project team is working closely with internal City departments on coordinating the design and possible construction of the adjacent trail projects so that they can all be ready to go when the Third Crossing is completed. The goal is to have all the connections open for the ribbon cutting day of the Third Crossing.
116	9/26/2019	Open House Verbal Comment	Bridge Design	Why was the bridge design changed? Why wasn't this shared with City Council?	<p>The 2012 Environmental Assessment proposed three different construction methods that could be used to build the permanent bridge which would need to be explored further during detailed design. The three methods included using a dredged channel and marine barges; using a temporary steel temporary work bridge; and using a temporary in-water rock berm. At that time, the final determination of selecting the most appropriate and feasible method would be best determined when a contractor would be selected for the project. The IPD team is a multi-party team led by Kiewit, Hatch, and Systra working in Partnership with the City of Kingston for the Third Crossing's validation, detailed design and eventual construction. The validation phase determined what type of bridge will be built, how it will be built, and the location of major structural elements. Some of the improvements that have added value to the project include:</p> <ul style="list-style-type: none"> <li>• Reducing the length of the main span from 150m down to approximately 95m</li> <li>• Addition of an arch that is under the bridge in lieu of the former above-deck arch;</li> <li>• Majority of bridge spans will be made of concrete rather than steel;</li> <li>• The main span and two back spans will be steel girders supporting the concrete deck;</li> <li>• Two smaller look outs along the south side elevation</li> <li>• Use of an in-water rock berm for construction access</li> </ul> <p>These design changes have added value to the project by increasing constructability, service life, and aesthetics and determined that the project can be built within the \$180 million dollar approved budget</p>

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117	9/26/2019	Open House Verbal Comment	Construction	Why was construction access changed?	A second round of site investigation during the validation phase that focused on the overburden determined that the silty clay did not have the capacity to support either temporary (trestle) or permanent piles in skin friction. All foundation elements for the project must extend to bedrock, and the depth of bedrock is at up to 50 meters depth below the western portion of the bridge. All bridge construction from floating equipment is not feasible for a number of reasons: the water elevation varies significantly throughout the year, and the large equipment required to lift girders would require very large barges that would require extensive dredging. Furthermore the river typically freezes over in winter, which presents a significant access challenge and safety risk for a large portion of the year. Building a rock causeway provides the necessary access for the heavy equipment, uses locally sourced material and is most feasible in the shallow water depths. In the deeper water depths in the Eastern reach of the project we will be building trestle for access. In this trestle area, the bedrock is at approximately 20m depth.
118	9/26/2019	Open House Verbal Comment	Connectivity	Is there opportunity for tolling on the Third Crossing?	The opportunity for tolling was reviewed as part of the Third Crossing Business Plan in 2017. The recommendation of the plan was that the Third Crossing would not be a toll bridge. This recommendation was reviewed and approved by Council in 2017. More info can be found in the <a href="#">Third Crossing Business Plan on the City's website</a> .
119	9/25/2019	Open House Verbal Comment	How We Got Here	Received feedback from a resident on the east side who was extremely impressed with the Kiewit on-site workers. The resident noted how the workers are always extremely polite and respectful. The resident also thought the entire team was doing an amazing job and was very impressed with the project and really likes the new design.	Thank you for your comment.
120	9/25/2019	Open House Verbal Comment	How We Got Here	Several comments from residents just wanting the bridge to be built.	Thank you for your comment.
121	9/25/2019	Open House Verbal Comment	How We Got Here	Several comments about how long it has taken for this project to get started (dates back to 1967).	Thank you for your comment.
122	9/25/2019	Open House Verbal Comment	How We Got Here	One resident expressed concern that the bridge would cause more traffic to flow into the downtown core and worried about how this will impact parking (which is already limited). Resident was encouraged to fill out a comment card.	The City has parking strategies that are being carried out for the downtown area which includes the use of the Third Crossing to provide more opportunities for Active Transportation and Transit ridership for residents to use as part of their work and recreational commute.
123	9/26/2019	Open House Verbal Comment	How We Got Here	Must be on time and on budget (comment from City Councillor).	Thank you for your comment.
124	9/26/2019	Open House Verbal Comment	How We Got Here	Several residents asked how much the total project budget was.	The approved budget for the project is \$180 million dollars
125	9/26/2019	Open House Verbal Comment	How We Got Here	Sidewalk issue in the Riverpark subdivision. One resident expressed concern with the gravel sidewalk for those with accessibility issues. Referred resident to the construction station.	Referred to construction station.
126	9/26/2019	Open House Verbal Comment	How We Got Here	Concern with dust and volume of construction traffic in Riverpark; referred to construction station.	Referred to construction station.
127	9/26/2019	Open House Verbal Comment	How We Got Here	Concern with the number of trucks bringing in rock; referred to construction station.	Referred to construction station.
128	9/26/2019	Open House Verbal Comment	How We Got Here	Comment about accessibility in getting to the open house. One resident with accessibility issues had a difficult time as they had parked at the front of the school.	Apologies were made to the resident but also informed them tht both open house locations were fully accessible as they were at schools and have ramps to get into and out of the buildings.
129	9/25/2019	Open House Verbal Comment	Construction	You are wasting a lot of rock.	A good part of the material will be re-used after on the project's shorelands to help build the approaches. Any leftover rock and its use is currently being contemplated.
130	9/25/2019	Open House Verbal Comment	Construction	Question about how many trucks will be on the road due to construction.	To achieve the causeway work, around 12 to 15 additional trucks on the road will supply the project

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131	9/25/2019	Open House Verbal Comment	Construction	What is the limit to the number of trees to be cut, and will the big tree on the hydro corridor stay?	Showed the limit on the maps. The big tree is currently outside our project limit and will not be cut.
132	9/25/2019	Open House Verbal Comment	Construction	Why are you wasting time and not starting?	Complex project and in process of obtaining all the regulatory permits and approvals
133	9/25/2019	Open House Verbal Comment	Construction	Who is Kiewit and where is their office?	Explained the company and the locations of Eastern Canada offices.
134	9/25/2019	Open House Verbal Comment	Construction	Are the trails open on the east side?	Some trails are blocked for safety during construction work.
135	9/25/2019	Open House Verbal Comment	Construction	How long will Gore road be closed?	Gore Road west of the library entrance will be closed for the duration of the project, pedestrian access will be provided during the project.
136	9/25/2019	Open House Verbal Comment	Construction	Rumours are that the project is already over budget.	The project team is working constantly to ensure that we stay within the budget envelope.
137	9/26/2019	Open House Verbal Comment	Construction	Questions about dust and debris during construction.	Access to our job site is on hard surface and the truck will be travelling on rock surfaces within the job site. This will limit most of the debris on the truck tires. Dust will also be monitored and measures will be in place to mitigate, such as the application of water, etc.
138	9/26/2019	Open House Verbal Comment	Construction	Concern about traffic on Montreal Rd. from the trucks.	To achieve the causeway work, around 12 to 15 additional trucks on the road will supply the project
139	9/26/2019	Open House Verbal Comment	Construction	Will the new bridge be noisy like the LaSalle bridge?	LaSalle is a grated surface, the third crossing will be an asphalt surface resulting in less noise from the travelling vehicle.
140	9/26/2019	Open House Verbal Comment	Construction	Will the causeway rock be washed like Parks Canada told me?	The causeway rock will be screened to an acceptable gradation within guidelines and dust will be monitored.
141	9/26/2019	Open House Verbal Comment	Construction	Will you be providing the residence with masks? You will impact my health with all the dust particles. You protect the wildlife better than the humans.	We will not be providing masks. We are using means and methods that will not harm the public.
142	9/25/2019	Open House Verbal Comment	Bridge Design	Noise levels from the report. People were interested why we have low noise walls. They think these one are not effective.	Noise modelling was conducted for both construction noise and operations noise. The noise barrier currently under construction are intended to help with construction related noise and will be used for operations noise mitigation and meets provincial requirements.
143	9/25/2019	Open House Verbal Comment	Bridge Design	Bridge cross section. Several people were interested in cross section and how road lanes are divided from MUP.	A concrete traffic barrier will separate car traffic and pedestrians on the MUP throughout the entire inwater portion of the bridge.
144	9/25/2019	Open House Verbal Comment	Bridge Design	Bridge navigation clearance. Several people were interested is lower profile will meet required clearance.	The required 6.7m navigational height clearance required from Transport Canada has been met with the current design.
145	9/25/2019	Open House Verbal Comment	Bridge Design	Posted speed on Pt. St. Mark, will it be increased?	No, the posted speed on Pt. St. Mark will not be increased.
146	9/25/2019	Open House Verbal Comment	Bridge Design	Will Pt. St. Mark extend north to future development?	No, there will be no connection of PSM to development to the north.
147	9/25/2019	Open House Verbal Comment	Bridge Design	Several people really liked new underarch design. They think it fits better with surroundings.	Thank you for your comments
148	9/25/2019	Open House Verbal Comment	Bridge Design	Several people were interested how financial structure will be closed. They wanted to know how the City's portion will be financed.	Information on the funding model can be found in the City's Third Crossing Business Plan which is posted on the City's website.
149	9/25/2019	Open House Verbal Comment	How We Got Here	Concern re safety of site on west site and how it is blocked off – has seen kids climbing the cement barriers.	Said we would pass on to the team – we put it on a comment card. Also referred them to Construction station.
150	9/25/2019	Open House Verbal Comment	How We Got Here	Comment re bringing in an independent project costing resource to review project costs with the objective of finding efficiencies.	Explained the IPD model and the team approach to managing the budget and how this model is different from a design build project that the individual was more familiar with.
151	9/25/2019	Open House Verbal Comment	How We Got Here	Complimentary comment on the format of the open house and how it allows folks that wouldn't speak up in a large presentation setting to have input and ask questions one on one.	Thank you for your comment.
152	9/25/2019	Open House Verbal Comment	Construction	How will you construct the deck?	Partial depth precast panels (so we do not have to strip forms and waste material), and then tied it all together with rebar and another concrete pour.

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153	9/26/2019	Open House Verbal Comment	Construction	Will you be driving piles around the clock like the John Counter work? That is loud.	No. John Counter are driving piles with an impact hammer. We have about 100 to install and we will use a vibratory hammer for most of the install, and only use the impact hammer to seat the pile at the end of the drive. This will be for very short duration compared with the John Counter work.
154	9/26/2019	Open House Verbal Comment	Construction	Is the material for constructing the bridge coming from Kingston, or from Ontario?	The causeway rock is coming from a local quarry, the precast concrete is coming from Barrie (just north of Toronto), the concrete supplier is local to Kingston, and the steel girders could be coming from outside of Canada.
155	9/25/2019	Open House Verbal Comment	Connectivity	Concern about traffic issues and Highway 15 not being able to handle the increased traffic.	Information regarding the widening of Hwy 15 from Hwy 2 to the 401 can be found at the City's website.
156	9/25/2019	Open House Verbal Comment	Connectivity	Concern that the bridge will bring crime east across the river from Kingston.	This concern was brought to the attention of the Kingston Police Force who were consulted during the development and endorsement of the Third Crossing Business Plan.
157	9/25/2019	Open House Verbal Comment	Environment	Question as to if the hiking trail from the library will remain open during construction.	The hiking trails in the vicinity of the construction will be closed during construction for public safety.
158	9/25/2019	Open House Verbal Comment	Bridge Design	Read the 1,500 pages of the DIA and compared it with the EA document. Documented all the reasons why JLR said that a causeway trestle option was not good and questioned why we would then be moving forward with that option.	<p>The 2012 Environmental Assessment proposed three different construction methods that could be used to build the permanent bridge which would need to be explored further during detailed design. The three methods included using a dredged channel and marine barges; using a temporary steel temporary work bridge; and using a temporary in-water rock berm. At that time, the final determination of selecting the most appropriate and feasible method would be best determined when a contractor would be selected for the project. The IPD team is a multi-party team led by Kiewit, Hatch, and Systra working in Partnership with the City of Kingston for the Third Crossing's validation, detailed design and eventual construction. The validation phase determined what type of bridge will be built, how it will be built, and the location of major structural elements. Some of the improvements that have added value to the project include:</p> <ul style="list-style-type: none"> <li>• Reducing the length of the main span from 150m down to approximately 95m</li> <li>• Addition of an arch that is under the bridge in lieu of the former above-deck arch;</li> <li>• Majority of bridge spans will be made of concrete rather than steel;</li> <li>• The main span and two back spans will be steel girders supporting the concrete deck;</li> <li>• Two smaller look outs along the south side elevation</li> <li>• Use of an in-water rock berm for construction access</li> </ul> <p>These design changes have added value to the project by increasing constructability, service life, and aesthetics and determined that the project can be built within the \$180 million dollar approved budget</p>
159	9/25/2019	Open House Verbal Comment	Environment	Made a comment on sediment on the bottom of the river and the contaminants, including uranium and cobalt. Something to the effect of I also read about the contaminants in the river that could impact drinking water.	Sediment sampling has occurred in the vicinity of the bridge alignment. It should be noted that the Kingston water supply intake is located on the Lake Ontario and not in the vicinity the Thrid Crossing.
160	9/25/2019	Open House Verbal Comment	Environment	Came to see what was happening with the trees along Gore Rd. near the rock fence.	Explained we were able to save the trees and the rock wall.
161	9/26/2019	Open House Verbal Comment	Construction	West side near neighbors commented that the squeaking track noises from the dozer during the west shore grading was loud and very early in the morning. However, they also acknowledged that this is no longer an issue in the recent weeks. Asked if causeway the construction could start later in the morning	We start work early to take advantage of daylight. Unfortunately, there will always be some noise associated with the various construction activities.

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162	9/26/2019	Open House Verbal Comment	Construction	Couple of residents commented that the bottom of the river is highly contaminated. Asked how do we ensure contamination doesn't spread.	Explained that boreholes and soil sampling were done at different locations along the bridge alignment. Analysis was completed and there is not a significant concern – referred them to the Environmental Station for more info. Also explained that the steel casings installed help contain the spoils that are removed within. Removed soil and water would be treated and disposed of properly.
163	9/26/2019	Open House Verbal Comment	How We Got Here	Open Houses were well organized with good information and knowledgeable people to address questions. Liked the format particularly of being able to walk around at own pace to topics that they were interested in, and liked the quality of information being presented at each station.	Thank you for your comment.
164	9/26/2019	Open House Verbal Comment	Bridge Design	Liked the VR technology at Station 2 which helped them to envision the bridge.	Comment noted.
165	9/26/2019	Open House Verbal Comment	How We Got Here	Appreciated that there wasn't a Q and A as they had specific questions that they wanted to learn about and were not interested in reliving the whole project.	Thank you for your comment.
166	9/26/2019	Open House Verbal Comment	Construction	Has it started? Is it being built? Are we there yet? This from community members who expressed that they would like to use it sooner than later and feel that the whole process of getting the bridge has been very long.	Comment Noted
167	9/25/2019	Open House Verbal Comment	Connectivity	How do I find out what is happening on Point St. Mark with access? What is the road configuration going to be when the bridge is done? Several noted that they had heard that Point St. Mark would be reconfigured with more traffic infiltration likely.	The City has not made a decision on whether Point St Mark will remain connected to Gore once the Third Crossing is in operation. The City will be closely monitoring the traffic patterns in the PSM area throughout the construction duration. The City will continue gathering data to support whether or not this closure will be permanent. The City will be reaching out to the residents and emergency services for feedback on the shortcutting options if this entrance is to be re-opened after construction is completed.
168	9/25/2019	Open House Verbal Comment	Connectivity	Some commented that since the construction preparation on the east side they have seen a noticeable reduction in cars moving on their streets which they like.	Comment noted
169	9/25/2019	Open House Verbal Comment	Connectivity	How will the library be accessed during construction?	The library will remain open with access from Gore Road during the full construction period.
170	9/25/2019	Open House Verbal Comment	How We Got Here	One or two commented that this whole thing is a waste of time and money and that the bridge will bring more congestion.	Thank you for your comment.
171	9/25/2019	Open House Verbal Comment	Connectivity	What is happening with the Highway 15 Study?	Information regarding the widening of Hwy 15 from Hwy 2 to the 401 can be found at the City's website.
172	9/25/2019	Open House Verbal Comment	Connectivity	Is this really happening – when will it be done? How can the city ensure that there won't be big delays? (referred to Station 1)	Keeping the project on time and on budget is a primary goal of the city. The project has received approval to proceed with design and construction. The project's completion is scheduled for 2023. The project team is working hard to ensure that any delays can be mitigated for and still have the bridge open for 2023. This bridge project is the first in North America to use a model called Integrated Project Delivery which means the budget is set and the city, contractor and designer (Kiewit, Hatch and SYSTRA) work collaboratively together.
173	9/26/2019	Open House Verbal Comment	Connectivity	When will it be done? (referred to Station 1)	The project's completion is scheduled for 2023.
174	9/26/2019	Open House Verbal Comment	Connectivity	What is the bridge going to look like when completed? (referred to Station 2)	The attendees viewed the bridge images in station 2. Comment closed.
175	9/26/2019	Open House Verbal Comment	Connectivity	Just curious about the process. It has been talked about for so long. Glad to see it going ahead.	Comment noted
176	9/26/2019	Open House Verbal Comment	Connectivity	One representative from Kingston Field Naturalists wanted to know when drawings/displays would be posted.	A City staff member took down their email address and sent them an email when the boards were available online.

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177	9/26/2019	Open House Verbal Comment	Connectivity	Two individual took photos of displays and indicated that they wanted to make sure that the city didn't change the info before posting on the web site.	Comment noted
178	9/20/2019	Email	How We Got Here	Sign up for project email list.	Thank you for your email. I have signed you up for the project email list. I can also sign you up for an east or west side near neighbour specific list that informs residents living close to project construction about upcoming neighbourhood impacts. If you are interested in being on one of those lists, please let me know. I have also attached our latest newsletter informing residents about our current engagement and open houses.
179	9/21/2019	Email	How We Got Here	Sign up for project email list.	Thank you for your email. I have signed you up for the project email list. I can also sign you up for an east or west side near neighbour specific list that informs residents living close to project construction about upcoming neighbourhood impacts. If you are interested in being on one of those lists, please let me know. I have also attached our latest newsletter informing residents about our current engagement and open houses that are this week.
180	9/20/2019	Email	How We Got Here	Sign up for project email list.	Thank you for your email. I have signed you up for the project email list. I can also sign you up for an east or west side near neighbour specific list that informs residents living close to project construction about upcoming neighbourhood impacts. If you are interested in being on one of those lists, please let me know. I have also attached our latest newsletter informing residents about our current engagement and open houses.
181	9/25/2019	Email	How We Got Here	Add to East Side Email List: iyamamoto@bell.net Thanks! :)	Completed.
182	9/25/2019	Email	How We Got Here	Thank you for getting back to Marie. Put me on the other lists as well. I hope to attend the open house tonight.	I have added you to the east and west side listservs. Thanks very much.
183	9/25/2019	Email	How We Got Here	At what time will the Open Houses start and finish? Will there be a presentation to the public during the Open Houses? If so, when will it start?	Thanks again for coming out to the open house last week. It was a pleasure to speak with you about your mandate and the Third crossing project. I wanted to let you know, the open house boards are now available on the project website. You can review all the boards organized through the stations they were in. All the boards are located on our 'Past Engagement' page. The link to that page is here <a href="https://thirdcrossing.cityofkingston.ca/engagement/past-engagement">https://thirdcrossing.cityofkingston.ca/engagement/past-engagement</a> You will also see on our home page I have linked to the ' Past Engagement' page. Happy to answer any further questions.

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184	9/26/2019	Email	Bridge Design	<ul style="list-style-type: none"> <li>- Will the third crossing have a dedicated, protected bike lane?</li> <li>- If not, will the third crossing have a(n) unprotected yet dedicated bike lane?</li> <li>- Will pedestrians be separated from traffic?</li> <li>- Will a bike lane be on the bridge when it opens, which I gather is phase 1?</li> </ul>	<p>Thank you for your email and your interest in the Third Crossing. I have provided answers to your questions below. Also I wanted to let you know we have a e-newsletter we send out with project updates. If you would like to stay up-to-date on the project, please sign up for our e-newsletter here. Also information about the project, current updates and next steps can be found on the Third Crossing website <a href="https://thirdcrossing.cityofkingston.ca">https://thirdcrossing.cityofkingston.ca</a></p> <p>Below please find answers to your questions. If you have any further questions, please let me know and I am happy to answer them or speak with you at any time.</p> <p>-Will the third crossing have a dedicated, protected bike lane? The bridge portion of the Third Crossing (shore to shore) will have a concrete barrier that separates cyclists from the cars (4.0m wide multi-use pathway) The multi-use pathway will be for cyclists, pedestrians and others to use.</p> <p>-If not, will the third crossing have a(n) unprotected yet dedicated bike lane? In addition to the multi-use pathway, there will be on-road buffered bike lanes from Montreal St to the water (west shore) and from Hwy 15 to the water (east shore). There will be 2.0 meter wide shoulder for each lane on the bridge that is going over the river.</p> <p>-Will pedestrians be separated from traffic? Yes.</p> <p>-Will a bike lane be on the bridge when it opens, which I gather is phase 1? There will be shoulders on the bridge that cyclists can use in addition to the fully separated multi-use pathway. There is only one phase of the Third Crossing project. Once it opens, the ped/cycling facilities will be open. Many thanks.</p>
185	9/26/2019	Email	Bridge Design	<p>One more question - is there just ONE multi-use pathway on the bridge? So both directions, pedestrians and cyclists are tasked with using the same 4m, while going in potentially different directions?</p>	<p>There is one multi-use pathway on the bridge. Also you can now find the boards from the open house on the project website. On the boards there is information about design, construction, environment, connectivity and how we got to here. You will be able to find more information and drawings of the bridge and the multi-use pathway.</p> <p>Please let me know if you have any further questions, and I would be happy to answer them. <a href="https://thirdcrossing.cityofkingston.ca/">https://thirdcrossing.cityofkingston.ca/</a></p>
186	9/26/2019	Email	Construction	<p>I thank you for putting on the recent PIC/open house in the east end. Please see below for a few comments/questions that I have. I should note that I received educated and thorough responses from the various consultants present at the event.</p> <p>Where will the staging areas be for the bridge construction? I did not see these areas on a map, and would be surprised if (even if you received pieces on an "as required" basis) these pieces could be stored within the work area designated on your maps</p>	<p>Please see appendix B in the DIA for the staging areas. The DIA is located on the City's Get Involved platform here: <a href="https://getinvolved.cityofkingston.ca/">https://getinvolved.cityofkingston.ca/</a></p>
187	9/26/2019	Email	Environment	<p>What stage are you at specifically with DFO regarding your application for an Authorization under the Fisheries Act? I understand you have been provided an LOA of sorts to implement pre-construction measures such as turtle exclusion fencing, turbidity curtains, etc., but am curious as to where the Authorization application stands. What indication(s) do you have from DFO that there will be no significant disturbance to fish/fish habitat, and when do you expect sign-off from them?</p>	<p>With respect to the DFO, we are currently in discussion with the DFO on our draft fisheries act authorization application. Authorization from DFO is expected prior to start of construction of the causeways. For the installation of the turtle fence and turbidity curtain, the turtle fence has been specially designed to attach to the turbidity curtain to prevent turtles from possibly entering the construction areas. This work has been approved by Parks Canada and all the necessary permits / approvals have been received.</p>



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188	9/26/2019	Email	Environment	On the note of disturbances to fish/fish habitat, I noted that one of your exhibits indicated a total loss of 225 m square do fish habitat. Based on the number of piers to be isntalled, this number seems quite low. I am curious if you have identified certain "regions" of the watercourse as not providing fish habitat (if so, what has determined this?) or if this number is incorrect. Also, will there be riprap placed around these piers of the abutments? I did not get a close look at your drawings. Any drawings/sizing of piers would be appreciated.	The total permanent water footprint of the caissons and the portion of the West abutment within the Average higher level is 225 square meters or less. The general arrangement drawings provide the sizing.
189	9/26/2019	Email	Environment	If possible, I would greatly appreciate being able to take a look at the Contractor's erosion and sediment control plan. The scale of this project will require extensive dewatering, in particular since you are so clearly within the public eye, and also just down the road from the conservation authority. Sediment plumes will be extremely visible in this location and likely result in public outcry. I have too often been part of a project in which the Contractor failed to adequately prepare such a plan, and did not also have an Emergency Response Plan in place. Any information you could provide would be much appreciated.	The measures currently installed and planned are in accordance with Parks Canada's environment standards and guidelines - Ontario waterways - 2017.
190	9/26/2019	Email	Environment	I applaud the work of removing a marine wall and dock. These sorts of things strongly benefit the natural environment, and are relatively easy to include in such a large scale project. I appreciate the use of turtle exclusion fencing. Also, the public seems to have responded well (and who doesn't like new acronyms...AETC or something along those lines?)	Comment noted.
191	9/26/2019	Email	Environment	You have certainly agreed to offset some SAR bat habitat loss. I am happy with the number of bat nurseries being installed. Would it be possible to see conditions set out in the MECP's LOA? Specifically, I am curious as to the post-construction monitoring of these structures.	The IPD Team proposed bat boxes at a rate of 10 per hectare of woodland removed as part of the mitigation strategy for Species at Risk Bats to the MNR. The MNR provided the Letter of Advice that confirmed this replacement ratio and the requirement for installation of the boxes in advance of May 1st after removal of the trees in question. The Letter of Advice does not require post construction monitoring of the bat boxes.
192	9/28/2019	Email	Construction	Can you let me know the approved start and finish hours for construction on the weekends please?	Extended work hours are anticipated to start as soon as we get in-water permit approval. We will be letting people know exact hours beforehand. But they are anticipated to be 7am – 10 pm - Monday to Saturday.
193	9/23/2019	Get Involved Site	Environment	Totally agree that we need to keep moving. This isn't the first Environmental impact assessment to be completed over the last many years.  Disagrees: 1 Agrees: 0	Comment noted.
194	9/30/2019	Get Involved Site	Environment	Why would this project be proceeding when the city has declared a climate emergency?  Disagrees: 0 Agrees: 0	The City of Kingston has decalred a climate emergency and have identified within their Climate Action Plan that by 2020 it is their goal to reduce Greenhouse Gas emissions from 2011 levels. Though construction activities are expected to increase GHG emissions within the area, the briudgewill present opportunities to improve transportation network connectivity, enhance public transit and other municipal services, promote active transportation, and accommodate planned future growth. The construction of the bridge is expected to reduce overall GHG emissions within the City by 14,000 metric tonnes (approximately 21% of the transportation sector goal and 7% of the overall goal). For further information regarding GHG emissions with respect to the bridge, please see Section 3.2.5 of the DIA, the Lifecycle Anaylis (Appendix N) as well as the various management plans that address issues to air quality and emissions.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
195	9/30/2019	Email	How We Got Here	I was trying to work on the report but find it painful and difficult to read as it is. Could you kindly send me a hard copy? It does not need to be in colour, a B&W would do. If you wanted to save the postage, I could pick it up, let me know when and where, the earlier the better as time is flying and it does not look like there is going to be a public meeting... Thanking you in advance.	Apologies for the delayed email here. Given the size of the document and the requests we have received for hard copies we are making some hard copies available one at 1211 John Counter Blvd and to at City Hall for you to sign out. They are there now. Also to your point on public meeting, we had two public meetings on the DIA last week, one at LaSalle Secondary school and LCVI Secondary School. We won't be holding any additional public meetings but are happy to coordinate a call or meeting if you're interested in that.
196	10/1/2019	Email	Bridge Design	I'm very concerned a contract was awarded last year and I assume the City required certain standards be achieved and now there is an erosion of the original standards , seems the citizens of Kingston are subject to bait and switch tactics Your response seems purposely vague.	Thanks for the response and apologies if you've feeling it's a bit high level. I am just trying to convey where we are in the process currently. The information on the environmental phase of this work including the design changes are posted on the city's GetInvolved page for residents to review and comment on until October 12 at 4 pm. We will also be engaging people in early 2020 on some of the more refined design elements like the hand rail, landscaping, public art.  Please let me know if you're interested in a meeting or call, again happy to coordinate to help discuss your questions.
197	10/2/2019	Email	Bridge Design	Hello I just looked for design change section and it seems to be allusive can you point me via a link to the design change section Thanks	This is the link to the design changes and construction method. It's in the appendix section of the Detailed Impact Assessment.  <a href="https://thirdcrossing.cityofkingston.ca/documents/26467239/36766204/Appendix+B+-+Bridge+Design+and+Construction+Methodology.pdf/65c39dff-3eb6-43c0-95ac-fd7ba90754f2">https://thirdcrossing.cityofkingston.ca/documents/26467239/36766204/Appendix+B+-+Bridge+Design+and+Construction+Methodology.pdf/65c39dff-3eb6-43c0-95ac-fd7ba90754f2</a>
198	10/3/2019	Email	Bridge Design	Thanks it appears that the lane width has been decreased from 3.5m lanes to 3.30 m, not sure what the percent commercial is but suggest that the minimum width for transports is 3.5m. The City appears to have accepted a reduction in design speed from 80km/hr to 70 .....In my opinion the 3.30m lane width maybe an issue when a truck and say a city plow approach each other there is very little "lane buffer" this could cause erratic behaviour .....I'm not too sure why the City/consultant didn't look at modern roundabouts at the major intersections it could	The reduction of lanes widths to 3.3meter will help in reducing excessive speeding on the bridge corridor. The shoulders are 2.0meters wide which can account for wider traffic if needed. Roundabouts were explored at all intersections however due to area restrictions (Private property) roundabouts were not possible.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
199	9/25/2019	Email	Bridge Design	My question is, why is the new bridge going to have a left-hand curve from John Counter to the centre and then a right-hand curve back to Gore Rd.? The original photo published in the Whig several months ago, showed a bridge going straight across the river. I was always taught that the shortest distance between 2 points is a straight line.	<p>The Environmental Assessment from 2012, which you can find on our project website (see link below) has always shown a curve in the bridge and that has never changed. We agree that a straight line would have been preferred; however through the Environmental Assessment, the preliminary design and current design, it was deemed that placing a curve was the best option.</p> <p>Environmental assessment: <a href="https://thirdcrossing.cityofkingston.ca/info-centre/environmental-assessment">https://thirdcrossing.cityofkingston.ca/info-centre/environmental-assessment</a>  Preliminary design <a href="https://thirdcrossing.cityofkingston.ca/info-centre/preliminary-design">https://thirdcrossing.cityofkingston.ca/info-centre/preliminary-design</a></p> <p>Through those assessments, there are several reasons the curve was chosen which are listed below:</p> <ul style="list-style-type: none"> <li>•More perpendicular to the in-water navigation channel thus reducing span length;</li> <li>•Moved more north to create more distance between houses in Kenwood's Circle to help with noise reduction;</li> <li>•Avoidance of archaeology site on the east shore;</li> <li>•Avoidance of major underwater/underground electrical cables.</li> </ul> <p>If you have any further questions, please don't hesitate to ask.</p>
200	10/4/2019	Email	Bridge Design	I have been noticing "The Shoreline Route" signs around this area. I was wondering if there is going to be a pedestrian underpass at the approach of the bridge to allow for access to the shore line? If not is that something that should or could be proposed at this time. This would be a key part of future waterfront trails in this part of the city and an addition to the pedestrian walk way on the bridge.	<p>Thanks for your questions. In terms of looking at a pedestrian underpass for the project, the waterfront master plan had looked at a potential underpasses as part of the Third Crossing. I have attached further information for the Waterfront Master Plan. This can also be found on the City's website for more information. <a href="https://www.cityofkingston.ca/city-hall/projects-construction/waterfront-master-plan">https://www.cityofkingston.ca/city-hall/projects-construction/waterfront-master-plan</a></p> <p>Thanks for sending us the email and your considerations.</p>
201	10/6/2019	Email	How We Got Here	I believe it is vitally important to consult with Indigenous community members. I have spoken with Indigenous, Kingston based, community members who in fact do not support this project and I see that their voices are missing in this report. I also noted that there was no mention of the Outer Station, on the west side of the future construction site, where artifacts have been found from an Indigenous fishing camp, dating back 500 years.	<p>The Federal Duty to Consult and Accommodate process has been progressing between leaders of Indigenous Nations and the City for the duration of the Third Crossing Project. The project is nearing the time to begin involving more of the local indigenous voice in conjunction with Indigenous Nation leaders voices for elements that help tell the cultural and historical stories of the project area. The project team looks forward to welcoming the local voice as we begin working on the shore land elements. The Outer Station is not located within the project's impact area and therefore is not part of the mitigation effort for the Third Crossing.</p>

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
202	10/6/2019	Email	Environment	<p>I am greatly concerned about the environmental impact of the Third Crossing. The survey completed greatly depends on the time of day and even the time of year it was completed, as the wildlife may be migratory, have certain daily times for activity, or be seen at certain seasons. This makes it very difficult to determine the impact on the species of the area for sure. We do know that worldwide, there are many species threatened by extinction due to human activity. Unless we change our approach, fish, plants, animals, birds and insects will have nowhere left to go. Did you know that there was a researcher following turtles (a severely threatened species) in Douglas Fluher park this summer, who employed radio-transmitters and discovered the tagged turtles travel as far up the river as Highway 401, which shows that the turtles travel quite long distances? These turtles would then be passing through danger of the construction site. I am concerned that the protective measures suggested may be insufficient for these ancient and beautiful creatures, as well as many others we as human beings are connected to and depend on. Did you know that lights at night from cars and other traffic confuses migratory and other birds and has led to higher mortality among birds? Has it been included in the report that, due to the industrial background of the area along the Cataraqui, disturbing the sediment risks releasing a number of toxins into the water we all share? Is there really an effective measure to prevent the salination of our river in winter when the new Third Crossing will require clearing of snow and ice? (I understand this has been accounted for, but have not seen information on the efficacy of the system that is proposed)</p>	<p>I appreciate your concern for the environment in regards the Kingston Third Crossing Project and can assure you that it is a top priority to maintain the ecological integrity of the area. In regards to the impacts on wildlife and sensitive time periods, tree clearing has been scheduled to avoid the sensitive time periods for migratory birds to avoid disruptions to nesting and breeding. All in water works are expected to occur within the AETC (essentially an exclusionary fence surrounding the causeway) where turtles, fish and other wildlife will be excluded from prior to work. As turtles have been shown to navigate within Cataraqui River, the temporary causeway will consist of 5 openings to allow turtle, fish and other wildlife passage to reduce habitat fragmentation. The shoreline areas will also include reptile exclusionary fencing to prevent turtles from entering the site. Section 3 of the DIA does address concerns relating to the re-suspension of sediments that have the potential to release toxins. Drilling during construction will occur on top of the causeway, therefore creating a barrier for sediment that is disturbed at greater depths. Any contaminated sediment is expected to be handled appropriately to reduce releases into the water outside of the Project Location. Additionally, a pre and post construction monitoring program will be implemented. The contractors will also monitor surface water conditions throughout construction and take appropriate action if high levels of turbidity are observed outside of the Project Location.</p>
203	10/6/2019	Email	Environment	<p>Another environmental concern is carbon emissions. The plans include active transportation as the bridge construction will include space for cyclists and pedestrians, and this is a positive step. At the same time, the Third Crossing is primarily directed to cars, and for now the reality is that those cars will be dependant on fossil fuels for the most part (although we may see a time soon when electric cars are accessible and affordable and can drive longer distances without needing charging). Of course, cars are only part of the picture when it comes to reducing emissions, but they are an important part of the picture. And it is important to note the effect of the emissions from 8000 dump trucks and other construction equipment involved in building this bridge. I believe that if the City of Kingston is committed to innovation, and stands by the declaration of a climate emergency, then it must reject this project.</p>	<p>The City of Kingston has declared a climate emergency and have identified within their Climate Action Plan that by 2020 it is their goal to reduce Greenhouse Gas emissions from 2011 levels. Though construction activities are expected to increase GHG emissions within the area, the bridge will present opportunities to improve transportation network connectivity, enhance public transit and other municipal services, promote active transportation, and accommodate planned future growth. The construction of the bridge is expected to reduce overall GHG emissions within the City by 14,000 metric tonnes (approximately 21% of the transportation sector goal and 7% of the overall goal). For further information regarding GHG emissions with respect to the bridge, please see Section 3.2.5 of the DIA, the Lifecycle Analysis (Appendix N) as well as the various management plans that address issues to air quality and emissions.</p>

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
204	10/6/2019	Email	Bridge Design	<p>Next, I was reading the Detailed Impact Assessment regarding the necessity of a Third Crossing. It explained that it is not practicable to expand the Lasalle Causeway. I can understand the challenges in this area of the city, I wonder if a variety of options for restoration and improvement of the causeway were discussed. In fact, there is very little information available publicly regarding plans for the Lasalle Causeway. Therefore I remain unconvinced that there could not be a workable solution in this area. Additionally, the projections of increased traffic and Kingston population was mentioned. I was not able to locate a source to support this. I have noted that Statistics Canada only projects a very small increase in Kingston's population. Finally, when urban planning studies have been completed, they have over and over again shown that building more roads can have two effects: more people may be encouraged to drive cars, or a traffic congestion problem is simply moved to another area of the city. If we look at the East End, I have lived there and the experience was positive. I hope this community feels included and can conveniently access the rest of the city, and especially receive emergency services promptly. However, my daily observations of John Counter boulevard (which is the only artery to the west end of the city) and Montreal street (the closest access from the Third Crossing to the downtown core) show that those two roads are in no way equipped to handle an increase in traffic volume. In fact, it is interesting to look at traffic trackers over time to see in fact the most congestion occurs in Kingston's West End. All this points to the need to reconsider this project.</p>	<p>The 2012 EA determined that additional crossing capacity was needed across the Cataraqui River at the location of Gore Road to John Counter. The EA was presented to Kingston Council who endorsed the EA and then was sent to the MOECC (Ministry of Environment). The EA was posted in the public realm for 30 days. Ultimately, the EA was approved by the Ministry in 2013. The EA described the limitations of the Lasalle Causeway. Please visit the City's website for more information on the Third Crossing EA.</p>
205	10/6/2019	Email	How We Got Here	<p>I am surprised that the work has advanced as far given that the public consultation and Parks Canada approval (vitaly important as the Rideau is an UNESCO world heritage site as well as a critically important natural habitat). I also noted that in fact the project has changed significantly since it was approved by Council in 2017. Under these grounds, I strongly urge the Council to return to hold another vote on this project.</p>	<p>The 2012 Environmental Assessment proposed three different construction methods that could be used to build the permanent bridge which would need to be explored further during detailed design. The three methods included using a dredged channel and marine barges; using a temporary steel temporary work bridge; and using a temporary in-water rock berm. At that time, the final determination of selecting the most appropriate and feasible method would be best determined when a contractor would be selected for the project. The IPD team is a multi-party team led by Kiewit, Hatch, and Systra working in Partnership with the City of Kingston for the Third Crossing's validation, detailed design and eventual construction. The validation phase determined what type of bridge will be built, how it will be built, and the location of major structural elements. Some of the improvements that have added value to the project include:</p> <ul style="list-style-type: none"> <li>• Reducing the length of the main span from 150m down to approximately 95m</li> <li>• Addition of an arch that is under the bridge in lieu of the former above-deck arch;</li> <li>• Majority of bridge spans will be made of concrete rather than steel;</li> <li>• The main span and two back spans will be steel girders supporting the concrete deck;</li> <li>• Two smaller look outs along the south side elevation</li> <li>• Use of an in-water rock berm for construction access</li> </ul> <p>These design changes have added value to the project by increasing constructability, service life, and aesthetics and determined that the project can be built within the \$180 million dollar approved budget</p>

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
206	10/6/2019	Email	How We Got Here	Lastly, an important consideration on the minds of hardworking citizens is the cost of this project. Is there a plan to account for the likely possibility that this project will cost much more than projected? To provide for maintenance over the 100-year projected life span of the Third Crossing without burdening our future generations, as residents of the City of Kingston already pay some of the highest taxes in the province? Personally, I am happy to pay taxes for services that we all use and benefit from, however I also value fiscal responsibility and do not believe this project fits into this especially when there are already	Please review the Third Crossing Business Plan for more information on how the bridge will be funded for capital and operational phases of the project.
207	10/7/2019	Email	Construction	Old retaining beams and sod/landscaping materials were never cleaned up from the Old Canada Post location on Ascot Lane.	The City spoke with the Riverpark Condo board regarding construction updates, their concerns around snakes, noise fence, and activities forthcoming and that we would keep each other in the loop.
208	10/8/2019	Email	Environment	<p>It did not seem that the city of Kingston actually wanted any community input into the Detailed Impact Assessment. The DIA was released to the public late on a Friday afternoon with little information. Hard copies were, at first, not made available to the public and only when Parks Canada was contacted, did the City agree to let community members borrow a copy of the 1500 page document.</p> <p>The dates for the open houses were announced in an email without giving times. We had to request the times and then there were changes made to the times, resulting in several people I know missing the open house.</p> <p>The open house on the west side was poorly attended and was, as usual, a sales job, and not a genuine effort for discourse with the public. There was no opportunity for consultation and concerns were brushed off - "that's construction" was one comment I received from a Kiewit employee.</p> <p>I believe the lack of interest stems from the City of Kingston trying to make the bridge seem like a "done deal" by cutting down the trees on the west side, levelling and putting down gravel for a staging area and putting out silt fences and turtle fences. ( I belong to Friends of Kingston Inner Harbour and will join them in the comments about protecting turtles. Just note that silt and turtle fences were shown to increase turtle mortality in the construction of highway 69 along Georgian Bay and a road in Long Point.)</p>	The DIA process includes a Federal requirement to engage with the public with a minimum 30 day public posting of the document for public input. All the results of the City of Kingston's engagement with the public and the environmental information will be included by the city as part of their analysis in the DIA document.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
209	10/8/2019	Email	Environment	Item 1.3.1 – mentions meaningful stakeholder consultation. As mentioned above, I attended all open houses and public meetings regarding the bridge and found the meetings to be sales fairs. There was no meaningful consultation and public concerns were sloughed off or denied as a problem.	During the 30-day review period more than 1,100 people visited the City's webpage where the DIA is located. A total of 231 people downloaded documents and 27 people contributed to 10 topic forums. The most visited pages were the Introduction; Project Scope and Description of Environmental Components. Throughout the 30-day review period, the Project team received 258 comments via email. A total of 51 comment cards were submitted during the Public Open Houses and 104 verbal comments were recorded. Of the 452 comments received in total.
210	10/8/2019	Email	Environment	Item 4.3.5 – effect of the bridge on air quality. The main reason for building this bridge is supposed to reduce traffic congestion down highway 15 and over the LaSalle causeway. The City of Kingston is completely ignoring the concept of Induced Demand. It has been shown worldwide that increasing a lane of traffic paradoxically increases congestion, because more roads encourage more people to drive their cars. So the bridge will increase greenhouse gas emissions by encouraging more Kingstonians to drive. "Trying to cure traffic congestion by adding more capacity is like trying to cure obesity by loosening your belt." is an aphorism that correctly expresses the issue. I do not believe that this increase in greenhouse gas emissions has been adequately calculated in looking at the environmental impact on air quality.	It is expected that the addition of the Third Crossing will result in less traffic congestion, and hence idling of cars, and is expected to reduce GHGs due to transportation by reducing both travel time and travel distance. More information can be found in the Third Crossing Business Plan from 2017.
211	10/8/2019	Email	Environment	The other issue re: air quality is the addition of 8000 dump truck loads of aggregate that will be put into the river. No one at the open house was able to tell me where the aggregate is coming from. I believe that we, the public, need to see the distance, emissions factor and tonnage of each load. Plus the current plan for the bridge calls for removal of most of the aggregate, adding another 5 – 6 thousand dump truck loads. How much will that contribute to GHG emissions?	The LaFarge quarry is approximately 5 km from the West Shore of the Project Footprint, The project team carried out a Life Cycle Assessment of the construction activities that are anticipated to construct the bridge which included carbon footprint calculations. Please see Appendix O of the Preliminary Design Summary Report that is posted on the City's website for more info.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
212	10/8/2019	Email	Environment	There is little information on snow removal except that it follows the City of Kingston policy. I do not feel that is sufficient given the city's liberal use of salt and sand. With 1.2 km. to plow, there is no possible way to avoid pushing salt into the water.	Pre-treatment and active treatment of bridge surfaces will be similar to what the City uses on terrestrial roadways throughout the city. All runoff from the bridge will flow downhill via under bridge storm pipes to the shorelands for onshore treatment and then be released into the river. There are two snow operations that occur during/after a snow event. The first operation is snow clearing which is plowing snow to clear the surface. The snow is pushed to the sides of the roadway. As more snow falls during winter, the snow that is cleared starts to accumulate in the piles. Once the piles become large, the snow removal operation occurs which is scopping snow and placing it in a truck to haul away from the roadway. The frequency of clearing and removal is factored into the City's overall operations plan being managed by Public Works. Arterials and Major collector roads receive priority for snow clearing and removal.
213	10/8/2019	Email	Environment	Also, I was told by Parks Canada that they would require washing of the aggregate before putting it in the river. But at the Open house I was told that is not going to happen. If unwashed aggregate is dumped, there will be a huge increase of dust in the area, which will hugely effect air quality in the area.	<p>Rockfill for the third crossing project is sourced locally, and the rock that will be used occurs naturally along the existing shoreline of the Cataraqui River and Lake Ontario. This rock used is not toxic.</p> <p>The rockfill material for the mainline of the causeway (which represents the majority of material required for Causeway Construction), will be quarried, crushed in a primary crusher (jaw run) to eliminate everything above 150mm, and screened to reduce fines, and transported to the project. Gradation testing will be carried out at the Quarry to ensure consistency of product. Placement methods on site consist of delivery and dumping the quarried material on to the Causeway (above the water), and the dozer will work the material out and through the end of the causeway to avoid end dumping in water. End dumping in water would allow segregation of the rockfill material resulting in poor geotechnical performance. This method of placement working the material through the embankment has proven to be effective at maintaining turbidity levels within the specified limits during embankment construction even with unprocessed shotrock.</p> <p>The rockfill for the causeway will be sourced locally. The rockfill has been designed to:</p> <ol style="list-style-type: none"> <li>1. ensure stability of the causeway under various load conditions,</li> <li>2. to facilitate the piling operation (temporary and permanent casings will be installed through the causeway finger material)</li> <li>3. to ensure that turbidity limits are always met by minimizing the introductions of fines into the river</li> <li>4. to meet the specification of fill on the project such that the material can be reincorporated into the on shore approaches</li> <li>5. to be not too oversized to present a challenge achieving a precise excavated level when the causeway is removed</li> </ol> <p>The rockfill for the fingers in the area around the drilled shafts will be quarried, crushed in a primary crusher (jaw run) to eliminate everything above 150mm, crushed in a secondary (cone) to eliminate everything above 50mm, screened to reduce the fines, and transported to the project.</p>



Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
214	10/8/2019	Email	Environment	Section 6 of the DIA discusses the cumulative effects of the bridge and temporal and spatial crowding. Montreal St. is very crowded and backed up at peak times right now. As someone who has lived on the east side of the river as well as the west side, the present congestion along Montreal St. is just as bad as that on highway 15 and it will become worse if the bridge is constructed.	The City carried out extensive traffic modeling as part of the EA, Preliminary Design and Business Plans in conjunction with the latest KTMP and level of service standards. All of these reports determined that the need for additional crossing capacity was justified and that the location of the Third Crossing would be connecting Gore Road to John Counter. Kingston Council has reviewed and approved all these documents and the construction of the bridge.
215	10/8/2019	Email	Environment	Section 7.9 states that the bridge is needed to reduce congestion – that is a myth – the best case scenario mentioned at some of the bridge open houses was that the bridge would save 8 min. a day or 4 minutes a trip???? – here is some more information on induced demand: It has been noted for decades that increasing the number of roadways does not alleviate congestion at all; rather increasing the number of highway lanes or adding another bridge increases the number of automobiles on the road, a phenomenon called “induced demand.”	The concept of induced demand was deliberated extensively during the council sessions in 2017 when the Third Crossing Business Plan was presented to Council. Ultimately, Council approved the construction of the bridge. Please review the Third Crossing Business Plan for more information which is posted on the City’s website.
216	10/8/2019	Email	Environment	Could I please obtain a digital copy of the Detailed Impact Assessment for the Third Crossing project. Thank you.	Thank you for your email and your interest in the project. The entire Detailed Impact Assessment is available online on the City’s Get Involved site with is the City’s engagement platform. On that website you are able to download the DIA – although you do need to be signed in to be able to view and download the document. You will also find an information summary of the DIA on that website as well.  Please let me know if you have any issues or further questions, I’d be happy to walk you through downloading the document.  Website for download: <a href="https://getinvolved.cityofkingston.ca/third-crossing-environmental">https://getinvolved.cityofkingston.ca/third-crossing-environmental</a>
217	9/10/2019	Get Involved Site	Environment	While some bird species can nest on bridges (pigeons, cliff swallows, etc...) many of the affected species cannot.  Agrees: 1, Disagrees: 0, Replies: 0	Noted. The landscaping along the west and east approaches will provide alternate nesting habitat.
218	9/10/2019	Get Involved Site	Environment	Personally I'd rather have it done in a manner that limits the impacts to the environment.  Agrees: 0, Disagrees: 0, Replies: 0	Comment Noted
219	9/10/2019	Get Involved Site	Construction	This section refers to monitoring that will be conducted after the project is complete though....  Agrees: 1, Disagrees: 0, Replies: 0	Comment Noted.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
220	12/10/2019	Get Involved Site	Construction	In the words Mike Holmes "Do It Right"  Agrees: 0, Disagrees: 0, Replies: 0	Comment Noted.
221	11/10/2019	Get Involved Site	Environment	Have not seen evidence that the team has seriously engaged with the profound 2011 report by the Mohawk Nation Council of Chiefs. This report insists that we must think of the bridge as "a visitor to the river and the land, rather than its owner. Standing against the natural flow of water, disturbing the river's bed, and occupying the home of all the life the river supports, the bridge would not be able to help being an intruder. Our challenge is to constantly consider how to minimize that intrusion" (17). I am not convinced that bridge proponents are taking this seriously. 80,000 tonnes of rock in the river? Years of construction and disrupting of habitat? Ongoing noise and no doubt dirt and salt draining into the river? I suggest we need to think seriously and holistically about how the city's health is related to the health of the river. We have already damaged it a great deal, but this is not an excuse to damage it further.  Agrees: 0, Disagrees: 0, Replies: 0	Please refer to section 7.2.1.1. in the DIA report which speaks to the work regarding the MNCC report.
222	9/10/2019	Get Involved Site	Environment	It's interesting that the 401 bridge over the Cataraqui is being expanded to three lanes in each direction and I have not heard of any talk of environmental studies or impact on the environment. Does no one seem to be questioning how that will have an effect on the river? At least we are doing environmental assessments on the third crossing, we are being cautious but it's time to build the bridge. I believe due diligence has been done.  Agrees: 1, Disagrees: 0, Replies: 0	Highway 401 is under the authority and jurisdiction of MTO. Please contact the MTO to express your concerns.
223	12/10/2019	Get Involved Site	Environment	I think the City should also be talking to local groups that are more familiar with the local Cataraqui River like Turtles Kingston and the Kingston Field Naturalists . During construction it might a good time to improve areas within the building zone possibly removing invasive species both on the shoreline and in the river.I would also like to see the bridge design tweaked a little to draw nature to it. The bridge could have osprey/eagle platforms on the bridge structure. The bridge abutments at the footings could incorporate cribs for fish or aggregate for turtle nesting sites. If some wildlife could consider the crossing habitat it would only enhance the beauty of this structure.  Agrees: 0, Disagrees: 0, Replies: 0	Comment noted. We are appreciative of any design ideas that are provided. Though many ideas have been presented regarding the creation of enhanced habitat, such as alterantions to the substrate, Parks Canada has indicated that rehabilitating the area to its baseline, natural state is the preferred alterantive.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
224	9/10/2019	Get Involved Site	Environment	<p>This bridge needs to be completed, the causeway is in dire need of replacement, I suspect that it will be able to be replaced once the third crossing is in place. These delays are just causing more expense just get on with it. The only access to a close hospital from the east end is available via the causeway and the 401. Time matters in a life or death scenario. In the end this bridge could lower the carbon foot print, there will be a proper bike lane that will attach to bike paths that will allow access to downtown and no more burning gas while sitting in traffic. Also shorter distance to shopping, this means that they don't have to build more commercial space on the east side.</p> <p>Agrees: 1, Disagrees: 0, Replies: 0</p>	Comment noted.
225	9/10/2019	Get Involved Site	Environment	<p>Or a bit reduced as there will be less idling or stop and go during busy times, when the Causeway is up etc.</p> <p>Agrees: 1, Disagrees: 1, Replies: 0</p>	Comment noted.
226	9/10/2019	Get Involved Site	Environment	<p>I strongly support that the city keep moving this project forward and that a third crossing is completed. It is important for the public to see that thorough environmental assessment is completed and the process and results are open and transparent. There are concerns that the building of a third crossing will affect the natural habitat in the area and these concerns need to be addressed.</p> <p>Agrees: 6, Disagrees: 0, Replies: 0</p>	Comment noted.
227	9/10/2019	Get Involved Site	Environment	<p>New roads bring more cars. Housing would be different.</p> <p>Agrees: 0, Disagrees: 3, Replies: 1</p>	Please review the Third Crossing Business Plan for more information on why the bridge was to be built using two car lanes and that future technologies will yield smaller vehicles thus providing an opportunity to repaint the bridge with narrower lanes.
228	9/10/2019	Get Involved Site	Bridge Design	<p>I agree with the 4th lane idea. I remember in Ottawa to Quebec Bridge that controlled multi lanes so that lanes more available during strongest flow at rush hour in and out of Quebec on that bridge. For example 7 am 3 lanes into Quebec, one into ontario and opposite to that at 5pm. Normal 2 lanes in and out at other times of the day. I have been stuck in downtown in urgent matters when bridge is delaying things and it aint pretty.</p> <p>Agrees: 1, Disagrees: 1, Replies: 0</p>	The Third Crossing Business Plan that is on the City's website had narrative on the lane configuration for the future. With the increase of Active Transportation, Transit use, autonomous vehicles, working from home, and having smaller cars would permit the lanes to be repainted to account for these types of future considerations.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
229	9/10/2019	Get Involved Site	How We Got Here	<p>I was at the last meeting in regards to concept. I agree with the last person in that they should go with the 4 lanes. With the buildup of housing both east and west of the waterway, by the time this bridge is built and opened the requirement for 4 lanes will be required. There was a discussion of 3 lanes with the use of lane lights based on traffic flow. This is better than 2, but again will be outdated by the time the bridge is completed/opened. The causeway is aging (bridge) and closing lanes at important times for maintenance. This is also a retirement community and the need for medical availability is becoming more crucial.</p> <p>Agrees: 1, Disagrees: 3, Replies: 1</p>	Please review the Third Crossing Business Plan for more information on why the bridge was to be built using two car lanes and that future technologies will yield smaller vehicles thus providing an opportunity to repaint the bridge with narrower lanes.
230	11/10/2019	Get Involved Site	Environment	<p>With a climate emergency upon us (and acknowledged by our own City Council), we must organize our city such that individual car use is the LAST transportation option, not the first. As we develop infrastructure for increased use of public and active transit, and take a firm stand on not extending the existing urban boundary, we do not need a 4 lane bridge. I am highly concerned about the environmental impact of the bridge and its lengthy construction period. I am also concerned that we may be paying for it for decades to come.</p> <p>Agrees: 1, Disagrees: 0, Replies: 0</p>	The City of Kingston has declared a climate emergency and have identified within their Climate Action Plan that by 2020 it is their goal to reduce Greenhouse Gas emissions from 2011 levels. Though construction activities are expected to increase GHG emissions within the area, the bridge will present opportunities to improve transportation network connectivity, enhance public transit (eg. busses that can utilize the bridge) and other municipal services, promote active transportation, and accommodate planned future growth. The construction of the bridge is expected to reduce overall GHG emissions within the City by 14,000 metric tonnes (approximately 21% of the transportation sector goal and 7% of the overall goal). For further information regarding GHG emissions with respect to the bridge, please see Section 3.2.5 of the DIA, the Lifecycle Analysis (Appendix N) as well as the various management plans that address issues to air quality and emissions.
231	11/10/2019	Get Involved Site	Environment	<p>The climate-harming assumption that individual car ownership is normal or necessary has to be challenged if we want our planet to continue to sustain life. We need infrastructure and city design that makes it easy to get around in other ways. We have already demonstrated that we can make it easy to take the bus. Building roads/bridges designed for individuals in cars encourages environmental destruction.</p> <p>Agrees: 1, Disagrees: 0, Replies: 0</p>	The City of Kingston has declared a climate emergency and have identified within their Climate Action Plan that by 2020 it is their goal to reduce Greenhouse Gas emissions from 2011 levels. Though construction activities are expected to increase GHG emissions within the area, the bridge will present opportunities to improve transportation network connectivity, enhance public transit and other municipal services, promote active transportation, and accommodate planned future growth. The construction of the bridge is expected to reduce overall GHG emissions within the City by 14,000 metric tonnes (approximately 21% of the transportation sector goal and 7% of the overall goal). For further information regarding GHG emissions with respect to the bridge, please see Section 3.2.5 of the DIA, the Lifecycle Analysis (Appendix N) as well as the various management plans that address issues to air quality and emissions. The bridge can be used by public transportation like city busses, but also needs to account for greater connectivity for emergency vehicles.
232	9/10/2019	Get Involved Site	Environment	<p>Wouldn't this thinking apply to building anything new? Where do we draw the line to new development? I think we need to develop responsibly and that is what we are doing with the third crossing.</p> <p>Agrees: 3, Disagrees: 0, Replies: 1</p>	Please review the Third Crossing Business Plan for more information on why the bridge was to be built and the benefits to society as a whole.
233	9/10/2019	Get Involved Site	Environment	<p>Pretty well everyone that owns a home owns a car and last time I checked every house is on a street, I don't see your point.</p> <p>Agrees: 3, Disagrees: 1, Replies: 1</p>	Comment Noted.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
234	9/10/2019	Get Involved Site	Environment	Where does that number come from?  Agrees: 0, Disagrees: 0, Replies: 0	No response, comment unclear.
235	9/10/2019	Get Involved Site	Bridge Design	This project needs to move forward. We need the additional connection across the River for a variety of reasons. I have witnessed delays for emergency vehicles to cross from the East side to the mainland on several occasions. I am concerned about the lowering of the height of the Bridge.  Agrees: 5, Disagrees: 1, Replies: 0	The required 6.7m navigational height clearance required from Transport Canada has been met with the current design.
236	9/10/2019	Get Involved Site	How We Got Here	Most people would acknowledge another crossing is required. It should have been 4 lanes, but, two is a start and it needs to progress. Time is more money. The fact that it is the 7th crossing, not the third, within City of Kingston boundaries should not affect the project.  Agrees: 4, Disagrees: 1, Replies: 1	Please review the Third Crossing Business Plan for more information on why the bridge was to be built using two car lanes and that future technologies will yield smaller vehicles thus providing an opportunity to repaint the bridge with narrower lanes.
237	12/10/2019	Get Involved Site	Bridge Design	I think it should be 4 lanes to allow for future growth . Expansion from 2 lanes to four at a future date would require another another impact on the river ecosystem . Impact it once now and hopefully it won't have to be done for a long long time.  Agrees: 0, Disagrees: 0, Replies: 0	The Third Crossing Business Plan that is on the City's website had narrative on the lane configuration for the future. With the increase of Active Transportation, Transit use, autonomous vehicles, working from home, and having smaller cars would permit the lanes to be repainted to account for these types of future considerations.
238	11/10/2019	Email	Environment	I have been trying to add my comments in regards to the Environmental work on the 'get involved' website. But I found it extremely hard to navigate the site -it's actually super frustrating. I was unable to leave my comments there so I am going to do it here: From what I gather the 'active transportation' portion will be about 4m wide on the south side of the bridge deck. How will this part of the bridge be cleared of snow in the winter? Where is the snow going to be moved to? if it is salted or silted, will this just be pushed into the river? What is being done to avoid that from happening?  In addition, I want to voice my frustration with the so called 'public consultation. Two two-hour time slots (basically over the dinner hour) is not really inviting for the public to come out and get involved. I do not feel that my comments are indeed asked for. It took me quite some time to even find the site. Why give such limited access for the public to get involved?	There are two snow operations that occur during/after a snow event. The first operation is snow clearing which is plowing snow to clear the surface. The snow is pushed to the sides of the pathway. As more snow falls during winter, the snow that is cleared starts to accumulate in the piles. Once the piles become large, the snow removal operation occurs which is scopping snow and placing it in a truck to haul away from the pathway. The frequency of clearing and removal is factored into the City's overall operations plan being managed by Public Works. Arterials and Major collector roads recieve priority for snow clearing and removal.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
239	10/12/2019	Email	Environment	<p>I am emailing to voice my concern about the environmental and economic impact if the third crossing.</p> <p>My understanding of declaring a climate emergency is that all future decisions have to consider the environmental impacts of projects moving forward.</p> <p>Since there have been changes in the development and design of the 3rd crossing, I believe that it is in the councils best interest to re-evaluate the project due to some of the following issues:</p> <ul style="list-style-type: none"> <li>-average over-run costs of projects by 34% which falls to tax payers</li> <li>-dumping 8000 dumptruck loads of stone for a temporary aggregate causeway- this will have environmental impact</li> <li>-cutting old growth trees along the east side of the river</li> <li>-snow removal/salting which will impact river health/wildlife</li> <li>- building more roads will not actually reduce long term congestion and will instead encourage more car traffic. Why not instead spent the money to investigate projects such as free transit?</li> </ul> <p>To show that declaring a climate emergency wasn't just an act, but that the council is truly serious about the dire future we are facing if we don't make significant changes , I ask that you reconsider what the legacy of the 3rd crossing is during this time.</p>	Please review the Third Crossing Business Plan for more information on why the bridge was to be built and the benefits to society as a whole.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
240	10/12/2019	Email	Environment	<p>I am writing to express concerns about the plans for the new bridge across the Cataraqui River.</p> <p>Because it is not within my expertise or the time available to me to discern clearly if some of my concerns may be answered in the DIA, I am trusting you to distinguish between those concerns that you consider duly addressed, and those that you may wish to pause and pursue.</p> <p>I have not been able to engage with the Third Crossing discussion over the past few years because my available time was taken up working to stop the Wellington Street Extension. As you know, the southern part of that road has been cancelled, for which I am grateful. However, the environmental impact of the WSE would have been far less, I fear, than the environmental impact of the bridge. I find myself quite despairing that despite all the progress made in recent years on active transportation, public transportation, and other environmental initiatives, the bridge (in its environmental impact and its cost) will seriously undermine any claim Kingston has to responsible stewardship of the environment.</p> <p>I spend a considerable amount of time in Belle Park, Doug Fluhrer Park, and Belle Island. I canoed around Belle Park and Belle Island this morning, in fact. In my research and teaching about the treaty, Indigenous, and industrial histories of Kingston, I point out the simple fact that Kingston as a city only exists because of its position where the (Cataraqui) river meets the lake (Ontario). Colonial and environmental violence have profoundly damaged and transformed our relationship to land, water, and air. And yet, many of us still seek wild spaces for solace, for inspiration, and to witness the way our fellow living creatures go about their lives. Indeed, their lives are our lives: the trees and water that</p>	<p>Thank you for taking the time to provide us with your comments on the DIA. I wanted to confirm we have received them and that they will be included in a consultation report along with our responses to Parks Canada.</p> <p>Have a great thanksgiving.</p>

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
241	10/12/2019	Email	Environment	<p>1.Impact on the river and its residents. I have read the 2011 report on the bridge and the river by the Mohawk Nation Council of Chiefs. I hope you have also. It seems to me that the City has utterly failed to register the report's serious (and prescient) concern for the health of the river. This river is the only river we have. I simply cannot believe that dumping 80,000 cubic metres of rock into it will not harm fish, amphibians, reptiles, and aquatic plants, birds and mammals. I am also concerned that the bridge will drain dirt and road salt into the river. We are told on p. 2-5 that "The large size of the area allows for a high diversity of habitat features including waterfowl nesting and feeding areas, animal movement corridors, and general foraging habitat for amphibians, reptiles and small mammals. Multiple species of fish also utilize aquatic portions of the wetland as spawning habitat and foraging habitat." Are we really taking this seriously as we anticipate building and using and maintaining this bridge? You've got all the charts and check-lists in there, but I simply find it impossible to credit claims of "negligible impact." Don't you? The construction noise alone will have huge impact on creatures human and nonhuman. You know how far sound carries on water. I know humans have already done great damage to the river and its shores – but is that permission to do more? Surely not.</p>	<p>The DIA's intention is ultimately to place a significant rating on the various valued components and sub components some of which you have mentioned. It is important to note a not significant rating does not equal no effects. In the case of the 80,000 cubic meters of the causeway, the geographical extent is quite small and most of the effects are reversible over time, easily monitored and has further reclamation triggers if milestones are not met. In some cases such as fish where the causeway will be disrupting habitat during construction, offsetting is required, this is equally true of the permanent bridge piers. In these cases projects that benefit the same fish community are required to ensure the long term sustainability for the resource. In this case the projects is expected to increase the wetland and wetted area of the river through the decommissioning of Music Marina, re-naturalize portions of the western shoreline and identify new habitat projects on the adjacent Little Cataraqui Creek system. Furthermore the IPD team is still consulting with the regulatory agencies on projects or strategies that should benefit the local turtle populations over the long term. Noise has and will continue to be a construction and operation effect that needs to be managed carefully. Construction methods, thresholds, mitigations and monitoring are in place to ensure noise levels remain within approved levels. The IPD team expects the DIA work permit will outline the noise limits and likely outline when those limits can and cannot be exceeded depending on the time of year and sensitivity surround that time of year. (Example - Species at Risk Bird Breeding Season). Various modelling has occurred for both human and natural receptors to gain the best understanding on potential noise effects prior to construction, these modelled predictions will be evaluated at the onset of the construction to ensure regulated thresholds are adhered to.</p>
242	10/12/2019	Email	Environment	<p>2.Increased car travel and pressure on the eastern urban boundary. The bridge will induce traffic demand. And I fear the bridge will put pressure on the eastern city boundary, encouraging the construction of more single family homes with double garages at a time when such a model for neighbourhoods is simply unethical.</p>	<p>Please review the Third Crossing Business Plan for more information on why the bridge was to be built and the benefits to society as a whole.</p>
243	10/12/2019	Email	Environment	<p>3.Failure to consider impact on Belle Park and Belle Island. In cultural heritage parts of the DIA, I am surprised to see that the view from Belle Park and Belle Island is not considered at all. On p. 2-122, Belle Island is deemed a "backdrop." A backdrop? The City of Kingston has committed to the Mohawk Nation Council of Chiefs to protect the island, rich in flora and fauna and host to Indigenous sacred sites and ceremony. It's not the backdrop: it's the main act. On p. 2-112, we are told that "the landscape ... south of Belle Island is blocked by the tree line along the northern portion of Belle Park and Belle Island." So here Belle Park and Island are not a backdrop but a helpful screen. What this of course means is that from Belle Island and Belle Park, the bridge will be highly visible and audible. Tourists and downtown shoppers are protected from the bridge, while those who inhabit or venture into natural areas absorb its impact. Why should these spaces, already so damaged, have to bear this responsibility? Belle Park, partly because of its toxic state, is the only undeveloped spaces in downtown Kingston, and City Council recently approved a plan to preserve it as such.</p>	<p>The Federal Duty to Consult and Accommodate process has been progressing between leaders of Indigenous Nations and the City for the duration of the Third Crossing Project. Belle Island is co-owned by the City and the MNCC and we continue to work together to preserve and benefit Belle Island's heritage.</p>



Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
244	10/12/2019	Email	How We Got Here	4.Cost. I am concerned that the cost will be higher than budgeted. We could be spending this money on other priorities. Is this project worth going into debt over, given that if we have to do so we will not be able to afford other projects such as affordable housing, increased cycling infrastructure, enhanced public transit, etc.?	Please review the Third Crossing Business Plan for more information on how the bridge will be funded for capital and operational phases of the project. The Business Plan was approved by Kingston Council as one of the many priorities of Council.
245		Email	Connectivity	I hope you will not dismiss my questions and concerns as sentimental. I would suggest that attachment to the idea of the bridge is sentimental. In our culture, bridges connect; they help us over troubled water; they are symbols of progress, romance, and social cohesion. But we need to be really hard-headed about this project and recognize water as the source and the destination, not the obstacle.	The Third Crossing Business Plan has additional reasons why the bridge provides benefits to Kingston which was reviewed and approved by Kingston Council.
246	10/12/2019	Email	Environment	Mitigation Measures and Identification of Residual Effects- Section 4.1.1.2 Erosion and Sediment Control Measures- -Temporary ditches, temporary sediment ponds/basins, permanent SWM ponds, and other erosion and sedimentation control measures and stormwater management measures should be installed at the commencement of construction so that they are functional during construction. -A liner to separate the native substrate from the rock fill should be installed prior to the placement of the rock fill for the causeway. This will reduce impact on potentially contaminated sediments, maintain the existing substrate in the wetland and facilitate the full removal of imported rock materials following construction. -The AETC diagram (Figure 4.1) is not consistent with the AETC diagram shown in Appendix O. Will the base of the turbidity curtain be "keyed in" or not? -Figure 4-2 has no legend to explain the colours and symbols used on the diagram. -There is no discussion of the impacts associated with the import/export of rock fill for the causeway, equipment and building materials. Assuming that 100,000 m3 of rock is required to construct the causeway, this could account for approximately 10,000 dump truck round trips to the site. A further 10,000 dump truck round trips will be required to remove the rock fill. The impacts of truck haul include: GHG and other air emissions, energy consumption, noise and vibration, traffic delays, wear and tear on local infrastructure, etc. None of these impacts have been addressed in the DIA.	Figure 4-2: legend was removed during formatting by accident, will be revised in the final version.
247	10/12/2019	Email	Environment	Residual Effects- -Makes several references to the use of bubble curtains for mitigation, while Appendix H indicates that bubble curtains are not warranted.	Bubble curtains are referenced as a known mitigation measure available to reduce noise effects on fish and can be incorporated as part of an adaptive management strategy.

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248	10/15/2019	Email	Environment	<ul style="list-style-type: none"> <li>•Media release of September 13, 2019 did not provide times for the Open Houses, only the dates</li> <li>•City website on Sunday, September 22, 2019 had the time for the first Open House on September 25, at LaSalle Secondary School, as 2:30 to 4:30 pm (which was incorrect)</li> <li>•City did not issue a media release to add information to its original release of September 13, 2019 to provide Open House times</li> <li>•First Open House was at 5:30 to 7:30, September 25, 2019</li> <li>•No one from the city seemed to be at LaSalle Secondary School in the afternoon of September 25th to inform people of the later time.</li> <li>•Note: the city has set up four public meetings on waste diversion with only two on the new bridge.</li> </ul> <p>1.Does this meet the requirements of proper notice for the DIA? 2.Not all the Appendices were available when the consultation period began. Should the 30-day consultation period run from the time the information available to the public was complete? Incidentally, the city had told people the consultation period would be 60 days and start in</p>	The DIA process includes a Federal requirement to engage with the public with a minimum 30 day public posting of the document for public input. All the results of the City of Kingston’s engagement with the public and the environmental information will be included by the city as part of their analysis in the DIA document.
249	10/15/2019	Email	Environment	The review of noise impacts considers birds etc. How many humans live or work within the area will be affected by construction noise?	A noise assessment was completed in Appendix L that included an assessment of construction noise and mitigation. While we did not identify the total number of people that may be affected we did identify the closest sensitive receptors and assessed the potential effects and mitigation measures.
250	10/15/2019	Email	Environment	What is the effect of excessive noise on humans who live and work within the noise range of construction?	Noise level are identified through the MTO/MECP criteria for increases in noise levels that would require noise mitigation. The unmitigated noise levels are identified in Section 3.1.10.2 and used that for the basis to provide mitigation through provision of noise barriers as shown in Section 4.1.2.1.
251	10/15/2019	Email	Environment	The Detailed Impact Assessment says that construction will only take place during daylight hours – “Unless otherwise necessary and approved, activities will be undertaken during daylight hours in accordance with the City’s Noise By-Law.” Page 4-2, Appendix 4. At the June 2019 public meeting, project staff said that work would be going on from 7 am to 11 pm. Under what circumstances will work be permitted after sundown? What is the planned work schedule?	Extended work hours are anticipated to start once in-water permit approval is received, and notice will be provided to the public prior to construction commencing.
252	10/15/2019	Email	Environment	“Public complaints will be monitored by keeping a record and issues raised will be addressed in a timely manner.” Page 4-2, Appendix 4. Will this list of public complaints without identifying information be available to the public within 24-hours of the complaint being filed? If not, why not? What is the plan for giving the public access to this complaint information?	The City will be providing periodic updates to Council throughout the project's construction. We will consider providing this feedback as part of that info reporting to Council.

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253	10/15/2019	Email	Environment	The city's Official Plan shows the PSW covering the area from the 401 to south of Belle Park. - Are the calculations of area of PSW in section 2.1 correct? - Has the appropriate provincial ministry agreed with the figures and comments about the PSW in the DIA? - When and whom?	Yes, the entire provincially significant wetland is 504 ha.
254	10/15/2019	Email	Environment	Section 2.2.1 "Throughout the center of the PSW, the Rideau Canal navigable channel and a dredged access route have been created and used by the former Music Marina. These two areas are excluded from the PSW boundary due to unsuitable depths and lack of vegetation during previous wetland assessments." [bold added] Page 2-5 Are these areas excluded from MNR's mapping of the PSW or only from the city's own maps? In other words, does MNR's mapping of the PSW confirm the city's mapping?	The mapping for the DIA was taken from the Land Information Ontario database provided from the Ministry of Natural Resources.
255	10/15/2019	Email	Environment	Page 2-5 "CRCA 2018 watershed card identifies all wetlands within the Study Area as being in fair condition, improving from a fair ranking published in 2013 by CRCA." This statement does not make sense "improving from a fair" to a fair. The 2013 CRCA report card says: "Wetland cover in the region is generally healthy. Eight watersheds within the region scored an A, including Bay of Quinte, Millhaven Creek, Collins Creek, Great Cataraqui River, [bold added] <a href="https://crca.ca/wp-content/uploads/PDFs/2013-watershed-report.pdf">https://crca.ca/wp-content/uploads/PDFs/2013-watershed-report.pdf</a> . The 2018 CRCA report cards seems to give the Great Cataraqui River an "excellent". <a href="https://www.crca.ca/wp-content/uploads/PDFs/2018-WRC-CRCA.pdf">https://www.crca.ca/wp-content/uploads/PDFs/2018-WRC-CRCA.pdf</a> Is the statement in the DIA about the "fair" ranking of the Great Cataraqui River correct?	Correct. Changes have been made in section 2 of the DIA.
256	10/15/2019	Email	Environment	Table 2-5 lists 15 species of mussel. Text before the table, page 2-48 says there are 13 mussel species possibly in the study area. Which is it?	The number in the text should be 15. Text has been changed to reflect what is shown in the table

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257	10/15/2019	Email	Environment	Heavy equipment, machinery and all storage materials will be stored are at least 30 m away from the Cataraqui River, Greater Cataraqui Marsh PSW, other wetlands and any sensitive features (e.g., turtle nesting sites)." Page 4-17. The DIA seems to give the impression that the bridge construction area is not in the PSW. The whole project is taking place in the PSW as stated in section 2.2.1. Shouldn't the DIA consistently reflect this PSW status and not distinguish between the river and the PSW?	This sentence indicates that storage areas for this equipment will be at least 30 m away from the boundaries of the Greater Cataraqui PSW, the Cataraqui River and any other sensitive environmental features. This is a standard best management practice to prevent unnecessary or incidental impacts to these natural features that can occur in "busier" areas of a construction site, often focused where commonly used materials are stored and heavy equipment is parked after each use. Construction activities set to occur within the Cataraqui River, or PSW are clearly indicated throughout the DIA. Due to a small portion of the River not considered PSW (according to MNRF mapping), providing wording for both the river and the PSW provides more clarity.
258	10/15/2019	Email	Environment	Lighting- 2.4.2 What is the trade-off between "aesthetic goals" and "visitor experience" and wildlife? Given that migratory birds use the river in great numbers in the spring and fall including during nighttime hours, should the consideration for lighting levels in the bridge location only be "human safety" and not pleasure?	Lighting on the bridge will minimize impacts to wildlife as much as possible while adhering to safety standards on the bridge.
259	10/15/2019	Email	Environment	Lighting- What would be the difference in terms of lighting placement and light levels were the bridge to be lit for human safety and not for aesthetics?	Lighting on the bridge will minimize impacts to wildlife as much as possible while adhering to safety standards on the bridge. At this point accent lighting is not included on the bridge. The safety lighting is being designed using full cutoff shrouds to limit glare and light pollution and to focus the light on the travel portion of the bridge.
260	10/15/2019	Email	Environment	Lighting- Section 3.1.3.3.2.1 -- "For example, red lights have been shown to affect the navigational abilities of migrating birds, while blue-green lighting had no effect, and nesting birds tend to find white light most disruptive. As such, the bridge lighting may potentially affect birds differently according to seasonality." [bold added] What is the light colour planned? Are there options that would have less effect on migrating birds?	The use of accent lighting on the bridge is under discussion with Parks Canada. If implemented LEDs could be used that are tunable to different colours depending on the season. Lighting for the road surface will be in accordance with City of Kingston standards and will use full cutoff shrouds to limit light pollution and glare.
261	10/15/2019	Email	Environment	Cultural landscape- Figures 2.12 to 2.16 are difficult to read. They do not show the impact of the bridge on the shorelines – west and east – where it will land and in particular the removal of trees on the east shore. They do not show multiple vantage points. What is the intent of these images? Where is an accurate drawing of the full bridge at the design height?	The font size of the labels within these Figures will be increased in the Final DIA, but can be viewed digitally at their current size. These Figures are intended to show the existing views and landscapes, including cultural landscapes within the Study Area. As described in Section 3.1.11 of the DIA, the preferred bridge design has addressed the design criteria for aesthetics as presented in the Bridge Design and Construction Methodology (Appendix B). Accordingly, these aesthetic values have been foundational in the development of the Project. Sections 4.2.10 provides renderings of the preferred bridge design from multiple vantage points and show the full bridge at the design height.

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262	10/15/2019	Email	Environment	<p>Archaeological and cultural heritage resources- Section 2.2.8 says that in November 2018 archaeological work was done on the west side of the river and concludes "After these investigations were completed it was determined that these properties held no archaeological potential." This seems to contradict the information earlier in the section substantiating that this side of the river was an indigenous hunting and fishing area for centuries. Also, the area between the River Park development and the river is owned by the city and "off-limits". What was the extent of the archaeological work done on the west side of the river to justify the conclusion that the area has "no archaeological potential"?</p>	<p>Under the Ontario Planning Act and the complementary Provincial Policy Statement, development and disturbance is only permitted on lands of potential archaeological resource if the resources there can be conserved by removal and documentation, or by on-site preservation. The west side of the Third Crossing was identified as having archaeological potential, and therefore was a candidate for assessment. Furthermore, all public development projects such as the Third Crossing require an archaeological assessment under the Environmental Assessment Act. This assessment was conducted in 2018 as it was necessary for the affected land to be owned by City of Kingston prior to assessment.</p> <p>An archaeological assessment is conducted by a consultant archaeologist, and consists of a Stage 1 background study and property inspection, and a Stage 2 property assessment that includes a land survey and the opening of various test pits to determine archaeological potential. Where Stages 1 and 2 suggest the presence of archaeological resources, a consultant can recommend Stage 3 and 4 assessments.</p> <p>For the west side of the Kingston Third Crossing, no Stage 3 assessment was recommended as the Stage 1 and 2 surveys did not indicate the presence of archaeological resources. The recommendation to permit the development of this land is delivered by the licensed archaeologist who conducted the assessment to the Ontario Ministry of Tourism, Culture and Sport to ensure the terms and conditions for fieldwork and reporting have been sufficiently met.</p>

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
263	10/15/2019	Email	Environment	Archaeological Site BbGc-127 ... In the event that previously unidentified archaeological or cultural heritage resources are found by activities associated with the preliminary design phase of the Third Crossing of the Cataraqui River project the following steps were recommended by Golder (2017):...” Section 4.2.7.2, Appendix 4 Shouldn’t the same measures be in place in case an item of archaeological or cultural value is found on the west side of the river even though nothing is expected?	The purpose of archaeological assessment is to prevent the accidental disturbance of culturally significant resources or sites, and it is important to note that the Stage 1 and 2 assessments completed on the west side of the Third Crossing Project Footprint determined that construction could continue and was not expected to disturb any archaeological resources, as per recommendation by a licensed archaeologist. However, the Ontario Heritage Act prohibits anyone without an archaeological license from disturbing or altering an archaeological site. In the unlikely event that an artifact is discovered on the west side of the Project Area, construction and soil disturbance in the area must therefore be stopped until a licensed archaeologist is summoned to assess the find. In the event that construction activities unearth human bones, all construction and soil disturbance will be stopped in order to have the find assessed by the necessary authorities, to determine the need for continued assessment of the archaeological resource, and to allow for the bones to be properly handled, as per the Funeral, Burial and Cremation Services Act.
264	10/15/2019	Email	Environment	Page 2-123 “South of Belle Island and the Rideau Canal to the southerly limit of the Study Area at the LaSalle Causeway, visitors experience an urban environment both visually and spatially. This experience is characterized by the City’s historic downtown, residential neighbourhoods, Inner Harbour, Fort Henry, CFB Kingston and RMC. These features highlight the City’s current role as a multi-faceted regional service centre.” Doesn’t this misrepresent the current state of the river shoreline south of Belle Park? On the west side is the former tannery property – a green space, the city wastewater transfer facility set back from the water, the historic woolen mill, Doug Fluhrer Park and marinas, then Frontenac Village. More green space than developed space. On the east side, though residential, the houses are well set back from the water south of the Island and the dominant effect until RMC is green space. Wouldn’t a different characterization be more accurate?	The Waterfront Master Plan which was presented to council presented a vision of the future water/shoreline for Kingston. The addition of more greenspace was also considered in that plan.
265	10/15/2019	Email	Environment	Contaminants- .Why is Barium listed as exceeding limits by 50% on page 2-120 and not included in the earlier list of exceedances (tables 2.7, 2.8, and 2.16) or mentioned in section 3.2.1?	Barium did not exceed limits by 50%, it had exceedences in 50% of samples. It is not included in the tables you had listed because they exceedences of barium were in the on-shore soil, not within the sediment (this is why it is not mentioned in Section 3.2.1). In Section 3.2.2.2 Soils, it is stated that many areas along the west bank have been degraded through previous and current land use and states the potential for contaminants to leach if not handled properly. A dedicated EMP for soil management has therefore been created to ensure no contaminated soil is improperly handled or managed.

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266	10/15/2019	Email	Environment	Contaminants-The exceedance tables in section 2 show only cadmium and silver as over the limits for water quality and Section 3.1.4 says: "Within the sediment, a majority of parameters in exceedance of the sediment quality guidelines were heavy metals such as lead, copper, chromium and zinc." Why are the sediment exceedances not also listed in a table in section 2? [bold added]	Cadmium and Silver were in exceedance for water quality whereas lead, copper, chromium and zinc were in exceedance within the sediment (These tables are found in Appendix C as they are quite long). Please note that an exceedance in sediment does not mean that it will also have the corresponding water quality exceedance as many contaminants are either buried in the sediment or bound to the sediment. Sediment disturbance can cause resuspension of these contaminants, therefore a water quality monitoring program has been developed. Please see Section 8 of the DIA for details.
267	10/15/2019	Email	Environment	Contaminants-Heavy metal contamination within aquatic plants can lead to die off and alterations in growth patterns. Additionally, many heavy metals, primarily lead (shown to exceed in Section 2.2.4.2), can both bioaccumulate and bio magnify within the food web, causing behavioural and physiological impairments within wildlife." [bold added] Section 2.2.4.2 also mentions chromium, copper, fluoranthene, and pyrene. What effect will the release of these contaminants have on water quality and species health? Should the bridge work result in releases of this contamination, what are the mitigation measures to reduce impact? Who will monitor for this and when will reports be made public? Note that people swim off the rowing docks and on the east side (Barriefield), and rowers sometimes fall in. Will there be public advisories should contaminant levels rise?	Construction activities will likely result in sediment disturbance, increasing the chances for sediment bound contaminants to be resuspended into the water column (this was carried through as a residual effect in Section 5). Due to the potential for this, monitoring plans have been created and are detailed in Section 8. In summary, prior to construction, samples will be collected immediately upstream and downstream of the Project location to obtain baseline results. In addition, prior to construction, real time data loggers for turbidity, pH, TSS, temperature, dissolved oxygen and conductivity will be monitored. If high levels of turbidity, TSS or conductivity are noted during construction activities (using data loggers throughout the duration of construction), this could result in elevated contaminant concentrations. If levels exceed ministry guidelines, work will be stopped in the area and handled appropriately. The City of Kingston is aware of the blue green algae issues in the inner harbour, and city staff do liaise with regulatory agencies regarding water standards. It is recommended that swimmers contact the City if they wish to know of any advisories.
268	10/15/2019	Email	Environment	Contaminants- However, it is unlikely that mitigation will be 100% effective, so the possibility of some short-term, low magnitude releases of sediment is likely (i.e., during causeway installation and removal). It will be the responsibility of the contractor to monitor local surface water quality conditions during construction and take appropriate actions if high levels of turbidity are observed outside the Project Location, on the understanding activities may need to stop until corrective measures can be taken to minimize further adverse effects. Furthermore, adverse effects to sediment quality remains dependant on the final behaviour of the compressed peat and sediments below causeway, the effectiveness of the caissons at containing the sediments and the proficiency of the contractor collecting and/or treating the excavated sediments. As such as residual will remain until post construction sampling confirms pre / post sediment quality is relatively comparable." Section 4.2.4.1, Appendix 4 – Who will be reviewing this monitoring work? Will there be any random inspections to make sure this is being done as set out in this section?	Frequent monitoring reports (currently daily) will be completed by the onsite environmental manager and submitted to Parks Canada for review. Parks Canada will have routine inspections of the site

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269	10/15/2019	Email	Environment	Contaminants- 27. Will these reports on possible release of sediment contamination submitted to Parks Canada on a regular basis? Will they be made public? When?	All monitoring reports will be submitted to Parks Canada with any exceedances within the mandatory time frame. It is at the discretion of Parks Canada to make these reports public.
270	10/15/2019	Email	Environment	Contaminants- 28. How is Public Health involved with respect to water contamination issues and human use of the river?	The City of Kingston regularly liaise with regulatory agencies regarding water standards. It is recommended that users contact the City if they wish to know of any advisories.
271	10/15/2019	Email	Environment	Contaminants- 29. Section 3.1.4 – “Sewer discharge may also be a point source of contamination for the Cataraqui River; a number of overflow pipes are located along the west shore of the lower Cataraqui River. Elevated heavy metals and nutrients within the water and the sediment may be indicative of sewage contamination within the Study Area.” What is being done to clean up the sewer source of pollution into the river? What is the time frame for fixing this problem?	The City of Kingston and Utilities Kingston are continuing their efforts to reduce the amount of overflows during rainfall events. Please visit the following link for more info on overflow strategy: <a href="https://utilitieskingston.com/Wastewater/SewerOverflow/Map">https://utilitieskingston.com/Wastewater/SewerOverflow/Map</a>
272	10/15/2019	Email	Environment	Contaminants- Section 4.1.1.1, Appendix 4 does not identify dust from the stone that is being placed in the river as a source of air pollution. It does say “Only clean materials free of fine particulate matter shall be placed in or near water where it has been previously planned and authorized.” (page 4-4 and page 4-5) Will each load of stone be washed at source before it is released into the river? Who is monitoring this?	Parks Canada requires each load to be less than 2% fines, representative and ongoing analysis of the material is provided by the quarry to ensure the shipped product is meeting this requirement.
273	10/15/2019	Email	Environment	Contaminants- 31. Will dump trucks carrying rock to the causeway have their loads covered until they are dumped? And covered after leaving the dump site so residual rock dust is less likely to be released into the air?	The dump trucks will not be covered. Test loads have been carried out and dust is not being generated. The fines have been screened from the material and the existing moisture content is preventing dust generation
274	10/15/2019	Email	Environment	Contaminants- 32. “If unmitigated, air emissions including excessive dust levels can cause human health concerns (i.e., irritation of lungs, eyes, etc.), which, depending on the magnitude and geographic distribution of the dust plume, could potentially impact construction workers and recreational users of the area. Fugitive dust could also adversely impact surface water quality and aquatic habitat if it were to be deposited into surface water.” Section 4.3.5 How is this being monitored? What is the mitigation measure being put in place? How will neighbours be alerted to high dust levels?	Dust suppression measures are listed in Section 4.1.1.1, these include covering of stockpiles and trucks, and cleaning of access roads.
275	10/15/2019	Email	Environment	Climate change-33. Table 2.3.5, Table 2.18 The climate change projections are based on a 2014 report. Wouldn't it be prudent to use more recent calculations given increased understanding of climate change impacts?	The 2014 Climate Change Action Plan is the basis for the City's approach for climate change.



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276	10/15/2019	Email	Environment	Climate change-34.Section 3.5.2.2 sets out some worst case scenarios from weather events including water overtopping the bridge, ice wedging into cracks and snow build up leading to bridge instability. There is mention of the requirement for a safety plan. What are the possible structural and environmental consequences? What are the related costs?	The bridge is designed in accordance with the Canadian Highway Bridge Design Code, which includes live and dead loads for the bridge as summarized in Section 1.1.1 in Appendix B.
277	10/15/2019	Email	Environment	Wetland- In discussing effects on the wetland in 3.1.1 – DIA states: “These would all expected to be reversed during operations with post construction monitoring likely showing a return to the “good” ranking with increased wetland size.” [bold added] How is the wetland going to increase in size after bridge construction? Isn’t it all PSW now according to MNRF mapping?	The vast majority of the Cataraqui River is considered PSW currently. However the previous Music Marina and navigation channel to the Music Marina were not mapped as wetland, as a result of increased depths and inadequate vegetation coverage. With the purchase and decommissioning on the marina approximately 37,300 m2 of net wetland area is expected to be mapped into the PSW.
278	10/15/2019	Email	Environment	Wetland- Page 3-7, section 3.1.2.5.1.1 – There seems to be an assumption that because the construction disruption and rock in place represents only .085% of the overall PSW the long-term effects on fish are minimal. This might make sense if it is only a small pocket of fill. How is the impact evaluated when the causeway (rock) is going to stretch across the river almost from bank to bank with the rock remaining above the riverbed for over 3 years for the fill extending from the western shore?	The percentage calculations account for the total area expected to be infilled (temporarily or permanently) with Causeway fill compared to the overall size of the Greater Cataraqui Wetland (approximately 3,150,000 m2 in size currently). The western causeway accounts for 0.85% of the PSW whereas the eastern causeway will impact approximately 0.12% PSW. For a total percentage of PSW impact of 0.97%, of the overall PSW. The disruption of the fish habitat is not accounted for, some of the impacts should be reduced through the purchase of the Music Marina and the recolonization of the those areas, other will be offset in the long term through the removal of Music Marina Seawall and any future projects identified within the Little Cataraqui Creek watershed assessment, being completed as a supplementary fish offset for this Project. DFO takes all temporary, alterations and habitat loss into account when determining the appropriate offset values.
279	10/15/2019	Email	Environment	Wetland-Section 3.1.2.5.1.2 “This [impact on western shore] is primarily due to the reduced unconsolidated sediments within the immediate adjacent areas that may infill and voids, as well as a possible reduced rate of sediment deposition potential based on a general river morphology.” What does “may infill and voids” mean? Does this suggest that the river bottom may be significantly changed even after the rock is removed to a depth of 10 cm? If so, what is the ecological impact of this change?	See bullet #5 of Section 3.1.13 "The presence of the causeway will temporarily change the hydraulic regime of the study area under open water conditions. Specifically, water velocity through the bridge alignment (in a north-south direction) will progressively increase as the opening in the causeway decreases (for the same water movement events) and be at a maximum when the causeway is complete. The causeway, in its finished state, will be present for approximately 10 months and then progressively removed over the subsequent months that follow."  See bullet #6 of Section 3.1.13 "With the temporary causeway in place, open water velocity (under the design event) was estimated to be higher near the navigation channel and lower, generally, west of the navigation channel both north and south of the temporary causeways [relative to the status quo]. The estimated maximum velocity in the navigation channel with the Causeway in place was 1.3 or 0.8 m/s greater than the situation without the Causeway". The estimated drop in velocity west of the navigation channel was 0.3 m/s (i.e. to zero) under the 50-year design event.  Increases and decreases in velocity at the navigation channel and the area west of the navigation channel, respectively, resulting from the presence of the temporary causeway will see similar change.

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280	10/15/2019	Email	Environment	Wetland-How certain are the scientists that the river bottom will function after construction as it has since canal construction in the 1800s, with the new bridge in place and much of the rock for the temporary bridge left in place? On a scale of 1 to 10 is this a “guess” –a one – or a substantiated scientific calculation – a ten? What scientific evidence is there that after 3 years of rock covering the riverbed that it will restore to its natural condition? The DIA predicts a possibility of six years after the rocks are removed to the riverbed level for regeneration to occur.	The three - six year prediction is based on the professional experience of the IPD team, based on the similar projects throughout Canada as well as observation within the Cataraqui river that include the decommissioning on the of the Music Marina (Fully reclaimed in six years) utility corridors across the cataraqui (fully reclaimed in three years)
281	10/15/2019	Email	Environment	Wetland- Response to presence of European Water Chestnut. Sections 4.1.1.6 and 4.4.1.1, Appendix 4 say that water chestnut will be documented and removed with rakes, if detected. In Table 3-17, Appendix 3 it says herbicides could be used. Is this always the appropriate removal strategy or does the response depend on the time of year?	The appropriate removal strategy would be dependant on the extent at which the species is present or established. Due to the species potential to dominate a given area, situations exist where herbicide is necessary however, physical removal is preferred. (rakes)
282	10/15/2019	Email	Environment	Wetland- Page 3-92 says “If this species [European Water Chestnut] is encountered, they will be removed, and regulatory agencies informed immediately for advice or corrective action (if this species has not become established throughout the lower Cataraqui River). [bold added] Why does Appendix 4 not reflect the language of Appendix 3? Given that European Water Chestnut, although found north of Belle Park, is not yet prevalent in the river and construction is set to start why include the words “if this species has not become established throughout the lower Cataraqui River”?	The bracketed text (if this speceis has not already become established throughout the Lower Cataraqui River) has been removed from section 3.3.1 of the DIA.

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283	10/15/2019	Email	Environment	<p>Wetland-Section 3.1.2.5.2 “The existing vegetation and fish community is expected to be adapted to this habitat [daily changes in water flow]. Although flow is expected to be altered once the causeways are in place, these conditions are likely to occur at various times throughout the year regardless of the presence of the presence of the causeways.” It would seem to be evident that the flow will be significantly altered when the causeways from west and east are in place and throughout construction. Is there any doubt about that?</p>	<p>“See bullet #5 of Section 3.1.13 ““The presence of the causeway will temporarily change the hydraulic regime of the study area under open water conditions. Specifically, water velocity through the bridge alignment (in a north-south direction) will progressively increase as the opening in the causeway decreases (for the same water movement events) and be at a maximum when the causeway is complete. The causeway, in its finished state, will be present for approximately 10 months and then progressively removed over the subsequent months that follow.”“ See bullet #6 of Section 3.1.13 ““With the temporary causeway in place, open water velocity (under the design event) was estimated to be higher near the navigation channel and lower, generally, west of the navigation channel both north and south of the temporary causeways [relative to the status quo]. The estimated maximum velocity in the navigation channel with the Causeway in place was 1.3 or 0.8 m/s greater than the situation without the Causeway”“. The estimated drop in velocity west of the navigation channel was 0.3 m/s (i.e. to zero) under the 50-year design event. Increases and decreases in velocity at the navigation channel and the area west of the navigation channel, respectively, resulting from the presence of the temporary causeway will see similar change.”</p>
284	10/15/2019	Email	Environment	<p>Wetland- Furthermore, the five causeway openings within the causeway have been modelled to possess minimal velocities with the causeway in place, however this detail may be beyond the limitations of the model. Nonetheless, velocities within the openings are expected to be within swimming speeds of migrating fish species shown in Table 3.2 below.”  <b>[bold added]</b> So there will be five openings in the causeway in addition to the boating channel and the best guess is that the water flow will not be too fast for aquatic species to travel from one side of the causeway to the other for the three years it is in place? What if it is too fast? Who is monitoring this? What is the contingency plan?</p>	<p>Discussion among IPD Team is warranted to determine the value of conducting a climate resilience vulnerability assessment. Such an assessment would be comprehensive and not only include potential changes to environmental factors that drive water movement in the Project area.</p>
285	10/15/2019	Email	Environment	<p>Noise- 43.Section 3.1.3.3.2.2 -- “Similar to construction any potential operation effects would be within the open water area that provides little nesting habitat.” Operation effects will be along the whole length of the bridge, including on the shoreline. Does it make sense to suggest that it doesn’t matter because there is no nesting on the water? And have any tests been done to establish a baseline for sound levels on each shore? If so, what are they? If not, should they be done before concluding: “As background noise levels increase such as onshore or near other roads the potential impact zone decreases.”?</p>	<p>Noise assessment for operations included in Appendix L. Sound levels at each shore are based upon background traffic and urban noise sources.</p>

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286	10/15/2019	Email	Environment	Causeway placement and removal effects- Section 3.1.5.2 -- "As the fine unconsolidated substrates infill the 100 mm void, the benthic invertebrate relative abundance within the Project Footprint is expected to transition back to pre-construction conditions." It is assumed that Zebra Mussels and Quagga Mussels will move into the rock left behind once the temporary causeway is removed. What are the consequences if the invasive mussels move in and then are not outcompeted by native species? Will they have to be removed? How and at what cost?	Although these natural features are correlated, vegetation / wetland function is not expected to re-establish at the same rate and benthic communities and sediment composition. Vegetation is expected to recolonize at a slower rate than benthic communities and sediment composition. (I.e., Unconsolidated sediment will have to infill the infilled areas prior to nearby vegetation re-establishing. Vegetation re-establishment is likely somewhat dependant on unconsolidated sediment infilling the area.). Post construction monitoring has been proposed to monitor the level at which unconsolidated sediment and benthic communities re-establish the previously infilled areas. Additionally, aquatic vegetation monitoring has been proposed to determine the success of vegetation re-establishment in the area.
287	10/15/2019	Email	Environment	Causeway placement and removal effects-The Proponent has committed to conduct further sediment and benthic invertebrate sampling prior to construction. Upon completion of these, an updated evaluation of water and sediment quality, and how that relates [to] the benthic invertebrate community, will be completed." Will Parks Canada issue construction permits before this additional work is completed?	Parks Canada is expected to issue these permits prior to the work being completed. The purpose of the work is to supplement previous studies in documenting baseline or in some instances start of construction conditions of the sediment and benthic invertebrate communities. Post construction monitoring is proposed after construction to document the level at which benthic communities restore, and unconsolidated sediment infills the area previously occupied by the causeway
288	10/15/2019	Email	Environment	Causeway placement and removal effects- Section 3.1.5 -- "As a result, the wetland may not recover to wetland conditions outlined in OWES 2013 for many years, although it anticipated that by six years into operation the Project Location would become re-established as mappable wetland." This conclusion seems to be at odds with some of the information presented and with the incomplete assessment of the benthic invertebrate community. Is it a reliable conclusion? If it proves to be wrong, what will be done to protect the wetland function?	Although these natural features are correlated, vegetation / wetland function is not expected to re-establish at the same rate and benthic communities and sediment composition. Vegetation is expected to recolonize at a slower rate than benthic communities and sediment composition. (I.e., Unconsolidated sediment will have to infill the infilled areas prior to nearby vegetation re-establishing. Vegetation re-establishment is likely somewhat dependant on unconsolidated sediment infilling the area.). Post construction monitoring has been proposed to monitor the level at which unconsolidated sediment and benthic communities re-establish the previously infilled areas. Additionally, aquatic vegetation monitoring has been proposed to determine the success of vegetation re-establishment in the area.
289	10/15/2019	Email	Environment	Species at risk- 3.1.2.1 The list of construction effects does not mention the impact of dumping rock in the river during construction. "Construction Phase Potential effects on fish during construction include: • Noise and vibration by construction equipment during caissons installation. • In-water pier foundation (caisson) placement." Won't rock dumping have an effect on fish which may be in the path of the rock? Should this be included in this list? Why is this not referenced here when it is referenced in section 3.1.2.2?	This effect is not included as it is anticipated the fish would be excluded from the area. The IPD team is currently exploring option to further exclude and assess the AETC cells prior placement of material.
290	10/15/2019	Email	Environment	Species at risk- 48. Section 3.1.6.1.1 – Re: American Eel – an endangered species – "Nonetheless the construction phase of the Project will result in a reduction of juvenile and adult and habitat." Is there suitable mitigation for this species at risk? It would seem that reduction in population numbers is a significant consequence of the bridge project. What is the compensation?	Habitat availability is not expected to be a limiting factor of the Lake Ontario population the loss of the causeway footprint would not be expected to cause any population fluctuation. Communication with MNRF indicated limited catches by commercial fisherman within this reach of the Catarqui River. Permanent footprints will be offset with the western shoreline works ( music marina seawall removal) and western point removal.
291	10/15/2019	Email	Environment	Species at risk- Any large American Eel meeting MNRF's Trap and Relocate requirements will be delivered to the appropriate location." Page 4-18, Appendix 4. How is large defined? Isn't it important to protect all sizes of this listed endangered species?	This comment relates to MNRF's trap and relocate program with the commercial fisherman within Lake Ontario waters. The intent is to transport large breeding females, that would be expected to migrate downstream in the near future (All Ontario American eels are female). The program transports all incidental mature American Eels downstream of the Cornwall dam to increase survival and ultimate reproduction of the species within the Atlantic Ocean) Prior to any capture activities specification of eligible specimens will be provided by MNRF.

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292	10/15/2019	Email	Environment	Species at risk- The clearing of trees and vegetation may result in general disturbance, loss of birds and their habitat." [bold added] Section 4.2.3.1.3 Given what is written elsewhere in the DIA, it is clear that the tree cutting and vegetation removal will result in general disturbance and the loss of habitat and may result in the loss of birds. Why not be accurate?	The Project Team thanks you for your comment and has reviewed. Given that none of the SAR woodland species have been confirmed, the wording in the report will remain.
293	10/15/2019	Email	Environment	Species at risk- 51.Section 3.1.6.3.5 -- "However, without proper mitigations, the clearing of those woodlands constitutes a high potential effect to [woodland species at risk bird] nests, eggs and young." Is it a question of mitigation or compensation? E.g. the city acquiring similar land for permanent protection?	It is a question of Mitigation the loss of woodland within the regional context does not represent a significant loss nor a loss of species at risk habitat that could require an offset. As a result provided mitigations (i.e timing windows ) to avoid direct effect to woodland bird is all that was needed.
294	10/15/2019	Email	Environment	Should the DIA consider the possibility that the next few years, with climate change, will see major rainfalls or snowfalls that will exceed the 100-year event calculations? For instance, stating that the possibility of an ice-jam is "extremely low" or that scouring effects are likely "inconsequential" (section 3.1.13) may not be realistic in a 100-year forward time span. This could affect flooding and the condition of the piers.	Discussion among IPD Team is warranted to determine the value of conducting a climate resilience vulnerability assessment. Such an assessment would be comprehensive and not only include potential changes to environmental factors that drive water movement in the Project area.
295	10/15/2019	Email	Environment	The stormwater management design (bridge deck cross-fall and permanent onland storage/treatment facilities) complies with regulatory requirements and also exceed MTO standards for a 10 year storm event." Section 3.5.1.1, Appendix B, page 70 In light of recent years' rain events, is this an appropriate level for managing highwater potential during construction? Wouldn't "overtopping" of the causeway wash rock into the river that could not be controlled? How can this risk be better managed?	The crest of the Causeway will be 76.5 m (0.2 m above Regulatory Level and above the 100-year level). The risk of exceeding the 100-year level during construction is less than 2.3%. Water levels in 2009 were the highest on record, and they did not reach 76.5 m.
296	10/15/2019	Email	Environment	Table 1-10, Appendix B – east side is a significant woodland / contributory woodland – presumably there is a lot of absorption of water within this woodland habitat now. This cannot be similar to stormwater flow from a cleared site and a roadway. Are these calculations accurate?	The calculations are accurate.

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297	10/15/2019	Email	Environment	Adverse effects to air quality from the site preparation, construction and site restoration / rehabilitation phases are possible, however the Project will present opportunities to improve transportation network connectivity; enhance public transit and other municipal services; promote active transportation; and accommodate planned future growth. The Project will contribute to the City of Kingston's Climate Action Plan goals of reducing GHG emission from 2011 levels. As after construction, the 14,000 metric tonnes per year reduction provided by the Project represents approximately 7% of the City's 2020 reduction goals and approximately 21% of the transportation sector goal as identified in Kingston's Climate Action Plan. Further, the Project will result in beneficial effects on transportation related vehicle emissions and air quality." Page 3-86. Where does the reduction of 14,000 metric tonnes per year come from?	The reduction of travel time savings and distance due to having the Third Crossing in service. This information can be found in the Third Crossing Business Plan and the Cost Benefit Analysis documents
298	10/15/2019	Email	Environment	There was no plan for a bus route on the bridge after opening, only, possibly in the longer term and the active transportation use is limited by plans to store snow on the bridge on the active transportation pathway, leaving it to melt. Where is the calculation of the number of days that the multiuse pathway will not be open for walking or cycling due to snow build-up and storage?	The MUP on the bridge forms part of the City's overall sidewalk network and will be cleared of snow as part of Public Works snow clearing/removal operations along with the other sidewalks in Kingston.
299	10/15/2019	Email	Environment	What is the exact CO2 calculation for the dump trucks bringing the fill to build the causeway?	The project team carried out a Life Cycle Assessment of the construction activities that are anticipated to construct the bridge which included carbon footprint calculations. Please see Appendix O of the Preliminary Design Summary Report that is posted on the City's website for more info.
300	10/15/2019	Email	Environment	What is the exact CO2 calculation for the dump trucks removing the fill to 10 cm below the riverbed?	The project team carried out a Life Cycle Assessment of the construction activities that are anticipated to construct the bridge which included carbon footprint calculations. Please see Appendix O of the Preliminary Design Summary Report that is posted on the City's website for more info.
301	10/15/2019	Email	Environment	What is the calculation for road damage caused by trucks with a heavy load travelling on city streets and the possible required repairs? The repair work has a CO2 impact.	The project team carried out a Life Cycle Assessment of the construction activities that are anticipated to construct the bridge which included carbon footprint calculations. Please see Appendix O of the Preliminary Design Summary Report that is posted on the City's website for more info.

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302	10/15/2019	Email	Environment	In the event of an accidental release of petroleum hydrocarbons and/or other hazardous substances the causeway and trestle will act as a buffer between the rivers, which provide a buffer between the work area and the Cataraqui River." Page 3-96 "The accidental release of liquid concrete would be mitigated by the buffer created by the causeway and trestle." Page 3-97 Is the DIA saying that spills or liquid concrete leaks upstream from the causeway do not require spill management because of the presence of the causeway?	No - This was meant to illustrate that working off the causeway or trestle would allow for a cleanup to occur as the work platform would inhibit a direct release directly into the water. In addition to this, there is also multiple other mitigation measures, such as drip pans under stationary equipment, CO2 canisters on site during concrete works to deploy in the case of liquid cement to combat pH changes, refuelling procedures, etc..
303	10/15/2019	Email	Environment	The tracking of mud onto local streets will be monitored during construction. When mud accumulates on the streets, the contractor will be required to implement a system to prevent its transfer to local storm drains. This could potentially include wheel washing areas at the exit from the construction site or end-of-day street scraping/sweeping to remove accumulated materials from local streets." Page 4-24, Appendix 4 What will be done during changeable weather when the temperature drops and the washing material freezes? What material will be put on John Counter to prevent icing? What will be done to keep that de-icing material from flowing into the river?	Access to our job site is on hard surface and the truck will be travelling on rock surfaces within the job site. This will limit most of the debris on the truck tires. Dust will also be monitored and measures will be in place to mitigate, such as the application of water, etc.
304	10/15/2019	Email	Environment	Figure 1-8, Appendix B – this image makes it look like the length of the bridge is several meters above the water. Isn't the bridge only 1 m above the water for most of its length with a 6.7 m clearance in the navigation channel and a 3 m clearance in the adjacent area to accommodate rowers? Could you provide an accurate image of the bridge as it is proposed?	The general arrangement and planview of the bridge is provided in the DIA. One of the bridge design goals is to propose a bridge that is low to the water. Efficient use of materials by minimizing heights assists with reducing carbon footprint of construction and material being used. The Kingston Rowing Club has been consulted with and provisions for rowing operations has been maintained with the bridge design and construction.
305	10/15/2019	Email	Environment	Appendix B, page 62 – "Ascot Lane is reconfigured as a perpendicular intersection to John Counter Boulevard, and is also signalized..." In some city material, it is said that there will be no traffic light at Ascot Lane. Does "signalized" mean a traffic light or a stop sign? If a stop sign, will the traffic flow on the bridge enable people to leave the River Park subdivision without undue delay during rush hours? What are the traffic volume calculations at peak times?	Traffic signals will be installed at the intersection of Ascot Lane and John Counter Boulevard to facilitate movements to/from Ascot Lane. Traffic volumes on John Counter Boulevard are projected to be approximately 1,150 vehicles per hour in the peak direction.
306	10/15/2019	Email	Environment	How will cyclists and pedestrians coming from the east on the multiuse path and wanting to go north on Montreal Street or into River Park get there safely? Where is the cross-over point?	A cross ride is to be installed at the intersection of Ascot Lane and John Counter Boulevard together with traffic signals at this intersection to enable cyclists to cross from the multi-use path to the on-road bike lanes on John Counter Boulevard that connect to Montreal Street. The multi-use path is also to connect to other trails in the vicinity.
307	10/15/2019	Email	Environment	What will protect the concrete pillars from water damage should there be high water in the river or excessive wave action in a storm event?	The piers are designed to accommodate high water events and wave action without sustaining structural damage.
308	10/15/2019	Email	Environment	Will fishing be permitted from the bridge? If not, how will this be managed? If yes, how will this be managed?	The project team will bring this consideration to the attention of bylaw as to whether fishing will or will not be permitted from the bridge.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
309	10/15/2019	Email	Environment	Appendix Q, page 5 "Storm sewers should be designed to safely convey the 10-year design flow in accordance with City of Kingston requirements for an arterial road." Is it realistic to use a 10-year flow calculation when there are significant risks to the waterway resulting from discharges of grit, sand, salt, and oil into the river from a system overflow?	The "treatment train" approach allows stormwater to be collected and discharged to open ditches. The ditches will act as vegetated filter strips in low flows and allow for sediment settling in higher flows. This treatment is "pre-treatment" before flow enters the OGS.
310	10/15/2019	Email	Environment	How will snow removal be done when there is a snowstorm with significant snowfall? Will one lane be closed while a snowblower and dump trucks cart away the snow? Where will the remove snow be stored?	The bridge roadway will have 2.0meter wide shoulders that will allow snow to be piled up during snow fall events. Public Works will then schedule removal of accumulated snow from the shoulders as part of their scheduled snow removal operations. The snow will be trucked to the City's approved snow dump north of the 401.
311	10/15/2019	Email	Environment	How will the multi-use pathway be cleared of snow?	There are two snow operations that occur during/after a snow event. The first operation is snow clearing which is plowing snow to clear the surface. The snow is pushed to the sides of the pathway. As more snow falls during winter, the snow that is cleared starts to accumulate in the piles. Once the piles become large, the snow removal operation occurs which is scopping snow and placing it in a truck to haul away from the pathway. The frequency of clearing and removal is factored into the City's overall operations plan being managed by Public Works. Arterials and Major collector roads recieve priority for snow clearing and removal.
312	10/15/2019	Email	Environment	Will it be possible for people to walk across the bridge or cycle it during the winter after a snow fall and before the snow has melted?	There are two snow operations that occur during/after a snow event. The first operation is snow clearing which is plowing snow to clear the surface. The snow is pushed to the sides of the pathway. As more snow falls during winter, the snow that is cleared starts to accumulate in the piles. Once the piles become large, the snow removal operation occurs which is scopping snow and placing it in a truck to haul away from the pathway. The frequency of clearing and removal is factored into the City's overall operations plan being managed by Public Works. Arterials and Major collector roads recieve priority for snow clearing and removal.
313	10/15/2019	Email	Environment	If snow is stored on the bridge and there is a rain event, what is the capacity of the stormwater system to handle the melted snow/rain? At what point, would the snow/rain melt overflow into the river? What are the safeguards to prevent this from happening?	Bridge stormwater system is design for 100-year event, should be their be rapid snow melt, the system should not be overwhelmed. The City's public works department also has equipment that will facilitate the melting of snow in the pipes during times of freezing temperatures to ensure the capacity of the pipe is not compromised.
314	10/15/2019	Email	Environment	What is the possibility that the melted snow/rainwater in the stormwater pipes freeze and remain blocked for a period of time? E.g. should there be rain/snow followed by a deep freeze. Where will the water go should the pipes become blocked? How will the pipes leading to the shores be unblocked?	The City's public works department has equipment that will facilitate the melting of snow in the pipes during times of freezing temperatures to ensure the capacity of the pipe is not compromised.



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315	10/15/2019	Email	Environment	Appendix Q does not analyze possible weather events and their expected impact on stormwater production and management. Why not?	The SWM report is based upon the City's stormwater management criteria to manage the 2 and 100 year events to control flows from the facilities at a rate that is equivalent or less than to pre-construction conditions.
316	10/15/2019	Email	Environment	Appendix Q seems to consider rainwater management without recognizing that the material coming off the bridge is not the same as rain. The material on the bridge will include whatever products are put on the bridge during winter to keep ice from forming (salt, sand, de-icing material) and the inevitable grit, oil, windshield washer chemicals etc. that are released by vehicle traffic at all times of the year. Isn't this more environmentally damaging than rain water going into the river? What is the strategy for keeping this material out of the river?	The "treatment train" approach allows stormwater to be collected and discharged to open ditches. The ditches will act as vegetated filter strips in low flows and allow for sediment settling in higher flows. This treatment is "pre-treatment" before flow enters the OGS.
317	10/15/2019	Email	Environment	What type of material will be used in the winter to prevent ice build-up? Where is the assessment of the potential effects of various products on the river?	The snow and ice on the bridge will be managed according to the City of Kingston's Winter Operations Level of Service Policy. The Public Works department will strive, as reasonably practical to provide safe and passable winter road and sidewalk conditions for vehicular and pedestrian traffic. From October 1 to April 30, the current and forecasted weather will be monitored once every shift or three times per calendar day, whichever is more frequent, at the intervals identified in the Winter Operations Plan. As a proactive measure, the City will apply pre-treatments in the form of Direct Liquid Application to roads in advance of snowfall events to prevent and/or treat ice formation.
318	10/15/2019	Email	Environment	Has the stormwater report, Appendix Q, been peer-reviewed?	The report has been subjected to Hatch internal QAQC procedures, and has been reviewed by the City of Kingston.
319	10/15/2019	Email	Construction	In several sections of the DIA there is mention of monitoring the situation during construction. Where is the calculation of what might delay the project? What are the impacts of the rock remaining in the river for longer than the predicted timeframe of 37 months?	Large Scale construction projects such as this have innumerable potential calculations of what might delay the project. Construction schedule is monitored and adjusted continuously during construction to minimize potential impacts if delays occur.
320	10/15/2019	Email	How We Got Here	The DIA has no financial information. The level of funding from the federal and provincial governments is set. What if, for example, more rock is needed than has been calculated because of "voids" or because a storm causes a loss of rock from the temporary causeway? What if the price of rock, concrete, steel, etc. goes up? What if one of the matters that is being monitored requires a mitigation measure? At some point, the city will not be able to afford cost overruns. What if, for example, there are insufficient funds to remove the temporary causeway as planned? Where is the calculation for these contingencies that surely would have an environmental impact?	The DIA is not a financial document and is intended to address environmental concerns and mitigation strategies for the Third Crossing. The validation phase determined that the project can be built within the \$180 million dollar budget that was approved by Council in 2017.

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321	10/8/2019	Email	Environment	Item 1.4.1 – assumes an increase in population in Kingston. In fact, Kingston City Council has been told that Kingston's population is not increasing and that the population will begin to decline in 2030, so traffic will not increase in the area. My understanding that the City's transportation policy is to increase congestion to decrease automobile traffic, so the construction of a bridge contradicts the City's policy	The concept of induced demand was deliberated extensively during the council sessions in 2017 when the Third Crossing Business Plan was presented to Council. Ultimately, Council approved the construction of the bridge. Please review the Third Crossing Business Plan for more information which is posted on the City's website
322	10/8/2019	Email	Environment	Item 2.88 – talks about or heavy metals in the silt ( such as arsenic, cadmium, chromium, copper, lead, and PHAs) that exceed guidelines. There is no discussion of how that influences the “safety” of constructing the bridge for wildlife when the sediment is disturbed.	Cadmium and Silver were the only periodic exceedences for water quality whereas lead, copper, chromium and zinc were in exceedence within the sediment (These tables are found in Appendix C as they are quite long). Please note that an exceedence in sediment does not mean that it will also have the corresponding water quality exceedence as many contaminants are either buried in the sediment or bound to the sediment. Sediment disturbance can cause resuspension of these contaminants, therefore a water quality monitoring program has been developed. Please see Section 8 of the DIA for details.
323	10/8/2019	Email	Environment	Item 2.102, talks about low to medium chance of seeing bald eagles or chorus frogs. Just to let you know I see bald eagles on the ice, near the area where the bridge is planned, every winter and heard chorus frogs in the area for the first time this spring. So, there is a 100% chance of those two animals being present.	Comment noted.
324	10/8/2019	Email	Environment	In Section 4 the Kingston Outer Station is not mentioned. This is only 1 of 3 Indigenous archaeological sites in Kingston so not sure why it is being left out.	The Outer Station is not located within the Project's study area and therefore is not part of the mitigation effort for the Third Crossing.
325	10/8/2019	Email	Environment	Section 5 of the DIA discusses effects on visitor experience and recreation, but does not discuss the effect on residents. There are around 500 residential units within 300 meters of the construction on the west side. We know that noise pollution and air pollution greatly impact on both physical and mental health and there is no recognition that residents will be subject to 4 years of constant noise and pollution to build a bridge that is not needed.	The City carried out extensive traffic modeling as part of the EA, Preliminary Design and Business Plans in conjunction with the latest KTMP and level of service standards. All of these reports determined that the need for additional crossing capacity was justified and that the location of the Third Crossing would be connecting Gore Road to John Counter. Kingston Council has reviewed and approved all these documents and the construction of the bridge.
326	10/10/2019	Email	Environment	What is the team planning on doing with the snow on the multi use path? Will the snow that goes through the railing end up in the River and does that mean salt will be in the River by extension?	There are two snow operations that occur during/after a snow event. The first operation is snow clearing which is plowing snow to clear the surface. The snow is pushed to the sides of the pathway. As more snow falls during winter, the snow that is cleared starts to accumulate in the piles. Once the piles become large, the snow removal operation occurs which is scopping snow and placing it in a truck to haul away from the pathway. The frequency of clearing and removal is factored into the City's overall operations plan being managed by Public Works. Arterials and Major collector roads receive priority for snow clearing and removal.

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327	10/9/2019	Email	Environment	<p>The report I requested in my email was:</p> <p>Li, Z. and D. Zeddies. 2017. Underwater Noise Modelling of Impact Pile Driving: Third Crossing of the Cataraqui River, Kingston, ON. Document Number 01193. Technical Report. Technical report by JASCO Applied Sciences, Kingston, Ontario.</p> <p>I dont think that this report is posted on the website. Thank you</p>	<p>I'm glad you were able to find the document and easily download it. If you are speaking about the Information Summary that you would also like, that is available on the same page. It says "Download the Information Summary. The summary is also available for download in French."</p> <p>Since the file size isn't that large, I am able to attach the file to this email. Please see attached for the English version of the information summary. If you are interested in the French version you can find that on the same webpage: <a href="https://getinvolved.cityofkingston.ca/third-crossing-environmental">https://getinvolved.cityofkingston.ca/third-crossing-environmental</a></p> <p>Thanks again for reaching out. Let me know if I can help with any further questions.</p>
328	10/12/2019	Email	Environment	<p>Section 5.1.14 Hydrological Effects- Are hydrologic processes considered "significant" or "not-significant?"</p>	<p>The processes themselves are not considered significant or non-significant, rather it is the impacts associated with the valued component that are evaluated. The impact of potential scouring and erosion from altered water velocities and direction has determined to be non-significant, largely based on the area being impacted having a high resilience to changes in hydrology and because the impact is only expected to occur during construction.</p>
329	10/12/2019	Email	Environment	<p>Cumulative Effects Assessment- The Homestead Rideau Marina Redevelopment should be accounted for in the DIA, including its effect on the aesthetic character of the Rideau Canal National Historic Site.</p>	<p>The Homestead Rideau Marina Redevelopment will be included in the Cumulative Effects Assessment of the Project within the Revised DIA. All development applications are submitted to the City of Kingston and regulatory agencies to ensure that environmental impacts due to proposed develop are properly mitigated to best reflect pre-development conditions.</p>
330	10/12/2019	Email	Environment	<p>Section 2.1 Applicable Legislation-This is not the Surface Water and Erosion and Sediment Control Plan.</p>	<p>Comment unclear, Section 2.1 is the General Description.</p>
331	10/12/2019	Email	Environment	<p>The proponent is also subject to provincial legislation including:</p> <ul style="list-style-type: none"> <li>•Endangered Species Act, 2007</li> <li>•Ontario Water Resources Act</li> <li>•Fish and Wildlife Conservation Act</li> <li>•Conservation Authorities Act</li> </ul>	<p>This is correct, however these aspects will be addressed seperately from the DIA. The DIA is a requirement under the federal enviornmental assessment process. Permits for the ESA (2007) and other applicable legislation will be obtained accordingly.</p>
332	10/12/2019	Email	Environment	<p>Fish and wildlife salvage will require a Scientific Collectors Permit under the Fish and Wildlife Conservation Act.</p>	<p>MNRF Permits Receieved</p>
333	10/12/2019	Email	Environment	<p>There is no indication how the turbidity curtain/turtle fence will be maintained over the winter and respond to ice-breakup and spring freshet conditions.</p>	<p>Turtle fence will be removed prior to freeze up as the Turtles will be hibernating. The hydraulics of the Cataraqui river follows the behaviour of a lake, as opposed to a river. Typical ice break up is refered to "rotting in place". In the cell in which causeway placement is taking place, the condition of the turbidity curtain will be evaluated and repaired/replaced if necessary</p>

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334	10/12/2019	Email	Environment	How will the curtain be embedded 300 m into the substrate? Will trenching and backfilling be required? Elsewhere in the document, the turbidity curtain is shown lying on the river bed with no keying in.	The AETC will be embedded into the substrate. The correct AETC design is included in the DIA as Appendix O.
335	10/16/2019	Email	Bridge Design	Bridge design – appendix B, page 70, section 1.1.12(1)(b)(iv) – what is the calculation for the frequency of overflows from the storm water catchment into the river on the west side?	It is design for 100year return period. In this event stormwater piped to the ditches before treatment to the OGS then discharge to the river. Even in the major events stormwater receives some treatment before entering the river
336	10/16/2019	Email	Bridge Design	What is the time frame for cleaning out and maintaining the oil grit separators on both sides of the river? How are they to be accessed?	This is as per manufacturer's recommendation. As with any stormwater treatment device, periodic inspection and maintenance of OGS is required for long-term performance. All OGS should be inspected yearly or when it reaches the target sediment depth. The frequency of inspection and maintenance may need to be adjusted based on site conditions to ensure the unit is operating and performing as intended. In practice it is found that the sediment loading for a mature stable site requires much less frequent sediment removal (in the order of 3-5 years). Access road have been design for all the proposed OGS in this project. Inspection and maintenance is performed from grade without entering the unit. Sediment depth inspections are performed through the outlet riser, and oil presence can be determined through the oil inspection pipe
337	10/16/2019	Email	Bridge Design	Why not manage the water now running off the east side instead of allowing it to go directly into the river? Bridge design – appendix B, page 70, section 1.1.12(2)(b)(i)	This approach has been revised. The existing minor system that drains directly to the river along the south of Gore Road is no longer valid. It has been proposed to drains to the proposed ditch on the north side of Gore Road via 750mm PVC pipe and finally discharge to the dry pond facility before outleting to the river. The treatment train approach has been applied for quality and quantity control
338	10/16/2019	Email	Bridge Design	Appendix B, page 10 – Given that the multi use pathways on either side of the river are no longer going under the bridge when they reach the shoreline, how are people – pedestrians and cyclists – using the multi use pathway going to get safely onto the correct side of the road? For example, travelling west how does a multi use pathway user get onto Montreal Street to go north or get into the River Park subdivision? How does someone travelling east get to the library or get to the far side of Highway 15 to head north? Are the design guidelines for a multi use trail and the reintegration into the traffic system being met?	In terms of looking at a pedestrian underpass for the project, the Waterfront Master Plan had looked at a potential underpasses as part of the Third Crossing which are still being explored. The pathway system will be designed to have a secondary route that leads to the intersections of Point St Mark at Gore Road and Ascot at John Counter. The current design is proposing a set of traffic signals at both of these intersections where pedestrians can cross the roads safely and continue on the pathway network.
339	10/16/2019	Email	Bridge Design	Is the rendering in Appendix B – drawing 1.1.2.2 – an accurate portrayal of the proposed design? Hasn't the V structure been replaced by columns? What is the purpose of this drawing?	Drawing 1.1.2.2 shows the vertical profile of the ESR's bridge profile v-pier design, which was subsequently refined during the validation phase to the modified conventional pier design shown in Drawing 1.1.2.3, as the preferred pier design. Drawing 1.1.2.2 was included for comparison purposes of the vertical profile to the preferred bridge profile.

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340	10/16/2019	Email	Bridge Design	Will people on small craft entering the water on the west side, e.g. from Belle Park or River Park be able to canoe or kayak north from Belle Park or south from River Park without having to travel all the way across to the navigation channel? In other words, is there enough clearance for canoes or kayaks under the bridge – with the storm water pipes in place?	The drainage pipe under the deck is being designed to not be lower than the soffit of the girders. There is adequate vertical clearance from the bridge girder soffit to the average high water level for canoes and kayaks under all bridge spans.
341	10/16/2019	Email	Bridge Design	<p>What is the estimated cost of bridge maintenance set out in Appendix B, section 5.2.1.1?</p> <p>“...it is anticipated that:</p> <ol style="list-style-type: none"> <li>1. Visual inspections would occur every 2 years and a comprehensive detailed and underwater inspection would occur every 2-3 years prior to a major rehabilitation to determine the scope of the rehabilitation work</li> <li>2. A minor rehabilitation would be required every 15 years which would consist of:               <ol style="list-style-type: none"> <li>a) Mill and paving of the deck surface.</li> <li>b) Replacing the expansion joint seals.</li> </ol> </li> <li>3. A major rehabilitation would be required every 25 to 30 years, depending on the existing condition of the element, and would consist of:               <ol style="list-style-type: none"> <li>a) Replacing:                   <ol style="list-style-type: none"> <li>i. the waterproofing membrane and asphalt; and</li> <li>ii. the bearings as well as the modular and strip seal joints and noise barriers.</li> <li>iii. A detailed condition survey of the top of the bridge deck concrete would be required when the waterproofing is removed for replacement.</li> </ol> </li> <li>b) Replacing the concrete in localized areas. At year 60, the major rehabilitation would include the items from the previous major rehabilitation, plus the replacement of the drainage system and traffic railings.”</li> </ol> </li> </ol> <p>Does this mean that the plan is only to repave the bridge every 15 years? Is this an industry standard?</p> <p>Does this mean that it is estimated that the drainage system will have a 60-year life span? Is this realistic given that the water flowing from the bridge into the drainage system will be carrying corrosives such as salt, sand, grit, de-icer etc. used for managing ice and snow?</p>	The City of Kingston performed rehabilitation maintenance frequency analysis during the preliminary design phase. The bridge maintenance plan will be updated as part of the detailed design.

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342	10/16/2019	Email	Bridge Design	Appendix B, Section 5.1.1(1)(b) – “A small concrete curb is provided at the base of the barrier on the south side of the bridge deck to enable snow plows to ride against it without damaging the railing system. It also prevents salt-laden water from flowing down the fascia.” How often is it estimated that the concrete curb will have to be repaired? A snow plow is likely to (unintentionally) damage this curb as we see on city streets. What is the plan to manage this risk to prevent salty, sandy, or silty water from going into the river? What is the frequency and cost of repairs?	If repairs are needed, they will be completed as per the City's minimum maintenance standards.
343	10/16/2019	Email	Bridge Design	Appendix B, Section 5.1.1(5)(g) – “As noted earlier, the multi-use pathway will be subjected to pedestrian loading of up to 4.0 kPa; and/or Maintenance Vehicle gross loading of 80 kN. This load can accommodate an ambulance.” Please clarify – should the bridge deck be blocked in both directions, an ambulance might be able to cross on the multi use pathway but a fire engine could not because it is too heavy?	The multi-use path is designed for pedestrian and maintenance vehicle loading. In emergency situations, the path could safely accommodate ambulances and firetrucks without jeopardizing structural integrity of the bridge.
344	10/16/2019	Email	Bridge Design	People are assuming that should the 401 be blocked truck traffic would come down Highway 15 or Montreal Street and cross on the new bridge. Does the bridge have the load capacity to handle a number of loaded 18-wheelers? What is the maximum weight capacity of the bridge deck?	The bridge is designed in accordance with the Canadian Highway Bridge Design Code load requirements, which for live load includes requirements, multiplied by required load factors, for: i) the CL-625-ONT truck load, and the CL-625-ONT lane load; and ii) 2 or 3 design lanes (whichever produces the governing loads). CL-625-ONT truck with total gross load of 625 kN.
345	10/16/2019	Email	Bridge Design	Appendix B, Section 5.1.2.3 – Why are winter control measures labelled “Future Design Considerations”?	Once bridge has been constructed, operations will confirm the winter maintenance plan.
346	10/16/2019	Email	Bridge Design	Has any work been done to calculate the number of times snow will need to be plowed on the bridge in an average winter?	The City's Public Works Department performs an estimate of how many snowfall events there will be to assist in the development of their snow operations budget. Some years there is more and other years that are less than their estimates.
347	10/16/2019	Email	Bridge Design	If I understand correctly, snow will be stored on the bridge along the side for a light snow fall and moved onto the multi use pathway when there is more snow. How is the snow going to get from the car lanes to the multi use pathway? Isn't there a concrete curb between the road and the pathway? For snow on the north side of the bridge, how will it get to the multi-use pathway?	There are two snow operations that occur during/after a snow event. The first operation is snow clearing which is plowing snow to clear the surface. The snow is pushed to the sides of the pathway. As more snow falls during winter, the snow that is cleared starts to accumulate in the piles. Once the piles become large, the snow removal operation occurs which is scoping snow and placing it in a truck to haul away from the pathway. The frequency of clearing and removal is factored into the City's overall operations plan being managed by Public Works. Arterials and Major collector roads receive priority for snow clearing and removal. The roadway and multi-use path are separated by a traffic barrier.

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348	10/16/2019	Email	Environment	Will the snow plow plumes send snow and winter control treatment into the river?	The DIA Appendix B Section 5.1.1 has the winter design provisions and Section 5.1.2.3 has the winter operations plan. Essentially the bridge deck is designed to allow efficient snow removal from both the road and multi use path. The bridge deck is sloped towards drains at the concrete barrier between the road and the MUP to direct snowmelt to the onshore stormwater management facilities. Snow on the pathway can be removed by blowing over the barrier into trucks for removal off the bridge.  Pedestrians and cyclist will be able to access the bridge year round
349	10/16/2019	Email	Bridge Design	Has there been a calculation of the risk of the snow stored on the bridge melting quickly during a winter rain event? Could that cause an overflow of the storm water drainage system?	Bridge stormwater system is design for 100-year event, should be their be rapid snow melt, the system should not be overwhelmed.
350	10/16/2019	Email	Environment	How much overflow of storm water is allowed to go in the river? How often? Once a winter? Once a month? What is the best practice for storm water going directly into the river?	There will be no overflow from the bridge into the river.
351	10/16/2019	Email	Environment	Is it appropriate to use a 10-year storm calculation for storm water management in light of climate change? How have significant rain events – and we have had several in Kingston over the last few years been calculated and applied to the bridge design?	Storm water drainage plan design is based on the storms stated in the design criteria (10-year and 100-year return period). The bridge stormwater system has been designed for the 100 year storm. The city is looking to update their stormwater design guidelines to accomodate for extreme weather events.
352	10/16/2019	Email	Bridge Design	Could you please explain the discrepancy between Appendix B – bridge design – and Appendix Q – storm water management? In one place the plan is to have drainage on the north and south sides of the roadway and in the other it is to have only one drainage system between the multi-use pathway and the roadway. Which is it?	Only one drainge system between the multi-use pathway and roadway
353	10/16/2019	Email	Bridge Design	Is the storm water drainage plan as presented in Appendix Q accurate and substantiated? What is the risk that water will pool on the bridge causing vehicles difficulties when it rains heavily and causing splashing into the river?	Storm water drainage plan design is based on the storms stated in the design criteria (10-year and 100-year return period). We reviewed/applied several stroms in our design to ensure a robust design. The bridge stormwater system has been desigine for the 100 year storm with the ponding that meets MTO guidelines. Given the longtitudinal slope of the bridge, stormwater should not pool on the bridge
354	10/16/2019	Email	Bridge Design	Are the drainage pipes taking rain and snow melt from the river going to be insulated? What happens if they freeze?	Drainage pipe design meets frost protection depth of 1.5m as per City of Kingston guidelines
355	10/16/2019	Email	Bridge Design	Where in the DIA is there a maintenance schedule for the drainage pipes taking water/snow melt from the bridge? How often will this need to be done to keep the drainage system working? What is the cost of cleaning out the drainage system?	Public Works carries out periodic inspections on stormwater infrastructure throughout the city as part of their maintenance plans. If pipes need flushing and catchbasins need cleanouts, those activities are scheduled accordingly.

Comment ID	Date Sent	Method of Engagement	Station	Comment	Response Action to Date
356	10/16/2019	Email	Bridge Design	What is the best practice for the schedule of sweeping the bridge of grit and build up? I don't see anything about this in the DIA, although I might have missed it. Presumably, it is important to keep the drainage system flowing as efficiently as possible.	Public Works plans to street sweep the roadways about four to five times a year from May to September.
357	10/16/2019	Email	Environment	<p>Re: the rock that is going in the river. Several questions:</p> <ul style="list-style-type: none"> <li>•Where is it coming from?</li> <li>•What is the travel route?</li> <li>•Why does the DIA have no information on the travel distance and CO2 impacts?</li> <li>•What is the calculation for damage to Kingston roads having heavily loaded trucks travelling on them?</li> <li>•How reliable is the calculation of 80,000 cubic meters? Given the area to be covered by the rock, 100,000 cubic meters seems to be a closer estimate?</li> <li>•What proportion of the cost of the bridge relates to getting the rock, putting it in the river, and removing some of it?</li> <li>•How will the total bridge cost be affected if more rock than predicted is required? i.e. the rock sinks further into the river bed than expected?</li> <li>•Will the rock be washed of rock particles before it is put in the river?</li> <li>•How is dust being managed to keep it from getting in the river?</li> <li>•How is dust being managed to keep it from getting into the air around people's residences and the workers who are working on the bridge construction?</li> <li>•Who is monitoring air quality?</li> <li>•Isn't the best practice to use a liner between the river bed and the rock fill so that there is a little contact between the contaminated sediment and the rock? Why is no liner being used?</li> <li>•For the rock that is being removed, who will test the rock to make sure it is not contaminated by the sediment before it is placed on the ground on the east side?</li> </ul>	The rock is coming from a local quarry. An additional 12-15 standard triaxial trucks will be on the roads to carry out the rockfill haul (which is approximately a 10 min haul). The roads of Kingston have been designed to accommodate the standard axle loads that these trucks will impose (all within MTO criteria). Due to the shallow depth of water, rockfill causeway is the most efficient and safest means of obtaining access to construct the bridge. The rockfill will settle into the existing peat, and will be removed to 100mm below the existing bottom of river when the access is no longer required. The rockfill will increase the benthic community diversity for a short period until redeposition of existing silty material returns conditions to as they are now. The remnant rockfill will not be able to prevent the invasive vegetation from returning as they are aggressive colonizers and the vegetation conditions will return. We have carried out strength tests on the peat that overlays the silty clay overburden and have accounted for settlement of this layer in our quantities. A liner is not being used because it would not be able to be removed without ripping it to pieces...furthermore the remnant rockfill will improve the benthic diversity and suppress the invasive vegetation for a short period until redeposition returns conditions to as they are now. The rockfill will not be mixed up with the existing strata when it is removed, and only the clean rockfill will be removed to embank on the East side.
358	10/16/2019	Email	Environment	The DIA has two different proposals for the placement of the turbidity curtain. One says it will be trenched into the river bed. The other says that it will be weighted. What is the best practice? What is the actual plan?	The AETC will be embedded into the substrate. The correct AETC design is included in the DIA as Appendix O.



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359	10/16/2019	Email	Connectivity	Why will snow be stored on the multi-use pathway – it sounds like pedestrians and cyclists will not be able to use the bridge during some or all of the winter months. How is this an active transportation plan? Wash't the federal money for the bridge based on its active transportation elements? Isn't there a risk that the federal government will pull its financial support because the bridge design no longer meets funding criteria?	There are two snow operations that occur during/after a snow event. The first operation is snow clearing which is plowing snow to clear the surface. The snow is pushed to the sides of the pathway. As more snow falls during winter, the snow that is cleared starts to accumulate in the piles. Once the piles become large, the snow removal operation occurs which is scopping snow and placing it in a truck to haul away from the pathway. The frequency of clearing and removal is factored into the City's overall operations plan being managed by Public Works. Arterials and Major collector roads receive priority for snow clearing and removal.
360	10/16/2019	Email	Environment	When will the Environmental Management Plan be ready? Will the city be posting it for comment? How long will the comment period be?	The Environment Management Plans are currently under review by Parks Canada. There is currently no requirement to post publically.
361	10/16/2019	Email	How We Got Here	<p>I am grateful to [City of Kingston] for the 4 day extension of the original October 12 deadline for submission owing to my having received the hard copy of the Detailed Impact Analysis Report (DIA) on October 2 and a week later (October 9), a complete copy of the extensive Appendices sections, many having been added shortly before the deadline for submission and leaving only 2 days for serious consideration of the issues.</p> <p>From the outset, the fact that the first design which was presented in a Public meeting has been completely changed without much explanation, leading to an initial impression of a lack of follow-up on what is presented as serious Public Consultation.</p>	<p>The 2012 Environmental Assessment proposed three different construction methods that could be used to build the permanent bridge which would need to be explored further during detailed design. The three methods included using a dredged channel and marine barges; using a temporary steel temporary work bridge; and using a temporary in-water rock berm. At that time, the final determination of selecting the most appropriate and feasible method would be best determined when a contractor would be selected for the project. The IPD team is a multi-party team led by Kiewit, Hatch, and Systra working in Partnership with the City of Kingston for the Third Crossing's validation, detailed design and eventual construction. The validation phase determined what type of bridge will be built, how it will be built, and the location of major structural elements. Some of the improvements that have added value to the project include:</p> <ul style="list-style-type: none"> <li>• Reducing the length of the main span from 150m down to approximately 95m</li> <li>• Addition of an arch that is under the bridge in lieu of the former above-deck arch;</li> <li>• Majority of bridge spans will be made of concrete rather than steel;</li> <li>• The main span and two back spans will be steel girders supporting the concrete deck;</li> <li>• Two smaller look outs along the south side elevation</li> <li>• Use of an in-water rock berm for construction access</li> </ul> <p>These design changes have added value to the project by increasing constructability, service life, and aesthetics and determined that the project can be built within the \$180 million dollar approved budget</p>
362	10/16/2019	Email	Environment	<p>Blanding Turtles recognized by the Federal and Provincial Governments as Threatened and Endangered. Their Central habitat, according to Parks Canada, is less than 500 meters North of the project and "may" provide overwintering. It is an unjustified assumption to state that: "To date there is (sic) no known observations downstream of the Project Location in the Cataraqui River." And then to add: "However, occurrence data does exist on Wolfe Island, approximately 8 km downstream". This would indicate that the project location is in fact situated along turtle migration and overwintering routes without mitigating avoidance measures having been considered.</p> <p>Most recent research is dated to 2014.</p>	The IPD team is considering these two populations isolated from one another with no frequent travelling between them. Following MNRF and Parks Canada protocols habitat is defined waterbodies, wetlands and adjacent lands within 2 km of the a known occurrence. For those reasons the Project Location is not thought to be within Blanding's Turtle habitat however given the importance of the species and size of the Study Area included within the DIA they were evaluated.
363	10/16/2019	Email	Environment	<p><b>Eastern Musk turtles</b> are listed as Special Concern by the Federal and Provincial governments. The most recent research is dated 2011. Their habitat and known location are South and North of the project in shallow waters. A longer description includes a lot of "likely" and what could have been confirmed was not done "through any water quality evaluations" All this leaves room for serious doubts and assumptions.</p>	The IPD team recognizes the limitations of the data, accordingly has assumed the Project Location to be Eastern Musk habitat including the potential for overwintering and assessed impacts accordingly. Comments from the regulatory and public stakeholders have increased the knowledge base of Eastern Musk Turtle within the Cataraqui River and will be included in the DIA.

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364	10/16/2019	Email	Environment	<p>Midland Painted Turtles are of special concern to both The Federal and Provincial Governments. The DIA states "it is likely that the turtles inhabiting the Study Area overwinter downriver", leading to the unavoidable conclusion that they are travelling long distances in the immediate area concerned by the project and that "the majority of the open water portion of the PSW should be considered potential overwintering habitat", as the DIA states. The assumption that this species necessarily overwinters downriver, i.e. not in the immediate PSW area is NOT supported by the facts!</p> <p>Another important point is "Midland Painted Turtles bury in mud in the winter, but not until late December" during the construction of the bridge ?</p> <p>Most recent research is dated 2008 along with ongoing Studies by the Friends of Kingston Inner Harbour.</p>	<p>The statement of turtles having a preference for the downstream reaches was based on observations from local groups and biologist that indicated an abundance of early spring observations downstream of Belle Island. However based on species preference it is recognized the PSW provides overwintering habitat throughout. The DIA has assessed this effect, with concerns by the regulators and the IPD team precipitating the need for Turtle exclusion, monitoring and future commitments to benefit the species and offset any effects occurring as a result of the project.</p>
365	10/16/2019	Email	Environment	<p>Northern Map Turtles, also of Special Concern by Federal and Provincial governments. This species "exhibit long range water movements" and indicates an ability to overcome obstacles in order to return to natal sites" After reading this, I find surprising to read that the lower reaches of the Cataraqui River is the site of action... it seems to me that a lot of areas North of the project could also be as prevalent as those indicated with application of modern technology and strengthens the DIA statement which "confirms usage throughout area." Once again the lack of data brings concocted assumptions and interpretations while the few recent and useful data are minimized if not pushed aside!</p>	<p>The IPD team is unsure what data you are referring to being minimized and apologize if this has occurred. Based on the available data the IPD team has tried to draw any potential conclusions. More information has become available through the public review and will be built into the DIA, to date the new information further emphasizes turtle movement through the Project Location.</p>
366	10/16/2019	Email	Environment	<p>TURTLE IMPACT STATEMENT is a perfect example of the DIA's minimizing of the different adverse effects on the turtle population. This is obvious and alarming. We simply do NOT have sufficient research, as seen by the use of mostly outdated documents to build the DIA's case rather than using available technology which would allow greater knowledge of the different species involved.</p> <p>When one considers the litany of problems that will be faced the turtle population: entrapment, loss of overwintering habitat, vehicle strike, nest excavation, crushing, and reduction of habitat, the inevitable conclusion that these will happen is "high" or "moderate". But we are to be re-assured, presumably, that there will be mitigation... on site! What kind and by whom is not spelled out which is not comforting as "mitigation" here really means nothing!</p>	<p>The IPD team apologizes you feel the DIA minimizes adverse effects on the turtle populations. Often adverse effects are subject to the readers opinion on the significance. The DIA recognizes the potential harm to turtle and turtle habitat, with tailored mitigations applied to reduce the potential effects. Where mitigations cannot fully document the removal of the potential effect, compensation is being discussed with the regulatory agencies to, have long term benefits of the local turtle populations. With regulatory approval of the mitigations, monitoring and compensation effects would be considered not significant.</p>

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367	10/16/2019	Email	Environment	UNDERWATER NOISE and IMPACT ON TURTLES. There are no criteria available for freshwater turtles so the DIA uses a study on Sea Turtles? This does not sound serious. No comparison found here. Table 3 is basically useless (pages 5-6 of Appendix H) for freshwater turtles. I have noted some efforts made to mitigate some problems. But, once again who is going to follow-up on the guidelines of inspection, frequencies and method? Who is officially going to do the monitoring and how? The proposed exclusion fencing may not be adequate to keep turtles out, turtles are not known to follow directions imposed by humans...	IPD team acknowledges the lack of available reference material regarding noise, however has followed industry standards. Noise monitoring is going to occur on a test pile and caisson within the turbidity curtain, within an area of low probability for fish and wildlife injury, these monitoring results will be submitted to Parks Canada, if the thresholds for fish and wildlife both aquatic and terrestrial are found to be unsuitable, further mitigations will be implemented or construction methods changes, until such a time effects are deemed acceptable by Parks Canada.
368	10/16/2019	Email	Environment	WATER QUALITY. Sediments moved by heavy equipment are sources of different contaminants within the turtle habitat. Cyanobacteria have also detrimental effects not only on wildlife but are "as well creating hazards for humans." We also know that turtles are more susceptible to pollution and diseases in the winter months.	Noted – Mitigations within Section 4 address sediment movement and increased total suspended sediment and Monitoring outlined in Section 8 will document and changes in Water Quality and/or Cyanobacteria, with mitigation and regulatory reporting completed. .
369	10/16/2019	Email	Environment	One noteworthy point to note is that the causeway material would provide suitable habitat for Zebra and Quagga Mussels, (page 3-28 of the report) two invasive species that have higher levels of algae that produce a toxin that can be harmful to humans and animals, according to a Michigan State University researcher. Ironic is not it?	Currently Cataraqui River System and Lake Ontario are colonized by Zebra and Quagga mussel, the relatively small causeway area in comparison would not be expected to change WQ to a measurable effect
370	10/16/2019	Email	Environment	To summarize, there is a lack of data throughout the report and, more specifically, on turtles and the indisputable disruption of their essential habitat. It is also difficult to understand that the work on the Third Crossing has already started based only on assumptions and vague deductions from outdated reports. I do hope the rest of the research concerning this project has been more thorough than the one on turtles and that the follow-up on presently vague and/or non-existent mitigation measures will be carefully put in place and monitored.  The fact is there is still so much unknown and so much to learn. Friends of Kingston Inner Harbour have just begun studying turtles in recent years using modern technology and their findings often reveal facts that were previously unsuspected. Turtles moving to and hibernating in the Kingston Mills location is one example. All this is very worrying in a time when species are disappearing due to human interference and climate change.  With climate change wreaking havoc here and there, it is sad that a City that proclaims its goal of sustainability puts so much effort into encouraging pollution instead of building an efficient and reasonable public transportation system!	Noted.

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371	10/16/2019	Email	How We Got Here	<p>1. We understand that there is huge pressure to get this project done on time and on budget.</p> <p>2. We are also very grateful that the Third Crossing Team made time for us to meet on site to discuss some of our concerns and that they have all been very personable, open, and easy to talk with.</p> <p>3. We appreciate the enthusiasm of the Third Crossing Team concerning the Integrated Project Delivery model - an interesting and ground-breaking model.</p> <p>4. We appreciate the team's repeated suggestions for possible further meetings.</p> <p>5. We appreciate the huge amount of work that has gone into this report. It is truly massive.</p>	Thank you for sharing your comments.
372	10/16/2019	Email	Bridge Design	<p>Change in plan of bridge design: The first plan involved extensive community consultation with the broader Kingston community. Then, somehow behind closed doors, that plan was changed with no similar public consultation and with insufficient explanation.</p>	<p>The 2012 Environmental Assessment proposed three different construction methods that could be used to build the permanent bridge which would need to be explored further during detailed design. The three methods included using a dredged channel and marine barges; using a temporary steel temporary work bridge; and using a temporary in-water rock berm. At that time, the final determination of selecting the most appropriate and feasible method would be best determined when a contractor would be selected for the project. The IPD team is a multi-party team led by Kiewit, Hatch, and Systra working in Partnership with the City of Kingston for the Third Crossing's validation, detailed design and eventual construction. The validation phase determined what type of bridge will be built, how it will be built, and the location of major structural elements. Some of the improvements that have added value to the project include:</p> <ul style="list-style-type: none"> <li>• Reducing the length of the main span from 150m down to approximately 95m</li> <li>• Addition of an arch that is under the bridge in lieu of the former above-deck arch;</li> <li>• Majority of bridge spans will be made of concrete rather than steel;</li> <li>• The main span and two back spans will be steel girders supporting the concrete deck;</li> <li>• Two smaller look outs along the south side elevation</li> <li>• Use of an in-water rock berm for construction access</li> </ul> <p>These design changes have added value to the project by increasing constructability, service life, and aesthetics and determined that the project can be built within the \$180 million dollar approved budget</p>

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373	10/16/2019	Email	Bridge Design	Change in plane for temporary bridge Similarly no adequate explanations have been offered as to why the huge amount of rock for a temporary bridge seemed necessary rather than the original temporary floating bridge concept.	<p>The 2012 Environmental Assessment proposed three different construction methods that could be used to build the permanent bridge which would need to be explored further during detailed design. The three methods included using a dredged channel and marine barges; using a temporary steel temporary work bridge; and using a temporary in-water rock berm. At that time, the final determination of selecting the most appropriate and feasible method would be best determined when a contractor would be selected for the project. The IPD team is a multi-party team led by Kiewit, Hatch, and Systra working in Partnership with the City of Kingston for the Third Crossing's validation, detailed design and eventual construction. The validation phase determined what type of bridge will be built, how it will be built, and the location of major structural elements. Some of the improvements that have added value to the project include:</p> <ul style="list-style-type: none"> <li>• Reducing the length of the main span from 150m down to approximately 95m</li> <li>• Addition of an arch that is under the bridge in lieu of the former above-deck arch;</li> <li>• Majority of bridge spans will be made of concrete rather than steel;</li> <li>• The main span and two back spans will be steel girders supporting the concrete deck;</li> <li>• Two smaller look outs along the south side elevation</li> <li>• Use of an in-water rock berm for construction access</li> </ul> <p>These design changes have added value to the project by increasing constructability, service life, and aesthetics and determined that the project can be built within the \$180 million dollar approved budget</p>
374	10/16/2019	Email	How We Got Here	Breadth of public consultation about the build process As part of the communication strategy, the Third Crossing Team held "Near Neighbourhood" meetings to inform local residents about the timetable re construction and allow citizens to air concerns. This was good. What was missing however was communication with the broader community across the city. As this is the most expensive project the city has ever been involved in all tax payers should be informed. It would have been better if, from the outset, communications had been sent out by the city newsfeed to all interested citizens as well as to near neighbourhood residents.	Thank you for your comment. The project has a dedicated website that posts all information that is upcoming, construction related or anything to do with the project for the greater community. The project team also actively posts on social media platforms encouraging the greater community to learn more about the project on the website. On the website any meetings that are held with key stakeholders (near neighbours, etc. ) are posted on the project website for the greater community to learn and read about that includes any presentations that are given to near neighbours.
375	10/16/2019	Email	How We Got Here	Length of time allowed for comment on the DIA by the general public Normally an Open House is held and then 30 days are given for public comments. In this case, the DIA was put online and the 30 day countdown started then. We are not sure if this is actually legal and wonder about those who don't have either easy access to a computer or ability with computers.	The DIA process includes a Federal requirement to engage with the public with a minimum 30 day public posting of the document for public input. All the results of the City of Kingston's engagement with the public and the environmental information will be included by the city as part of their analysis in the DIA document.
376	10/16/2019	Email	How We Got Here	Accessibility of the DIA Hard copies were made available when requested but they did not contain the appendices. Some of the appendices only appeared online a week or so before the deadline for comments. As the appendices were as long as the DIA report itself, this was clearly insufficient time for citizens to be able to digest them, let alone offer comments.	A10-page information summary was posted in English and French on the Third Crossing webpage that provided highlights of the full DIA document to help readers gain a rapid understanding of the DIA report. The DIA process includes a Federal requirement to engage with the public with a minimum 30 day public posting of the document for public input. All the results of the City of Kingston's engagement with the public and the environmental information will be included by the city as part of their analysis in the DIA document.
377	10/16/2019	Email	How We Got Here	Some of the maps and diagrams are too small to read easily and require a magnifying glass. Fold-out pages in the hard copies would be preferable.	Thank you for your comment. As a City organization we fall under the requirements for All documents provided online were in accordance with the Ontarios with Disabilities Act (AODA).

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378	10/16/2019	Email	How We Got Here	Problem with the Integrated Project Delivery Model Although this was touted to be a process where Parks Canada was working step-by-step through the work process with the city and the consultants, some citizens actually took it into their own hands to meet with representatives of Parks Canada to discuss their concerns and we were told that the perspective they received from Parks Canada differed from that of the city. For that reason, Parks Canada has been copied with this e-mail.	The City has been working closely with Parks Canada throughout the projects EA phase. The City is a Proponent proposing a project to a Federal agency which is a different relationship compared to residents speaking with a Federal Agency. The IPD model is also a new model for Parks Canada and the City has been explaining the model's strengths and benefits to Parks Canada since the Third Crossing Business Plan was approved. The City is also continuing to learn about the DIA proces with the assistance of Parks Canada in order satisfy the Proponent's DIA obligations.
379	10/16/2019	Email	Construction	Why is the curtain going in before official approval? Is this actually legal?	The details of the curtain have been reviewed with the required agencies and they have given the required permissions to install the curtain.
380	10/16/2019	Email	Environment	FKIH radio telemetry observations of four female Northern Map Turtles suggest that the reach between Highway 401 upstream to the Kingston Mills dam is a primary overwintering site for Map Turtles captured in the Inner Harbour in July and August. Prior to the radio-telemetry study and incidental observations by boat, FKIH suspected that the primary overwintering area for Map Turtles was somewhere in the river south of Belle Park, close to the Davis Tannery property as indicated in the Third Crossing Detailed Impact Assessment (DIA). This had been inferred based on walking surveys documenting concentrations of basking Map Turtles at the Tannery shoreline in April at the beginning of the active season. Because of the new data we have collected, we now suspect that most Map Turtles in the Inner Harbour must traverse the proposed Third Crossing site in late summer or fall and again in early spring in order to migrate to and from their primary overwintering site. With the third-crossing being directly in their route, we cannot be sure how this will negatively affect the seasonal movements of this species at-risk. Six female Map Turtles were fitted with transmitters during July and August. One transmitter fell off in late August and we have been unable to detect a signal for another after 9 September. Between 13 August and 2 September the remaining turtles moved approximately 6 km from the Inner Harbour area downstream of Belle Park to the Kingston Mills/401 reach. Over the same period, we observed a pronounced increase in basking Map Turtles in the Kingston Mills/401 reach while incidental observations of adult and older juvenile Map Turtles declined in the Inner Harbour to the point that we essentially ceased encountering them there in September. On 23 August we observed five Eastern Musk Turtles during 60 minutes of directed searching in the Kingston Mills/401 reach with several others observed opportunistically on other occasions. Similar sampling at several sites downstream of the 401 in late August failed to detect Musk Turtles although we had been able to find them earlier in the active	Thank you for the additional information to further the DIA's database. Movement of the turtles through the Project site has been a continuous concern of the Project. Consultation with the regulatory agencies have concluded that the five (5) eco passages in addition to the main opening should provide adequate passage during these times of movement. Eco passages have been developed using MNRF's best management practices and will be monitored via motion active cameras to determine usage. Frequent monitoring reports (currently daily) will be submitted to Parks Canada on the effectiveness of the exclusionary and passage systems. Daily monitoring as well mandatory contractor education has also been implemented to ensure the entire work crew is turtle conscious. This is very interesting data and we thank you for providing. I would appear based on your observations and preliminary telemetry results there was a movement of Northern Map turtles from south to north during the summer months. Equally interesting was the observation of the shell painted turtle that move from the inner harbour to the central quarry in the spring. Seems difficult to assume that all turtles would overwinter within the upper reaches, move to the inner harbour very early in the spring to then disperse to their nesting sites. Possibly more likely that the overwintering is occurring in both locations or as you noted elsewhere, possibly the movement is to capitalize on foraging opportunities. We would very much be interested in receiving any additional information from these individuals beyond early September to determine if there was any subsequent dispersion. This information will be incorporated into the DIA. The IPD team thanks you for the observations, it is interesting to note the relatively high abundance of Eastern Musk turtles within the system. Similar to the Northern Maps, it is difficult to draw overwintering conclusions from summer observations, however you inclinations may be correct, it would be reasonable to assume the upper reaches provide better overwintering habitat then the Project Area.

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381	10/16/2019	Email	Environment	In recent discussions with local avid fishermen in the area, they stated that right now salmon are spawning at Kingston Mills. Evidently lots of fish eggs end up floating in the water that become food for many other species of fish and very probably for the turtles as well. In addition to the eggs, when the salmon have finished spawning they die and their bodies become food for insects which also end up floating in the river as food for other species. It seems possible that the turtles may be going up to Kingston Mills late in the season for food as well as for hibernation in oxygenated water. More research is needed.	IPD team agrees this is an interesting topic of research and discussion there are many occurrences in nature where species or individuals will undergo seasonal movements to take advantage of an abundance of food, this is especially true for species that rely on fat reserves to sustain them over long overwintering periods.
382	10/16/2019	Email	Environment	When turtle habitat is discussed, it appears to concentrate on nesting and overwintering with no mention of either basking habitat or actual ranges that have been observed to date.	The entire PSW to stated as being suitable habitat for all 4 species with slight preferences of each species dicatating actual use during the year. The DIA focus on nesting and overwintering as these are sensitive periods where the turtles are the most susceptible to effects
383	10/16/2019	Email	Environment	In the Sound impact section, the possible impact on turtles seems missing. The data doesn't exist to warrant any conclusions here. Species of Interest We note that in the report there are references from Golder, Snetsinger, Li and Zessies providing bird and reptile species that could be affected by construction and traffic noise but no reference to turtles. In Appendix N - Underwater Noise Modeling Report it states that the top sediment layer at the riverbed surface is composed of fine, water-saturated sediments (very loose silt, and silty clay to clay, Appendix B.3) and in general, soft sediments allow for high penetration of acoustic energy and its subsequent attenuation as the acoustic wave propagates and interacts with sediments. Impact to Animals In section 4.2 Based on the criteria proposed by Popper et al (2014) for acoustic impacts on fish and turtles, the distances to the thresholds for injury are quite small (Table 6). The peak pressure thresholds for mortal and recoverable acoustic injury to fish and for mortal injury to fish eggs, fish larvae, and turtles occurred within 2-3 m of the source. The SEL 24th thresholds for mortal acoustic injury to fish with a swim bladder, fish eggs, fish larvae, and turtles were within 5-6m of the source; the SEL 34th threshold for recoverable acoustic injury to fish with a swim bladder was within 7 m of the source. For dual-criteria thresholds, such as the peak pressure and SEL24th, the greater of the two ranges is generally used for regulatory purposes. The maximum distance to the temporary threshold shift-onset (186 dB re 1 uPa2 s) was 86m. Popper at al (2014) do not specify quantitative thresholds for recoverable injury for turtles, fish eggs, or fish larvae, nor do they specify quantitative thresholds for masking or behavioural disruption of any fish or turtle. Instead, qualitative risk levels as a function of relative range are used as shown in Table 3. Turtles within tens of meters of the pile are at high risk of recoverable injury, and fish eggs and larvae are at moderate risk of recoverable injury within this range. The relative risk drops to low for	Thank you for the comment, the IPD cannot comment on the regulatory preference for thresholds. We can comment that the modelling provided within the appendix is based on a worst case unmitigated scenario and that construction acoustic monitoring is proposed with an adaptive strategy implemented depending the test monitoring results. If the regulatory thresholds are surpassed at the set distance, either further mitigations will be implemented or change in construction methods to ensure compliance with conditions of the DIA. As previously mentioned Appendix N appendix is based on a worst case (all impact driving construction method) unmitigated scenario and that construction acoustic monitoring is proposed with an adaptive strategy implemented depending the test monitoring results. If the regulatory thresholds are surpassed at the set distance, either further mitigations will be implemented or change in construction methods to ensure compliance with conditions of the DIA. Turtle hearing in freshwater turtles is relatively unknown as such the IPD is using the best available information and direction from the regulatory agencies.

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384	10/16/2019	Email	Environment	We disagree strongly that all impacts are "Not Significant". It would actually be correct to say that insufficient data exist to determine impact.	Significance ratings are subjective to the readers interpretation of the available information and we note your disagreement with the DIA's conclusion(s) of "Not Significant". Mitigation and monitoring requirements have been increased with potential for offsetting or future improvement projects ongoing with the regulatory agencies to combat any uncertainties within the data that currently exists
385	10/16/2019	Email	Environment	We are concerned about follow-through. What proof is there that all of the follow-up monitoring procedures will actually happen? Past instances in other places have shown that monitoring ends up being slipshod and insufficient.	Comments received on the DIA inclusive of these comments are taken into consideration, with both these and regulatory comments prompting changes to Section 8 of the DIA with increased monitoring effort and durations. Many of the aquatic habitat monitoring requirements are also incorporated into the Fisheries Act Authorization with follow-up monitoring costs incorporated into a letter of credit held in trust by fisheries and oceans until a point monitoring has shown the offsets and reclamation has occurred. If the City reneges on those obligation Fisheries and Oceans have the funds available to complete the monitoring that relate to fish and fish habitat.
386	10/16/2019	Email	Environment	We are not confident that exclusion fencing is adequate to keep turtles out. Our experience in Doug Fluhrer Park showed that the turtles broke it down. We have concerns that turtles may be caught up in the vegetation removal and that the AETC is being put in when turtles may be migrating to Kingston Mills.	The IPD team acknowledges exclusionary fences are not 100% effective. However when combined with a robust monitoring system, whereas a dedicated person inspects every day and the entire work force is trained to be on the lookout for wildlife and instructed to shut down while the environmental staff alleviate the concerns, have been shown to reduce the potential for injury or mortality substantially.
387	10/16/2019	Email	Environment	The map showing turtle sightings is incomplete. Other sightings exist. Pages 3-42 to 3-46 have interesting although not always accurate information on each of the types of turtles. We would be happy to meet to assist in these corrections.	The IPD is interested in receiving all available information available and welcomes any additional sighting within the Study Area. The IPD team would be happy to receive any additional information and possible corrections.
388	10/16/2019	Email	Environment	Overwintering comments? The suggestion that the turtles may be overwintering south of Belle Park but closer to the main channel rather than near the main shoreline is undocumented and the rationale is unclear. Perhaps the reason we are finding out that they seem to like Kingston Mills for overwintering is due to the oxygenated water there due to flow?	The IPD team acknowledges the upper reaches would also provide suitable overwintering habitat for all species with a more increased potential for the anoxic intolerant Northern Map and Eastern Musk Turtles. We apologize if the rationale was unclear, the intent was that the anoxic intolerant species would likely move further offshore to waters less apt to be depleted in Oxygen. Other turtles such as Snapping and Painted would be fine near the shores if oxygen were to be depleted.
389	10/16/2019	Email	Environment	The impact of change in flow on turtles and other wildlife may well be much greater than indicated in the DIA - especially given how seasonal and climate change will effect water levels and flow. There is simply insufficient data to warrant any conclusions.	The IPD team respectively disagrees, extensive hydrology modelling using decades of climatic data was used to model dozens of scenario's. The Casueway opening was sized to be comparable with the Belle Island River width, with the additional five eco -passages further providing passage. In regards to future climate change and water fluctuations outside the City's control, the IPD agrees that these may have adverse effects on turtles and other aquatic wildlife (i.e flooded nests or nesting sites)
390	10/16/2019	Email	Environment	There is too much reliance on on-site decisions i.e. when to lower curtain	Complex long duration projects such as these are very reliant on on-site decisions, permit conditions will dictate conditions and thresholds that will require adherence. The IPD tea has a suite of mitigations at their disposal as outlined in Section 4 of the DIA, with these being implemented as needed to ensure compliance with the regulatory frame work. Parks Canada will be reviewing frequent monitoring reports (currently daily) and have an onsite presence through inspection to ensure compliance



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391	10/16/2019	Email	Environment	As there is no data as to where turtles actually overwinter (although we are currently discovering that Kingston Mills seems to be a major site) no assumptions can be made on what the impact of the bridge footprint will be on their choices of overwintering sites.	The IPD team acknowledges the lack of overwintering data on the system and welcomes any information that can be provided. With that acknowledged, predictions can be made using the best available information on what conditions the turtles may seek out, using past research. The DIA predicted Northern Map and Eastern Musk would move to an area of greater oxygen concentrations and based on previous observation of early season activity, made a reasonable assumption overwintering would be occurring near those observation points, following MNR's Wildlife Significance Criteria. Using the criteria the are indicated remains an assumed significant overwintering area. Possibly new information will identify a second significant area, if in fact late fall, early winter telemetry or early spring emergence studies show suitable abundance, below Kingston Mills.
392	10/16/2019	Email	Bridge Design	The report is lacking in specifics regarding storm management details.	This report has been revised with specific details and will be resubmitted.
393	10/16/2019	Email	Environment	The impact of snow removal, salting/sanding is not accounted for.	The DIA Appendix B Section 5.1.1 has the winter design provisions and Section 5.1.2.3 has the winter operations plan. Essentially the bridge deck is designed to allow efficient snow removal from both the road and multi use path. The bridge deck is sloped towards drains at the concrete barrier between the road and the MUP to direct snowmelt to the onshore stormwater management facilities. Snow on the pathway can be removed by blowing over the barrier into trucks for removal off the bridge.  Pedestrians and cyclist will be able to access the bridge year round
394	10/16/2019	Email	Environment	The comment that the causeway substrate will not be suitable for nesting lacks details/authentication.	Mitigation measures are in place to assess the suitability and access of the causeway material for nesting. If found to be suitable corrective actions will be taken to reduce suitability, this may include covering with a geo-textile material.
395	10/16/2019	Email	Environment	Permanent exclusion fencing is needed where the bridge joins the roads on each side of the causeway to be sure to keep turtles off the road.	Discussion with agencies regarding this or the need for a precluding road mortality study is ongoing.
396	10/16/2019	Email	Environment	Reference is made in a few places that missing information will be gathered during construction. However this assumes that the information gathered will not indicate a significant impact or need for mitigation. This assumption is lacking in rationale. All data should be in place before any work starts.	Comment noted, advancement and approval of the project is subject to the regulatory authorities, with any supplementary data collection approved through research permits provided by Parks Canada.
397	10/16/2019	Email	Environment	The comment about the low eel abundance seems to contradict the actual behaviour of the commercial fishermen who are fishing for them.	Information regarding Eel catches within the Cataraqui river was provided by MNR records. The fisherman is part of the trap and transport program, with little to no eels submitted to MNR.
398	10/16/2019	Email	Environment	The statement that " Although the general habitat disruption is undisputable it remains unavoidable despite mitigations." is true. However the subsequent words "however the overall impacts remain relatively minor with the total construction footprint representing less than 0.7% of the total habitat available with the Provincially Significant Wetland estimated at 504 ha" is, quite frankly, irrelevant. What matters is that the parts of the marsh that the turtles do use are not destroyed and that the entire marsh is protected. In fact we don't have enough data to make any sort of assumption that because 0.7% represents the total construction footprint, that the effect of construction will be minimal on the turtles. It could well be that the 0.7% actually represents 50% or more of the area where turtles actually choose to be within the whole of the Provincially Significant Wetland.	We agree with the comment that the not all habitat can be treated equally when data exists to show preference to one location or another. Using past studies and consultation with various regulatory agencies and stakeholders there is no indication the Project Location is used to a greater extent than other portions of the PSW or adjacent areas. Information provided by the FIKH as well as others continues to demonstrate the importance of other areas with no known congregations of turtle within the Project Location. However the importance of the Project Location as a travel route has been raised previously and is further emphasized with FIKH's telemetry work.

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399	10/15/2019	Other	How We Got Here	Will the report be made public?	Yes once we have compiled all the comments and how we considered and or addressed them. It will be available on our project website.
400	10/15/2019	Other	Bridge Design	Is there an angle to the fence being installed from Ascot to Montreal street or is it a straight line?	There is a slight angle of alignment that was needed to avoid existing underground infrastructure.
401	10/15/2019	Other	Construction	Board mentioned that Kiewit staff have been fantastic to work with – several residents have commented about their responsiveness, professionalism and craftsmanship.	Thank you, we appreciate the compliment and have relayed the message onto our workforce. Our team strives to be good neighbours.
402	10/15/2019	Other	Construction	Board appreciated attention given to the relocation of Canada Post mailboxes, and the the debris leftover from this relocation.	Thank you, we appreciate the compliment. As issues like these arise, we will do our best to get them addressed as soon as possible