



Detailed Impact Assessment Process
Overview

February 2024



Presentation Contents

- Impact Assessment Act, Detailed Impact Assessment (DIA), and Conceptual Constraints and Impact Considerations (CCIC)
- Valued Components (VCs)
- Valued Component Assessment
- Information Gaps
- Next Steps







KINGSTON INNER HARBOUR DETAILED IMPACT ASSESSMENT



Impact Assessment

- The Project will be subject to an Impact Assessment under the Federal Impact Assessment Act (2019)
- Impact Assessment Act sets out impact assessment requirements in relation to projects on Federal lands and waters
- Prior to taking action or making a decision, Transport Canada and Parks Canada are required to determine if the project, as proposed, has the potential to cause significant adverse or negative environmental effects

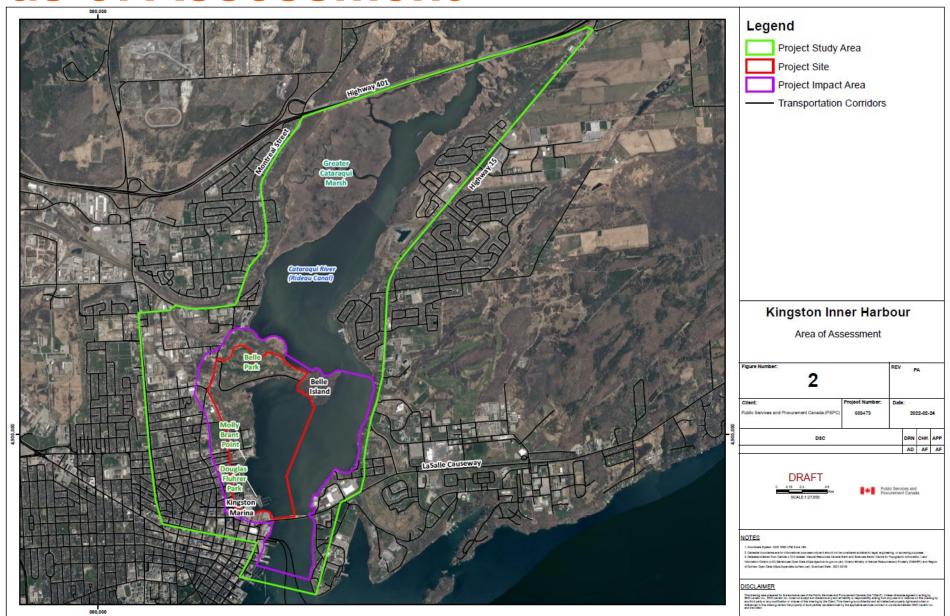


Detailed Impact Assessment and Conceptual Constraints and Impact Considerations

- Detailed Impact Assessment (DIA) is being prepared
- Conceptual Constraints and Impact Considerations (CCIC) document has been prepared that provides a preliminary, high-level consideration of Project impacts. It includes:
 - Identification of Valued Components (VCs)
 - Desired outcomes, thresholds, potential design considerations, potential constraints and information gaps for each VC

Areas of Assessment









What is a Valued Component (VC)?

- Valued Components (VCs) are aspects of the environment that are important features and/or are representative of the KIH
- VCs are environmental, health, social, economic or additional elements or conditions of the natural and human environment
- VCs and associated desired outcomes and thresholds were revised based on input received during consultation and engagement with Indigenous peoples and the public



Natural Resource VCs

- Aquatic Wildlife and Vegetation:
 - fish
 - molluscs
 - amphibians
 - benthic invertebrates
 - macrophytes (aquatic plants)
 - algae
- Species at Risk Turtles
- Species at Risk Birds
- Species at Risk Bats





Natural Resource VCs (cont'd)

- Terrestrial Vegetation
- Terrestrial Wildlife (birds, mammals, reptiles)
- Surface Water Quality
- Lacustrine Processes (e.g., water levels, wave action)
- Sediment Quality
- Soil and Landform Resources
- Air Quality
- Climate Change





Indigenous Interests and Rights & Archaeological Resources VCs

- Indigenous Interests and Rights
- Terrestrial Archaeological Resources
- Submerged Archaeological Resources





Cultural Heritage and Visitor Experience VCs

- Cultural Heritage VCs:
 - National Historic Site Cultural Heritage Values
 - Rideau Canal UNESCO World Heritage Outstanding Universal Values
 - Cultural Landscape Features
- Visitor Experience VCs:
 - Tourism and Visitor Experience (includes Aesthetic Values)
 - Navigation





How are Impacts on VCs Assessed?

- The potential effects of the KIH Project on the environment are assessed by considering the Desired Outcome, Threshold and Standard of Proof for each VC.
- Desired Outcome: What the environmental component will look like after the project is fully completed.
- Standard of Proof: The level of scientific evidence needed to ensure the desired outcome.
- Threshold: The conditions used to assess and measure achievement of the desired outcome of the project.







Assessment of Project Impacts For Each VC

- For each Valued Component, the Assessment will include:
 - Description of the Assessment Methodology
 - Description of its Current Status/Condition
 - Identification of Potential Effects and Mitigation Measures to prevent, avoid or lessen such effects.
 - Identification of Adverse Effects when they cannot be avoided or fully eliminated.





Mitigation Measures

- Alterations to the project design early in the planning process can assist with eliminating or reducing the potential negative effects
- Mitigation measures are then identified that help avoid or lessen negative effects
- Mitigation measures in the DIA can involve:
 - Adjusting the timing, location and intensity of activities
 - Specific environmental actions or measures during project activities to prevent, lessen or reduce potential negative effects



Monitoring Measures

During Project Activities

- Monitoring is undertaken during project activities to ensure the valued components are protected and mitigation measures are working
- Monitoring usually involves detailed attention as to how construction is going with a focus on higher risk activities to valued components

Post-Construction

Following project implementation/construction, monitoring is undertaken to ensure the desired outcome has been met for each valued component



Residual Effects

- Residual effects are effects that are left over after mitigation measures are put in place
- Residual effects consider the magnitude, extent, frequency, reversibility, and duration
- Residual effects can be positive or negative





Other Components of the DIA

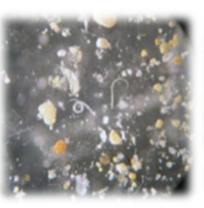
- Accidents and Malfunctions
- Adverse Effects of the Environment
- Climate Change
- Cumulative Effects





KINGSTON INNER HARBOUR INFORMATION GAPS













Information Gaps

- There are several VCs for which more information will help to improve the quality of the assessment and provide for a better project. These include:
 - Turtles (habitat and movement)
 - Greenhouse gas emissions
 - Climate Change Considerations
 - Sediment Conditions
 - Lake Ontario hydrodynamic processes





Next Steps

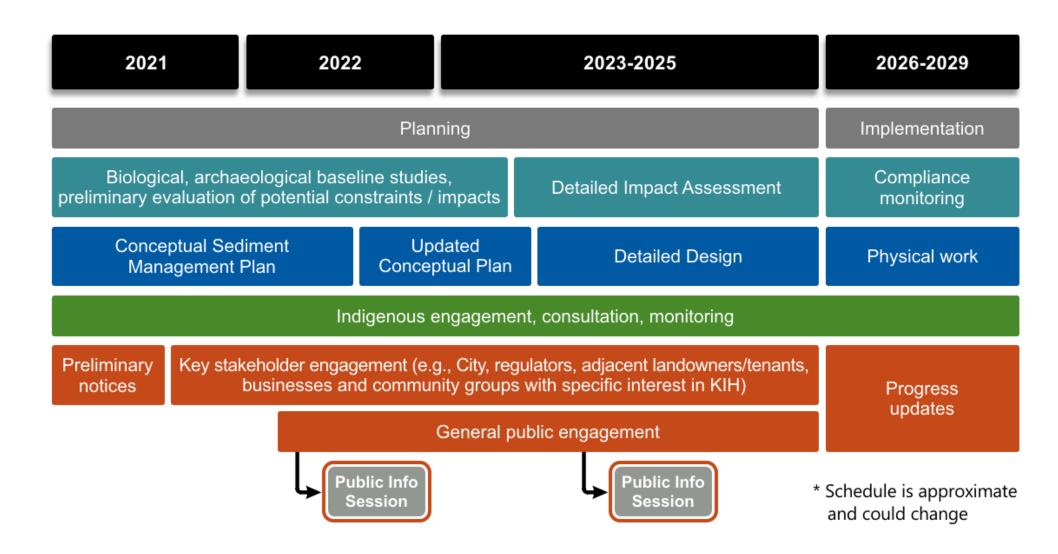
- Continue to address Information Gaps
- Continue engagement
 with Indigenous Peoples,
 stakeholders and the public
- Prepare Detailed Design to 33% design stage
- Prepare Draft #1 of the DIA after the33% design stage is ready



Project Schedule

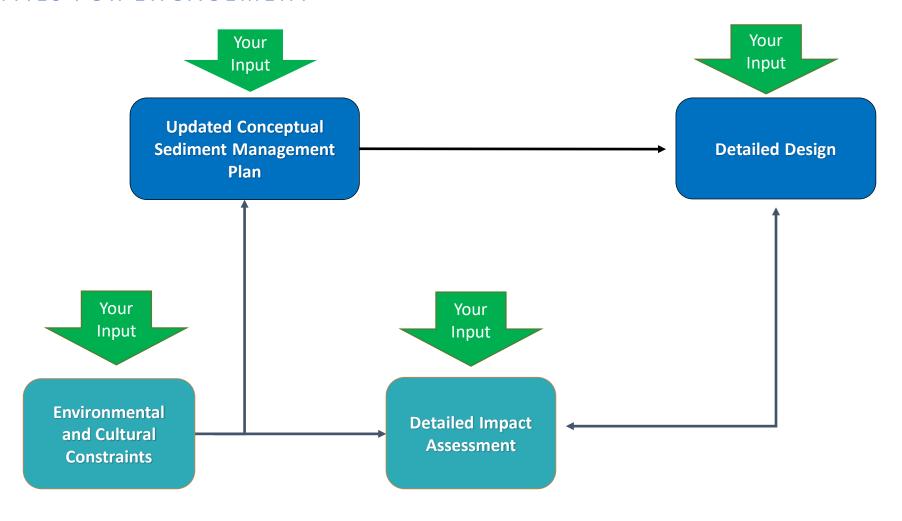


KEY STEPS



ARCADIS

OPPORTUNITIES FOR ENGAGEMENT



Check http://www.kihproject-projetpik.ca for updates