Kingston Inner Harbour
Sediment Management Project

Project Updates

March 2026

AGENDA

- Welcome and Land Acknowledgement
- Overview of Project Scope and Approach
- Pilot Study
- Staged Approach
- Detailed Impact Assessment
- Next Steps
- Discussion

PURPOSE AND OBJECTIVES

Share project progress on:

- **Staged Project Approach**
  Division of the project into two stages, allowing us to address the southern water lots first (Stage 1), while building valuable insights that will support work for the remaining areas (Stage 2).
- **Pilot Study Concept**
  Early validation step for key remediation techniques and environmental protection measures for broader implementation under site-specific conditions.
- **Impact Assessment**
  Update of the impact assessment to reflect the two-stage approach and additional data collection needs for Stage 2.

Opportunity for discussion and to obtain initial feedback on the proposed staged approach and design elements.

HOW WE GOT HERE

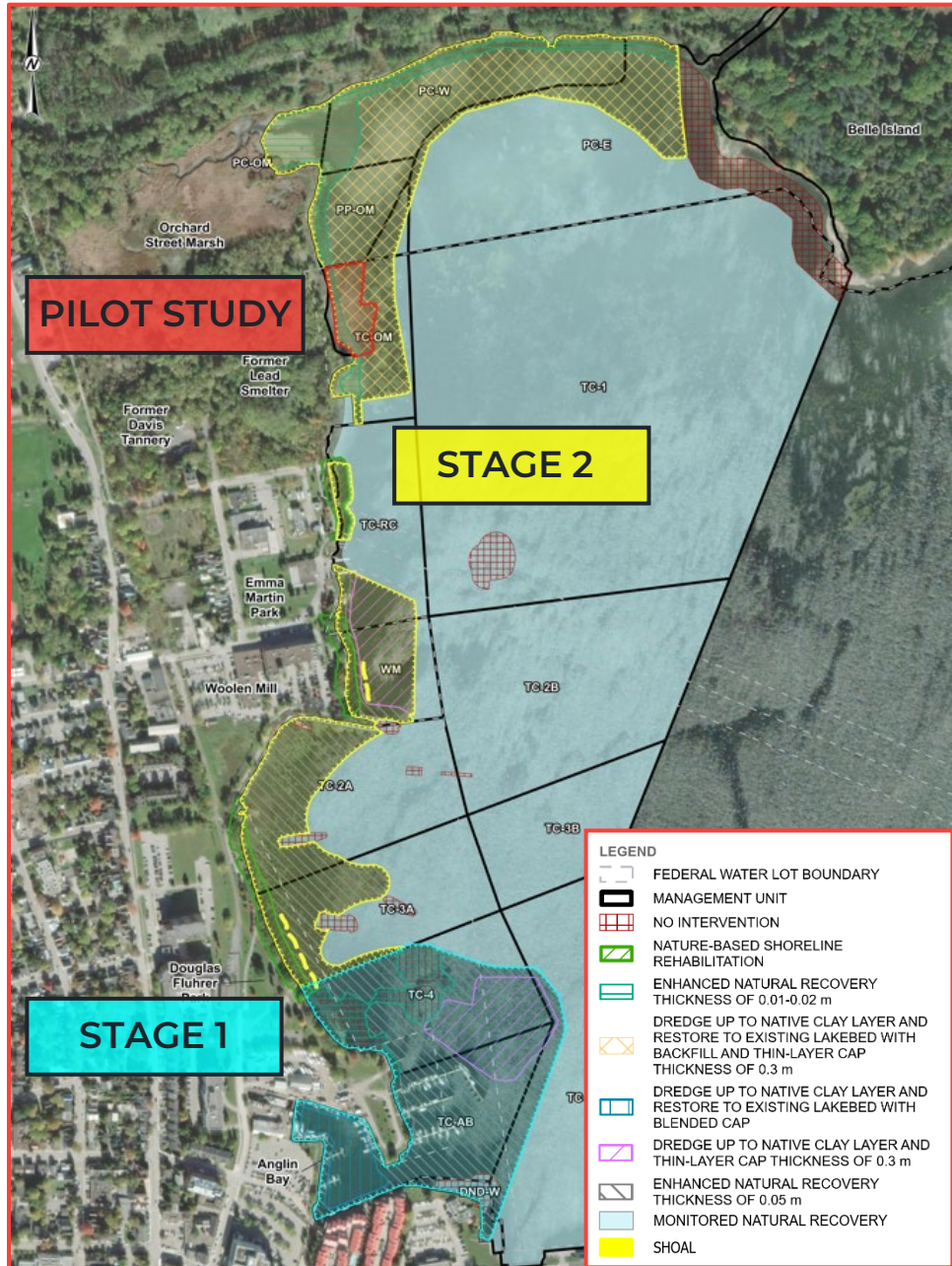
- As the design and the DIA progressed, more data was required to understand the project's potential impacts to turtle habitat – particularly overwintering habitat.

- Given the complexities of the northern waterlots, the need for adaptive management, and distinct contaminant sources within the harbour, it was possible to divide the project into stages – Pilot Study, Stage 1, and Stage 2.

- The smaller scale of testing sediment management methods helps to refine our understanding of the scope of impacts, effectiveness of mitigation measures and recovery timelines of restored areas.

PROJECT OVERVIEW

- **Pilot Study**
  - Pilot-scale testing/monitoring within portion of Stage 2 footprint
  - Early validation step for broader project implementation
- **Stage 1**
  - Anglin Bay and southern end of Douglas Fluhrer Park
  - Active measures in areas where contamination is greatest
  - No shoals or shoreline rehabilitation
- **Stage 2**
  - Central zone — From Douglas Fluhrer Park to River Street north of the Kingston Rowing Club
  - Northern zone — Shores along former lead smelter, Orchard Street Marsh and Belle Park landfill
- **Monitored Natural Recovery** (in light blue)



PILOT STUDY GOALS

1. Validate constructability methods (e.g., dredging, capping, dewatering, treatment) to be used , particularly for Stage 2 of the project.
2. Confirm acceptability of low-intrusion methods and effectiveness of environmental mitigation measures
3. Monitor early indicators of ecological recovery (e.g., aquatic vegetation, recolonization)
4. Generate performance data to inform adaptive management strategies (e.g., cap mixes/materials, habitat restoration approaches)

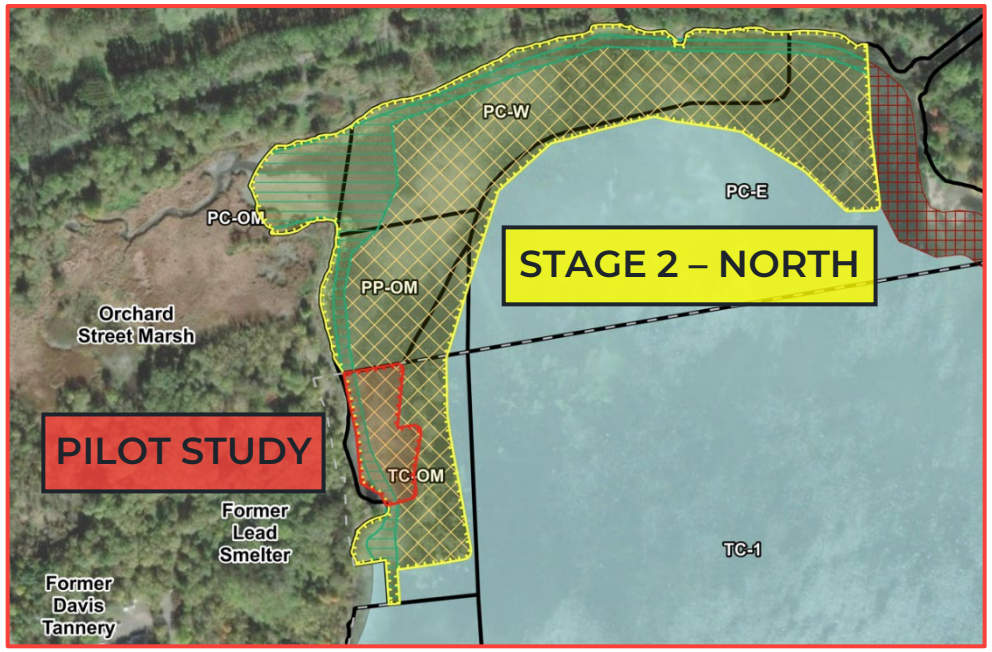
Selection of Scale/Size

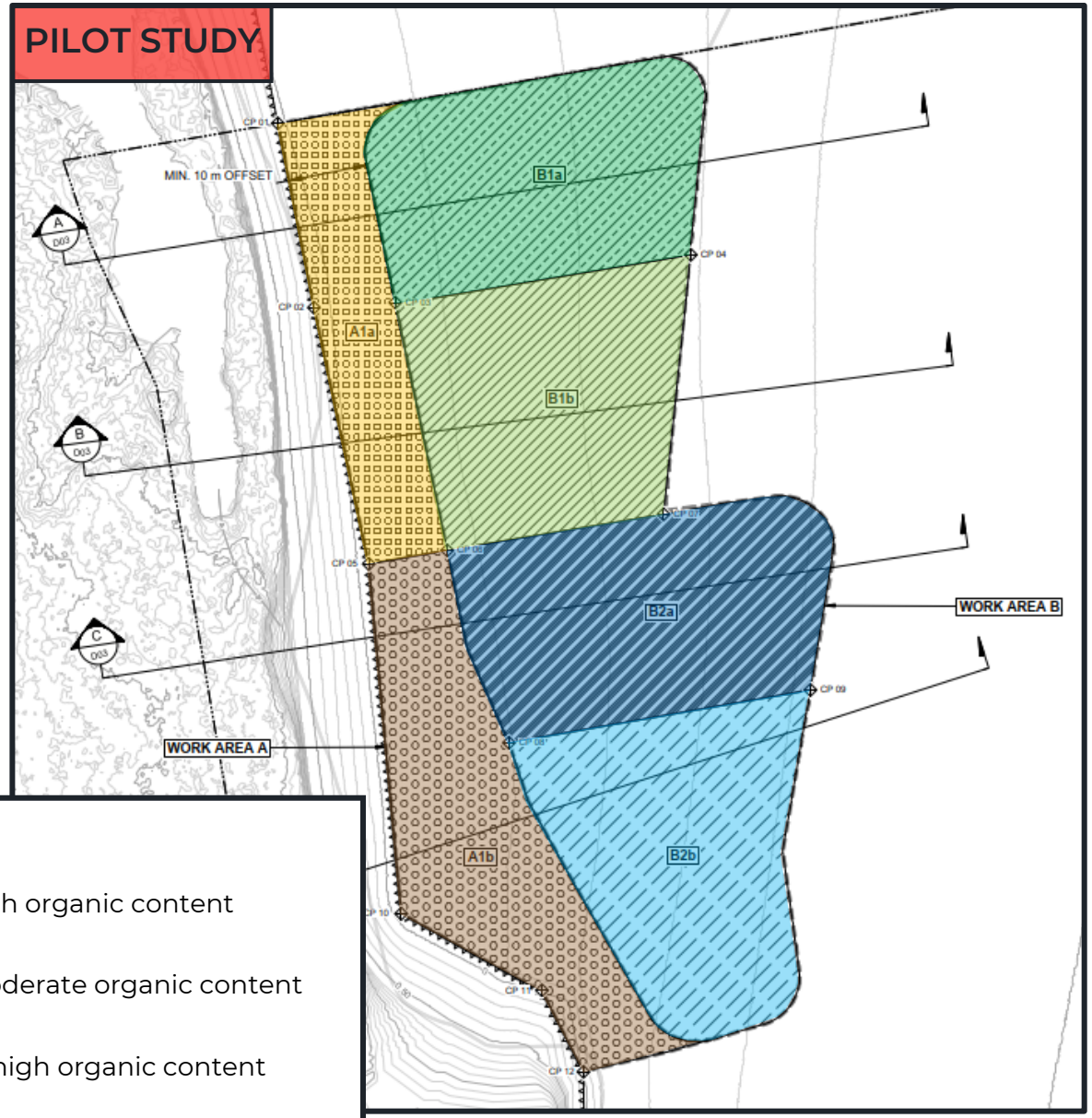
- Sufficiently small to limit environmental disturbance
- Large enough to accommodate testing of multiple design scenarios
- Large enough to evaluate recovery processes

Selection of Location

- Accessibility (staging, deployment)
- Representative sediment conditions (nearshore silts)
- Environmental sensitivity (quasi-natural area, close to but not within most sensitive habitats)

PILOT STUDY LAYOUT





LEGEND

ENHANCED NATURAL RECOVERY

- Very thin ENR
- Thin ENR

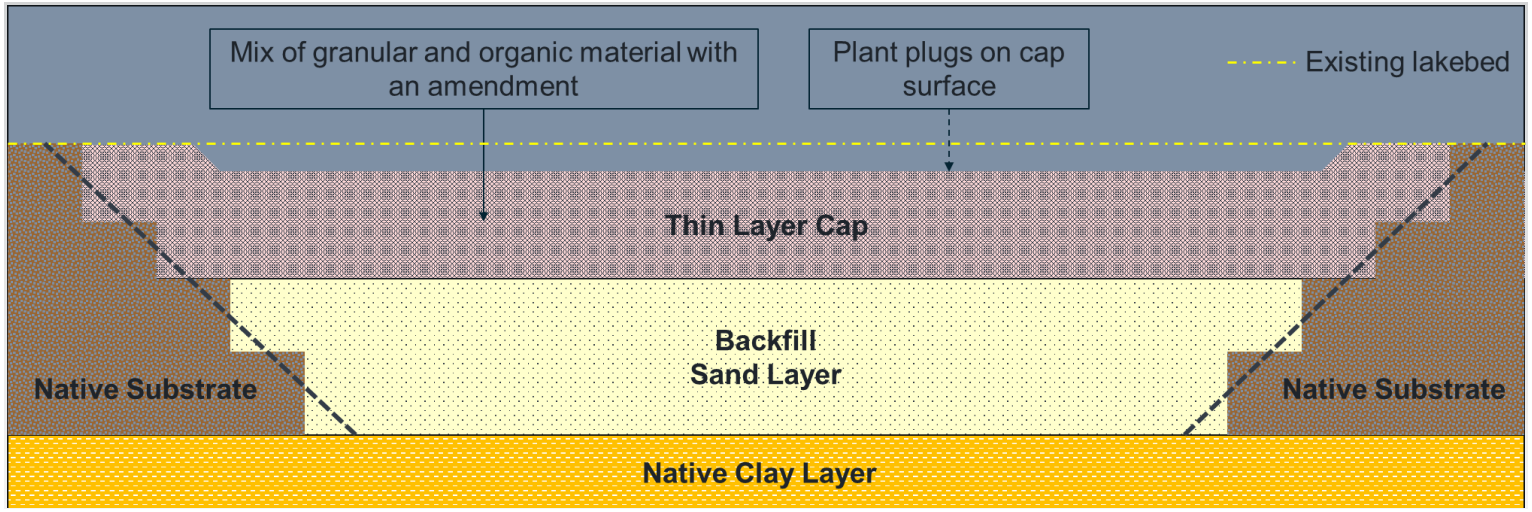
POST-DREDGE CAPPING

- Fine cap mix; high organic content
- Fine cap mix; moderate organic content
- Coarse cap mix; high organic content
- Coarse cap mix; moderate organic content

Draft-Concept

PILOT STUDY DESIGN COMPONENTS

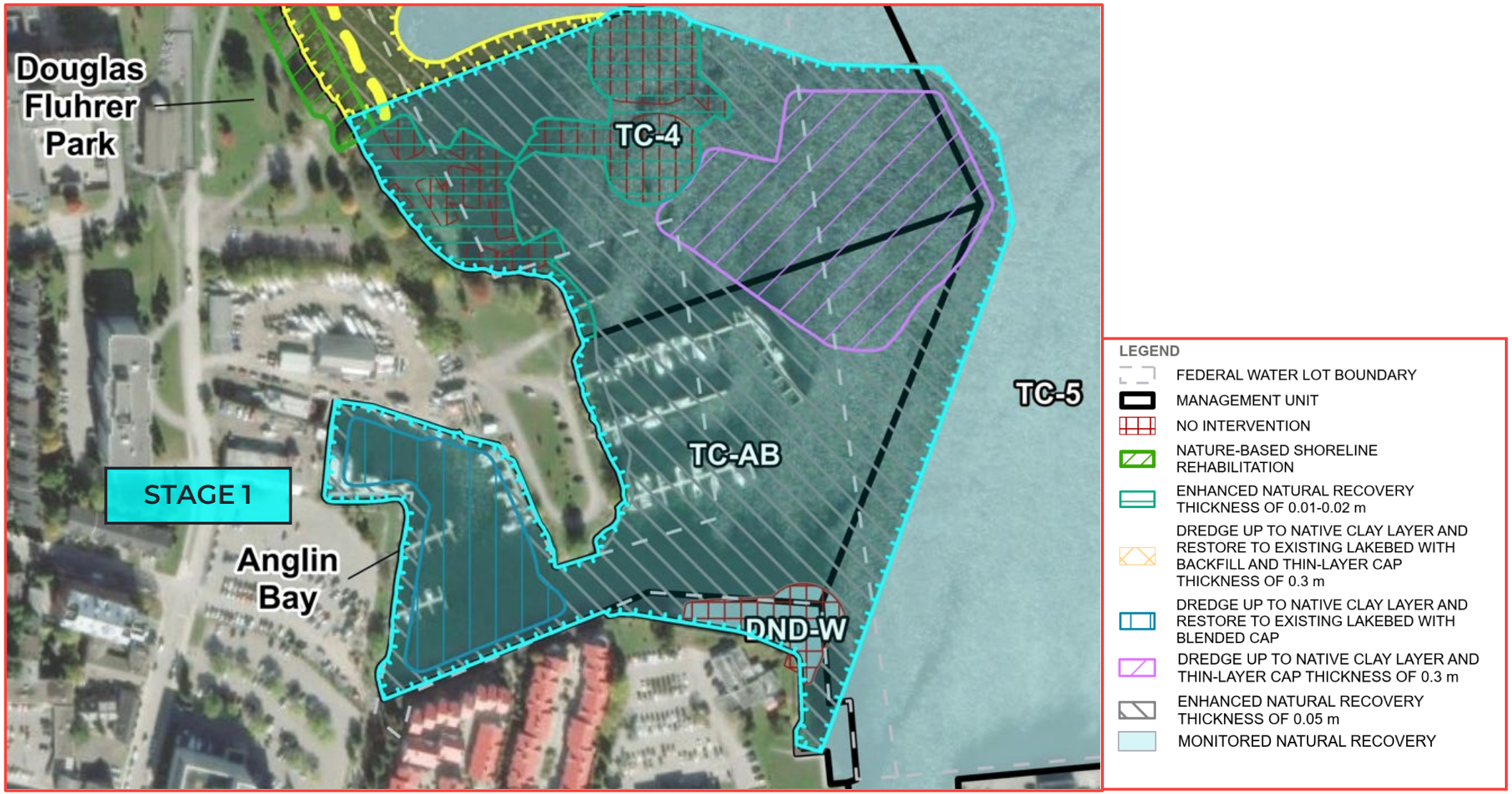
- **Dredging:** Permanent removal of contaminated sediments in hot spots to reduce risk to people and wildlife within the harbour and prevent spreading of hot spots to less contaminated areas
- **Capping:**
  - Active materials—Amendments to enhance recovery / reduce chemical exposure
  - Habitat factors—Organics and natural underwater structures to support recolonization and habitat reuse
  - Stabilizers—Granular material (e.g., sand) to provide cap protection against waves and currents
- **Planting:** Native plant plugs on the cap surface to re-establish aquatic vegetation



STAGE 1 RATIONALE

- Significant source of PAHs within and adjacent to Anglin Bay (TC-AB) where hydrocarbon contamination has been confirmed associated with historical coal tar-containing wastes.
- This contamination source is separate and distinct from other contamination sources in the rest of KIH.
- While some PAH distributions remain broadly consistent, elevated PAH concentrations in TC-AB and TC-4 have expanded across the southwest corner of KIH.
- Addressing these Stage 1 units now prevents further migration into the adjacent waterlots (i.e., TC-5), which is largely under Monitored Natural Recovery.

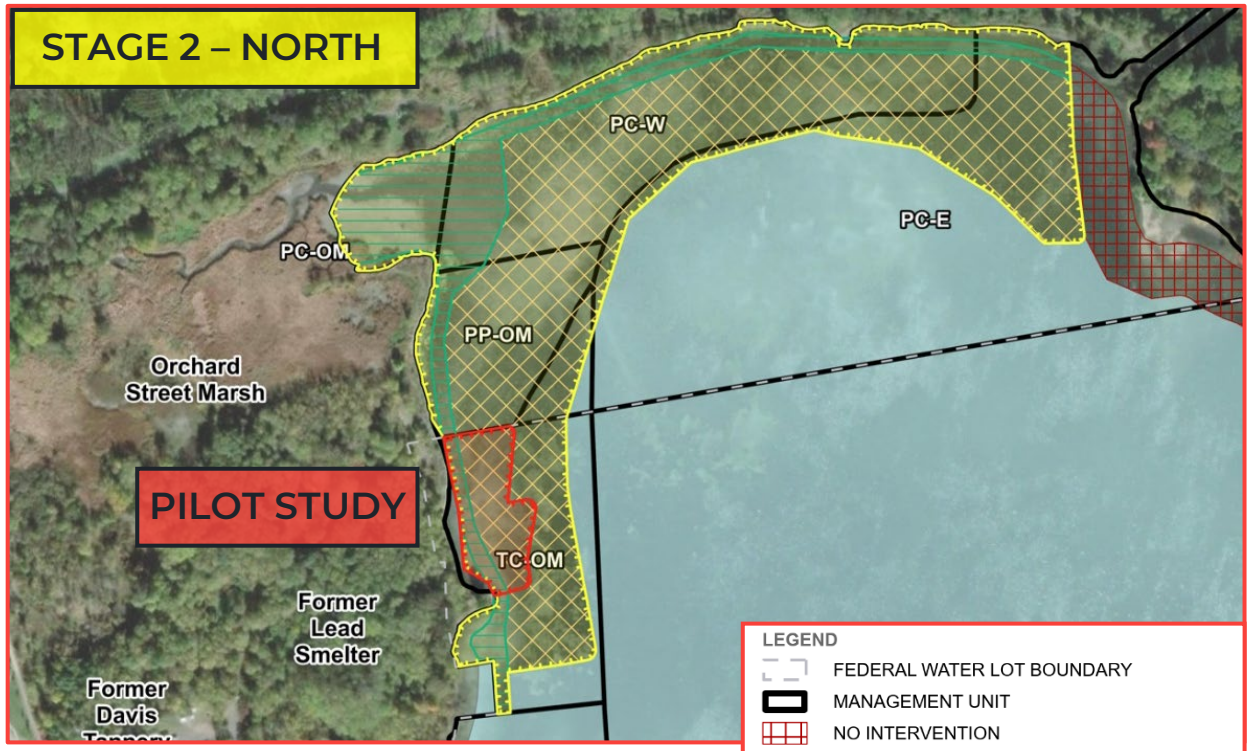
STAGE 1 – DESIGN OVERVIEW

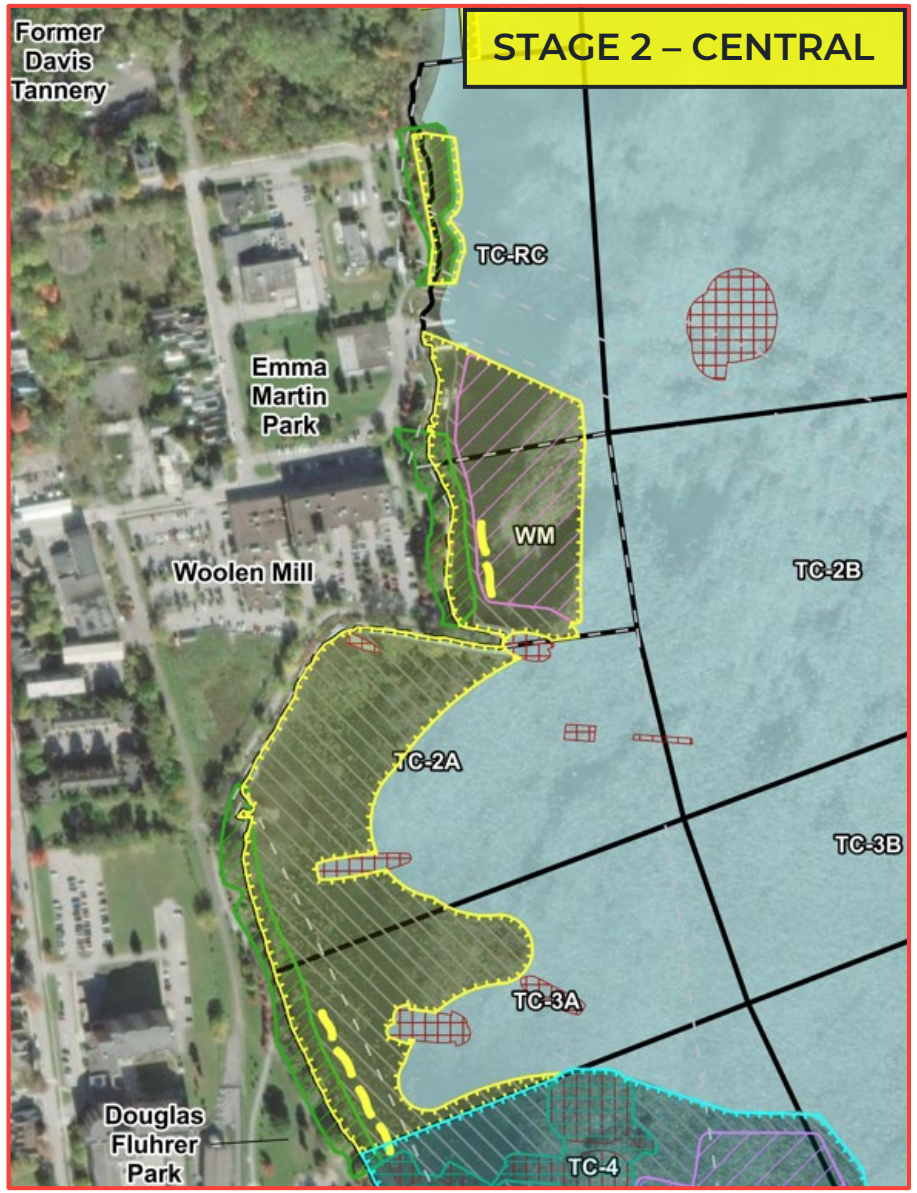


STAGE 1 – DESIGN COMPONENTS

- Contamination sources close to shore reflect a legacy industrial shipyard and historical gasification plant source
- Habitats range from rip-rap in DND water lot to mixed substrate in TC-4
- Different cover methods, ranging from ENR to post-dredge caps of various thicknesses
- Anglin Bay
  - Limited vegetation
  - Construction interfaces (marina)
  - Geotechnical constraints

STAGE 2 – DESIGN OVERVIEW





STAGE 2 – DESIGN COMPONENTS

- Ecologically more sensitive than Stage 1 (e.g. wetlands, wildlife); requiring lower intervention methods and restoration

- Currently in intermediate design stage; detailed design will be refined based on learnings from ongoing investigations including biological studies, benchscale testing, Pilot Study and Stage 1

- Will be constructed over 3 years; includes shoreline rehabilitation component

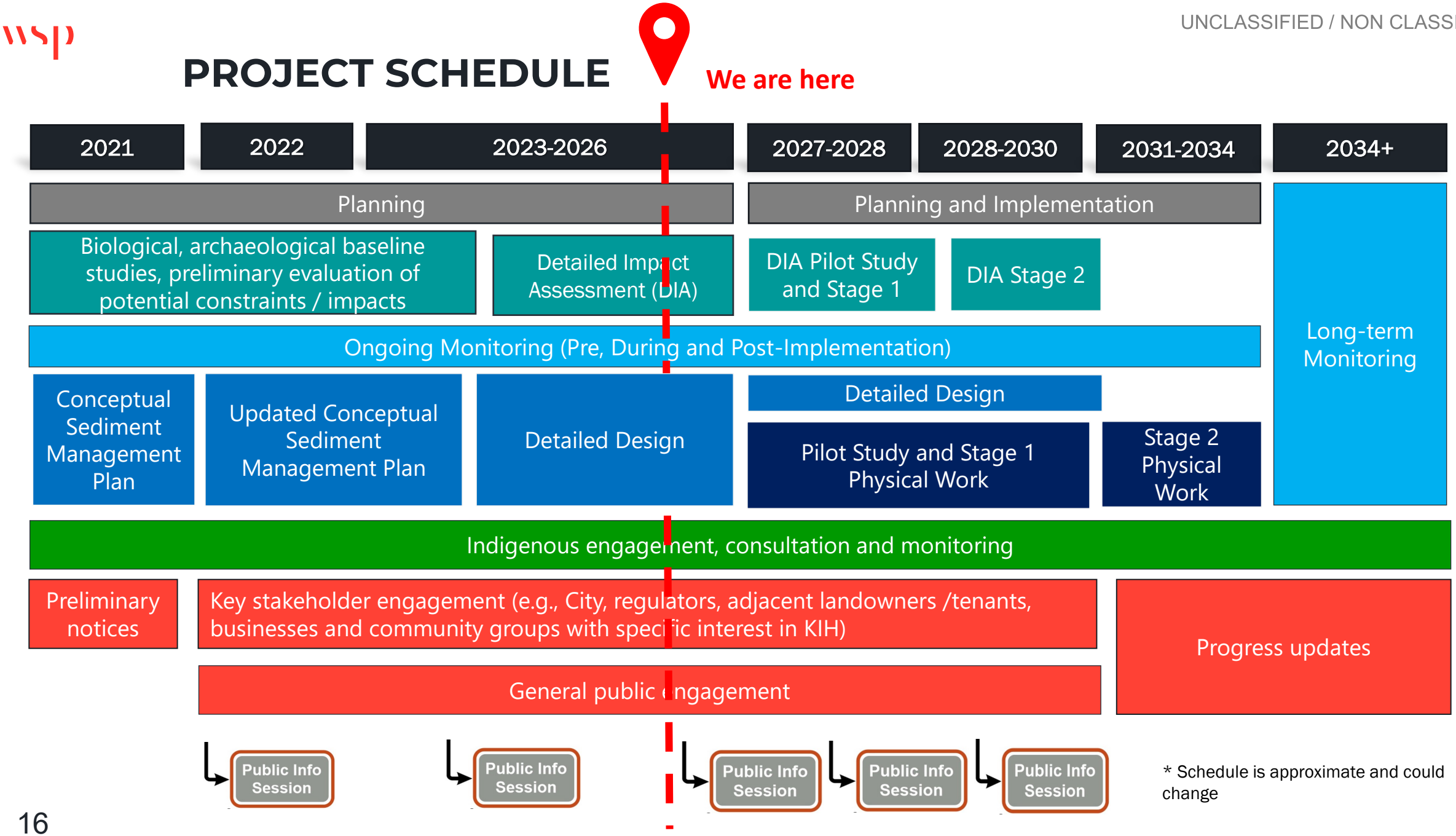
IMPACT ASSESSMENT STUDIES

- DIA will be reformatted based on stage division.
  - One DIA for Pilot/Stage 1, one DIA for Stage 2.
- Pilot/Stage 1 DIA will focus on the scope of activities in Pilot/Stage 1 and include high-level activities for Stage 2 in cumulative effects assessment.
- Pilot/Stage 1 DIA draft is expected for review in fall of 2026.
- Allows for additional data to be collected in northern waterlots, lessons learned, design and mitigation measure adaptions and early post-construction data to be included in the Stage 2 DIA.

IMPACT ASSESSMENT STUDIES

- Turtle overwintering field work is mapping important habitat in the northern and central areas of the KIH project.
- For these areas, an additional year of data collection is required to refine measures to mitigate potential effects to turtles, project staging and scheduling options.
- Turtle studies will inform pre- and post-population assessments and habitat use to track mitigation measure effectiveness and long-term management.

PROJECT SCHEDULE



* Schedule is approximate and could change

SUMMARY

- We have incorporated key learnings from ongoing investigations and stakeholder engagement.
- We have taken a precautionary approach in the most sensitive habitats, relying on low intrusion methods instead in those areas.
- The staged implementation approach allows us to validate methods at a local scale before broader deployment.
- Revisions are ongoing and will continue as DIA input and other information becomes available.
- DIA (Pilot and Stage 1) work remains ongoing, and a draft report will be available for stakeholders in Fall 2026.