ONLINE PUBLIC ENGAGEMENT

Municipal Class Environmental Assessment Schedule “B”

Kirwin Avenue/Little John Lane (Cooksville) Sanitary Sewer Diversion

Date: May 2024

Project No: 23-2129

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Purpose of Public Engagement

Provide information about project scope and background studies

Present the alternatives, evaluation methodology and recommended solution

Provide opportunity to obtain input and address any comments or questions raised

Discuss next steps

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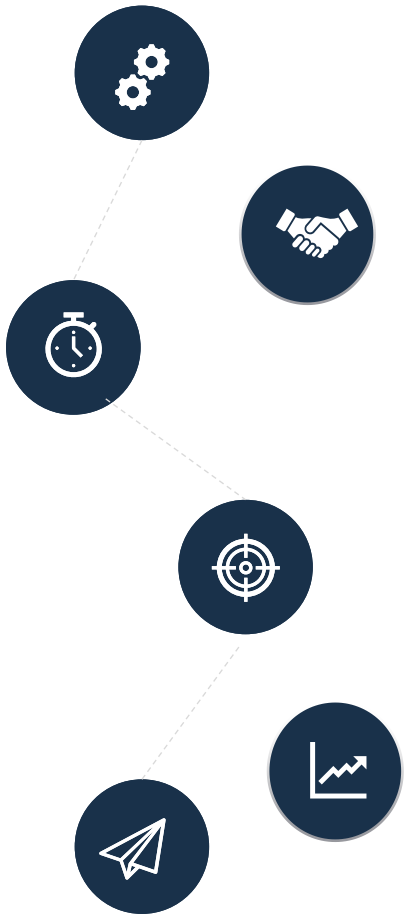
Agenda



1. Project Background
2. What is a Class EA? Municipal Class EA Process
3. Problem/Opportunity Statement
4. Existing Site Considerations
5. Archaeological & Cultural Heritage
6. Evaluation Process
7. Alternative Solutions and Evaluations
8. Recommended Preferred Solution
9. Proposed Mitigation Measures
10. Schedule and Next Steps (project)

Project Background

The Region of Peel has identified the need to enhance and increase wastewater servicing capacity to facilitate proposed and future developments in the vicinity of the Hurontario Street and Kirwin Avenue intersection.

The planned improvements entail redirecting flows from the current local sewer (300mm diameter) and accommodating new flows from the anticipated developments at Hurontario Street and Kirwin Avenue into the existing Cooksville Creek trunk sewer.

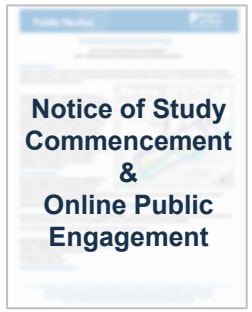
What is Class EA:

A **Municipal Class Environmental Assessment (Class EA)** is a planning and approval process for municipal infrastructure projects, following Ontario's Environmental Assessment Act.

The Class EA study for this project is being conducted in accordance with **Schedule 'B'** of the Municipal Class EA document (March 2023).

Municipal Class EA Process

Phase 1: Problem or Opportunity
- Identify the problems or opportunities



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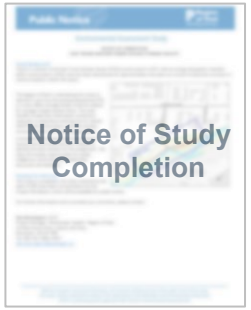
Phase 2: Alternative Solutions (We Are Here)
- Identify alternative solutions
- Inventory natural, cultural and social-economic environments
- Identify potential impacts of the alternative solutions after mitigation
- Evaluate the alternative solutions considering environmental and technical impacts
- Identify a recommended solution
- Confirm the preferred solution based on input from public engagement and review agencies

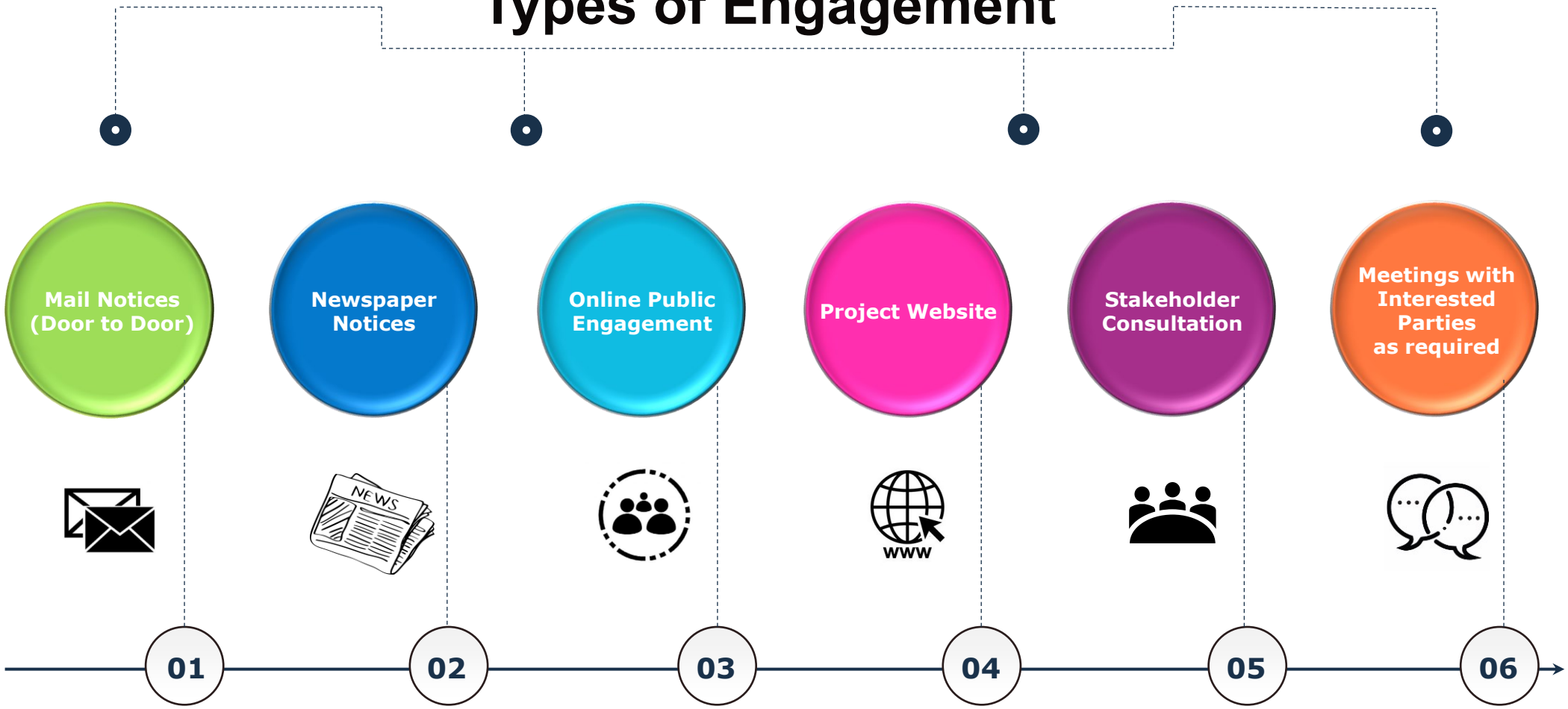
Project File Report:
- Prepare project file report to describe the activities undertaken through Phases 1 and 2
- Notify public, stakeholders, and review agencies of completion of the Study and of the Part II Order provision (appeal process) in the EA Act
- Place project file report on public record for review for 30 calendar days



Implementation:
- Detailed design and construction

Municipal Class EA Process (Continued)

Types of Engagement



Problem/Opportunity Statement

Phase 1 of the Municipal Class EA process defines the starting point for any Class EA as the “Problem/Opportunity Statement.”

The Problem/Opportunity Statement for the Kirwin Avenue/Little John Lane (Cooksville) Sanitary Sewer Diversion Municipal Class EA is defined as follows:

> ***“To enhance and increase wastewater servicing capacity to facilitate proposed and future developments in the vicinity of the Hurontario Street and Kirwin Avenue intersection.***
>
> ***There is an opportunity to accomplish this by installing a new sanitary sewer to divert flows from the existing 300mm sewer and accommodate flows from proposed developments near Hurontario Street and Kirwin Avenue to the Cooksville Creek trunk sewer.”***

In accordance with the requirements of the Municipal Class EA planning process, the Region of Peel initiated this Municipal Class EA to identify and evaluate alternative solutions to address this Problem/Opportunity Statement.

Existing Site Considerations

Legend

- Shafts
- Shafts (by others)
- Existing Sanitary Sewer
- Watercourse
- Heritage Site
- Wooded Area

Alternative 1

- Sanitary Sewer - Open Cut

Alternative 2

- Sanitary Sewer - Open Cut
- Sanitary Sewer - Tunnel
- Hurontario Crossing (by others)

Archaeological & Cultural Heritage

Archaeological Assessment

There are no known archaeological resources in or near the area of impact.

Cultural Heritage

The area of impact is situated in close proximity to a potential Cultural Heritage Landscape (C.H.L) Post-War Streetscape on the east side of Kirwin Avenue. The project is not expected to have any direct or indirect adverse impacts; however, potential temporary noise and vibratory effects will be considered during the construction phase.

Evaluation Process

COMPARATIVELY EVALUATE THE THREE ALTERNATIVES

- Identify evaluation criteria
- Evaluation takes into consideration:
  - Natural
  - Social-cultural
  - Technical
  - Economic (costs)
- Overall, the evaluation considerations are colour coded to easily identify preferences in the rating

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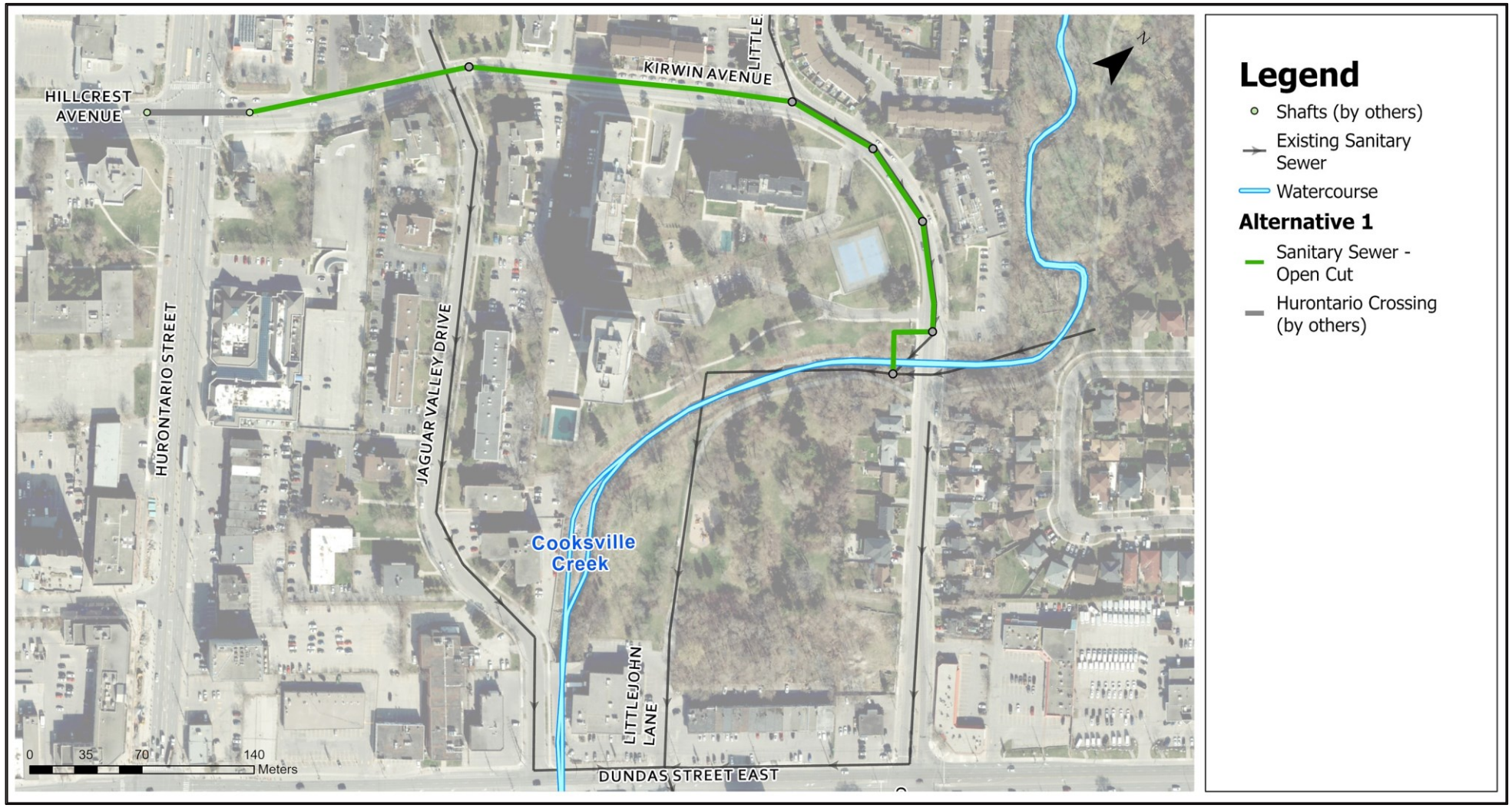
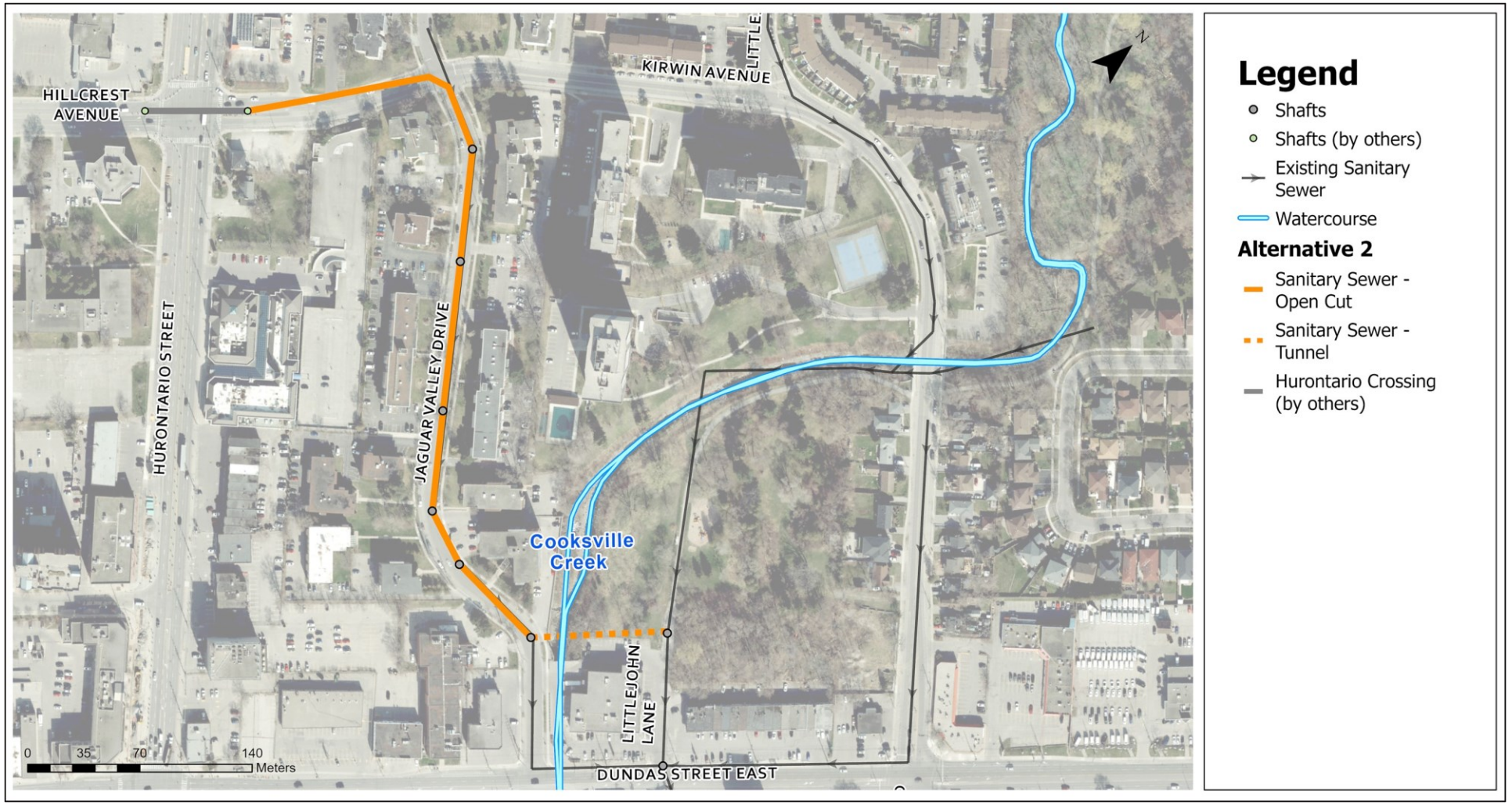
Alternative Solution #1

Kirwin Avenue



Alternative Solution #2

Jaguar Valley Drive



Alternative Solution #3

“Do Nothing”

The **"Do Nothing"** Alternative, suggests maintaining the current sanitary system without any proposed infrastructure upgrades.

- This option contrasts with the other alternatives, as it does not involve any construction or diversion of flows.
- This alternative will increase the risk of sewer system surcharging and overland flooding, due to capacity issues currently present within the existing network.

Summary Table for the Evaluation of Alternative Solutions 1

	Criteria	Alternative 1	Alternative 2	Alternative 3 "Do Nothing Option"
Natural Environment	Surface Water Impacts	• Involves excavation within CVC regulated area, crossing the Cooksville Creek which requires a CVC permit and implementing sediment/erosion controls for open cut construction. • Open-cut crossing of Cooksville Creek.	• Involves excavation within CVC regulated area, crossing the Cooksville Creek which requires a CVC permit and implementing sediment/erosion controls for trenchless construction. • Trenchless crossing of Cooksville Creek has potential for frac-out due to limited cover (~1m).	• Increase possibility of surcharging and surface flooding due to future population growth.
	Natural Heritage Area Impacts	• Potential impacts to existing trees, tree canopy and vegetation along Cooksville Creek. • Restoration of the channel and riparian vegetation should be undertaken to mitigate impacts to aquatic and terrestrial habitat in the study area.	• Potential impacts to existing trees, tree canopy and vegetation along Cooksville Creek.	• None
	Groundwater / Subsurface Impacts	• Water taking anticipated during construction.	• Water taking anticipated during construction.	• None
	Vegetation / Greenspace Impacts	• Impacts to vegetation from the proposed sanitary sewer placement will result in the removal of a small portion of the cultural woodland/thicket community along Cooksville Creek adjacent to Kirwin Avenue.	• Potential impacts to existing woodland area along Cooksville Creek.	• None
Social and Cultural Environment	Disruption/Impacts to Private Property / Existing Land Uses (e.g., Traffic impact)	• Access to residents and businesses will be minimally impacted due to increased road traffic along Kirwin Avenue construction. • Temporary pedestrian pathways will be constructed around shafts to accommodate pedestrian flow during long duration. • Possible sidewalk closures.	• Access to residents and businesses will be minimally impacted due to increased road traffic along Kirwin Avenue, Jaguar Valley Drive construction. • Temporary pedestrian pathways will be constructed around shafts to accommodate pedestrian flow during long duration. • Possible sidewalk closures.	• None
	Nuisance Impacts	• Noise, dust, and other nuisance impacts during construction.	• Noise, dust, and other nuisance impacts during construction.	• None
	Cultural Heritage / Archaeological Impacts	• No direct impacts to the Potential Cultural Heritage Landscape (identified from 3061 Kirwin Avenue to 3081 Kirwin Avenue). Potential temporary vibratory impacts will be considered during construction. • Area within alternative 1 does not retain any archaeological potential on account of deep and extensive land disturbance.	• No direct impacts to the Potential Cultural Heritage Landscape (identified from 3061 Kirwin Avenue to 3081 Kirwin Avenue). Potential temporary vibratory impacts will be considered during construction. • A park within the alternative 2 study area (John C. Price Park), exhibits archaeological potential. A Stage 2 archaeological assessment prior to any proposed construction activities on these lands is required.	• No cultural heritage areas or known archaeological resources will be impacted.

Preferred	Less Preferred	Least Preferred

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Summary Table for the Evaluation of Alternative Solutions 2

	Criteria	Alternative 1	Alternative 2	Alternative 3 "Do Nothing Option"
Technical Considerations	Ease of Construction (e.g., Construction Constraints)	• Implementation of Erosion and Sediment Control measures/plan to mitigate the potential for silt and sediment entry into surface water features and adjacent natural lands. • Applying appropriate Timing Window for vegetation/tree removal/clearing (avoid tree removal/pruning between May 1 to November 15 and avoid vegetation removal between April 1 and August 31) within the regulated area. • Applying appropriate Timing Window for in-water work is required (as this is a warmwater watercourse, construction crossing the creek should occur between July 1 and March 3). • Less construction risks associated with soil conditions and location.	• Implementation of Erosion and Sediment Control measures/plan to mitigate the potential for silt and sediment entry into surface water features and adjacent natural lands. • Applying appropriate Timing Window for vegetation/tree removal/clearing (avoid clearing May 1 to November 15) within the regulated area. • Greater Construction risks associated with potential for frac-out due to limited cover (~1m). • Possible complications due to crossing a retaining wall for tunnel sections.	• No construction required.
	Operational Flexibility	• Ensures the Region has sufficient servicing capacity to accommodate future population growth.	• Ensures the Region has sufficient servicing capacity to accommodate future population growth.	• Alternative will not increase operational flexibility.
	Impacts on Region's Hydraulic Level of Service	• Increases wastewater (sanitary sewer) servicing capacity to accommodate future growth and new developments. • Prevents future surcharges and flooding.	• Increases wastewater (sanitary sewer) servicing capacity to accommodate future growth and new developments. • Prevents future surcharges and flooding.	• No improvement in the system's ability to meet Region's hydraulic level of service. • Possible surcharging and basement flooding.
	Locations / Impacts on Other Existing Utilities	• Nearby gas, hydro, and telecommunication utilities along Kirwin Avenue will have to be considered and mitigated during construction.	• Nearby gas, hydro, and telecommunication utilities along Kirwin Avenue and Jaguar Valley Drive will have to be considered and mitigated during construction.	• None
Economic Considerations	Capital Costs	• Typical Open Cut Construction Costs.	• Higher Construction Costs due to tunnelling and possible complications near tunnelling location (retaining wall).	• None
	Operating and Maintenance Costs	• Typical operating and maintenance requirements.	• Typical operating and maintenance requirements.	• Potential costs related to basement and surface flooding.
	Land Acquisition / Easement Requirements	• Working and permanent easements will be required from CVC and City of Mississauga.	• Working and permanent easements will be required from CVC and City of Mississauga. • Potential permit to enter John C. Price Park.	• None

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Preferred	Less Preferred	Least Preferred

Summary Table for the Evaluation of Alternative Solutions 3

Criteria	Alternative 1	Alternative 2	Alternative 3 "Do Nothing Option"
		SUMMARY	
Natural Environment	• Potential impacts to existing trees, tree canopy and vegetation along Cooksville Creek including identified SAR bat habitat and Kentucky coffee trees.	• Potential impacts to existing trees, tree canopy and vegetation along Cooksville Creek including identified SAR bat habitat and Kentucky coffee trees. • Five trees will be planted to replace the 17 trees removed during construction, in adherence to Mississauga's tree replacement policy.	• Increased possibility of surcharging and flooding due to future population growth.
Social and Cultural Environment	• Temporary disruptions to traffic and access to local businesses and residents during construction. • Potential noise and vibratory impacts to cultural heritage area. • Area near alternative 1 does not retain any archaeological potential on account of deep and extensive land disturbance.	• Temporary disruptions to traffic and access to local businesses and residents during construction. • Potential noise and vibratory impacts to cultural heritage area. • A park within the study area (John C. Price Park), exhibits archaeological potential. A Stage 2 archaeological assessment prior to any proposed construction activities on these lands is required.	• None
Technical Considerations	• Provides additional volume which will reduce peak flow and prevent future surcharges and flooding. • Enhances wastewater (sanitary sewer) servicing capacity to accommodate future growth in the area. • Less construction risks associated with soil conditions and location.	• Provides additional volume which will reduce peak flow and prevent future surcharges and flooding. • Enhances wastewater (sanitary sewer) servicing capacity to accommodate future growth in the area. • Greater construction risks associated with soil conditions and location. Possible complications near retaining walls for tunnel sections.	• No improvement system's ability to meet the Region's hydraulic level of service for future growth.
Economic Considerations	• Lower Costs then Alternative 2 (Open Cut Only). • Working and permanent easements will be required from CVC and City of Mississauga.	• Higher Construction Costs due to tunnelling and possible complications near tunnelling location (retaining wall). • Working and permanent easements will be required from CVC and City of Mississauga.	• Does not provide any additional serving capacity for future growth of the area.
OVERALL RANKING	RECOMMENDED • Lowest cost of construction. • Increases wastewater (sanitary sewer) servicing capacity to accommodate future growth and new developments. • Prevents future surcharges and possible flooding. • Area near alternative 1 does not retain any archaeological potential on account of deep and extensive land disturbance.	LESS RECOMMENDED • Higher construction costs and possible complications due to tunnelling. Trenchless crossing of Cooksville Creek has potential for frac-out due to due to limited cover (~1m). • Increases wastewater (sanitary sewer) servicing capacity to accommodate future growth and new developments. • Prevents future surcharges and possible flooding. • A park within the study area (John C. Price Park), exhibits archaeological potential. A Stage 2 archaeological assessment prior to any proposed construction activities on these lands is required.	NOT RECOMMENDED • Does not meet the problem statement. • Increased possibility of surcharging and flooding due to future population growth. • Does not increase operational flexibility. • Does not increase wastewater (sanitary sewer) servicing capacity to accommodate future growth and new developments. • Does not meet the sanitary service demands from a growing population.

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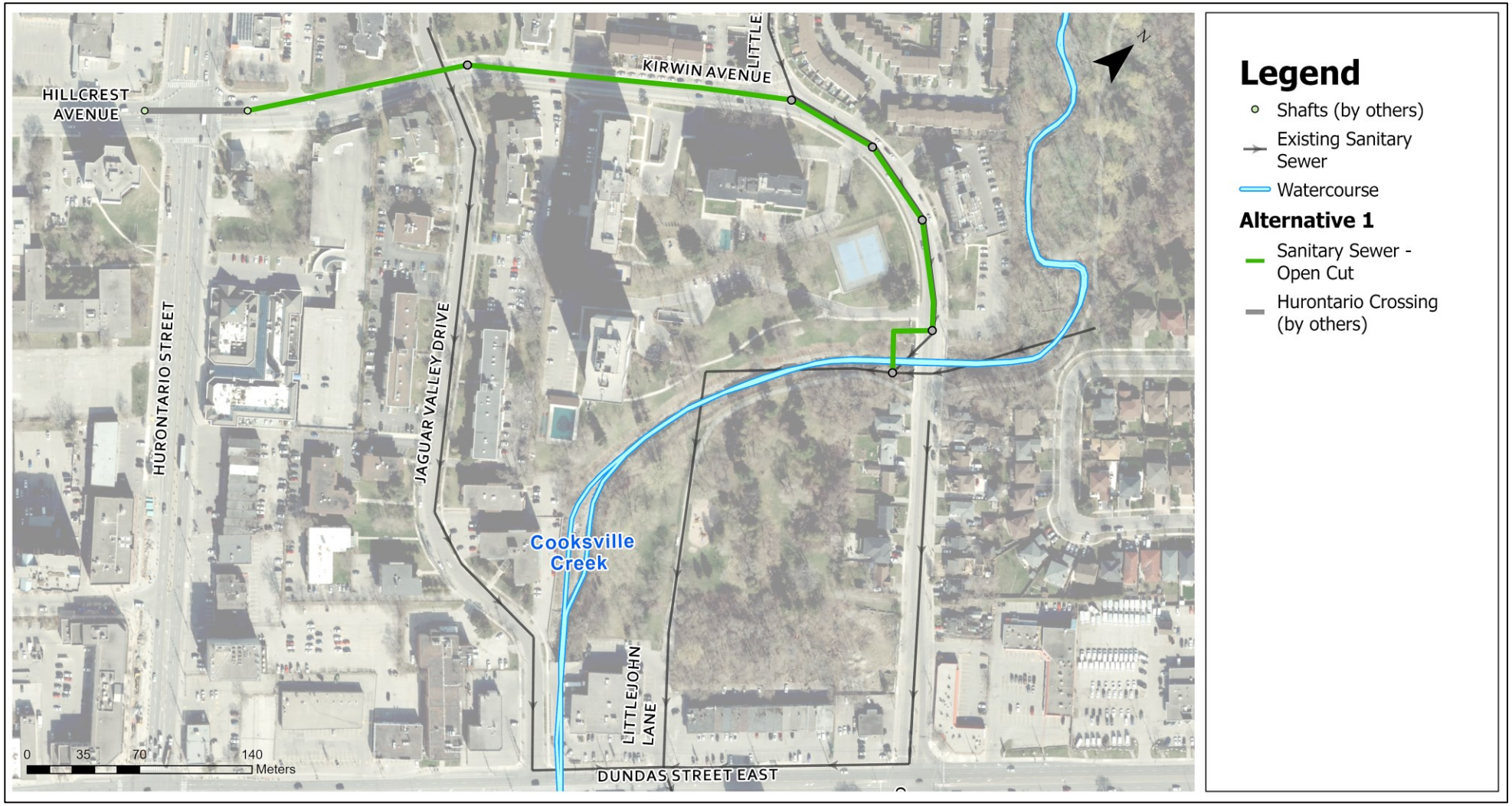
Preferred	Less Preferred	Least Preferred

Recommended Preferred Solution

Alternative 1 – Kirwin Avenue



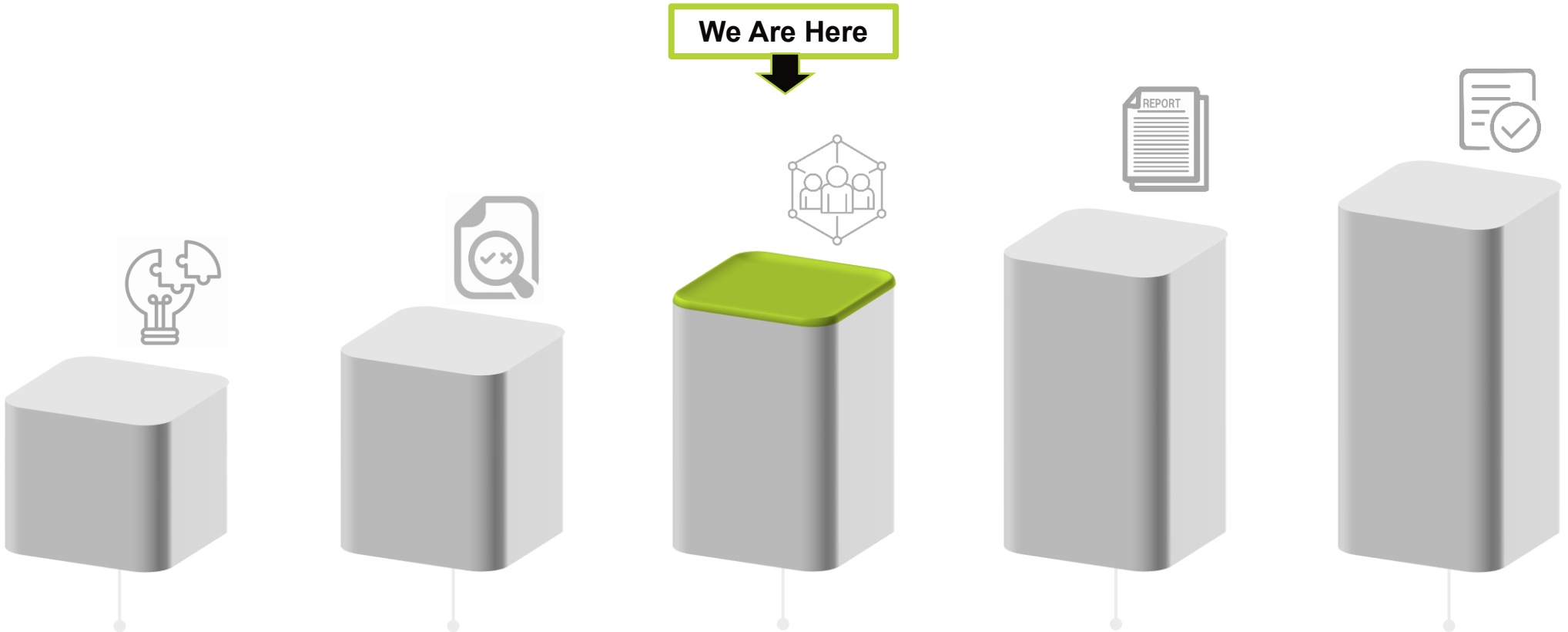
Proposed Mitigation Measures

- The operation of equipment adjacent to watercourse/creek will be prohibited.
- Coordinating with Credit Valley Conservation Authority to develop ecological restoration of disturbed vegetated area along Cooksville Creek, following construction.
- Developing and implementing Erosion and Sediment Control Plan to eliminate sedimentation into Cooksville Creek.
- Enforce timing windows (April 1 – August 31 for vegetation removals, and May 1 – November 15 for tree removal/pruning) to avoid sensitive bird and bat breeding including birthing, rearing, and roosting periods.
- Enforce timing windows (construction should occur between July 1 – March 3) for in-water works to reduce impacts to the warmwater watercourse.

Proposed Mitigation Measures (continued)

- Work confined to the working area minimizing impacts to adjacent private properties.
- All excess and unsuitable materials generated (e.g., from excavation work) managed appropriately.
- A Traffic/Pedestrian Management Plan to be developed during detailed design to mitigate traffic/pedestrian impacts.
- Noise disturbance controlled by limiting construction during normal working hours and complying with City's noise by-law.
- Undertaking a vibration assessment with specific focus on the potential Cultural Heritage Landscape (C.H.L) to determine potential vibration impacts and implementing Vibration Monitoring Plan to lessen impacts.
- Tree/root protection plan developed to mitigate impact on existing trees. Tree removal and compensation to conform to the City of Mississauga by-law and relevant policies regarding tree compensation.
- Construction materials, excess material, construction debris and empty containers will be stored and contained within secured solid board hoarding to prevent their entry into the watercourse/creek.

Schedule And Next Steps



Review background information, conduct field work and prepare background reports to support the Study

Problem/opportunity statement, evaluate alternatives, and identify recommended solution

Online Public Engagement

Confirm the preferred solution based on input from the public and review agencies

Prepare Project File Report

Place report on public record, notify stakeholders of completion of the Study

Detailed Design and Construction

Thank you

Remain involved in the Study

Your comments are important as they will be reviewed and considered as part of the Study. To indicate your interest to remain involved in the Study or if you have any questions, please contact one of the following team members by **May 22, 2024**.

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