



Don Mills Channel Flood Remediation Class Environmental Assessment

General Committee February 20, 2018





Agenda

- 1. Background Flood Control Program
- 2. Don Mills Channel Class EA Overview
- 3. Implementation Schedule
- 4. Stormwater Fee Financial Update
- 5. Next Steps/Recommendations

Purpose

• To obtain endorsement of the preliminary preferred alternative identified in the Don Mills Channel EA, and to seek authorization to host public meetings to obtain feedback from the public on the preliminary preferred alternative











1. Background - Flood Control Program

- In November 2012, Council adopted a 30 year implementation schedule for the Flood Control program, with fee collection beginning in 2015
- The West Thornhill Stormwater Flood Remediation Project was the first to be initiated, with implementation ongoing
- Design and construction of the Don Mills Channel is to begin in 2021
- The City Wide Environmental Assessment has been accelerated and is currently being initiated

2014 -2020

Continuation of West Thornhill Design and Construction

Don Mills Environmental Assessment and complete low cost flood risk reduction measures

Prioritization of City-Wide Projects

2021-2025

Completion of West Thornhill Construction

Complete Design and Initiate Don Mills Capital Works

Initiation of EAs for Other City Wide Projects

2026-2045

Complete Don Mills Capital Works (2025-2030)

City-Wide Projects (2030-2045) to be scheduled in the future based on Prioritization and Future EAs)

Original Flood Control Schedule (November 2013)

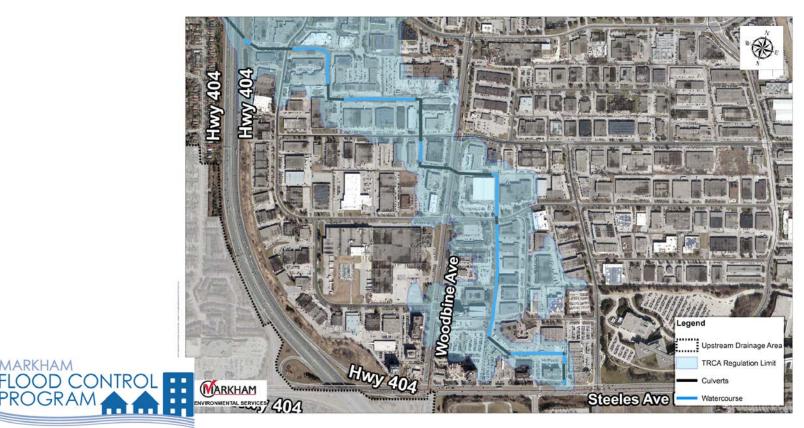




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2. EA Overview - Location



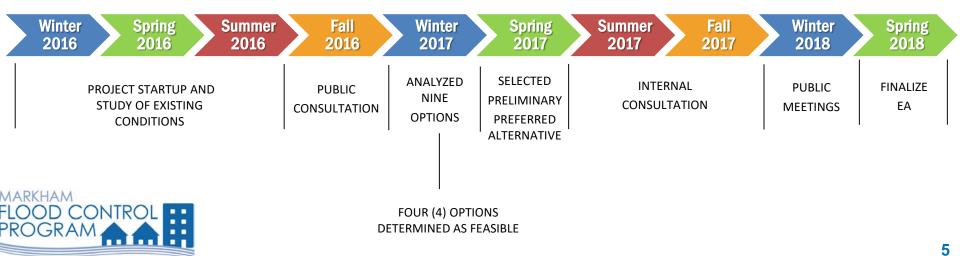
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2. EA Overview - Schedule

- The Don Mills Channel flood remediation is the 2nd major project to be completed under the City's Flood Control Program after the West Thornhill Flood Remediation
- The Study Objective is to provide flood protection for a Council Approved 5 year level of protection for the Don Mills Channel Area
 - Note: Other areas across the City target 100 year level of service for storm sewer systems





2. EA Overview - Evaluation of Alternatives



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Natural Environment

- Potential Impact on terrestrial system (vegetation, trees and wildlife)
- Potential impact on aquatic systems (aquatic life, surface water and groundwater)
- Potential to improve natural environmental conditions



Social Environment

- Disruption to existing community during construction (business disturbance, traffic, noise)
- Impacts to community in the long term (emergency access, land acquisition, aesthetics)
- Ability to reduce risks to public safety
- Impacts to Archaeological systems and First Nations
- Timeliness of implementation



Technical

- Effectiveness of solution in reducing flood risk (minimum 5 year level of service target)
- Impacts on upstream and downstream landowners
- Long term operations and maintenance
- Constructability
- Ability to meet regulatory requirements



Economic

- Estimated costs to implement project
- Estimated costs of long term operations and maintenance
- Reduction in potential future flood damages
- Estimated losses in tax revenue





2. EA Overview – Alternatives Studied

Option #	Name	Effectiveness	Description
#1	Status Quo		No new capital works (existing programs would continue) – required through EA process
#2	Enhanced Channel Maintenance		Clear cutting of trees within channel and institution of grass lined channel
#3	Underground Storage		Storage under private parking lots
#4	Flood Proofing and Education	8	Program to help property owners flood proof their own properties and make them more aware of the flood risks
#5	Removal of Flood Prone Properties		Purchase of properties prone to flooding and conversion of properties to green space/low risk usage
#6	Channel Widening/Culvert Improvements		Expansion of the channel and culvert systems
#7	Flow Diversion		Piping of stormwater around the flood prone area
#8	Central Municipal Flood Storage	\bigotimes	Construction of a pond to store water during storm events
#9	Central Municipal Flood Storage, Education Program and Culvert Upgrades		Combination of parts of #4, #5, #6, and #8

Refers to Alternatives that are technically effective

Refers to Alternatives that are **NOT** technically effective

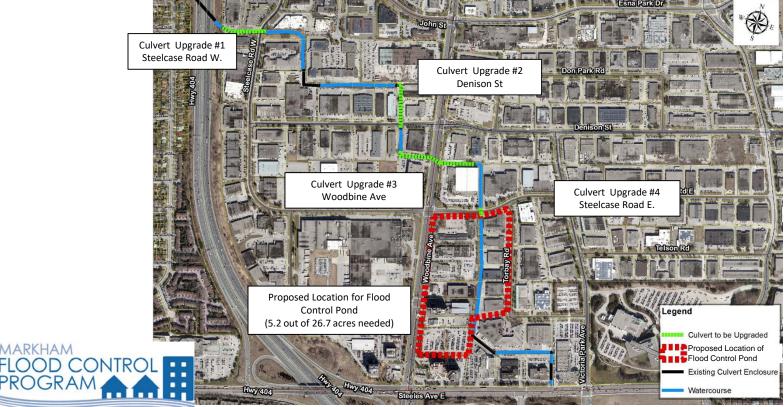
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2. EA Overview - Preliminary Preferred Alternative #9 - Central Municipal Flood Storage, Culvert Upgrades & Education Program





2. EA Overview – Preliminary Preferred Alternative

Part 1: Property Acquisition

FUTURE TOGETHER

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- Purchase 5.2 acres (2.1 ha) of privately owned land within optimal location for central facility
- Part 2: Infrastructure Engineering and Construction
 - Demolition of Buildings and Construction of Central Facility
 - Culvert Upgrades
- Part 3: Education/Flood Proofing
 - Program to be developed in 2018
 - Expected to span 10 years (2019-2029)

Total Cost - \$72 Million









3. Implementation Schedule





FLOOD PROOFING EDUCATION PROGRAM







4. Stormwater Fee Update

- Council approved fee of \$47 per residential property and \$29/per \$100,000 of CVA for nonresidential. In 2017, non-residential rate was adjusted to \$28/per \$100,000 due to current value reassessment.
 - No increases to the fee were planned for the first 5 years of the program (2015-2019)
- Fee is to be updated in 2020 to account for:
 - Inflation
 - Updated Cost Estimates for all projects
 - Accelerated Programs:
 - West Thornhill Phase 4 Design
 - Markham Village/Unionville Areas
 - New/Expanded Programs:
 - Pilot Private Plumbing Protection Program (New)
 - Downspout disconnection program (Expanded)
- Staff will be undertaking a review of the Stormwater Fee in 2019 for implementation of any changes in 2020 (subject to council approval)





5. Next Steps

- Obtain feedback on the findings from the public through Liaison Committee Meeting #2 and Public Information Centre #2
- Finalize Project and File Notice of Study Completion with the MOECC in Spring 2018
- Complete land acquisition activities
- Develop education program and implement in 2019
- Complete Stormwater Fee review in 2019, for implementation on January 1, 2020 (as per November 2013 Council Resolution)











5. Recommendations

- 1. THAT the presentation entitled "Don Mills Channel Flood Remediation Class Environmental Assessment," be received;
- 2. AND THAT Staff be authorized to hold Public Meetings to obtain feedback on the preliminary preferred option identified through the Schedule 'B' Class Environmental Assessment Study for the Don Mills Channel Flood Remediation (the "Class EA Study");
- 3. AND THAT Staff report back to Council with feedback obtained from the public prior to endorsement of the final preferred alternative identified through the Class EA Study;
- 4. AND THAT staff be authorized and directed to do all things necessary to give effect to this resolution.

