

# **Cherry Street Stormwater & Lakefilling Project**

## **Contracting Options Analysis and Recommendation**

**Finance, Audit and Risk Management Committee**  
**March 9, 2017**



# Objective

- To provide an update on the current status of the Cherry Street Stormwater & Lakefilling Project.
- To review options for the procurement and form of contract for construction related services.
- To obtain FARM and then Board of Directors approval on the recommended contractor procurement strategy.

# Project Basics

- The three levels of Government jointly announced \$65M in funding for the implementation of the Cherry Street Stormwater & Lakefilling Project (Formerly titled Essroc Quay Lakefilling & Naturalization Project).
- Cherry Street Stormwater & Lakefilling project (CSLF) is part of the broader Port Lands Flood Protection project.
- Project must be completed by March 31, 2019 pursuant to the Clean Water Waste Water funding program criteria.



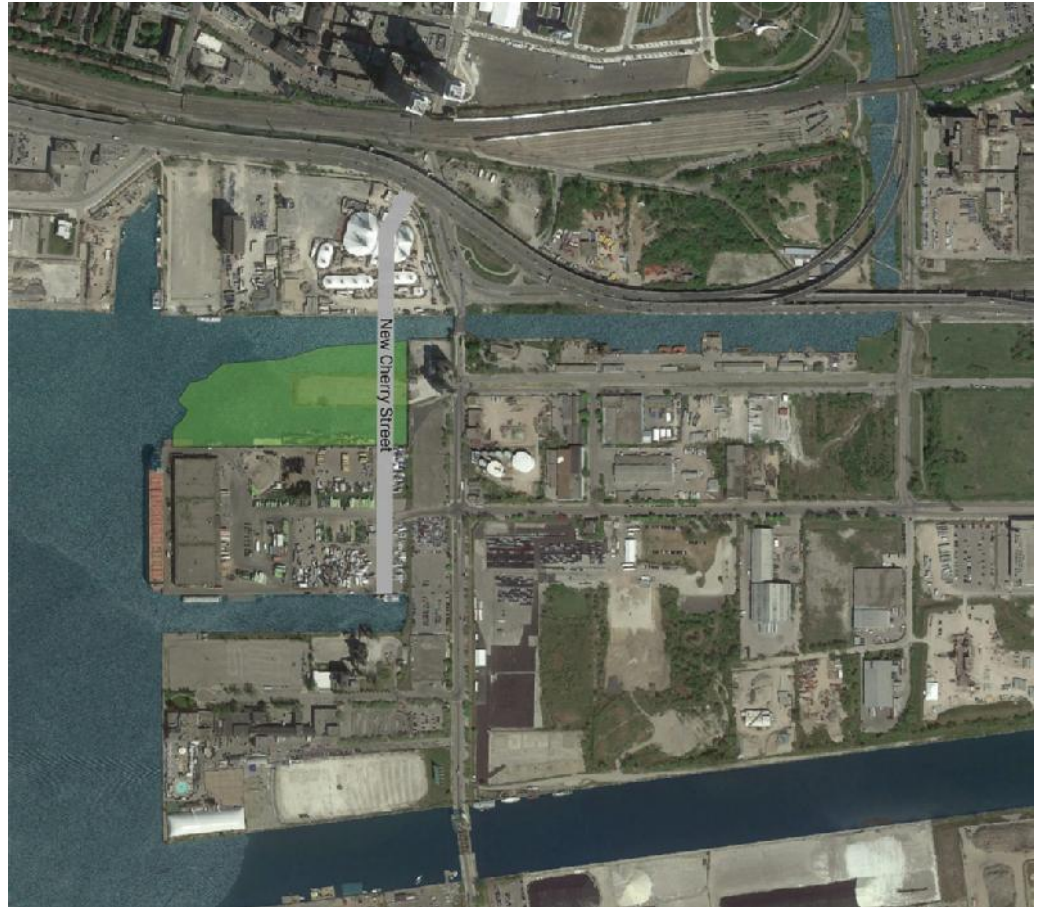
## Legend

- Cherry Street Lakefilling

# Project Scope

The project includes the design and construction of the following elements:

- Confinement berm structures
- Rock armoring and dockwall structures
- Lakefilling
- Aquatic and land ecological habitat structures and features
- Diversion of an existing storm sewer



# Current Status/Background

- Project Charter has been developed, reviewed with WT partner agencies, and has been circulated for execution.
- Contribution Agreement has been drafted and is under negotiation with City staff who are concurrently negotiating Federal/Provincial funding agreements.
- Management obtained Board approval at the October 25, 2016 meeting, to commence project and commit up to \$2M in advance of CA execution.
- Management is tackling key long-lead approvals that also impact design, including: Department of Fisheries and Oceans; Transport Canada- Navigation Protection Act; and Storm Sewer Diversion.

# Current Status/Background–Con't



- Following Board approval, key consultants were procured, including:
  - In-Water Geo-Environmental Investigation, and Cost Estimating efforts are underway;
  - Ecological Habitat and Sewer Diversions design and approvals with respective agencies in progress;
  - Architect retained for project design alignment with the broader Port Lands Flood Protection project;
  - Lead Engineer procurement underway (procurement structured to allow flexibility with future contracting strategy); and
  - TO COME: Scheduling & Risk Analysis RFP release to the market is imminent.
- Staff will return to Board for Capital Approval for the project once 20% design and pricing has been attained.

# Procurement Decision: Key Considerations



1. CWWF funding timeline criteria dictate that the project be fast-tracked.
2. Early Contractor involvement required to source fill material, assess constructability, schedule, and estimate the work.
3. Critical approvals that can impact design will be ongoing as design progresses and nears scheduled completion. Enable flexibility to accommodate such fast-tracking.
4. Approach needs to align with the essential design services that are already retained (Architect, Ecological Habitat, and Sewer Diversion design).
5. Waterfront Toronto needs to retain some control over design aspects of the shoreline as it directly impacts the programming and design of the future Promontory Park North (currently not in Port Lands Flood Protection scope).
6. More transparent open book process supports timely decision making and easier government audits.



# Contracting Analysis- Option 1

## General Contractor - Lump Sum Tender

- Tender issued to prequalified list of general contractors
- Lowest compliant bidder selected
  - No early contractor involvement
  - Design must be 100% complete prior to tender
  - Cost is known prior to construction start upon award
  - Owner carries the cost and schedule-impacting risks
  - Closed book process

# Contracting Analysis- Option 2



## Design-Build (DB)

- DB selected through early Pre-Qualified RFP process based on services, qualifications, and bid price
- Contractor awards Engineer and Sub-Trade contracts as required to suit schedule (Closed Book Process)
  - Little early contractor involvement
  - Owner does not have much control over design
  - Does not allow design flexibility for concurrent approval requirements
  - Cost is a factor in DB selection and is known early
  - DB carries the majority of project risks
  - Closed book process

# Contracting Analysis- Option 3



## Construction Management/General Contractor (CM/GC)

- CM selected through early Pre-Qualified RFP process based on services, qualifications and fee proposal
- Sub-trade tenders issued at varying stages of completion to suit schedule (open book process)
  - Pre-construction services include constructability, value advice, estimating, scheduling, mock-ups
  - Allows the most flexibility to Owner for the integration of design and approvals
  - Cost certainty obtained later once final sub-trade tender is awarded
  - CM services geared to help achieve cost and schedule efficiencies
  - Owner carries the majority of the project risks
  - Open book process

# Contracting Analysis- Option 4



## CM/GC (Negotiated Guaranteed Maximum Price option)

- CM selected through early Pre-Qualified RFP process based on services, qualifications and fee proposal
- Sub-trade tenders issued sequentially at varying stages of completion to suit schedule (open book process)
  - Pre-construction services include constructability, value advice, estimating, scheduling, mock-ups
  - Allows flexibility to Owner for the integration of design and approvals until Guaranteed Maximum Price (GMP) is reached
  - Cost certainty obtained as GMP is negotiated following 60% estimate
  - CM carries some project risks and builds risk impacts into its GMP
  - CM has an incentive to finish early
  - Contractor and owner share savings based on final tender values
  - Open book process

# Contracting Analysis- Option 5

## CM/GC (Negotiated Stipulated Price option)

- CM selected through early Pre-Qualified RFP process based on services, qualifications and fee proposal
- Contractor awards Sub-trade contracts as required to suit schedule (Closed book process)
  - Pre-construction services include constructability, value advice, estimating, scheduling, mock-ups
  - Allows flexibility to Owner for the integration of design and approvals until Stipulated Price is reached
  - Cost certainty obtained as Stipulated Price is negotiated following 60% estimate
  - CM carries most project risks and builds risk impacts in its Stipulated Price
  - CM has an incentive to finish early
  - Closed book process

# Contracting Options Analysis



Contracting Option	Pre-Con Services	Design & Approvals	Cost Certainty	Overall Cost	Schedule Adherence	Risk Transfer	Open Book	Weighted Total
<b>Importance</b>	<b>High</b>	<b>Med</b>	<b>Low</b>	<b>High</b>	<b>High</b>	<b>Med</b>	<b>High</b>	
General Contractor	1	2	5	5	1	2	1	<b>37</b>
Design-Build (DB)	2	1	4	4	2	5	2	<b>46</b>
CM/ GC	5	5	1	3	3	1	5	<b>61</b>
CM (Negotiated GMP)	4	4	2	2	4	3	5	<b>58</b>
CM (Negotiated Stip. Price)	3	3	3	1	5	4	2	<b>53</b>

<u>Legend</u>	
1	5
Lowest Ranked	Highest Ranked

<u>Weighting</u>		
1	2	3
Low	Medium	High

# Conclusion



- Construction Management (highest score) achieves critical project requirements to the greatest extent: e.g. early contractor involvement, design/approvals flexibility, schedule constraints, and transparency.
- Option exists to negotiate a Guaranteed Maximum Price with CM.
- Both options are fully open book and transparent.

# Recommendations

- Adopt Construction Management for the Cherry Street Stormwater & Lakefilling project.
- Proceed with the CM procurement upon Board approval of this recommendation.
- Monitor conditions and consider the option to negotiate a Guaranteed Maximum Price with the CM prior to completion of construction drawings and sub-trade procurement.



# Proposed Motion



**ON MOTION** duly made, seconded, and carried, be it **RESOLVED** that the Finance, Audit and Risk Management Committee hereby approves, for recommendation to the Board of Directors, the following recommendations:

- That Waterfront Toronto adopt Construction Management for the Cherry Street Stormwater & Lakefilling project and proceed with the procurement of a Construction Manager upon Board approval; and
- That Waterfront Toronto monitor conditions and consider the option to negotiate a Guaranteed Maximum Price with the Construction Manager prior to completion of construction drawings and sub-trade procurement.



WATERFRONToronto

