

Port Lands Flood Protection and Enabling Infrastructure

Due Diligence and Project Planning

Request for Capital Approval

Board of Directors

May 4, 2015



Port Lands Acceleration Initiative (PLAI 1 and 2) & Don Mouth Naturalization Project (DMNP EA) & Lower Don Lands EA Master Plan (LDL EA)

PLAI 1 (2011/12)



- Port Lands Acceleration Initiative (PLAI) re-examined the 2010 Don Mouth Naturalization and Port Lands Flood Protection Project Environmental Assessment (DMNP EA)
- High Level Business and Implementation Plan developed for Port Lands Revitalization (North of the Ship Channel), centred on flood protection requirements
- Order-of-magnitude conceptual cost estimates and 30+ year phasing strategy prepared as part of this exercise

City Council Direction (October 2012)



- **Amend the DMNP EA based on the 2012 “4WS Re-aligned” option and submit to the Ministry of the Environment (MOE) for approval** Complete
- **Revise the Lower Don Lands (LDL) Master Plan and Keating Channel Precinct Class EA to align with the PLAI direction** Complete
- Confirm precinct boundaries and initiate precinct planning, inclusive of business and implementation planning, for the Cousins Quay, Polson Quay and Film Studio Precincts Underway
- Protect the proposed valley and stream corridors from encroachment by development Underway
- Complete a high-level framework plan for the entire Port Lands Underway

PLAI 2 (2012-15)

- Response to City Council direction included:
 - DMNP EA and Lower Don Lands EA Master Plan amended to align with PLAI 1
 - Villiers Island precinct plan initiated (led by WT)
 - Framework plan, transportation and servicing master plan, and Film Studio District precinct plan initiated (led by City)
- Conceptual cost estimates updated as required to reflect final EA
- Board of Directors approved WT 2.0 Strategic Plan submitted to governments on December 20, 2013 (including Port Lands Flood Protection)
- Preliminary business case for Port Lands Flood Protection prepared for WT by PwC in September 2014

WT 2.0 Strategic Plan



- WT proposal to continue tri-government funding and governance model to complete Waterfront Revitalization objectives
- WT to continue as Master Developer, leveraging and utilizing broader public sector agencies (Eligible Recipients) to capitalize on available resources, capabilities and expertise (e.g. TRCA, TPLC, Infrastructure Ontario)
- Roles and responsibilities of all parties to be determined during due diligence process over next twelve months and documented in Project Charter
- WT 2.0 staffing, process and upgraded technology requirements to be developed and implemented upon total project funding approval

Conceptual Estimate Development



- Conceptual estimates were developed during PLAI 1 for :
 - Flood protection infrastructure
 - Enabling infrastructure including major roads, municipal trunk services and structures
 - Local roads and municipal services
 - Higher order transit facilities (e.g. LRT)
- Conceptual estimates were derived from EA concept plans and WT project benchmarks employing multiple expert industry sources, including:
 - Hanscomb Limited (Cost Consultant)
 - Aecon Construction and Materials (Contractor)
 - Parsons Brinkerhoff Halsall (Engineer)
 - The Sernas Group (Engineer)

Conceptual Estimate Assumptions



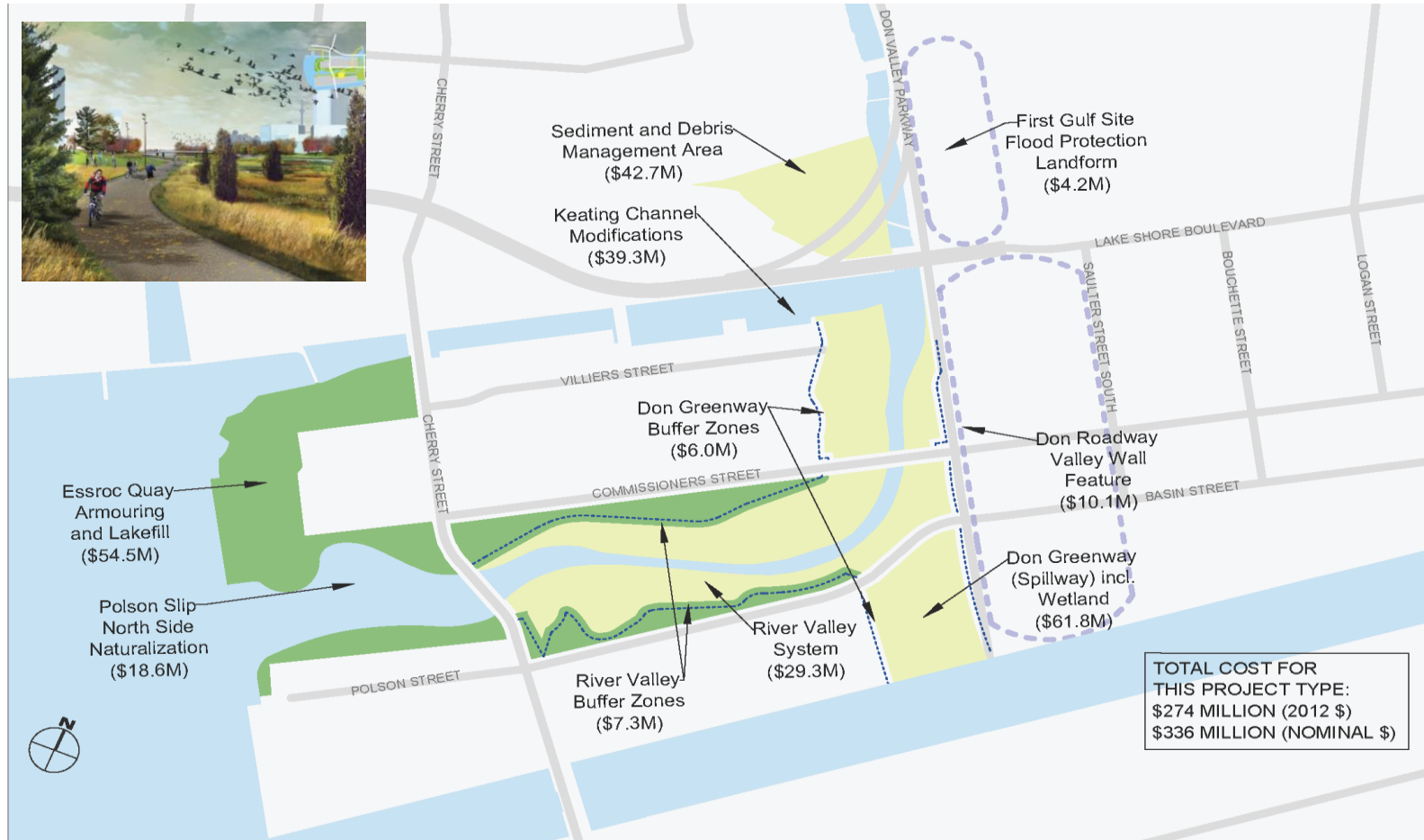
- Costs are CONCEPTUAL estimates based on the level of design and specification detail that is consistent with an environmental assessment
- Average 15% applied to hard construction costs to account for project soft costs (consultants, permits, approvals, project management, etc.)
- Average 25% contingency applied to hard construction costs to account for project risks and unknowns
- Soft cost and contingency percentages will vary according to the specific requirements and risks inherent in each project but are estimated to total 40% overall

Conceptual Estimate Assumptions



- Conceptual estimate assumes that excavated soils will be recycled and reused for lake fill and to raise grades where necessary
- Conceptual estimate excludes local roads and municipal services, soil remediation and re-grading of development lands, which costs are to be borne by individual site developers
- Conceptual estimate excludes higher order transit facilities (e.g. LRT components)
- Conceptual estimate updated from PLAI 1 to PLAI 2 to account for changes in final DMNP Environmental Assessment and LDL Masterplan
- Current estimate is **\$975M** and is based on \$795M (in 2012 \$) escalated at 2.5% over an approximate 10 year schedule

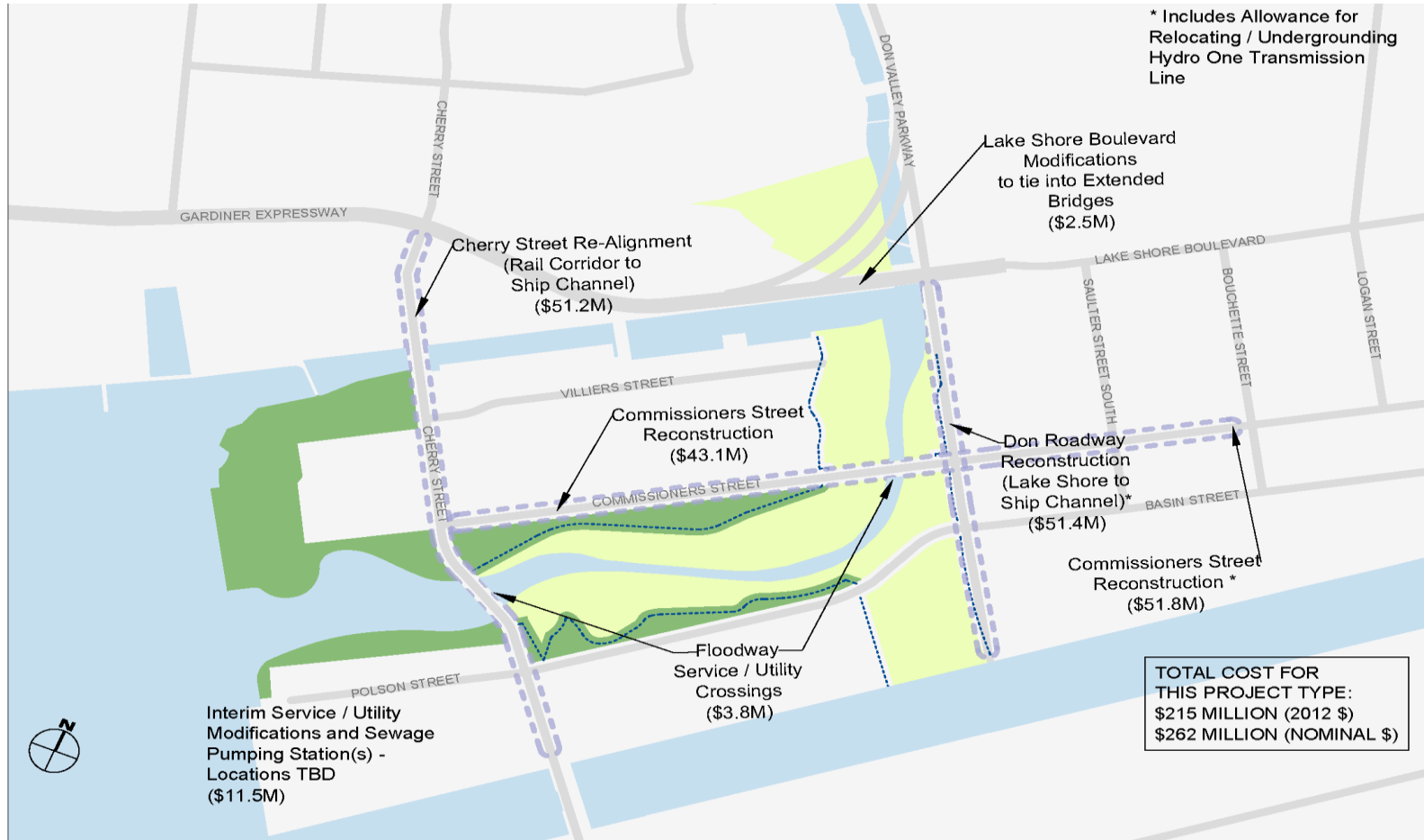
Flood Protection Earthworks & Lakefill



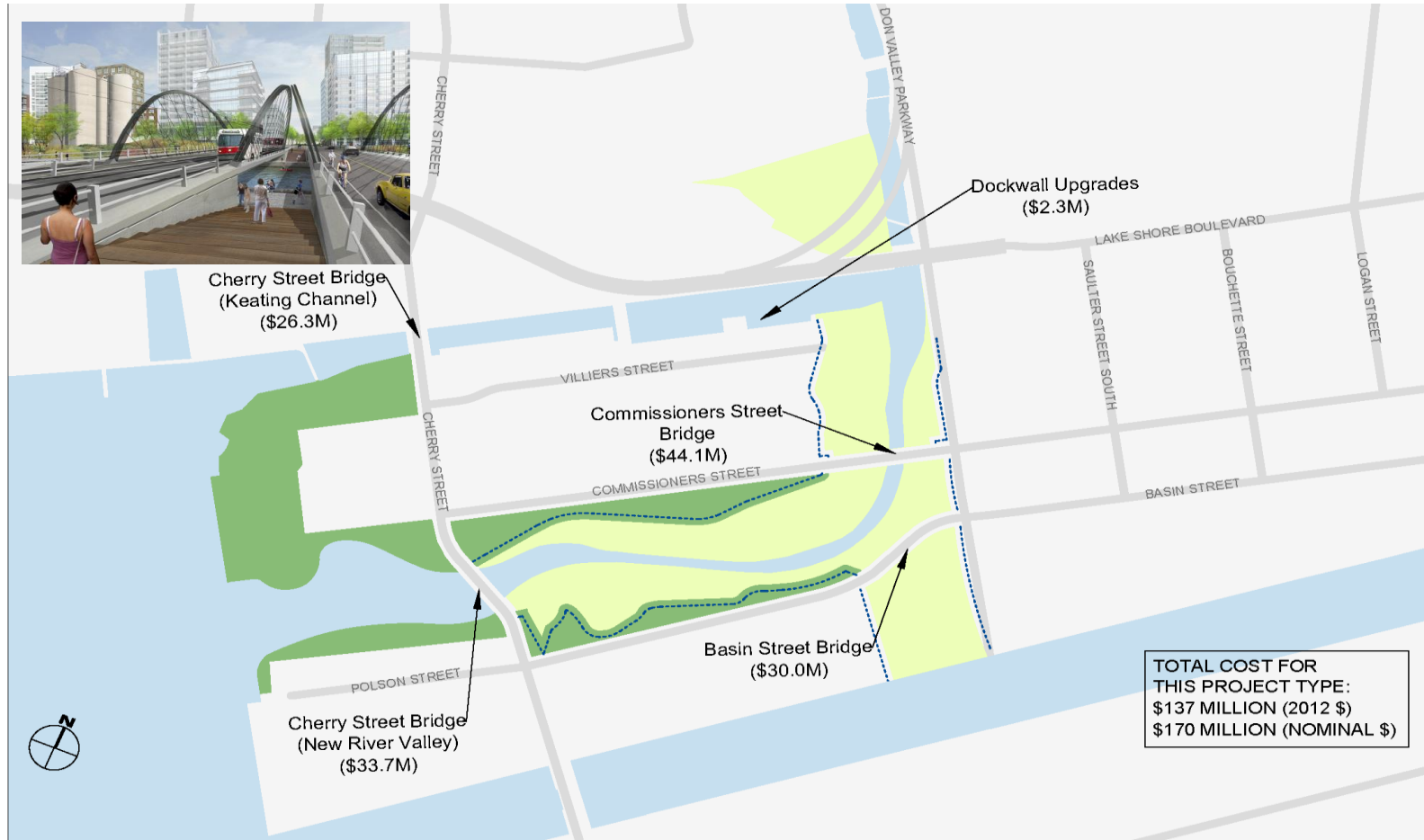
Flood Protection Structures



Roads and Municipal Services



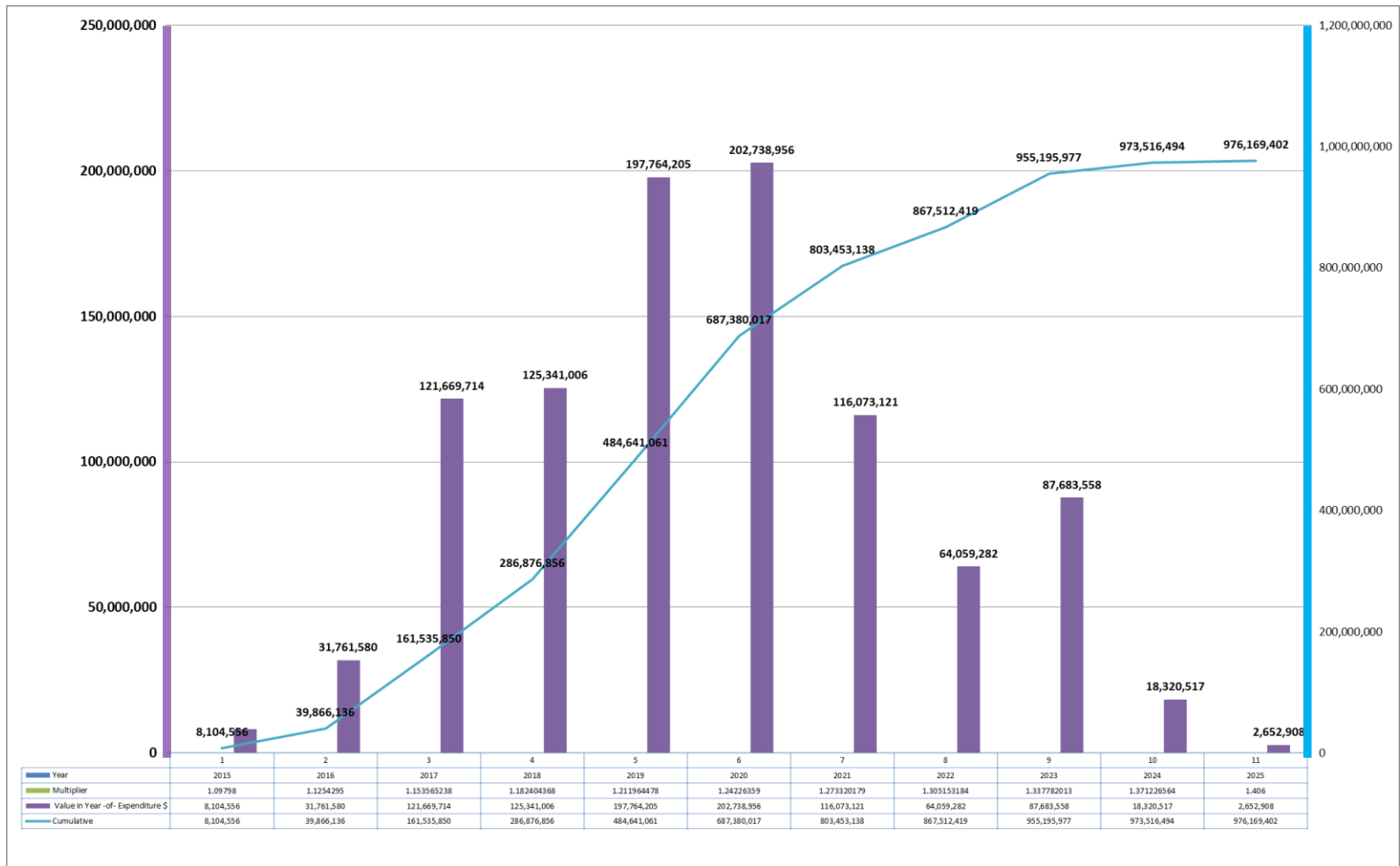
Bridges and Marine Structures



Public Realm



Potential Annual Cash Flow



2012 \$ Versus Year of Expenditure \$



Project Type	Estimated Cost (2012 \$M)	Escalated Cost (Year of Expenditure \$M)
Flood Protection Earthworks & Lakefill	\$ 274	\$ 336
Flood Protection Structures	\$ 118	\$ 145
Roads and Municipal Services	\$ 215	\$ 262
Bridges and Marine Structures	\$ 137	\$ 170
Public realm	\$ 51	\$ 62
Grand Total	\$ 795	\$ 975

- All costs rounded to nearest million \$
- Escalation rate assumed to average 2.5% per annum (2015 – 2025)
- Escalated costs based on approximate 10 year project schedule
- Actual costs will vary dependent on final determination of sequencing and construction of project components

Project Cost Breakdown



Cost Element	Hard Costs	Soft Costs	Contingency	Total
Flood Protection Earthworks/Fill	\$ 240	\$ 36	\$ 60	\$ 336
Flood Protection Structures	\$ 104	\$ 15	\$ 26	\$ 145
Bridges and Structures	\$ 187	\$ 28	\$ 47	\$ 262
Roads and Services	\$ 122	\$ 18	\$ 30	\$ 170
Parks & Public Realm	\$ 44	\$ 7	\$ 11	\$ 62
Total	\$ 697	\$ 104	\$174	\$ 975

All costs are rounded to nearest **\$ million**

Costs are expressed in Year of Expenditure nominal dollars

Soft cost and contingency values are estimated to equate to 40% of project hard costs. Soft costs may range between 15% and 20% (\$104M to \$139M) and contingencies may range between 20% and 25% (\$139M to \$174M) of hard costs on an aggregate and consolidated basis.

Current Status



- DMNP and Lower Don Lands Master Plan EA approvals are in place as of January 28, 2015
- Forecast Summer 2015 completion and Fall 2015 City Council adoption of Villiers Island Precinct Plan, Port Lands Framework Plan, Transportation and Servicing Master Plan EA, and Film Studio District Precinct Plan
- Negotiations under way with three orders of government to finalize high level funding commitment for the implementation of Port Lands Flood Protection and Enabling Infrastructure
- Detailed project due diligence and execution planning proposed in parallel

Primary Objectives



- Finalize tri-government funding commitment
- Validate site characteristics and data
- Increase project cost and schedule certainty
- Ensure that project benefits have been comprehensively evaluated
- Formulate plan to procure the project and transfer risk in a cost effective manner
- Identify technical and commercial project risks and develop appropriate risk treatment strategies
- Clearly define roles, responsibilities, and success criteria for project delivery
- Establish an appropriate and effective project governance structure
- Identify interim review and re-evaluation “off-ramps”
- Prepare detailed execution plan for implementing flood protection and related infrastructure works

Scope of Work and Deliverables



Key deliverables for the next 12-18 months:

- Initial project charter for due diligence and project planning scope of work
- Detailed program execution and implementation plan
- Base cost estimate update
- Master program schedule and cash flow update
- Quantitative cost/schedule risk analysis
- Procurement options analysis and strategy (including P3/AFP screening)
- Identification and strategy for securing required permits, licenses and approvals
- Interface coordination requirements with related/adjacent projects and maintenance activities (i.e. Gardiner EA, Keating Channel dredging, etc.)
- Landowner engagement
- Confirmation of funding sources and strategy

Scope of Work and Deliverables



Environmental due diligence deliverables including:

- Compilation of existing subsurface information
- Identification of data gaps/uncertainties
- Development and implementation of field sampling program
- Development of Conceptual Site Model
- Definition of Risk Assessment/Record of Site Condition (as per O. Reg. 153/04) sites and requirements, based on condition and proposed future function
- Phase 1 and Phase 2 Environmental Site Assessments as required to validate cost estimates

Scope of Work and Deliverables



Site characteristics due diligence deliverables including:

- Comprehensive topographic, bathymetric and legal surveys
- Updated flood plain mapping
- Sub-surface utility mapping
- Geo-technical investigation and assessment
- Dock wall structural assessment

Project Organization



- Participating Agencies:
 - Waterfront Toronto
 - City of Toronto
 - Toronto and Region Conservation Authority
 - Toronto Port Lands Company
 - Infrastructure Ontario (TBC)
- Executive Steering Committee established for PLAI 1&2 will continue as joint decision-making body
- Specific roles and responsibilities of each agency to be confirmed in Initial Project Charter

Detailed Budget



Confidential
Attachment
(By-Law No. 2, Item 6.1.1(a) - The security
of the property of the Corporation)

Detailed Budget



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Budget Breakdown



Required Services	Budget
Professional Services (e.g. architecture, engineering)	\$ 2,875,000
Financial Due Diligence	\$ 250,000
Program Management, Project Planning & Implementation	\$ 1,425,000
Contingency	\$ 450,000
Total Budget	\$ 5,000,000

Context



The Due Diligence and Project Planning work described herein is the first stage of the overall Port Lands Flood Protection and Enabling Infrastructure implementation plan.

The Capital Approval of \$5 million requested herein is 4.8% of the overall Portlands Flood Protection and Enabling Infrastructure soft cost budget of \$104 million.

The Capital Approval of \$5 million requested herein is carried within the \$975 million overall project cost

Future Professional Consulting

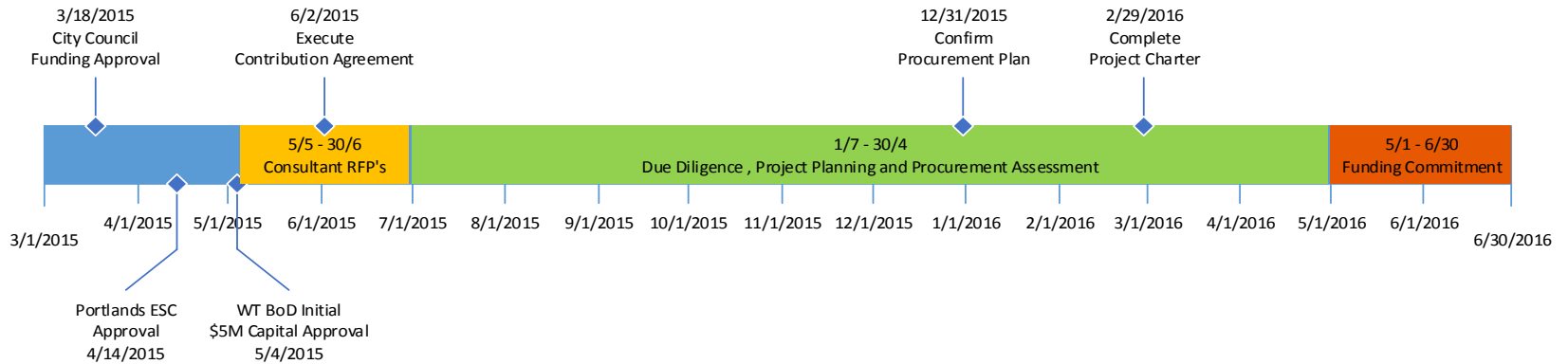


Additional required consulting services (Subject to future funding)

- Heritage building structural assessments
- Existing buildings designated substances surveys
- Dredging and dewatering pilot study
- Real estate and contractual legal
- Testing and inspection
- Design and contract documents
 - Earthworks and backfill
 - Bridges
 - Roads and municipal infrastructure
 - Parks and public realm

These services are not forecast to be required during the due diligence and project planning stage but will be required in the future and will be funded through the soft cost budget

Proposed Schedule



Project status will be updated and reported on a quarterly basis to the FARM Committee and Board of Directors for the duration of the project

Project Risks



Risk Description	Potential Impact	Mitigation Strategy
<ul style="list-style-type: none">• Procured values exceed budgets• Additional services identified during project• Additional consultant services required	<ul style="list-style-type: none">• Available funding exceeded	<ul style="list-style-type: none">• Maintain contingency• Scope services for flexible addition/ deletion, if required• Prioritize Consulting services and defer if necessary
<ul style="list-style-type: none">• Failed procurement (no suitable team identified)	<ul style="list-style-type: none">• Re-procurement and delay	<ul style="list-style-type: none">• Prequalify consultants prior to proposal stage

Recommended Capital Budget



Consultant Fees, Site Investigation, Contingency & NR HST (included in projected soft cost estimate)	\$5.0M
Funding Approved in 2015 City Budget (Note 1)	\$5.0M

Note 1: Funding has been sourced through City of Toronto WT1.0 \$500 million contribution. Reallocation of 1/3 of City Environmental Reserve Fund (Total \$15M) to be utilized to fund this work. Funding is not first tranche of WT2.0 funding.

Recommendation



Management recommends Board Approval for capital of \$5.0M to undertake due diligence and project planning and initiation work required to advance the Port Lands Flood Protection and Enabling Infrastructure project, subject to the commitment of funding by the City of Toronto through a Contribution Agreement.

Motion



ON MOTION duly made, seconded and carried, be it **RESOLVED** that the Board approves a capital expenditure of \$5.0M to undertake due diligence and project planning work required to advance the Port Lands Flood Protection and Enabling Infrastructure project and report back to the Board on progress at the June 24, 2015 Board meeting. Approval is subject to the commitment of funding by the City of Toronto.

