## Section IV - Ontario Regulation 166/06, As Amended

**TO:** Chair and Members of the Executive Committee

Meeting #1/20, March 13, 2020

FROM: Sameer Dhalla, Director, Development and Engineering Services

RE: APPLICATIONS FOR PERMITS PURSUANT TO ONTARIO REGULATION

166/06, AS AMENDED

Development, Interference with Wetlands and Alterations to Shorelines and

Watercourses

#### **KEY ISSUE**

Pursuant to Ontario Regulation 166/06, as amended, written permission from the Authority is required for:

- a) straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland;
- b) development, if in the opinion of the Authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development.

A permit may be refused through a Hearing Process, if in the opinion of the Authority, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land is affected.

# **RECOMMENDATION**

THAT permits be granted in accordance with Ontario Regulation 166/06, as amended, for the applications which are listed below:

## MAJOR PERMIT APPLICATION 11.1 - REGULAR - FOR APPROVAL

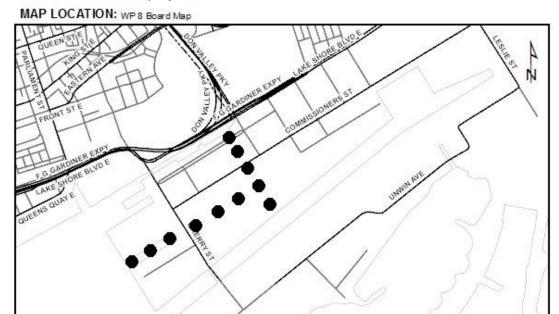
Applications that involved a more complex suite of technical studies to demonstrate consistency with policies; applications that cover a significant geographic area, extensive modifications to the landscape, major infrastructure projects, applications requiring site specific conditions and permissions that extend beyond two years.

## CITY OF TORONTO (TORONTO AND EAST YORK COMMUNITY COUNCIL AREA)

#### 11.1 WATERFRONT TORONTO

To construct, reconstruct, erect or place a building or structure, site grade, temporarily or permanently place, dump or remove any material, originating on the site or elsewhere, alter a shoreline and alter a watercourse on Commissioners Street, Villiers Street, Don Roadway, in the City of Toronto (Toronto and East York Community Council Area), Don River Watershed as located on the property owned by the City of Toronto (TEDCO under Master Agreement with Waterfront Toronto). The purpose is to construct the Port Lands Flood Protection and Enabling Infrastructure (PLFPEI) project, a comprehensive plan to protect southeastern portions of downtown Toronto that is currently under risk of

flooding during a Regulatory Storm event thereby unlocking nearly 240 hectares of lands for revitalization and facilitating private investment. There are no in-water works associated with the project.



The permit will be issued for the period of March 13, 2020 to March 12, 2022 in accordance with the following documents and plans which form part of this permit:

- Port Lands Flood Protection and Enabling Infrastructure, Work Package #8; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number G101; Drawing List and Abbreviations; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number G102; Project Area Components; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number G103; Work Package #8 Area of Work; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number G104; Project Survey; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number G105; Key Plan; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number G106; General Site Plan; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;

- Drawing Number 001; Levee Core Plan A & Sections; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 002; Levee Core Plan B & Sections; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 003; Levee Core Plan C & Sections; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 004; Levee Core Detail at Carp Gate A; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 005; Levee Core Detail at Carp Gate B; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 006; Levee Core Detail at Carp Gate C; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 101; Grading Plan A; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 102; Grading Plan B; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 103; Grading Plan C; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 104; Grading Plan D; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 105; Grading Plan E; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 110; Grading Cross-Sections 1-5; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 111; Grading Cross-Sections 6-10; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 112; Grading Cross-Sections 11-15; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 113; Grading Cross-Sections 16-20; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 114; Grading Cross-Sections 21-25; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;

- Drawing Number 115; Grading Cross-Sections 26-30; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 116; Grading Cross-Sections 31-35; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 117; Grading Cross-Sections 36-40; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 118; Grading Cross-Sections 41-45; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 119; Grading Cross-Sections 46-47; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 120; Grading Cross-Sections 48-51; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 121; Grading Cross-Sections 52-54; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 131; Path 1 Profile; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 132; Path 2 Profile; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 133; Path 5 Profile; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 134; Path 6 Profile; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 135; Path 4,7 & 8 Profiles; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 201; Layout and Material Plan A; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 202; Layout and Material Plan B; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 203; Layout and Material Plan C; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 204; Layout and Material Plan D; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;

- Drawing Number 206; Curve Data Chart; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 210; Pavement Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 211; Pavement Marking Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 215; Carp Gate A, B C, Guardrail and Pavement Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 216; Carp Gate A, B C, Guardrail Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 220; Ship Channel Kick Rail and Pavement Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 221; Site Furnishing Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 225; Range Fence Details 1; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 226; Range Fence Details 2; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 230; Log Feature Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 301; Stone & Planting Soil Plan A; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 302; Stone & Planting Soil Plan B; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 303; Stone & Planting Soil Plan C; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 304; Stone & Planting Soil Plan D; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 310; Stone Armour River Valley West; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 311; Stone Armour Don Greenway; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;

- Drawing Number 312; Stone Armour Details Ice Management Area (1); prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 313; Stone Armour Details Ice Management Area (2); prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 315; Revetment Plan & Sections Polson Slip prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 320; Stone Features 1 & 3; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 321; Stone Features 4; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 322; Stone Features 2 & 5; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 323; Stone Features 6 & 7; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 324; Stone Features 8; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 325; Stone Features 9; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 330; Stone Feature, Stone Schedule; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 340; Armour Stone & Rip Rap Profiles; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 341; Streambed Profiles A-H; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 342; Planting Soil Profiles prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 345; FES Details 1; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 346; FES Details 2; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 350; Material Transition Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;

- Drawing Number 351; Material Transition Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 352; Material Transition Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 353; Material Transition Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 354; Material Transition Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 501; Ecological Material & Layout Plan A; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 502; Ecological Material & Layout Plan B; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 503; Ecological Material & Layout Plan C; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 504; Habitat Wood Details 1; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 505; Habitat Wood Details 2; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 506; Crib Wall Detail 1; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 507; Crib Wall Details 2; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 508; Generic Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 509; Constructed Habitat Details 1; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 510; Constructed Habitat Details 2; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 600; Temporary Irrigation Plan A; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 601; Temporary Irrigation Plan B; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;

- Drawing Number 602; Temporary Irrigation Plan C; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 605; Temporary Pump Station; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 606; Temporary Irrigation Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 607; Temporary Distribution Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 701; Tree & Shrub Planting Plan A; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 702; Tree & Shrub Planting Plan B; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 703; Tree & Shrub Planting Plan C; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 711; Groundcover Planting Plan A; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 712; Groundcover Planting Plan B; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 713; Groundcover Planting Plan C; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 720; Planting Schedule Trees & Shrubs; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 721; Planting Schedule Groundcover Part 1; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 722; Planting Schedule Groundcover Part 2; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 723; Planting Schedule Groundcover Part 3; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 730; Planting Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 731; Planting Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;

- Drawing Number 800; Site Sections Key Plan; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 801; Site Section 1 STA 4+25; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 802; Site Section 2 STA 4+80; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 803; Site Section 3 STA 5+60; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 804; Site Section 4 STA 6+70 & Site Section 5 STA 7+20;
  prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 805; Site Section 6 STA 8+00; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 806; Site Section 7 STA 9+35; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 807; Site Section 8 STA 10+90 & Site Section 9 Basin St BRDG; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 808; Site Section 10 Wetland 3; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 809; Site Section 11 STA 12+75; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 810; Site Section 12 STA 13+90; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 811; Site Section 13 STA 14+50; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 812; Site Section 14 Wetland 4; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 813; Site Section 15 STA 5+50 & Site Section 16 STA 8+25; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 901; River Valley Bridge Enlargement Plan; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 902; River Valley Bridge Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;

- Drawing Number 903; River Valley Bridge Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 910; Wetland Bridge, Enlargement Plan; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 911; Wetland Bridge Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 921; Bridges, General Notes & Location Plan; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 922; River Valley Bridge General Arrangement; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 923; River Valley Bridge Abutment Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 924; River Valley Bridge Pre-Engineered Bridge Span; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 926; Wetland Bridge General Arrangement; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 927; Wetland Bridge Foundation Plan & Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 928; Wetland Bridge Framing Plan & Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1000; Structural Marine General Notes; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1001; Marine Demolition Plan A; prepared by Michael Van Valkenburgh Associates Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1002; Marine Demolition Plan B; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1003; Marine Demolition Plan C; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1004; Marine Demolition Plan D; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1005; Marine Demolition Plan E; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;

- Drawing Number 1101; Dockwall Demolition Details & Sections Ship Channel; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1102; Dockwall Demo Details & Temporary Cofferdam Ship Channel– Ship Channel; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1103; Dockwall Demolition Details & Sections Transition Wall; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1104; Dockwall Demolition Details & Sections Bumpout Wall; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1105; Dockwall Demolition Details Keating Channel East; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1110; Dockwall Demolition Details & Sections Polson Slip East; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1201; Dockwall Details & Sections Keating Channel Transition; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1202; Dockwall Details & Sections I Keating Channel Transition; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1203; Dockwall Details & Sections II Keating Channel Transition; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1205; Dockwall Details & Sections Keating Channel Bumpout; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1206; Dockwall Details & Sections Keating Channel Bumpout; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1211; Dockwall Details & Sections Ship Channel; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1212; Dockwall Details & Sections Ship Channel; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1213; Dockwall Details & Sections Ship Channel; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1214; Dockwall Details & Sections Keating Channel Bumpout; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1215; Carp Gate D1 & D2 Details (2); prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;

- Drawing Number 1221; Carp Gates A, B & C Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1222; Carp Gate Concrete Reinforcing Details; prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1223; Carp Gate Framing Details prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020;
- Drawing Number 1231; Fixed Weir prepared by Michael Van Valkenburgh Associates, Inc. on behalf of Waterfront Toronto; dated January 23, 2020; received by TRCA on January 22, 2020.

# **Application-Specific Permit Conditions**

# A. Operations Maintenance and Surveillance Manual:

Waterfront Toronto (WT) commits to prepare and finalize a robust Operations Maintenance and Surveillance (OMS) manual covering all components of the Port Lands Flood Protection and Enabling Infrastructure (PLFPEI) project. The OMS manual shall be finalized to the satisfaction of TRCA (and the City of Toronto) by December 2021 and shall include the full scope of responsibilities and corresponding financial obligations associated with assets to be assumed in future by TRCA. TRCA and City of Toronto staff will work with WT on the scope of the OMS manual to ensure all relevant components of the PLFPEI project are adequately documented. TRCA and the City of Toronto, in coordination with WT, shall develop a funding model aligned with the OMS needs identified by WT through the OMS manual to be presented to Toronto City Council and finalized prior to project handover.

#### B. Risk Assessment:

Waterfront Toronto (WT) commits to work with TRCA and the City of Toronto to undertake a Risk Assessment (RA) for all aspects of the new river valley and any other structures including but not limited to the Ice Management Area (IMA) and the Sediment and Debris Management Area (SDMA) that will be eventually managed by TRCA. WT shall provide all necessary documentation and information to TRCA, City of Toronto and the third-party assessor as needed. TRCA may require a peer review at the cost of WT subject to the discretion of TRCA staff, and funded under the original Project Management Delivery Agreement between TRCA and WT. WT shall work with TRCA and the City of Toronto during the development of the RA to quantify risks and responsibilities associated with these risks.

# C. Asset Management Plan:

Waterfront Toronto (WT) commits to support the development of an Asset Management Plan prepared by TRCA and the City of Toronto for the new river valley and any other structures including the SDMA and IMA. WT shall provide all necessary documentation and information to TRCA and the City of Toronto. WT shall work with TRCA and the City of Toronto during the development of the Assessment Management Plan to identify assets, responsibilities, maintenance requirements and corresponding financial requirements for key assets.

## D. Post Construction/Pre-Plug Removal Monitoring Requirements:

Waterfront Toronto (WT) shall prepare a comprehensive post construction/pre-plug removal conditions monitoring plan. This monitoring plan is required to confirm the appropriateness of river finishes installation, identify any issues and concerns related to the finishes, determine (if any) and implement all relevant corrective actions to ensure the proper function of the installed

river finishes. The post construction/pre-plug removal monitoring details shall be defined and agreed upon with relevant agencies and completed/ready for implementation once the first section of the river finishes is installed.

# E. Post – Plug Removal and Pre-Handover Monitoring Requirements:

Waterfront Toronto (WT) shall prepare a comprehensive post-plug removal and pre-handover conditions monitoring plan. This monitoring plan is aimed at monitoring the river finishes following the removal of the river plugs and the full flooding of the river channel and until such a time that the Operations, Maintenance and Surveillance phase commences. The post-plug removal monitoring plan shall be defined and agreed upon with relevant agencies and ready for implementation once the river is flooded.

# F. Keating Channel Scour Analysis:

Prior to construction of the Keating Channel area works, Waterfront Toronto (WT) commits to complete the scour analysis and to ensure that the Keating Channel scour assumptions in the hydraulic model are reasonable and consistent with the overall project wide report. Due to design scheduling, the results of the scour analysis will be confirmed when the project wide scour report is reviewed and accepted by TRCA staff.

# G. Adaptive management strategy for construction phase

During the construction of the river finishes, Waterfront Toronto (WT) commits to contact TRCA if there is an need for any modifications, changes or deviations from the approved plans/drawings, that impacts TRCA interests relating to flooding hazard, and erosion hazard, natural heritage and habitat creation. TRCA shall determine if a review and or a permit revision is required from TRCA for those modification, changes or deviations.

# H. Clarification on Lakes and Rivers Improvement Act (LRIA):

Waterfront Toronto (WT) commits to provide any relevant documents summarizing discussions with MNRF indicating whether the key features of the new river including the levees, carp gates, weirs, flow curtains, dock walls, flood protection features and structures require approval or not, under Section 14 of the LRIA prior to construction commencement of these key features.

#### I. Peer Review and Materials to Confirm Flood Protection is Achieved

Waterfront Toronto (WT) commits to provide TRCA with all materials required to confirm flood protection is complete, functional, and meets the design objectives of the Don Mouth Naturalization and Port Lands Flood Protection (DMNP) Environmental Assessment. In line with the "Protocol Regarding the Lower Don Special Policy Area (2018)", this information shall be used by a third party peer reviewer to validate assumptions, replicate calculations, verify results, and confirm findings. To address this requirement, as a minimum, WT shall provide to TRCA revised hydraulic modelling based on as-built conditions, flood plain mapping, and an accompanying detailed hydraulic report by a qualified engineer confirming that flood protection is achieved. Also required are engineered certified documents from all applicable disciplines confirming that the constructed flood protection infrastructure is in general conformance to the design criteria.

#### J. As- Built Drawings:

Waterfront Toronto (WT) commits to provide "As-Built Drawings" of all components constructed as part of this project that are required for use by future owner (s). Drawings shall be accompanied by certified documentation prepared by the relevant qualified professional (i.e. engineer, landscape architect) licensed in Ontario to confirm conformance to design

specifications and criteria. Conformance to engineering components shall be certified by a qualified professional engineer(s) licensed in Ontario.

#### K. Construction Documentation:

Waterfront Toronto (WT) commits to document and then provide construction documentation generated during the construction of the PLFPEI project (including but not limited to site reports, engineering reports, compaction testing, concrete testing, contracts, etc.) in an organized manner and preserved for use by the future operator and/ or owner(s).

# L. Use of Appropriate Licensed Qualified Personnel:

Regarding construction/installation personnel, Waterfront Toronto (WT) commits to ensure that during construction, any on-site changes or modifications regarding bio-engineering and river finishes (including but not limited to cribwalls, FES lifts, levees, rip-rap, and the ice management area), shall be authorized by appropriately Qualified Professional Engineer(s), licensed in Ontario.

## **RATIONALE**

The application was reviewed by staff on the basis of the following information:

## Proposal:

The proposal involves the construction of the <u>Port Lands Flood Protection and Enabling Infrastructure Project</u> (PLFPEI) project, a comprehensive plan to protect southeastern portions of downtown Toronto that are currently at risk of flooding during a Regulatory Storm event thereby unlocking about 240 hectares of flooded lands for redevelopment.

This project is based on the foundations of two Environmental Assessment (EA) studies. The first EA was the 2004 TRCA Don Mouth Naturalization and Port Lands Flood Protection Project EA (DMNP EA) that examined the need to establish and sustain the form, features and functions of a natural river mouth while providing flood conveyance and protection up to the regulatory storm event. The second EA was the joint City of Toronto/Waterfront Toronto (WT)/Toronto Transit Commission (TTC) Lower Don Lands (LDL) Municipal Class EA (completed in 2010 and amended in 2015) that identified the location and types of municipal infrastructure (roads, transit and servicing) required to revitalize and transform the Port Lands into a vibrant, mixed-use, sustainable community for private investment.

This permit involves the construction of the new Don River channel and associated valley including the creation of an approximately 1.3 kilometer (km) long new river channel discharging into Polson Slip, with a 300 metre (m) long greenway/spillway into the Ship Channel. Approximately 30 hectares of naturalized habitat consisting of four major wetlands, forests and marshes, intertwined with about 3.5 km of new pathways and natural trails, 11 viewing/fishing nodes and lookout areas will be created. Details of the new river design include the following:

## **Keating Channel Modifications:**

Currently the Keating channel serves as the only outlet for the Don River into the Toronto Harbour; approximately 800 m of this channel will be modified to improve conveyance and provide habitat. The current bumpout and narrow transition area along the Keating Channel will be replaced with new dockwalls and new transition dockwalls with appropriate tiebacks. New dockwalls will consist of steel sheet piles extending from current grades down to bedrock, with over 150 m of aquatic habitat boulders and amour stone incorporated along several sections of the dockwall.

Item 11.1

## New River Channel and Mouth:

The new 1.3 km long Don River channel and naturalized mouth will be created starting from just south of Lake Shore Boulevard, meandering southwards under the new Commissioners Street bridge, and westwards to discharge into Polson Slip and Lake Ontario. The new river although designed to be immobile, will accommodate expected flows and is based on key natural channel principles and bioengineering techniques to mimic channel form and functions typically observed in a natural channel.

Alternating along both sides of the river channel and Don Greenway are four major wetland/marsh habitats. A fixed weir will work in tandem with a flow curtain located just south of the Lake Shore Boulevard bridge to divert more baseflow into the new channel during normal conditions. In high flow conditions, this flow curtain will break away, thus maximizing flows in the Keating Channel. The new river channel consists of armour stone banks, habitat boulders, aggregate stone streambed and rip-rap river bed with gentle bioengineering slopes comprising of cribwalls, planted rip-rap banks, stone features/revetments, and planted fibre-encapsulated lifts. There are four carp gates proposed for the new river, located within the outlet channels of the four wetland areas to protect them from high lake levels and to prevent carp from swimming into the wetlands during lower flows and damaging the wetland vegetation.

## Ice Management Area:

Within the new river channel is an ice management area, an area approximately 250 m long, 3 m to 5 m deep, and 30 m to 60 m wide between the Keating Channel and the new Commissioners Street bridge. This ice management area is designed to funnel and trap periodic ice floes that pass underneath the Lake Shore Boulevard bridge into a narrow river channel. This section is lined with appropriately designed armour stone sized to resist ice build up and prevent ice jams from damaging the naturalized areas downstream.

## Don Greenway:

The Don Greenway is a new secondary spillway/outlet nearly 300 m long designed to convey river flows during very large storm events. This spillway will be activated beyond the 100 year recurrence storm event at which time water from the Don River will flow through the Don Greenway into the existing Ship Channel. In normal conditions, the wetland in the Don Greenway will be sustained by water from the Ship Channel and Lake Ontario. The greenway consists of two deeper channels surrounding a center inland wetland, flanked by two trails/pathways approximately 400 m long and 3 m wide that encircles the center wetland in a loop. These two pathways come together at the Ship Channel to provide users with splendid views of the island wetland and Lake Ontario to the south and provide connections to the lower portion of the Lower Don Trail system to the north. The spillway flows towards a new dockwall along the Ship Channel equipped with two new outlets.

## Aquatic and Terrestrial Habitat:

Naturalization of the new Don River channel will include the creation of approximately 30 hectares of aquatic and terrestrial habitat. The habitat design mimics the form and characteristics of similar natural systems that would have historically been created naturally in the Don River watershed. Aquatic and terrestrial habitats to be created include a diversity of wetlands (including emergent, submergent and meadow marshes), thicket swamps and flood plain forests. Several levees have been configured to form a boundary between the four main wetland/marsh habitat and the river channel, and to ensure the channel is functioning as intended by controlling the hydraulic connection to the river via carp exclusion gates.

The river streambed substrates are ideal for centrarchids, salmonids, darters, catostomids and shiners; it also provides burrowing habitat and attachment sites for crustaceans and macroinvertebrates. Creation of suitable areas for refuge, perching, and foraging sites for small mammals and bird species was key. The proposed drowned tree wood elements in the design also mimics natural snags in flooded wetlands and provides valuable bat and bird habitat and protection from predators. Specific suitable nesting areas and upland overwintering habitats for reptiles and amphibians have been provided in addition to habitats for turtles, green frog, waterfowl, northern short-tailed shrew, muskrats, garter snakes and green-winged teal. Nesting boxes and habitats for chimney swift, osprey, wood ducks and bats have been placed at select locations along the edge of the river corridor outside of the channel and wetlands. These areas are being isolated from human activity areas to the maximum extent practicable, and include bat boxes, wood duck houses, osprey platforms, chimney swift towers and other bird boxes. The nesting furnishings are intended to provide immediate habitat benefits until planted vegetation matures to a size that allows it to provide similar nesting benefits.

## Trails and Pathways:

Within the naturalized area, there are several 3.5 m to 4 m wide limestone pathways and natural trails, strategically placed to maximize user experience and provide remarkable viewsheds of the wetlands and river valley. Besides linkages to the main road network, sidewalks and the Lower Don Trail system, the project provides approximately 3.5 km of natural trails and pathways that will allow users to traverse the habitat fringes and the Lake Ontario waterfront via several pedestrian bridges over the river channel and wetlands.

# Polson Slip Naturalization:

With the introduction of the new river mouth into Polson Slip, revetment slope and armour stone modifications will occur along the north facing dockwalls to both provide fish habitat and minimize the need for new dockwalls. For this permit, the proposed revetment will extend approximately 9 m deep, to serve as a protection transition zone between Polson Slip and to allow for the development of Canoe Cove and Promontory Park South, which will be reviewed under a separate future TRCA permit.

#### Construction Schedule and Phasing:

The entire river valley will be constructed on a foundation established from clean backfill soils and risk management measures (RMM) installed to prevent movement of any remaining contaminants into the new river channel once built (works completed under separate approved TRCA Permits C – 200145; C – 200074; C – 190368). Construction of the river features and plantings will proceed under dry conditions. For construction purposes, the river valley has been divided into four main segments to be completed interdependently over a two to three year time frame starting in 2020 to 2023, beginning with the Meander area (including Wetlands 1 and 2); the Don Greenway area (including Wetland 3); the Elbow area; and the Ice Management area (including Wetland 4).

For each of the four segments, the construction sequence will be as follows: construction of the levee cores; installation of pedestrian bridges and footings; placement of soil, aggregates and stones; installation of fibre-encapsulated soil lifts and crib walls; installation of habitat structures; planting; and, seeding. As the river features in each of the areas and wetlands are completed and plants are installed, water will be introduced to each independently. Water will be introduced first to Wetland 2, followed by Wetland 3, Wetland 4 then Wetland 1. Full river flooding is expected to occur at the end of 2023 once all segments are completely installed and the plugs holding back the Lake and river are removed.

# Control of Flooding:

Although the site is currently within the Don River flood plain, the proposed works are not anticipated to impact flooding, flood storage or conveyance of flood waters. The proposed project is aimed at addressing current flood risk and protecting the Port Lands and adjacent areas for future development and from potential loss of life and costly flood damage. As a precautionary measure and upon TRCA request, the construction contractor will monitor the weather and implement a site flood contingency plan during the construction period to ensure the protection of life and property as well as to allow for flood water conveyance.

## Pollution:

Erosion and sediment control measures installed for the construction of earlier phases of works will be maintained during the construction of this phase. Measures include a combination of silt soxx and standard sediment control fence with cut-off swales, groundwater treatment facility, and stormwater collection ponding areas. These measures will be implemented to prevent the release of construction generated sediments into nearby Don River, Polson Slip, and Ship Channel of Lake Ontario. Erosion and sediment control measures have been provided in accordance with the *Greater Golden Horseshoe Area Conservation Authorities Erosion and Sediment Control Guidelines for Urban Construction (2006)*.

## Dynamic Beaches:

Not applicable.

#### Erosion:

There are no impacts identified to slope stability or erosion as a result of these works.

# Conservation of Land:

There are no in-water works associated with this project. The new river channel will be built in dry conditions behind the secant pile walls that will serve as a barrier (cut of wall).

#### **Plantings**

Naturalization of the new Don River channel will include the creation of approximately 30 hectares of aquatic and terrestrial habitat. Aquatic and terrestrial habitats to be created include a diversity of wetlands (including emergent, submergent and meadow marshes), thicket swamps and flood plain forests. Upon completion of all the plantings, over 3200 trees, 1.2 million live stakes, shrubs, perennials, rushes, grasses, sedges, and about 171,000 kilogrammes of custom seed mix would have been installed to create the new river habitat.

## **Policy Guidelines:**

This proposal complies with Sections 8.8 and 8.9, Interference with a Watercourse and Infrastructure Policies of The Living City Policies for Planning and Development in the Watersheds of the Toronto and Region Conservation Authority.

CFN: 62381 - Application #: 1138/19/TOR

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