

# Appendix L

## Project Works Associated with Phasing



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Step	River Reach	Specific Project Works	Activities Associated With Other Projects
1	Promontory	<ul style="list-style-type: none"> <li>• Land acquisition</li> <li>• Site preparation                             <ul style="list-style-type: none"> <li>➢ Demolition or relocation of existing buildings, operations, infrastructure and utilities, as required</li> <li>➢ Clearing and grubbing</li> <li>➢ Creation of construction staging and laydown area, including settling pond for sediments</li> </ul> </li> <li>• Creation of base for promontory                             <ul style="list-style-type: none"> <li>➢ Construction of containment berm within the Inner Harbour extending 1 metre above the normal lake water level</li> <li>➢ Lakefilling of promontory area to high lake water level</li> <li>➢ Placement of the fill will be limited to times when wave conditions allow safe construction operations.</li> <li>➢ Depending on the availability of fill or other soils, the northern promontory may be constructed in either one or two phases.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Work on the promontory will need to be conducted in accordance with the Soil Management Master Plan being developed by Waterfront Toronto. This will provide for the sustainable management of soil and encourage the reuse and treatment of soil to construct the promontory, where technically and economically feasible.</li> <li>• Toronto Port Authority must be closely involved in any activity within the Inner Harbour or that affects dock walls</li> <li>• Conform to fish timing window guidelines - Fish Salvage</li> <li>• Soils will need to meet the applicable standards of O. Reg. 153/04 and O. Reg. 155.09.</li> </ul>
2	Reach 3a	<ul style="list-style-type: none"> <li>• Land acquisition</li> <li>• Site preparation                             <ul style="list-style-type: none"> <li>➢ Demolition or relocation of existing buildings, operations, infrastructure and utilities</li> <li>➢ Clearing and grubbing</li> </ul> </li> <li>• Creation of construction staging and laydown area</li> <li>• Modification and reinforcement of the existing Ship Channel dock wall</li> <li>• Wetland creation                             <ul style="list-style-type: none"> <li>➢ Over-excavation of wetland area by approx. 1 metre and containment of adjacent contaminated soils, as per RA/RM</li> <li>➢ Capping / covering of excavated area with a barrier</li> <li>➢ Backfill with clean material for rough grading of wetland (to coincide with Containment of excess soils – see below)</li> <li>➢ Installation of valley wall stabilization along sides of wetland / spillway</li> </ul> </li> <li>• Installation of levee at north end of Reach 3a</li> <li>• Installation of abutments and piers “in the dry” associated with the causeway along Basin Street.</li> <li>• Fine grading of wetland and establishment of ecological features                             <ul style="list-style-type: none"> <li>➢ Establishment of rock berm and fish control structures designed to limit the entrance of carp to the wetland, but to allow other fish species and water to flow between the wetland and the Ship Channel.</li> </ul> </li> <li>• Partial removal off dock wall at Ship Channel to connect the wetland to the lake and to allow for establishment of ecological features</li> <li>• Treatment of excess soils                             <ul style="list-style-type: none"> <li>➢ Treatment and disposal of excavated (dirty) material (to deal with soils excavated from <i>Wetland creation</i>)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• During excavation, construct abutments and piers for Basin Street causeway “in the dry”</li> <li>• Method of treatment, disposal, capping and containment to be determined by RA/RM, the Waterfront Toronto Soil Management Master Plan and Environmental Management Plan for Project-related activities and the Groundwater Management Plan.</li> <li>• Depth of backfilled material will need to be consistent with City of Toronto parks requirements.</li> </ul>

Step	River Reach	Specific Project Works	Activities Associated With Other Projects
3	Reach 4	<ul style="list-style-type: none"> <li>• Land acquisition</li> <li>• Site preparation               <ul style="list-style-type: none"> <li>➢ Demolition or relocation of existing buildings, operations, infrastructure and utilities, as required</li> <li>➢ Clearing and grubbing</li> </ul> </li> <li>• Creation of construction staging and laydown area</li> <li>• Creation of base for southern promontory               <ul style="list-style-type: none"> <li>➢ Construction of containment berm to normal lake water level set fill limits</li> <li>➢ Installation of inert rubble or stone and placement or dumping of fill to approximately 2 metres above normal lake level.</li> </ul> </li> <li>• Lakefilling of promontory area to high lake water level Valley System creation (on land)               <ul style="list-style-type: none"> <li>➢ Modification and reinforcement of existing dock wall</li> <li>➢ Over-excavation of floodplain</li> <li>➢ Capping / covering of exposed soils</li> <li>➢ Backfill with clean material and rock revetment meeting the applicable MOE site condition standards or risk assessment derived property specific standards for rough grading</li> <li>➢ Removal of temporary protective barrier</li> <li>➢ Installation of stabilization works along the edges of the valley system.</li> </ul> </li> <li>• Valley System creation (in water)               <ul style="list-style-type: none"> <li>➢ Lakefilling of valley system and low flow channel to rough grades</li> </ul> </li> <li>• Fine grading of valley system and low flow channel and establishment of ecological features               <ul style="list-style-type: none"> <li>➢ Construction of low flow channel and adjacent levee system</li> <li>➢ Installation of stabilization works “in the wet”</li> <li>➢ Establishment of in-channel fish habitat structures</li> <li>➢ Establishment of controls for invasive species where required</li> <li>➢ Establishment of hydraulic connections between wetland areas</li> <li>➢ Establishment of aquatic, wetlands and terrestrial habitat with planting of appropriate species</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Fish Salvage</li> <li>• During excavation, create abutments and piers for Cherry Street bridge and install underground utility conduit “in the dry”</li> </ul>
4	Reaches 2 and 3	<ul style="list-style-type: none"> <li>• Land acquisition</li> <li>• Site preparation               <ul style="list-style-type: none"> <li>➢ Demolition or relocation of existing buildings, operations, infrastructure and utilities</li> <li>➢ Clearing and grubbing</li> <li>➢ Removal or relocation of recreational trails</li> <li>➢ Creation of construction staging and laydown area</li> </ul> </li> <li>• Valley System creation               <ul style="list-style-type: none"> <li>➢ Over-excavation of valley system</li> <li>➢ Capping / covering of exposed soils</li> <li>➢ Backfill with clean material for rough grading of floodplain</li> <li>➢ Installation of stabilization works along valley system wall</li> <li>➢ Planting of nursery crop / hydroseed</li> </ul> </li> <li>• Fine grading of valley system and low flow channel and establishment of ecological features               <ul style="list-style-type: none"> <li>➢ Construction of low flow channel and adjacent levee system</li> <li>➢ Establishment of in-channel fish habitat structures</li> <li>➢ Establishment of controls for invasive species where required</li> <li>➢ Establishment of hydraulic connections between wetland areas</li> <li>➢ Establishment of aquatic, wetlands and terrestrial habitat with planting of appropriate species</li> <li>➢ Removal of existing Cherry Street to allow flow of lake water into naturalized system</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• During excavation, install underground utility conduit “in the dry”</li> <li>• New Cherry Street bridge and associated roadway will need to be constructed before existing Cherry Street can be removed</li> </ul>

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5	Reach 1	<ul style="list-style-type: none"> <li>• Site preparation                             <ul style="list-style-type: none"> <li>➢ Demolition or relocation of existing buildings, infrastructure and utilities (including removal of hydro bridge and relocation of high voltage cables located within the bridge)</li> <li>➢ Clearing and grubbing</li> <li>➢ Removal or relocation of recreational trails, including Don River Bikeway and associated pedestrian bridge</li> <li>➢ Creation of construction staging and laydown area, including construction of service road to future management area</li> </ul> </li> <li>• Creation of sediment / debris management area                             <ul style="list-style-type: none"> <li>➢ Reinforcement of sheet pile along west side of channel</li> <li>➢ Over-excavation of widened channel / associated portion of sediment trap “in the dry”, and barge / boat slip and sediment / debris management area</li> <li>➢ Capping / covering of exposed soils</li> <li>➢ Backfill with material meeting the applicable MOE site condition standards or risk assessment derived property specific standards to grade</li> <li>➢ Installation of concrete footings / platform for management area in the dry</li> <li>➢ Stabilization works of widened channel</li> <li>➢ Excavation/dredging of remaining portion of sediment trap “in the wet”</li> </ul> </li> <li>• Undertake river works associated with enlarged Lake Shore Boulevard crossing                             <ul style="list-style-type: none"> <li>➢ Installation of upstream weir “in the dry”</li> </ul> </li> <li>• Creation of flood protection features                             <ul style="list-style-type: none"> <li>➢ Creation of flood protection features north of Lake Shore Boulevard (including regrading area north of CN crossing)</li> <li>➢ Excavate hump along Don Roadway north of Lake Shore Boulevard</li> <li>➢ Reconstruct and raise Don Roadway south of Lake Shore Boulevard to contain flooding to the east</li> <li>➢ Installation of one or two fixed slurry pipes<sup>1</sup> along the Don Roadway between Lake Shore Boulevard and to the Ship Channel and then west along the Basin Street causeway at the downstream end of Reach 3a</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lengthening of Lake Shore Boulevard to occur concurrent with these activities</li> <li>• New hydraulic dredge and dewatering system must be purchased by now, but ideally earlier in the process</li> </ul>
	Reach 2 and 3	<ul style="list-style-type: none"> <li>• Establish final grades along top of bank of new floodplain</li> </ul>	
6	Reach 2a	<ul style="list-style-type: none"> <li>• Removal of Keating Channel dock wall to connect new river mouth to Reach 1 and Don Narrows</li> <li>• Installation of sideflow weir</li> <li>• Lakefilling along southern edge of Keating Channel (after TPA works yard has been relocated)</li> <li>• Lowering of channel bottom and installation of rip rap revetment</li> <li>• Implementation of in-channel habitat structures</li> </ul>	<ul style="list-style-type: none"> <li>• Final connection through to Reach 4 must occur before any in-filling of Keating Channel can occur</li> <li>• Remove old Cherry Street bridge once new bridge and associated road has been constructed</li> </ul>
7	Promontory	<ul style="list-style-type: none"> <li>• Final grading on the promontories north and south of the new river mouth and other naturalized areas, including upland forest areas, adjacent to the valley system</li> </ul>	
	Don Narrows	<ul style="list-style-type: none"> <li>• Implementation of in-stream habitat structures as opportunities arise in consultation with the City and others</li> </ul>	

1. A second pipe would provide redundancy to the system to allow operations to continue in the event of a blockage or during the future replacement period for that infrastructure.

