

# Appendix F

## Evaluation Criteria and Detailed Evaluation Tables

Evaluation Criteria

**Table F-1.1 Evaluation Criteria for the Natural Environment.**

Objective	Criteria	Indicator	Measure/Parameter
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in habitat availability	<ul style="list-style-type: none"> <li>Overall area of available habitat (e.g., square meters or hectares)</li> <li>Number of natural features and linkages for aquatic species movement (e.g., along the shore from shallow water to deeper offshore water)</li> </ul>
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Potential to increase or decrease in water quality parameters (e.g., TSS, contaminants) or sensory disturbance (e.g., vibrations) that may enhance or reduce the quality (e.g., sand from volleyball courts, salt from parking lots and access) of available habitat)</li> </ul>
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in water quality	<ul style="list-style-type: none"> <li>Potential to increase or decrease in water quality parameters (e.g., TSS and contamination) due to existing conditions or spills during construction</li> <li>Weight of contaminants absorbed (by cattail in floating islands vs. no removal)</li> </ul>
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in Lake Ontario Shoreline systems (e.g., sensitive bluffs, dynamic beach)	<ul style="list-style-type: none"> <li>Impacts on shoreline</li> <li>Results/recommendations from Coastal Hazard Assessment Report</li> </ul>
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Stormwater management and infrastructure	<ul style="list-style-type: none"> <li>Ability to establish appropriate, effective, and sustainable stormwater management practices and infrastructure</li> <li>Potential to mitigate or protect against flood risks from Lake Ontario (e.g., wave uprush)</li> </ul>
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in hydrological function	<ul style="list-style-type: none"> <li>Disturbance to physical hydraulic properties of soil/land above or below the water table (e.g., grading, backfilling)</li> </ul>
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in water quantity	<ul style="list-style-type: none"> <li>Area of pervious surface (to allow the infiltration of water into the soil)</li> </ul>
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in groundwater quality	<ul style="list-style-type: none"> <li>Potential for increased or decreased in water quality parameters compared to existing conditions</li> </ul>
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the area and connectivity of available habitat	<ul style="list-style-type: none"> <li>Area of habitat created or removed including mature trees, other native and non-native vegetation, wetlands, and structures</li> <li>Connectivity of habitat (e.g., linkages to other parks, migration routes)</li> <li>Number of habitat features impacted (e.g., turtle basking areas, shoreline)</li> <li>Number of species impacted</li> </ul>
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Sensory disturbance (e.g., noise, dust, light, vibrations)</li> <li>Increase or decrease of forest structure (canopy, sub-canopy, understory)</li> <li>Interference of habitat by buildings/structures (e.g., glass/mirrored buildings alongside bird habitat)/people (e.g., encroachment on habitat)/suitability of habitat</li> </ul>

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Objective	Criteria	Indicator	Measure/Parameter
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in vegetation communities and species, including vegetation communities of concern	<ul style="list-style-type: none"> <li>Overall area of vegetation (e.g., square meters or hectares)</li> <li>Occurrences of invasive plant species</li> <li>Change in the presence of culturally significant plant species and mature trees</li> </ul>
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Terrestrial wildlife species, including species at risk (SAR)	Change in movement (e.g., migration, access to water)	<ul style="list-style-type: none"> <li>Barriers (e.g., open excavation during construction, buildings) or filters (e.g., fencing) to wildlife movement reducing connectivity of habitat can be existing (e.g., structures already in place) or part of the alternative design (e.g., new infrastructure)</li> <li>Retention or creation of nesting opportunities for species at risk (e.g., barn swallow)</li> </ul>
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Terrestrial wildlife species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Wildlife fatality occurrence(s)</li> <li>Protected species listing</li> <li>Increase chance of fatality (e.g., glass buildings and birds)</li> </ul>
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in movement	<ul style="list-style-type: none"> <li>Barriers to aquatic species movement due to temporary or permanent structures or infilling creating habitat fragmentation</li> <li>Water current changes that may impact species ability to use the water</li> </ul>
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Fatality occurrence(s)</li> <li>Spills into water (volume)</li> <li>Construction debris water entering the lake (volume)</li> </ul>
Maintain and improve air quality	Air quality	Change in number and diversity of trees and canopy cover	<ul style="list-style-type: none"> <li>Area and type of vegetative cover</li> </ul>
Maintain and improve air quality	Air quality	Change in local air or greenhouse gas (GHG) emission levels	<ul style="list-style-type: none"> <li>Ability to use or travel within the site without producing emissions (e.g., walk, run, cycle)</li> <li>Number and type of continuous emissions sources after implementation</li> </ul>

Table F-1.2. Evaluation Criteria for the Social Environment.

Objective:	Criteria	Indicator	Measure/Parameter
Social acceptability (i.e., outcome of a collective judgement or opinion of a project or plan)	Create a concept that is acceptable to the public and area users	Change in public and local perception of Ontario Place	<ul style="list-style-type: none"> <li>Feedback received during consultation and engagement</li> </ul>
Social acceptability (i.e., outcome of a collective judgement or opinion of a project or plan)	Acceptable noise and light pollution on surrounding communities	Change in noise and light pollution	<ul style="list-style-type: none"> <li>Addition of land mass/earthworks and tree clusters</li> <li>Use of full cut-off fixtures and downlighting; minimized use of uplighting</li> <li>Amount of audio generating activities</li> </ul>
Facilitate recreational opportunities	Provide access to the water	Change in area or length of accessible shoreline	<ul style="list-style-type: none"> <li>Area of accessible shoreline created or removed</li> </ul>
Facilitate recreational opportunities	Provide access to the water	Access to shoreline	<ul style="list-style-type: none"> <li>Number and type (e.g., paved vs. gravel) of trails leading to and/or access points to the shoreline</li> </ul>
Facilitate recreational opportunities	Tenant integration and connectivity	Ability to move from one site opportunity to the next without obstruction (e.g., connected to Martin Goodman trail)	<ul style="list-style-type: none"> <li>Number of access points</li> <li>Clear legible access to all tenant sites from the public realm</li> <li>Visible integration of tenant landscapes with public realm design</li> </ul>
Facilitate recreational opportunities	Provide recreational opportunities for users	Ability for users to participate in recreational activities	<ul style="list-style-type: none"> <li>Number of pathways/overall area of pathway for walking, cycling, running, etc. and access to shoreline for kayaking, swimming</li> <li>Incorporate amenities for public use (e.g., washrooms, changerooms)</li> <li>Multi-functional and multi-seasonal spaces (e.g., use for all seasons)</li> </ul>
Facilitate educational opportunities	Provide educational opportunities for users	Ability for users to participate in educational activities	<ul style="list-style-type: none"> <li>Number and type of educational/interpretive opportunities, including opportunities for Indigenous peoples and treaty-rights holders (e.g., MCFN)</li> <li>No cost or non-ticketed</li> </ul>
Provide a comfortable environment for site visitors	Year-round comfort (e.g., shade in the summer; pathways clear of snow in winter, wind protection in the winter and shoulder seasons)	Ability for users to use and enjoy the site comfortably throughout the year	<ul style="list-style-type: none"> <li>Areas with shade, cover, benches, protection from wind, creation of microclimate</li> <li>Access to food and beverages, and supporting facilities/sun and precipitation protected cover/pavilion</li> </ul>
Provide a comfortable environment for site visitors	Comfortable environment for site visitors	Overall site accessibility, or ability for the concept to offer accessible services (e.g., compliance with accessibility standards)	<ul style="list-style-type: none"> <li>Building code, public spaces, AODA, NYC Universal Design Guidelines (exceed ADA minimums), CPTED</li> </ul>
Provide a comfortable environment for site visitors	Safety and Provide a comfortable environment for site visitors security	Maintain safe access to the site throughout phased construction	<ul style="list-style-type: none"> <li>Preparation and implementation of Health and Safety plans, Traffic Control plans, etc. during construction</li> <li>Ease of access for emergency vehicles</li> </ul>
Provide a comfortable environment for site visitors	Safety and Provide a comfortable environment for site visitors security	Ability to implement safety features for site visitors (e.g., lighting, safety call/button, Security staff)	<ul style="list-style-type: none"> <li>Number and efficiency of safety features available to site visitors</li> <li>Sense of safety by site visitors</li> <li>Design and incorporate measures for safety to meet and exceed CPTED standards</li> </ul>

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Objective:	Criteria	Indicator	Measure/Parameter
Provide a comfortable environment for site visitors	Safety and Provide a comfortable environment for site visitors security	Reduce roads and vehicle use within the site to lower potential for accidents with site visitors (e.g., reduce amount of heavy equipment needed during implementation/operation, timed access when users are not present)	<ul style="list-style-type: none"> <li>▪ Designated trail use</li> <li>▪ Design for non-vehicle traffic only (e.g., width of trail)</li> <li>▪ Design discrete servicing routes to minimize use of open space while providing aesthetic appeal and pedestrian use when not used for servicing</li> </ul>
Provide a comfortable environment for site visitors	Safety and Provide a comfortable environment for site visitors security	Safety of the concept, in design and implementation	<ul style="list-style-type: none"> <li>▪ Ability for swimmers to exit the water</li> <li>▪ Integration of safety features (e.g., phones, lighting, emergency station)</li> </ul>

**Table F-1.3. Evaluation Criteria for the Cultural Environment.**

Objective:	Criteria	Indicator	Measure/Parameter
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes as per Ontario Place Strategic Conservation Plan	Compatible with identified built heritage resources and cultural heritage landscapes	Ability to conserve and promote identified built heritage features and cultural heritage landscapes	<ul style="list-style-type: none"> <li>▪ Meets conservation strategies to reduce negative impacts of the proposed concept on cultural heritage resources and landscapes.</li> </ul>
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes	Compatibility with the original vision for Ontario Place (Hough design)	Preservation and/or restoration of existing shoreline and shoreline amenities, landforms and ecological habitat	<ul style="list-style-type: none"> <li>▪ Implement Hough topography principles</li> <li>▪ Enhance public access to waterfront</li> <li>▪ Reintroduction of a destination marina environment</li> </ul>
<u>Indigenous Cultural:</u> Reflect Indigenous perspectives	Design that is reflective of Indigenous input and feedback and that facilitates traditional and cultural activities	Ability for the concept to integrate Indigenous input and perspectives into various aspects of design as they relate to different assessment criteria	<ul style="list-style-type: none"> <li>▪ Integration of feedback from Indigenous communities into design options to ensure appropriate management of environment and opportunities for traditional and cultural activities</li> <li>▪ Change in the presence of culturally significant plant species and mature trees</li> </ul>
<u>Indigenous Cultural:</u> Respect and reflect treaty history and current cultural landscapes	Respect and reflect treaty history and current cultural landscapes	Integration of Indigenous design principles and programming	<ul style="list-style-type: none"> <li>▪ Design concepts which appropriately reflect local Indigenous culture based on input received from Indigenous communities</li> </ul>

Table F-1.4. Evaluation Criteria for the Technical Environment.

Objective:	Criteria	Indicator	Measure/Parameter
Potential for the concept to be easily implemented	Constructability	Ease of construction and construction techniques	<ul style="list-style-type: none"> <li>Identified construction techniques</li> <li>Permitting requirements and known timelines</li> <li>Ability to obtain permit (e.g., SARA permit)</li> </ul>
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Reasonable permitting abilities and timelines	<ul style="list-style-type: none"> <li>Identified construction techniques</li> <li>Permitting requirements and known timelines</li> <li>Ability to obtain permit (e.g., SARA permit)</li> </ul>
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Meets applicable planning objectives and standards (e.g., PPS, City of Toronto)	<ul style="list-style-type: none"> <li>Identify and maintain compliance with applicable planning objectives and standards</li> </ul>
Facilitate multi-modal access	Roadway/vehicle access to the site	Change in ability for site visitors to access the site by vehicle or water	<ul style="list-style-type: none"> <li>Number of safe drop-off locations and parking opportunities</li> <li>Overall area of onsite parking</li> <li>Facilitates water-borne transportation (e.g., ferries, water taxis, private watercraft)</li> </ul>
Facilitate multi-modal access	Transit connection to and within the site	Change in ability for site visitors to access the site by transit	<ul style="list-style-type: none"> <li>Number of public transit stops/hubs to the site</li> <li>Mult-modal hubs (e.g., public transit [first/last mile connections], tour/shuttle bus, vehicle pickup and dropoff)</li> <li>Accommodate looping/terminating surface transit routes</li> </ul>
Facilitate multi-modal access	Pedestrian and cycling network to and within site	Change in existing pedestrian and cycling network (e.g., bridges, trails)	<ul style="list-style-type: none"> <li>Number and type of cycling and pedestrian network</li> <li>Ability to access the site from adjacent venues, including Exhibition Place and Ontario Line Exhibition Place Station</li> <li>Connectivity for transit users through the site (i.e., the improvements to the Martin Goodman Trail)</li> <li>Address conflicts between cyclists/pedestrians and cyclists/vehicles in intersection and access design</li> </ul>
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of impervious surfaces	<ul style="list-style-type: none"> <li>Overall area of pervious vs. impervious surfaces across the site</li> <li>Reduce hardscape areas</li> <li>Provide sustainable permeable solutions including greening of the surface parking lots</li> </ul>
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of increased elevation	<ul style="list-style-type: none"> <li>Minimum design elevations that meet or exceed 100-year storm event</li> </ul>

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Objective:	Criteria	Indicator	Measure/Parameter
Sediment management	Improve sediment management processes	Change in sediment management practices or volume	<ul style="list-style-type: none"> <li>▪ Volume of removed sediment</li> <li>▪ Beneficial reuse</li> <li>▪ Ability to integrate sediment stabilization/capture into construction or integration</li> <li>▪ Efficacy of erosion and sediment control strategies implemented to reduce sediment laden runoff from leaving the work area</li> <li>▪ Need for dredging after implementation</li> </ul>
Remediate existing contamination	Improve soil and/or water quality	Change in soil and water contamination	<ul style="list-style-type: none"> <li>▪ Record of Site Condition</li> </ul>
Upgrade or replace infrastructure and buildings	Improve infrastructure conditions for long-term use	Change in infrastructure and building condition	<ul style="list-style-type: none"> <li>▪ Conserve and adapt extant structures where possible.</li> <li>▪ Number and magnitude of change in buildings and supporting site infrastructure (e.g., utilities)</li> <li>▪ Decommission and remove old infrastructure along with design and construction of new buildings and supporting site infrastructure</li> </ul>
Maintain flexibility for future programming	Optionality for future use (i.e., more than one fixed use)	Flexibility for use	<ul style="list-style-type: none"> <li>▪ Number of feasible event ideas (paid or free events)</li> <li>▪ Number and type of utilities needed</li> </ul>

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Table F-1.5. Evaluation Criteria for the Economic Environment.

Objective:	Criteria	Indicator	Measure/Parameter
Construction costs	Estimated construction cost	Cost relative to other concepts	<ul style="list-style-type: none"> <li>▪ Change in cost</li> </ul>
Operation and Maintenance	Estimated annual operating costs for staff resources, ongoing operation and maintenance activities	Cost relative to other concepts	<ul style="list-style-type: none"> <li>▪ Change in cost</li> </ul>
Economic benefits	Ability to offer contract procurement, jobs, or other economic benefits from operating the park	Change in economic opportunities	<ul style="list-style-type: none"> <li>▪ Rentals (e.g., water use equipment)</li> <li>▪ Food and beverage sales</li> <li>▪ Attendees/pedestrian traffic within the site</li> <li>▪ Job opportunities that are inclusive of equity deserving communities</li> <li>▪ Provide skill training</li> </ul>

Evaluation Criteria

Table F-1.6. Evaluation Criteria for Sustainability.

Objective:	Criteria	Indicator	Measure/Parameter
Reduce contribution to climate change	Low atmospheric emissions (e.g., noise, air, GHG) associated with the concept	Air, noise and GHG emissions during construction (vehicle and heavy equipment emissions)	<ul style="list-style-type: none"> <li>Change in emissions relative to "Do-Nothing" baseline concept</li> </ul>
Reduce contribution to climate change	Low atmospheric emissions (e.g., noise, air, GHG) associated with the concept	Air, noise and GHG emissions during "operation/implementation" (e.g., air conditioning, use of fossil fuel)	<ul style="list-style-type: none"> <li>Change in emissions relative to "Do-Nothing" baseline concept</li> </ul>
Reduce contribution to climate change	Heat island effect	Ability for the concept to increase vegetation and reduce unnatural hard surfaces (e.g., concrete)	<ul style="list-style-type: none"> <li>Overall area of vegetation (trees, green roofs) and ability to provide shade throughout the site</li> <li>Overall area of hard surfaces</li> </ul>
Include sustainable infrastructure and buildings	Infrastructure resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles, wildfires)	Ability for the concept to align with all applicable building codes (e.g., Canadian Standards Association)	<ul style="list-style-type: none"> <li>Compliance with codes and standards (as-built/design documents)</li> </ul>
Include sustainable infrastructure and buildings	Infrastructure resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles, wildfires)	Adaptability and resilience of infrastructure to withstand a changing climate	<ul style="list-style-type: none"> <li>Infrastructure and site to withstand severe weather and temperatures</li> <li>Designed for longevity</li> </ul>
Include sustainable infrastructure and buildings	Green Infrastructure design and build	Compliance with: <ul style="list-style-type: none"> <li>Toronto Green Standards</li> <li>Waterfront Edge Design Guidelines</li> <li>LEED, as applicable</li> </ul>	<ul style="list-style-type: none"> <li>Number or size of certified buildings, as applicable</li> <li>Building approvals</li> <li>Zero Carbon Emissions</li> <li>SITES certification (i.e., sustainable sites)</li> </ul>
Sustainable Communities	Community-based solutions	Environmental and/or socio-economic benefits	<ul style="list-style-type: none"> <li>Green infrastructure solutions (e.g., permeable paving, green roofs)</li> <li>Climate change solutions (e.g., design new building to have zero carbon emissions, reduce parking on-site, potential for solar power)</li> </ul>

Water's Edge

Table F-2.1. Evaluation of the Natural Environment – Water's Edge Zone.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect			Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in habitat availability	<ul style="list-style-type: none"> <li>Overall area of available habitat</li> <li>Number of natural features and linkages for aquatic species movement (e.g., along the shore from shallow water to deeper offshore water)</li> </ul>	<b>Baseline</b> – no change in overall area of habitat; habitat availability will remain the same.	<b>Concept A (Stone Lookouts)</b> – large coarse rocks in water depths greater than 1 metre provide suitable habitat for American eel (known to occur along the Water's Edge).	<b>Concept B (Planted Piers)</b> – the integration of hard shoreline will provide large coarse rocks to contribute to American eel habitat.	Large coarse rocks in water depths greater than 1 meter provide suitable habitat for aquatic species, including American eel. Both concepts have equal potential to increase aquatic habitat along the Water's Edge. The Water's Edge is along the southern shore of Ontario Place connecting shallow habitat (i.e., shoreline) to the deeper areas of Lake Ontario. This zone is considered a "best go area" for aquatic habitat opportunities.
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Potential increase or decrease in water quality parameters (e.g., TSS, contaminants, sand from volleyball courts, salt from parking lots and access)</li> <li>Sensory disturbance (e.g., vibrations) that may reduce the quality of available habitat</li> </ul>	<b>Baseline</b> – water quality parameters are likely to decrease under existing conditions due to a number of existing anthropogenic influences.	<b>Concept A (Stone Lookouts)</b> – Hard shorelines may reduce aquatic nursery habitat since vegetation provides spawning habitat and natural cover for aquatic species.	<b>Concept B (Planted Piers)</b> – the integration of soft shoreline may increase or sustain available aquatic nursery habitat. Vegetation can also reduce TSS through filtration from runoff.	Concept B provides greater potential for increasing the overall quality of available habitat along the Water's Edge. However, both concepts will result in sensory disturbance during construction activities.
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in water quality	<ul style="list-style-type: none"> <li>Potential to increase or decrease in water quality parameters (e.g., TSS, contamination, salt) due to existing conditions or spills during construction</li> <li>Weight of contaminants absorbed (by cattail in floating islands vs. no removal)</li> </ul>	<b>Baseline</b> – water quality parameters are likely to decrease under existing conditions due to a number of existing anthropogenic influences.	<b>Concept A (Stone Lookouts)</b> – this concept does not provide vegetation to help filter runoff into the lake and hard shoreline can be constructed from materials that may leach into the water. However, Concept A will reduce the amount of potential salt in the water from winter maintenance since the Continuous Public Walkway is located further from the shoreline than Concept B, and precipitation (e.g., melting snow) will flow away from Lake Ontario.	<b>Concept B (Planted Piers)</b> – may help reduce TSS by increasing vegetation along the shoreline. Maintenance of the pathway during the winter months may result in more salt runoff to Lake Ontario compared to Concept A since the Continuous Public Walkway is located closer to the shoreline. The majority of precipitation (e.g., melting snow) is expected to flow away from Lake Ontario.	<p>Concept A provides a slightly greater potential for maintaining water quality since the Continuous Public Walkway is located further from the shoreline compared to Concept B, reducing the potential for salt from winter maintenance to flow toward Lake Ontario. Both concepts will be implemented in a manner that facilitates precipitation flowing away from Lake Ontario.</p> <p>During construction, all efforts will be made to reduce the potential for spills and waste will not be deposited into the lake.</p>

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in Lake Ontario Shoreline systems (e.g., sensitive bluffs, dynamic beach)	<ul style="list-style-type: none"> <li>Impacts on shoreline</li> <li>Ability for the concept to meet the recommendations of the Shoreline and Hazard Assessment</li> </ul>	<p><b>Baseline</b>- the current shoreline along the Water's Edge consists of armoured stone with gaps filled with concrete rubble and rip rap, and areas of grouted revetment. Shoreline protection is required at areas above 74 m elevation.</p> <p><b>Concept A (Stone Lookouts)</b> – includes a thickened and elevated shoreline that will reinforce the existing structure to improve protection of the shoreline. The stone lookouts may absorb wave energy, essentially protecting the shoreline to the greatest extent.</p> <p><b>Concept B (Planted Piers)</b> – includes a thickened and elevated shoreline that will reinforce the existing structure to improve protection of the shoreline. Vegetative roots keep soil in place to help dissipate wave energy.</p>	Both concepts will improve protection of the existing shoreline, which aligns with the recommendations of the Shoreline and Hazard Assessment; however, Concept A will protect against changes in the shoreline system better and longer than Concept B.
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Stormwater management and infrastructure	<ul style="list-style-type: none"> <li>Ability to establish appropriate, effective, and sustainable stormwater management practices and infrastructure</li> <li>Potential to mitigate or protect against flood risks from Lake Ontario (e.g., wave uprush)</li> </ul>	<p><b>Baseline</b> – the existing shoreline will continue to flood under certain conditions.</p> <p><b>Concept A (Stone Lookouts)</b> – provides raised elevation to protect against high water levels and strong waves. The stepped formation of the stone lookout will help protect against high water levels and wave uprush.</p> <p><b>Concept B (Planted Piers)</b> – provides raised elevation to protect against high water levels and strong waves. The hard and soft shoreline increases elevation helping to protect against high water levels and wave uprush.</p>	Both concepts provide an equal opportunity to establish stormwater management practices and protect against flood risks from Lake Ontario (e.g., wave uprush) considering the thickened and elevated shoreline, and that stormwater will flow away from Lake Ontario into a berm.
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in hydrological function	<ul style="list-style-type: none"> <li>Disturbance to physical hydraulic properties of soil/land above or below the water table (e.g., grading, backfilling)</li> </ul>	<p><b>Baseline</b> – there will be no change to the existing physical hydraulic properties at the zone.</p> <p><b>Concept A (Stone Lookouts)</b> – hydraulic function along the Water's Edge would have been disturbed during original construction. Grading at the lawn area of this zone is anticipated to be minimal.</p> <p><b>Concept B (Planted Piers)</b> – hydraulic function along the Water's Edge would have been disturbed during original construction. Grading at the lawn area of this zone is anticipated to be minimal.</p>	A negligible change to hydrological function may occur from either concept. Both concepts are considered to be equal in terms of disturbance to physical hydraulic properties.
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in water quantity	<ul style="list-style-type: none"> <li>Area of pervious surface (to allow the infiltration of water into the soil)</li> </ul>	<p><b>Baseline</b> – the current shoreline is a mix of armoured stone and concrete rubble and rip rap.</p> <p><b>Concept A (Stone Lookouts)</b> – does not provide an opportunity for infiltration of water through vegetated areas along the shoreline; however, lawn and vegetated areas north of the Continuous Public Walkway do provide a pervious surface.</p> <p><b>Concept B (Planted Piers)</b> – provides greater opportunity for infiltration of water into the soil by integrating soft shoreline into the concept while the lawn and vegetated areas north of the Continuous Public Walkway provide a pervious surface.</p>	Concept B provides more opportunity to change water quality by increasing vegetation into the soft shoreline components of the concept.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in groundwater quality	<ul style="list-style-type: none"> <li>Potential for increased or decreased in water quality parameters compared to existing conditions</li> </ul>	<p><b>Baseline</b> – groundwater quality in the Water's Edge zone in known to have exceedances of PHC and VOCs.</p> <p><b>Concept A (Stone Lookouts)</b> – hard shoreline can be constructed from materials that may leach into the water (e.g., bulkheads), potentially decreasing groundwater quality.</p> <p><b>Concept B (Planted Piers)</b> – hard shoreline can be constructed from materials that may leach into the water (e.g., bulkheads), potentially decreasing groundwater quality; however, the integration of vegetation into the shoreline provides a greater opportunity to filter runoff</p>	<p>Concept B may provide more opportunity for increasing water quality parameters through the use of vegetation in the soft shoreline component. Materials used for the hard shoreline will be selected in a manner that reduces potential for materials to leach into the water.</p> <p>During construction, all efforts will be made to reduce the potential for spills and waste will not be deposited into the lake. It is not anticipated that fertilizer will be used to maintain any of the vegetation implemented by either concept.</p>
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the area and connectivity of available habitat	<ul style="list-style-type: none"> <li>Area of habitat created or removed including mature trees, other native and non-native vegetation, wetlands, and structures</li> <li>Connectivity of habitat (e.g., linkages to other parks, migration routes)</li> <li>Number of habitat features impacted (e.g., turtle basking areas, shoreline)</li> <li>Number of species impacted</li> </ul>	<p><b>Baseline</b> – no habitat will be created or removed.</p> <p><b>Concept A (Stone Lookouts)</b> – terrestrial habitat will be created when the zone is revegetated following construction or maintained during construction. Stone shorelines may provide habitat for shorebirds; however, human activity may deter birds from nesting in this location. Connectivity to other habitat area (e.g., Trillium Park) will remain.</p> <p><b>Concept B (Planted Piers)</b> – terrestrial habitat will be created when the zone is revegetated following construction to a greater extent than Concept A considering the addition of the planted piers, or maintained during construction. Hard shorelines (e.g., rocks) may provide habitat for shorebirds; however, human activity may deter birds from nesting in this location. Connectivity to other habitat areas (e.g., Trillium Park) will remain.</p>	<p>Concept B will provide more available terrestrial habitat compared to Concept A through increased vegetation.</p> <p>During construction, current habitat features (e.g., turtle basking area, trees) will be maintained, where possible. No bird nesting sites were observed in this zone during natural heritage surveys.</p>
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Sensory disturbance (e.g., noise, dust, light, vibrations)</li> <li>Increase or decrease of forest structure (canopy, sub-canopy, understory)</li> <li>Interference of habitat by buildings/structures (e.g., glass/mirrored buildings alongside bird habitat)/people (e.g., encroachment on habitat)/suitability of habitat</li> </ul>	<p><b>Baseline</b> – no change to existing conditions. Existing sensory disturbance from human activity and park use will remain.</p> <p><b>Concept A (Stone Lookouts)</b> – sensory disturbance will occur during construction; however, noise beyond daily human park use is not anticipated. Lighting will be installed in this zone for safety purposes. Trees on the site will be preserved, where possible, and additional vegetation will be planted. Washrooms will be included in this concept (ground level, not glass).</p> <p><b>Concept B (Planted Piers)</b> – sensory disturbance will occur during construction; however, noise beyond daily human park use is not anticipated. Lighting will be installed in this zone for safety purposes. Trees on the site will be preserved, where possible, and additional vegetation will be planted. This concept allows for more vegetation compared to Concept A. Washrooms will be included in this concept (ground level, not glass).</p>	<p>Concept B provides a better opportunity to improve the quality of available habitat for terrestrial species considering the increase of vegetation compared to Concept A.</p>

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect			Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in vegetation communities and species, including vegetation communities of concern	<ul style="list-style-type: none"> <li>Overall area of vegetation</li> <li>Occurrences of invasive plant species</li> </ul>	<b>Baseline</b> – existing vegetation includes manicured lawn, trees, and common reed which is an invasive species that will continue to spread (via natural seed dispersion).	<b>Concept A (Stone Lookouts)</b> – trees on the site will be preserved, where possible, and additional vegetation will be planted. Invasive species can be eliminated/reduced/or effectively managed during construction.	<b>Concept B (Planted Piers)</b> – trees on the site will be preserved, where possible, and additional vegetation will be planted. This concept allows for more vegetation compared to Concept A. Invasive species can be eliminated/reduced/or effectively managed during construction.	Concept B provides a better opportunity to increase the overall area of vegetation compared to Concept A considering the planted piers that are included in the concept.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Wildlife, including species at risk (SAR)	Change in movement (e.g., migration, access to water)	<ul style="list-style-type: none"> <li>Barriers (e.g., open excavation during construction, buildings) or filters (e.g., fencing) to wildlife movement reducing connectivity of habitat whether existing (e.g., structures already in place) or part of the alternative design (e.g., new infrastructure)</li> <li>Retention or creation of nesting opportunities for species at risk (e.g., barn swallow)</li> </ul>	<b>Baseline</b> – wildlife movement will continue as there will be no change to existing conditions. No bird nesting sites have been identified along the Water's Edge.	<b>Concept A (Stone Lookouts)</b> – stone shorelines may provide habitat for shorebirds; however, human activity may deter birds from nesting in this location. Washrooms will be included in this concept (ground level, not glass).	<b>Concept B (Planted Piers)</b> – hard shorelines (e.g., rocks) may provide habitat for shorebirds; however, human activity may deter birds from nesting in this location. Washrooms will be included in this concept (ground level, not glass).	Both concepts will create an equal change in wildlife movement during construction (e.g., fencing) and after implementation (e.g., washrooms).  Fencing may be required during construction; however, this will be temporary, and no permanent fencing is required. Open excavation is not anticipated to implement either concept in this zone.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Terrestrial wildlife species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Wildlife fatality occurrence(s)</li> <li>Protected species listing</li> <li>Increase chance of fatality (e.g., glass buildings and birds)</li> </ul>	<b>Baseline</b> – no change to existing conditions.	<b>Concept A (Stone Lookouts)</b> – wildlife fatalities may occur during construction. There are no glass buildings included in this concept.	<b>Concept B (Planted Piers)</b> – wildlife fatalities may occur during construction. There are no glass buildings included in this concept.	Both concepts will increase the chance of wildlife mortality during construction equally; however, best practices and mitigation measures will reduce the chance of mortality risk to the extent possible. Neither concept is anticipated to increase wildlife mortality once implemented.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in movement	<ul style="list-style-type: none"> <li>Barriers to aquatic species movement due to temporary or permanent structures or infilling creating habitat fragmentation</li> <li>Water current changes that may impact species ability to use the water</li> </ul>	<b>Baseline</b> – the current shoreline is a mix of armoured stone and concrete rubble and rip rap that previously placed in the water creating a barrier to aquatic species movement.	<b>Concept A (Stone Lookouts)</b> – will increase barriers as a result of thickening the hard shoreline and expanding the Water's Edge; however, changes to the existing water current are not anticipated.	<b>Concept B (Planted Piers)</b> – will increase barriers as a result of thickening and expanding the shoreline but not to the same extent as Concept A. Changes to the existing water current are not anticipated.	Both concepts will thicken the existing stone/manufactured shoreline equally. There is no infilling of the lake along the Water's Edge that will create habitat fragmentation (i.e., the proposed work is considered stabilization and restoration).

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Result/Rational	
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Fatality occurrence(s)</li> <li>Spills into water (volume)</li> <li>Construction debris water entering the lake (volume)</li> </ul>	<b>Baseline</b> – no change to existing conditions.	<b>Concept A (Stone Lookouts)</b> – may reduce filtration of runoff. Fatality risk may increase during construction as stone lookouts are built; however, the risk of spills is the same as Concept B.  <b>Concept B (Planted Piers)</b> – soft shoreline may support filtration of runoff. Fatality risk may increase during construction as hard shoreline is built but to a lesser degree than Concept A (since there is less hard shoreline to build). The risk of spills during construction is the same as Concept A.	Concept B provides a slightly lower mortality risk during construction.
Maintain and improve air quality	Air quality	Change in number and diversity of trees and canopy cover	<ul style="list-style-type: none"> <li>Area and type of vegetative cover</li> </ul>	<b>Baseline</b> – no change in area or diversity of vegetative cover.	<b>Concept A (Stone Lookouts)</b> – vegetation will be created when the zone is revegetated following construction or maintained during construction.  <b>Concept B (Planted Piers)</b> – vegetation will be created when the zone is revegetated following construction or maintained during construction. Concept B provides a better opportunity to increase the area and type of vegetative cover along the Water's Edge.	Concept B will result in a larger increase of vegetative cover.
Maintain and improve air quality	Air quality	Change in local air or greenhouse gas (GHG) emission levels	<ul style="list-style-type: none"> <li>Ability to use or travel within the site without producing emissions (e.g., walk, run, cycle)</li> <li>Number and type of continuous emissions sources after implementation</li> </ul>	<b>Baseline</b> – no change in air or GHG emission levels.	<b>Concept A (Stone Lookouts)</b> – the public walkway will allow use of the site without producing emissions. Heavy equipment and vehicles will be used during construction to build the shoreline. There are no sources of continuous emissions after implementation.  <b>Concept B (Planted Piers)</b> – the public walkway will allow use of the site without producing emissions. Heavy equipment and vehicles will be used during construction to build the shoreline. There are no sources of continuous emissions after implementation.	Potential effects regarding air and GHG emissions are considered equal for both concepts.
<b>Summary of Natural Environment</b>				<ul style="list-style-type: none"> <li>Concept A will improve protection of the shoreline to a greater extent than Concept B, which is one main purpose of redeveloping this Zone.</li> </ul>	<ul style="list-style-type: none"> <li>Concept B provides a better opportunity to enhance the natural environment because of the increased vegetation which has a greater contribution to overall habitat quality and quantity and has a better chance of improving air quality.</li> </ul>	Both concepts are considered equal for a variety of criteria, including changes to aquatic habitat, stormwater management and impacts to wildlife movement (terrestrial and aquatic).

Table F-2.2. Evaluation of the Social Environment – Water's Edge Zone.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Social acceptability (i.e., outcome of a collective judgement or opinion of a project or plan)	Create a concept that is acceptable to the public and area users	Change in public and local perception of Ontario Place	<ul style="list-style-type: none"> <li>Feedback received during consultation and engagement</li> </ul>	<p><b>Baseline</b> – there will be no change to the existing perception of this zone.</p> <p><b>Concept A (Stone Lookouts)</b> – has generally been well-received by the public; however, feedback indicates a concern with safety and accessibility regarding the stone lookouts.</p> <p><b>Concept B (Planted Piers)</b> – has been well-received by the public, with the majority of comments favouring the additional vegetation included in this concept.</p>	Results from the October 2022 event indicate a general preference for Concept B (Planted Piers) but some like A (Stone Lookouts) and some prefer a hybrid of both.
Social acceptability (i.e., outcome of a collective judgement or opinion of a project or plan)	Acceptable noise and light pollution on surrounding communities	Change in noise and light pollution	<ul style="list-style-type: none"> <li>Addition of land mass/earthworks and tree clusters</li> <li>Use of full cut-off fixtures and downlighting; minimized use of uplighting</li> </ul>	<p><b>Baseline</b> – existing sources of noise in this zone include airports, Budweiser Stage, and daily park use (boats, park users). The Hough Hill helps filter noise from the Budweiser Stage to the Water's Edge.</p> <p><b>Concept A (Stone Lookouts)</b> – provide tree clusters in the lawn area as well as the potential to install lighting along the pathways and lookouts.</p> <p><b>Concept B (Planted Piers)</b> – provide tree clusters in the lawn area as well as the potential to install lighting along the pathways and lookouts.</p>	Both concepts include tree clusters between the shoreline and the Forum where daily noise is more likely to be generated. Noise from the existing Budweiser Stage will be heard at the Water's Edge during concerts.
Facilitate recreational opportunities	Provide access to the water	Change in area or length of accessible shoreline	<ul style="list-style-type: none"> <li>Area of accessible shoreline created or removed</li> <li>Ability for all site visitors to access the shoreline (e.g., pedestrians, cyclists, wheelchair, strollers)</li> <li>Number and type (e.g., paved vs. gravel) of trails leading to and/or access points to the shoreline</li> </ul>	<p><b>Baseline</b> – there will be no change in the existing area of accessible shoreline</p> <p><b>Concept A (Stone Lookouts)</b> – will increase access to the shoreline by expanding the Water's Edge and upgrading the Continuous Public Walkway. Pathways leading to the Water's Edge will be accessible for all site visitors.</p> <p><b>Concept B (Planted Piers)</b> – will increase access to the shoreline by expanding the water's edge and upgrading the public walkway. Pathways leading to the Water's Edge will be accessible for all site visitors.</p>	Both concepts will increase the area of accessible shoreline equally.
Facilitate recreational opportunities	Tenant integration and connectivity	Ability to move from one site opportunity to the next without obstruction (e.g., connected to Martin Goodman trail)	<ul style="list-style-type: none"> <li>Number of access points</li> <li>Clear legible access to all tenant sites from the public realm</li> <li>Visible integration of tenant landscapes with public realm design</li> </ul>	<p><b>Baseline</b> – N/A: this criterion is not applicable since the Water's Edge is bordered by public space from the west (Marina), north (Forum), east (Trillium Park) and south (Lake Ontario).</p> <p><b>Concept A (Stone Lookouts)</b> – N/A: this criterion is not applicable since the Water's Edge is bordered by public space from the west (Marina), north (Forum), east (Trillium Park) and south (Lake Ontario).</p> <p><b>Concept B (Planted Piers)</b> – N/A: this criterion is not applicable since the Water's Edge is bordered by public space from the west (Marina), north (Forum), east (Trillium Park) and south (Lake Ontario).</p>	N/A – connectivity from the West Island through to Trillium Park will remain accessible for public use.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Facilitate recreational opportunities	Provide recreational opportunities for users	Ability for users to participate in recreational activities	<ul style="list-style-type: none"> <li>Number of pathways/overall area of pathway for walking, cycling, running, etc. and access to water for kayaking, swimming</li> <li>Incorporate amenities for public use (e.g., washrooms, changerooms)</li> <li>Multi-functional and multi-seasonal spaces (e.g., use for all seasons)</li> </ul>	<p><b>Baseline</b> – there will be no change in the existing pathway or access to shoreline.</p> <p><b>Concept A (Stone Lookouts)</b> – will increase the overall area and efficacy of pathways for use. Concept A allows site visitors to be closer to the shoreline but does not permit kayaking or swimming (i.e., sit and put your feet in the water). The Water's Edge will be accessible during all seasons aside from the stone walkout areas due to safety reasons (e.g., slippery in icy conditions).</p> <p><b>Concept B (Planted Piers)</b> – will increase the overall area and efficacy of pathways for use. Site visitors are not permitted to access the water with Concept B due to safety reasons. The Water's Edge will be accessible during all seasons aside from the stone walkout areas due to safety reasons (e.g., slippery in icy conditions).</p>	Concept A will allow site visitors to step or climb down to the water to enjoy being closer to the lake (i.e., swimming or putting a vessel in the water is not permitted). Both concepts will increase the overall pathway, include washroom and restrict access during unsafe conditions (e.g., slippery, icy).
Facilitate educational opportunities	Provide educational opportunities for users	Ability for users to participate in educational activities	<ul style="list-style-type: none"> <li>Number and type of educational/interpretive opportunities, including opportunities for Indigenous peoples and treaty-rights holders (e.g., MCFN)</li> <li>No cost or non-ticketed</li> </ul>	<p><b>Baseline</b> – there is currently no charge or ticket required to access this zone. There are no existing formal educational or interpretive opportunities.</p> <p><b>Concept A (Stone Lookouts)</b> – will not require a charge or ticket to access. Concept A provides a variety of education or interpretive opportunities including Indigenous plant name markers, educational modules or QR codes, and panels or signage along the waterfront.</p> <p><b>Concept B (Planted Piers)</b> – will not require a charge or ticket to access. Concept B provides a variety of education or interpretive opportunities including Indigenous plant name markers, educational modules or QR codes, and panels or signage along the waterfront.</p>	Both concepts provide an equal opportunity for users to participate in educational activities.
Provide a comfortable environment for site visitors	Year-round comfort (e.g., shade in the summer; pathways clear of snow in winter, wind protection in the winter and shoulder seasons)	Ability for users to use and enjoy the site comfortably throughout the year	<ul style="list-style-type: none"> <li>Areas with shade, cover, seating, protection from wind</li> <li>Creation of microclimate</li> <li>Access to food and beverages, and supporting facilities/sun and precipitation protected cover/pavilion</li> </ul>	<p><b>Baseline</b> – currently offers few areas with shade and benches or protection from the wind. Existing food and beverage facilities have been closed. There are no existing pavilions or accessible buildings.</p> <p><b>Concept A (Stone Lookouts)</b> – provides an opportunity for shade protection compared Concept B since the large stones are constructed in a "stepped down" manner that will provide shade. This concept offers a substantial amount of seating on the stone lookout areas; however, this seating is not accessible for all site visitors (e.g., physical limitations to going up and down the stones).</p> <p><b>Concept B (Planted Piers)</b> – increased vegetation will remove the opportunity for more available seating along the shoreline compared to Concept A. Vegetation included in the shoreline is not anticipated to create a lot of shade.</p>	<p>Concept A provides more opportunity for stone seating and shade areas compared to Concept B. Shade provided by trees/vegetation in the lawn area will be the same between both concepts.</p> <p>There are no plans for food and beverage facilities at the Water's Edge; however, this zone is just east of and connected to the Marina which will offer these amenities.</p>
Provide a comfortable environment for site visitors	Comfortable environment for site visitors	Overall site accessibility, or ability for the concept to offer accessible services (e.g., compliance with accessibility standards)	<ul style="list-style-type: none"> <li>Building code, public spaces, AODA, NYC Universal Design Guidelines (exceed ADA minimums), CPTED</li> </ul>	<p><b>Baseline</b> – This area currently has a mix of accessible asphalt and paving spaces as well as wood decking and sand areas which are not completely accessible.</p> <p><b>Concept A (Stone Lookouts)</b> – All codes and AODA guidelines to be met during design development.</p> <p><b>Concept B (Planted Piers)</b> – All codes and AODA guidelines to be met during design development.</p>	Both concept A and B will include accessibility standards. Both concepts have accessible pathways which allow views to the water while sheltering visitors from wave uprush and flooding. Both designs keep the main pathway accessible all year round. Some features (e.g., shoreline) cannot be accessible for wheelchairs or strollers due to safety concerns.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Provide a comfortable environment for site visitors	Provide a safe and comfortable environment for site visitors	Maintain safe access to the site throughout phased construction	<ul style="list-style-type: none"> <li>▪ Preparation and implementation of Health and Safety plans, Traffic Control plans, etc. during construction</li> <li>▪ Ease of access for emergency vehicles</li> </ul>	<b>Baseline</b> – does not require construction; therefore, safe access throughout this zone would be maintained.	<b>Concept A (Stone Lookouts)</b> – will implement approved plans during construction. Once construction is complete, emergency vehicles will be able to access the zone, as needed.	<b>Concept B (Planted Piers)</b> – will implement approved plans during construction. Once construction is complete, emergency vehicles will be able to access the zone, as needed.	Both concepts will maintain safe access throughout construction equally.
Provide a comfortable environment for site visitors	Provide a safe comfortable environment for site visitors security	Ability to implement safety features for site visitors (e.g., lighting, safety call/button, Security staff)	<ul style="list-style-type: none"> <li>▪ Number and efficiency of safety features available to site visitors</li> <li>▪ Sense of safety by site visitors</li> <li>▪ Design and incorporate measures for safety to meet and exceed CPTED standards</li> </ul>	<b>Baseline</b> – the existing conditions do not facilitate safe entry and exit to the water.	<b>Concept A (Stone Lookouts)</b> – provides access to water; however, swimming and recreational use of the water is not permitted at this zone due to safety.	<b>Concept B (Planted Piers)</b> – does not include access to the water in order to increase safety for site visitors (i.e., not safe to swim at this location).	Both concepts provide an equal opportunity for safety features (e.g., lighting, safety phone/button). However, Concept B provides a better design to deter the public from entering the water at this location.
Provide a comfortable environment for site visitors	Provide a safe and comfortable environment for site visitors	Reduce roads and vehicle use within the site to lower potential for accidents with site visitors (e.g., reduce amount of heavy equipment needed during implementation/operation, timed access when users are not present)	<ul style="list-style-type: none"> <li>▪ Designated trail use</li> <li>▪ Design for non-vehicle traffic only (e.g., width of trail)</li> <li>▪ Design discrete servicing routes to minimize use of open space while providing aesthetic appeal and pedestrian use when not used for servicing</li> </ul>	<b>Baseline</b> – there will be no change to the existing environment for site visitors.	<b>Concept A (Stone Lookouts)</b> – will require heavy equipment during construction; however, it is not anticipated that vehicles will be required or have access to the Water's Edge following implementation except for emergency vehicles.	<b>Concept B (Planted Piers)</b> – will require heavy equipment during construction; however, it is not anticipated that vehicles will be required or have access to the Water's Edge following implementation except for emergency vehicles.	Both concepts will require vehicles and heavy equipment to be on site throughout construction; however, the work area will be blocked for public use during this time. The Continuous Public Walkway is designated for non-vehicular traffic, and will include space for pedestrians, cyclists, roller blading/skating, etc. to reduce collisions between vehicles and site visitors.
<b>Summary of Social Environment</b>					<ul style="list-style-type: none"> <li>▪ Concept A allows for more seating; however, the seating along the stone lookouts is not accessible for all site visitors.</li> <li>▪ Concept A allows site visitors to step/climb down to the water to enjoy being close to the lake.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public feedback indicates a strong preference for including vegetation throughout the shoreline design.</li> <li>▪ Concept B is designed to deter the public from entering the water at this location (safety).</li> </ul>	Generally, Concept A and Concept B were equal in terms of social acceptability, increasing the area of accessible shoreline (i.e., access to an unobstructed view of Lake Ontario), maintaining safety during construction and providing educational opportunities.

Table F-2.3. Evaluation of the Cultural Environment – Water's Edge Zone.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational	
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes as per Ontario Place Strategic Conservation Plan	Compatible with identified built heritage resources and cultural heritage landscapes	Ability to conserve and promote identified built heritage features and cultural heritage landscapes	<ul style="list-style-type: none"> <li>Meets conservation strategies to reduce negative impacts of the proposed concept on cultural heritage resources and landscapes.</li> </ul>	<b>Baseline</b> – existing conditions provide lake views, pathways, pedestrian trails and lookout to the shoreline.	<p><b>Concept A (Stone Lookouts)</b> – will provide a wider shoreline edge with lookouts and access to the water, naturalized landforms and a Continuous Public Walkway to contribute to a pedestrian circulation system. Concept A will meet the following conservation strategies: Public Realm, Climate Change (flooding), Accessibility Requirements, Visual Relationships, Circulation, Landforms, and Water Features. The Goh Ohn pavilion and bell may be relocated to the Water's Edge, north of the continuous public walkway.</p> <p><b>Concept B (Planted Piers)</b> – will provide a wider shoreline edge with lookouts and access to the water, naturalized landforms, a Continuous Public Walkway to contribute to a pedestrian circulation system, and greater tree planting and vegetation. Concept B will meet the following conservation strategies: Public Realm, Climate Change (flooding), Accessibility Requirements, Visual Relationships, Circulation, Landforms, and Water Features and Vegetation. The Goh Ohn pavilion and bell may be relocated to the Water's Edge, north of the continuous public walkway.</p>	Both concepts meet conservation strategies equally. Concept B meets one more conservation strategy compared to Concept A: <i>Conservation Strategies for Vegetation</i> include naturalizing the landscape. Concept B is able to provide more opportunity for naturalizing the landscape compared to Concept A. However, Concept A allows for greater flood protection ( <i>Conservation Strategies for Climate Change</i> ) compared to Concept B considering the entire shoreline will be hard shoreline.
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes	Compatibility with the original vision for Ontario Place (Hough design)	Preservation and/or restoration of existing shoreline and shoreline amenities, landforms and ecological habitat	<ul style="list-style-type: none"> <li>Implement Hough design principles</li> <li>Enhance safe public access to waterfront</li> <li>Reintroduction of a destination marina environment</li> </ul>	<b>Baseline</b> – includes the Hough Hill which incorporates original topography principles and provides access to the waterfront.	<p><b>Concept A (Stone Lookouts)</b> – provides a better opportunity to integrate the Hough lookout design (1970). Concept A enhances site visitors to be closer to the waterfront.</p> <p><b>Concept B (Planted Piers)</b> – enhances public access to the waterfront; however, there is less access to the water compared to Concept A.</p>	Neither concept retains existing heritage attributes in situ. Concept A provides greater opportunity to implement Hough principles while maximizing public access to the water compared to Concept B.
<u>Indigenous Cultural:</u> Reflect Indigenous perspectives	Design that is reflective of Indigenous input and feedback and that facilitates traditional and cultural activities	Ability for the concept to integrate Indigenous input and perspectives into various aspects of design as they relate to different assessment criteria	<ul style="list-style-type: none"> <li>Integration of feedback from Indigenous communities into design options to ensure appropriate management of environment and opportunities for traditional and cultural activities</li> <li>Change in the presence of culturally significant plant species and mature trees</li> </ul>	<b>Baseline</b> – the Water's Edge currently experiences flooding and erosion, negatively impacting habitat. There are currently no culturally significant plant species at this zone.	<p><b>Concept A (Stone Lookouts)</b> – hard shorelines will reduce erosion, protecting habitat features (including aquatic habitat) which is a topic of concern noted throughout consultation with Indigenous communities. Concept A provides limited space (compared to Concept B) to plant culturally significant plant species.</p> <p><b>Concept B (Planted Piers)</b> – hard and soft shorelines allow ecology to thrive which are topics of concern noted throughout consultation with Indigenous communities. Concept provides the potential for culturally significant plant species to be included in the Planted Piers.</p>	Concept B provides slightly greater opportunity to integrate feedback from Indigenous communities since there is a combination of hard and soft shoreline to protect or enhance habitat, and provides more area to plant culturally significant plant species.
<u>Indigenous Cultural:</u> Respect and reflect treaty history and	Respect and reflect treaty history and	Integration of Indigenous design principles and programming	<ul style="list-style-type: none"> <li>Design concepts which appropriately reflect local Indigenous culture based on</li> </ul>	<b>Baseline</b> – existing conditions at the Water's Edge do not	<p><b>Concept A (Stone Lookouts)</b> – provides an opportunity for a solstice looking.</p> <p><b>Concept B (Planted Piers)</b> – provides an opportunity for a</p>	Concept B provides a better opportunity to integrate Indigenous design principles and programming compared to Concept A. For

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
current cultural landscapes	current cultural landscapes		input received from Indigenous communities.	reflect Indigenous design principles and programming.		solstice lookout as well as planting native vegetation.	the Water's Edge, both concepts have the potential to incorporate a solstice lookout to create a connection to the night sky and provide an opportunity to share knowledge of 13 moons; however, Concept B will provide a better opportunity to incorporate native plants.
<b>Summary of the Cultural Environment</b>					<ul style="list-style-type: none"> <li>Concept A provides greater opportunity to implement Hough principles while maximizing public access to the waterfront.</li> </ul>	<ul style="list-style-type: none"> <li>Concept B provides slightly greater opportunity to integrate feedback from Indigenous communities since there is a combination of hard and soft shoreline to protect or enhance habitat, and provides more area to plant culturally significant plant species.</li> <li>Concept B provides a greater opportunity to incorporate Indigenous design planning and principles given the increased vegetation and ability to protect or enhance habitat, and provides more area to plant culturally significant plant species.</li> </ul>	Both concepts ultimately meet the objectives outlined in the Strategic Conservation Plan. Concept B meets one additional conservation strategy by naturalizing the landscape (Conservation Strategies for Vegetation from the Strategic Conservation Plan).

Table F-2.4. Evaluation of the Technical Environment – Water's Edge Zone.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Potential for the concept to be easily implemented	Constructability	Ease of construction and construction techniques	<ul style="list-style-type: none"> <li>Identified construction techniques</li> </ul>	<p><b>Baseline</b> – no activities are required for implementation.</p> <p><b>Concept A (Stone Lookouts)</b> –heavy equipment may be required on site longer than Concept B.</p> <p><b>Concept B (Planted Piers)</b> – concrete foundation is likely required for the planted piers.</p>	Both concepts include routine construction techniques.
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Reasonable permitting abilities and timelines	<ul style="list-style-type: none"> <li>Permitting requirements and known timelines</li> <li>Ability to obtain permit (e.g., SARA permit)</li> </ul>	<p><b>Baseline</b> – no implementation is required.</p> <p><b>Concept A (Stone Lookouts)</b> –A permit under the <i>Endangered Species Act</i> may be required where work has the potential to impact American eel habitat. Per the City of Toronto Redevelopment Checklist, a Natural Heritage Impact Study has been completed.</p> <p><b>Concept B (Planted Piers)</b> – A permit under the <i>Endangered Species Act</i> may be required where work has the potential to impact American eel habitat. Per the City of Toronto Redevelopment Checklist, a Natural Heritage Impact Study has been completed.</p>	Both concepts align with regulatory requirements equally, and will have approximately the same permitting and approval timelines.
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Meets applicable planning objectives and standards (e.g., PPS, A Place to Grow: Growth Plan for the GGH, City of Toronto)	<ul style="list-style-type: none"> <li>Identify and maintain compliance with applicable planning objectives and standards</li> </ul>	<p><b>Baseline</b> – no implementation is required.</p> <p><b>Concept A (Stone Lookouts)</b> – meets the objectives of applicable planning requirements (e.g., providing public access to the shoreline as outlined in the PPS).</p> <p><b>Concept B (Planted Piers)</b> – meets the objectives of applicable planning requirements (e.g., providing public access to the shoreline as outlined in the PPS).</p>	Both concepts meet the objectives of applicable planning requirements equally, including the PPS, A Place to Grow: Growth Plan for the GGH, and City of Toronto Official Plan).
Facilitate multi-modal access	Roadway/vehicle access to the site	Change in ability for site visitors to access the site by vehicle or water	<ul style="list-style-type: none"> <li>Number of safe drop-off locations and parking opportunities</li> <li>Overall area of onsite parking</li> <li>Facilitates water-born transportation (e.g., ferries, water taxis, private watercraft)</li> </ul>	<p><b>Baseline</b> – N/A</p> <p><b>Concept A (Stone Lookouts)</b> – N/A</p> <p><b>Concept B (Planted Piers)</b> – N/A</p>	N/A since access to the site is through the Mainland Zone.
Facilitate multi-modal access	Multi-modal connections to and within the site	Change in ability for site visitors to access the site by transit	<ul style="list-style-type: none"> <li>Number of public transit stops/hubs to the site</li> <li>Multi-modal hubs (e.g., public transit [first/last mile connections], tour/shuttle bus, vehicle pickup and drop-off)</li> <li>Accommodate looping/terminating surface transit routes</li> </ul>	<p><b>Baseline</b> – N/A</p> <p><b>Concept A (Stone Lookouts)</b> – N/A</p> <p><b>Concept B (Planted Piers)</b> – N/A</p>	N/A since access to the site is through the Mainland Zone.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Facilitate multi-modal access	Pedestrian and cycling network to and within site	Change in existing pedestrian and cycling network (e.g., bridges, trails)	<ul style="list-style-type: none"> <li>Number and type of cycling and pedestrian network</li> <li>Ability to access the site from adjacent venues, including Exhibition Place and Ontario Line Exhibition Place Station</li> <li>Connectivity for site visitors through the site (i.e., the improvements to the Martin Goodman Trail)</li> <li>Address conflicts between cyclists/pedestrians and cyclists/vehicles in intersection and access design</li> </ul>	<p><b>Baseline</b> – there will be no change in the existing pedestrian and cycling network.</p> <p><b>Concept A (Stone Lookouts)</b> – the proposed Continuous Public Walkway will include marked laneways for cyclists and pedestrians, potentially reducing conflict between cyclists and pedestrians. There is no vehicle access in this zone.</p> <p><b>Concept B (Planted Piers)</b> – the proposed Continuous Public Walkway will include marked laneways for cyclists and pedestrians, potentially reducing conflict between cyclists and pedestrians. There is no vehicle access in this zone.</p>	Both concepts will create a positive change to existing pedestrian and cycling networks throughout the implementation of the Continuous Public Walkway. The anticipated width of the walkway will allow for specific cycling and walking
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of impervious surfaces	<ul style="list-style-type: none"> <li>Overall area of pervious vs. impervious surfaces across the site</li> <li>Reduce hardscape areas</li> <li>Provide sustainable permeable solutions including greening of the surface parking lots</li> </ul>	<p><b>Baseline</b> – no change to existing conditions.</p> <p><b>Concept A (Stone Lookouts)</b> – includes lawn and stone edges, reducing the existing area of impervious surface.</p> <p><b>Concept B (Planted Piers)</b> – includes lawn, planted edges and stone edges, reducing the existing area of impervious surface.</p>	Concept B will include a greater amount of vegetative cover. The final design concept will reduce the amount of pervious surface to the extent possible.
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of increased elevation	<ul style="list-style-type: none"> <li>Minimum design elevations that meet or exceed 100-year storm event</li> </ul>	<p><b>Baseline</b> – the existing Water's Edge will continue to experience flooding.</p> <p><b>Concept A (Stone Lookouts)</b> – will thicken and elevate the shoreline for flood protection.</p> <p><b>Concept B (Planted Piers)</b> – will thicken and elevate the shoreline for flood protection.</p>	Both concepts provide a thickened and elevated shoreline area that will meet or exceed the 100-year storm event criteria.
Sediment management	Improve sediment management processes	Change in sediment management practices or volume	<ul style="list-style-type: none"> <li>Volume of removed sediment</li> <li>Beneficial reuse</li> <li>Ability to integrate sediment stabilization/capture into construction or integration</li> <li>Efficacy of erosion and sediment control strategies implemented to reduce sediment laden runoff from leaving the work area</li> <li>Need for dredging after implementation</li> </ul>	<p><b>Baseline</b> – no change to existing conditions.</p> <p><b>Concept A (Stone Lookouts)</b> – N/A</p> <p><b>Concept B (Planted Piers)</b> – N/A</p>	N/A since this concept does not require the removal of sediment (or associated beneficial reuse) or dredging after implementation
Remediate existing contamination	Improve soil and/or water quality	Change in soil and water contamination	<ul style="list-style-type: none"> <li>Disturbance of contamination during construction/implementation</li> <li>Ability for the concept to maintain or improve conditions (i.e., not increase contamination)</li> </ul>	<p><b>Baseline</b> – Existing soil and water contamination will remain on site.</p> <p><b>Concept A (Stone Lookouts)</b> –will not contribute to additional soil or groundwater contamination at the site.</p> <p><b>Concept B (Planted Piers)</b> –will not contribute to additional soil or groundwater contamination at the site</p>	Both concepts will manage existing contamination equally during construction with the intention of improving soil and/or groundwater quality, as needed.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Upgrade or replace infrastructure and buildings	Improve infrastructure conditions for long-term use	Change in infrastructure and building condition	<ul style="list-style-type: none"> <li>Conserve and adapt extant structures where possible.</li> <li>Number and magnitude of change in buildings and supporting site infrastructure (e.g., utilities)</li> <li>Decommission and remove old infrastructure along with design and construction of new buildings and supporting site infrastructure</li> </ul>	Baseline – N/A	Concept A (Stone Lookouts) – N/A	Concept B (Planted Piers) – N/A	N/A there are no buildings or structures associated with the zone.
Maintain flexibility for future programming	Optionality for future use (i.e., more than one fixed use)	Flexibility for use	<ul style="list-style-type: none"> <li>Number of feasible event ideas (paid or free events)</li> <li>Number and type of utilities needed</li> </ul>	Baseline – N/A	Concept A (Stone Lookouts) – N/A	Concept B (Planted Piers) – N/A	N/A since this zone is intended to create year-round access to the water and improve the existing public space (i.e., one fixed use).
<b>Summary of the Technical Environment</b>					<ul style="list-style-type: none"> <li>Concept A will thicken and elevate the shoreline for flood protection.</li> <li>Concept A includes lawn and stone edges, reducing the existing area of impervious surface.</li> </ul>	<ul style="list-style-type: none"> <li>Concept B will thicken and elevate the shoreline for flood protection.</li> <li>Concept B will include a greater amount of vegetative cover. The final design concept will reduce the amount of pervious surface to the extent possible</li> </ul>	Both concepts are preferred for the technical environment.

Table F-2.5. Evaluation of the Economic Environment – Water's Edge Zone.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Construction costs	Estimated construction cost	Cost relative to other concepts	<ul style="list-style-type: none"> <li>Change in cost</li> </ul>	<p><b>Baseline</b> – there are no construction costs associated with this option.</p> <p><b>Concept A (Stone Lookouts)</b> – will have more cut stone which is considered labour intensive.</p> <p><b>Concept B (Planted Piers)</b> – will require drilling to secure the planted piers with is considered labour intensive.</p>	Both concepts are relatively equal in terms of construction costs since they both include a labour-intensive scope of work in order to safely implement the design.
Operation and Maintenance	Estimated annual operating costs for staff resources, ongoing operation and maintenance activities	Cost relative to other concepts	<ul style="list-style-type: none"> <li>Change in cost</li> </ul>	<p><b>Baseline</b> – existing operating costs include trail and vegetation maintenance.</p> <p><b>Concept A (Stone Lookouts)</b> – will require general maintenance of the lawn (north of the shoreline).</p> <p><b>Concept B (Planted Piers)</b> –will require general maintenance of the lawn area (north of the shoreline). This concept may require more vegetation maintenance of the planted piers (e.g., pruning, watering plants during times of low precipitation).</p>	Concept B will likely require more maintenance compared to Concept A. Concept A will close the shoreline access areas during the winter months to reduce potential safety concerns due to slippery surfaces; the Continuous Public Walkway will remain open during winter months.
Economic benefits	Ability to offer contract procurement, jobs, or other economic benefits from constructing and operating the park	Change in economic opportunities	<ul style="list-style-type: none"> <li>Rentals (e.g., water use equipment)</li> <li>Food and beverage sales</li> <li>Job opportunities that are inclusive of equity deserving communities</li> <li>Provide skill training</li> </ul>	<p><b>Baseline</b> – there are currently no economic opportunities at this site. Existing amenities closed previously.</p> <p><b>Concept A (Stone Lookouts)</b> – economic opportunities may exist during construction only since there are no food and beverage stands or rentals.</p> <p><b>Concept B (Planted Piers)</b> – economic opportunities may exist during construction only since there are no food and beverage stands or rentals.</p>	Both concepts are equal in terms of economic opportunities during construction.
<b>Summary of the Economic Environment</b>				<ul style="list-style-type: none"> <li>Concept A will likely require less maintenance during operations.</li> <li>Concept B will likely require more maintenance during operations.</li> </ul>	Both concepts are generally equal in terms of construction cost and economic opportunities.

Table F-2.6. Evaluation of Sustainability – Water's Edge Zone.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Reduce contribution to climate change	Low atmospheric emissions (e.g., air, GHG) associated with the concept	Air and GHG emissions during construction (vehicle and heavy equipment emissions) and "operation/implementation" (e.g., air conditioning, use of fossil fuel)	<ul style="list-style-type: none"> <li>Change in emissions relative to "Do-Nothing" baseline concept</li> </ul>	<p><b>Baseline</b> – there are no emissions associated with construction vehicles or heavy equipment. Current buildings on site were previously approved for demolition; therefore, no existing sources of emissions exist.</p> <p><b>Concept A (Stone Lookouts)</b> – will require the use of heavy equipment and vehicles during construction. Washrooms are planned for this zone which will not require air conditioning or the use or fossil fuel.</p> <p><b>Concept B (Planted Piers)</b> – will require the use of heavy equipment and vehicles during construction. Washrooms are planned for this zone which will not require air conditioning or the use or fossil fuel.</p>	Neither concept will result in continuous emissions during operations/implementation. The use of heavy equipment and vehicles will be relatively similar in terms of air and GHG emissions throughout construction.
Reduce contribution to climate change	Heat island effect	Ability for the concept to increase vegetation and reduce unnatural hard surfaces (e.g., concrete)	<ul style="list-style-type: none"> <li>Overall area of vegetation (trees, green roofs) and ability to provide shade throughout the site</li> <li>Overall area of hard surfaces</li> </ul>	<p><b>Baseline</b> – the amount of existing vegetation and hard surface contributes to the heat island effect at Ontario Place.</p> <p><b>Concept A (Stone Lookouts)</b> – will support the reduction of the Heat Island Effect at Ontario Place by increasing vegetation and reducing the overall area of hard surfaces</p> <p><b>Concept B (Planted Piers)</b> – will support the reduction of the Heat Island Effect at Ontario Place by increasing vegetation and reducing the overall area of hard surfaces</p>	Concept B will have a slightly greater increase in vegetation and decrease in hard surfaces compared to Concept A.
Include sustainable infrastructure and buildings	Building resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles, wildfires)	Ability for the concept to align with all applicable building codes (e.g., Canadian Standards Association)	<ul style="list-style-type: none"> <li>Compliance with codes and standards (as-built/design documents)</li> </ul>	<p><b>Baseline</b> – existing infrastructure at this zone will be demolished.</p> <p><b>Concept A (Stone Lookouts)</b> – all infrastructure (e.g., washrooms) at this zone will be built in compliance with applicable codes and standards. .</p> <p><b>Concept B (Planted Piers)</b> – all infrastructure (e.g., washrooms) at this zone will be built in compliance with applicable codes and standards. .</p>	Both concepts provide an equal ability to align with all applicable codes and standards.
Include sustainable infrastructure and buildings	Infrastructure resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles)	Adaptability and resilience of infrastructure to withstand a changing climate	<ul style="list-style-type: none"> <li>Infrastructure and site to withstand severe weather and temperatures</li> <li>Designed for longevity</li> </ul>	<p><b>Baseline</b> – the existing shoreline is currently impacted by high lake levels and intense wind events.</p> <p><b>Concept A (Stone Lookouts)</b> – is designed to withstand severe weather events and temperatures. The stone lookout material is designed for longevity taking the wave and climate conditions along the shoreline into consideration.</p> <p><b>Concept B (Planted Piers)</b> – is designed to withstand severe weather events and temperatures. The planted piers offer vegetation that will support moisture absorption during times of high precipitation. The hard shoreline component is designed for longevity taking the wave and climate conditions along the shoreline into consideration.</p>	Both concepts are considered to be resilient to a changing climate and will be designed to support the climactic conditions experienced along the Water's Edge.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Include sustainable infrastructure and buildings	Green Infrastructure design and build	Compliance with applicable design standards and guidelines.	<ul style="list-style-type: none"> <li>▪ Number or size of certified buildings, as applicable</li> <li>▪ Building approvals</li> <li>▪ Zero Carbon Emissions</li> <li>▪ Waterfront design</li> <li>▪ Requirements identified throughout design development</li> <li>▪ SITES certification (i.e., sustainable sites)</li> <li>▪ Waterfront Edge Design Guidelines</li> </ul>	<p><b>Baseline</b> – the existing shoreline will continue to be impacted high lake levels and high wind events</p> <p><b>Concept A (Stone Lookouts)</b> – this concept incorporates the intent and design strategies outlined in the Waterfront Edge Design Guidelines to the extent possible (e.g., avoid or reduce risk from coastal hazards, improve connections to the water).</p> <p><b>Concept B (Planted Piers)</b> – this concept incorporates the intent and design strategies outlined in the Waterfront Edge Design Guidelines to the extent possible (e.g., avoid or reduce risk from coastal hazards, improve connections to the water).</p>	Both concepts will incorporate applicable green infrastructure and design principles.
Sustainable Communities	Community-based solutions	Environmental and/or socio-economic benefits	<ul style="list-style-type: none"> <li>▪ Green infrastructure solutions (e.g., permeable paving, green roofs)</li> <li>▪ Climate change solutions (e.g., design new building to have zero carbon emissions, reduce parking on-site, potential for solar power)</li> <li>▪ Transportation facilities: trails and multi-use pathways</li> <li>▪ Community greenspace: parks</li> </ul>	<p><b>Baseline</b> –existing conditions provide limited trails and park space in this zone.</p> <p><b>Concept A (Stone Lookouts)</b> – provides an increase in multi-use pathway and park area compared to existing conditions.</p> <p><b>Concept B (Planted Piers)</b> – provides an increase in multi-use pathway and park area compared to existing conditions.</p>	Both concepts provide an equal increase in multi-use pathways and park area compared to existing conditions.
Summary of Sustainability				<ul style="list-style-type: none"> <li>▪ Concept A has the ability to contribute to sustainability since neither concept will result in continuous emissions (e.g., air, GHG) and both provide an equal increase in multi-use pathways and park area compared to existing conditions.</li> <li>▪ Concept B the ability to contribute to sustainability since neither concept will result in continuous emissions (e.g., air, GHG) and both provide an equal increase in multi-use pathways and park area compared to existing conditions.</li> <li>▪ Concept B will have a slightly greater increase in vegetation and decrease in hard surfaces compared to Concept A.</li> </ul>	Both concepts have the ability to contribute to sustainability since neither concept will result in continuous emissions (e.g., air, GHG) and both provide an equal increase in multi-use pathways and park area compared to existing conditions.

## The Marina

Table F-3.1. Evaluation of the Natural Environment – The Marina.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect			Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in habitat availability	<ul style="list-style-type: none"> <li>Overall area of available habitat</li> <li>Number of natural features and linkages for aquatic species movement (e.g., along the shore from shallow water to deeper offshore water)</li> </ul>	<b>Baseline</b> – the zone provides marina basin and open water habitat. South of the ship breakwaters is a “Best Go Area” for fisheries opportunities and within the Marina is considered a “Fair Go Area”.	<b>Concept A (Park Marina)</b> – will not change the overall area of available habitat. The existing break wall will remain, and aquatic species movement is not expected to change.	<b>Concept B (Ontario Port)</b> – will not change the overall area of available habitat. The existing break wall will remain, and aquatic species movement is not expected to change.	Neither concept is expected to change the overall available habitat. The existing break wall will remain; therefore, linkages for aquatic species movement are not expected to change.
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Potential increase or decrease in water quality parameters (e.g., TSS, contaminants, sand from volleyball courts, salt from parking lots and access)</li> <li>Sensory disturbance (e.g., vibrations) that may reduce the quality of available habitat</li> </ul>	<b>Baseline</b> – water quality is likely to decrease under existing conditions due to a number of existing anthropogenic influences including boat and associated fuel use and deicing salt on land. American eel habitat exists along the eastern shoreline of the Marina zone.	<b>Concept A (Park Marina)</b> – vibrations during construction may temporarily reduce the quality of available habitat. Boats and associated fuel use will continue. Stormwater runoff will be managed so that water does not enter Lake Ontario (i.e., does not reduce the potential for deicing salt to reach the water).	<b>Concept B (Ontario Port)</b> – vibrations during construction may temporarily reduce the quality of available habitat. Boats and associated fuel use will continue. Stormwater runoff will be managed so that water does not enter Lake Ontario (i.e., does not reduce the potential for deicing salt to reach the water).	Both concepts have the potential to decrease water quality through the use of fuel and contaminants from on-land reaching the lake.
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in water quality	<ul style="list-style-type: none"> <li>Potential to increase or decrease in water quality parameters (e.g., TSS, contamination, salt) due to existing conditions or spills during construction</li> <li>Weight of contaminants absorbed (by cattail in floating islands vs. no removal)</li> </ul>	<b>Baseline</b> – this zone currently sees stagnant water and poor circulation. Water quality is likely to decrease under existing conditions due to a number of existing anthropogenic influences.	<b>Concept A (Park Marina)</b> – boats and associated fuel use will continue. This concept will allow for flexibility to improve stagnant water conditions and poor circulation in the future.	<b>Concept B (Ontario Port)</b> – boats and associated fuel use will continue. This concept will allow for flexibility to improve stagnant water conditions and poor circulation in the future.	Both concepts are being designed to allow for future implementation of water improvement systems.
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in Lake Ontario Shoreline systems (e.g., sensitive bluffs, dynamic beach)	<ul style="list-style-type: none"> <li>Impacts on shoreline</li> <li>Ability for the concept to meet the recommendations of the Shoreline and Hazard Assessment</li> </ul>	<b>Baseline</b> – the shoreline of the Marina consists of grouted stone revetment, steel sheet pile walls and a breakwater made up of three sunken ships (filled with stone material). The sheet pile walls are nearing the end of their useful life.	<b>Concept A (Park Marina)</b> – additional fill is required (to address grading and flood issues) which will alter the existing shoreline. Sheet pile walls will likely be improved to extend their useful life and support the redevelopment work meeting the recommendations in the Shoreline and Hazard Assessment.	<b>Concept B (Ontario Port)</b> – additional fill is required (to address grading and flood issues) which will alter the existing shoreline. Sheet pile walls will likely be improved to extend their useful life and support the redevelopment work meeting the recommendations in the Shoreline and Hazard Assessment.	Both concepts will alter the shoreline to address grading and flooding issues associated with this zone.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Result/Rational		
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Stormwater management and infrastructure	<ul style="list-style-type: none"> <li>Ability to establish appropriate, effective, and sustainable stormwater management practices and infrastructure</li> <li>Potential to mitigate or protect against flood risks from Lake Ontario (e.g., wave uprush)</li> </ul>	<b>Baseline</b> – this zone currently experiences flooding.	<b>Concept A (Park Marina)</b> – additional fill is required to address flood conditions. Catch basins will be placed throughout the Marina to capture stormwater runoff so that no water is directed to Lake Ontario. There may be opportunities to capture rainwater for reuse on site.	<b>Concept B (Ontario Port)</b> – additional fill is required to address flood conditions. Catch basins will be placed throughout the Marina to capture stormwater runoff so that no water is directed to Lake Ontario. There may be opportunities to capture rainwater for reuse on site.	Both concepts provide the ability to establish appropriate and sustainable stormwater management infrastructure, and protect against flood risks
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in hydrological function	<ul style="list-style-type: none"> <li>Disturbance to physical hydraulic properties of soil/land above or below the water table (e.g., grading, backfilling)</li> </ul>	<b>Baseline</b> – there will be no change to the existing hydraulic properties at the Marina.	<b>Concept A (Park Marina)</b> – hydraulic function at the Marina location would have been disturbed during original construction; however, additional fill is required to raise the grade of the existing Marina.	<b>Concept B (Ontario Port)</b> – hydraulic function at the Marina location would have been disturbed during original construction; however, additional fill is required to raise the grade of the existing Marina.	A negligible change to hydrological function may occur from either concept. Both concepts are considered to be equal in terms of disturbance to physical properties.
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in quantity	<ul style="list-style-type: none"> <li>Area of pervious surface (to allow the infiltration of water into the soil)</li> </ul>	<b>Baseline</b> – the Marina currently consists of concrete paving.	<b>Concept A (Park Marina)</b> – the Marina will continue to consist mainly of stone, concrete, interlocking pavers and/or sheet pile in order to protect the shoreline and offer protection from flooding.	<b>Concept B (Ontario Port)</b> – the Marina will continue to consist mainly of stone, concrete, interlocking pavers and/or sheet pile in order to protect the shoreline and offer protection from flooding.	Both concepts include impervious surfaces to protect the shoreline and offer protection from flooding.
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in quality	<ul style="list-style-type: none"> <li>Potential for increased or decreased in water quality parameters compared to existing conditions</li> </ul>	<b>Baseline</b> – locations across the Marina area that consists of artificial fill contain known soil (e.g., mercury) and groundwater (e.g., polycyclic aromatic hydrocarbons) parameter exceedances.	<b>Concept A (Park Marina)</b> – provides a small opportunity to additional vegetation across this zone; however, not enough that will substantially change the level of groundwater contamination by contributing to filtration.	<b>Concept B (Ontario Port)</b> – provides a small opportunity to additional vegetation across this zone; however, not enough that will substantially change the level of groundwater contamination by contributing to filtration.	Neither concept is anticipated to increase or decrease groundwater quality parameters.
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the area and connectivity of available habitat	<ul style="list-style-type: none"> <li>Area of habitat created or removed including mature trees, other native and non-native vegetation, wetlands, and structures</li> <li>Connectivity of habitat (e.g., linkages to other parks, migration routes)</li> <li>Number of habitat features impacted (e.g., turtle basking areas, shoreline)</li> <li>Number of species impacted</li> </ul>	<b>Baseline</b> – there is a bat maternity roost tree of moderate quality located on the east portion of the Marina. There is barn swallow nesting habitat located on some of the existing Marina buildings. There are barn swallow nests along the breakwater.	<b>Concept A (Park Marina)</b> – will include more vegetation and greenspace. Connectivity to the rest of the park (e.g., the Forum, Trillium Park, Brigantine Cove) will remain. Some buildings that contain barn swallow nesting habitat will be decommissioned and removed due to age and state of the structure.	<b>Concept B (Ontario Port)</b> – includes more open-air canopies and opportunity for commercial space. Some buildings that contain barn swallow nesting habitat will be decommissioned and removed due to age and state of the structure.	Concept A provides more opportunity for vegetation and greenspace.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect			Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Sensory disturbance (e.g., noise, dust, light, vibrations)</li> <li>Increase or decrease of forest structure (canopy, sub-canopy, understory)</li> <li>Interference of habitat by buildings/structures (e.g., glass/mirrored buildings alongside bird habitat)/people (e.g., encroachment on habitat)/suitability of habitat</li> </ul>	<b>Baseline</b> – there is minimal ornamental vegetation around the zone as well as some buildings and structures that may be used for habitat.	<b>Concept A (Park Marina)</b> – sensory disturbance will occur during construction, and lights/noise will continue in this zone after implementation considering the nature of this zone (i.e., high level of human activity and water vessels). There are no large glass buildings planned for the zone.	<b>Concept B (Ontario Port)</b> – sensory disturbance will occur during construction, and lights/noise will continue in this zone after implementation considering the nature of this zone (i.e., high level of human activity and water vessels). There are no large glass buildings planned for the zone.	Both concepts will influence the quality of available habitat through ongoing noise and light that is associated with the activity throughout the zone.
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in vegetation communities and species, including vegetation communities of concern	<ul style="list-style-type: none"> <li>Overall area of vegetation</li> <li>Occurrences of invasive plant species</li> </ul>	<b>Baseline</b> – no invasive species are known to occur at this zone.	<b>Concept A (Park Marina)</b> – includes more vegetation and greenspace.	<b>Concept B (Ontario Port)</b> – includes more open-air canopies and potential future commercial space.	Concept A provides more opportunity for vegetation and greenspace.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Terrestrial wildlife, including species at risk (SAR)	Change in movement (e.g., migration, access to water)	<ul style="list-style-type: none"> <li>Barriers (e.g., open excavation during construction, buildings) or filters (e.g., fencing) to wildlife movement reducing connectivity of habitat whether existing (e.g., structures already in place) or part of the alternative design (e.g., new infrastructure)</li> <li>Retention or creation of nesting opportunities for species at risk (e.g., barn swallow)</li> </ul>	<b>Baseline</b> – there is a bat maternity roost tree of moderate quality located on the east portion of the Marina. There is barn swallow nesting habitat located on some of the existing Marina buildings. There are barn swallow nests along the breakwater.	<b>Concept A (Park Marina)</b> – construction fencing will be used to restrict human access to the construction site for safety purposes. Existing structures that may provide wildlife habitat will be removed due to the age and condition of the building. New structures include an office, amenities, canopies, potential future restaurants and shops, and a new lighthouse.	<b>Concept B (Ontario Port)</b> – construction fencing will be used to restrict human access to the construction site for safety purposes. Existing structures that may provide wildlife habitat will be removed due to the age and condition of the building. New structures include a Cultural Hub, canopies, potential future restaurants and shops, and a new lighthouse.	Both concepts will introduce barriers to wildlife during construction and include the removal and addition of buildings across the site. Building removal will be done outside of the breeding bird active nesting season.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Terrestrial wildlife species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Wildlife fatality occurrence(s)</li> <li>Protected species listing</li> <li>Increase chance of fatality (e.g., glass buildings and birds)</li> </ul>	<b>Baseline</b> – no change to existing condition. There is a bat maternity roost tree of moderate quality located on the east portion of the Marina. There is barn swallow nesting habitat located on some of the existing Marina buildings. There are barn swallow nests along the breakwater.	<b>Concept A (Park Marina)</b> – wildlife fatalities may occur during construction. There are no glass buildings included in this concept.	<b>Concept B (Ontario Port)</b> – wildlife fatalities may occur during construction. There are no glass buildings included in this concept.	Both concepts will increase the chance of wildlife mortality during construction equally; however, best practices and mitigation measures will reduce the chance of mortality risk to the extent possible. Both concepts will include the removal of buildings that provide barn swallow nesting habitat. Neither concept is anticipated to increase wildlife mortality once implemented.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Result/Rational	
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in movement	<ul style="list-style-type: none"> <li>Barriers to aquatic species movement due to temporary or permanent structures or infilling creating habitat fragmentation</li> <li>Water current changes that may impact species ability to use the water</li> </ul>	<b>Baseline</b> – American eel habitat exists along the eastern shoreline of the Marina zone.	<b>Concept A (Park Marina)</b> – a new boardwalk is planned above American eel habitat along the eastern shoreline of the Marina.  <b>Concept B (Ontario Port)</b> – a new boardwalk is planned above American eel habitat along the eastern shoreline of the Marina.	Both concepts may present a barrier to aquatic species movement during construction; however, neither concept will create permanent habitat fragmentation.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Fatality occurrence(s)</li> <li>Spills into water (volume)</li> <li>Construction debris water entering the lake (volume)</li> </ul>	<b>Baseline</b> – no change to existing conditions.	<b>Concept A (Park Marina)</b> – will require in-water work during construction.  <b>Concept B (Ontario Port)</b> – will require in-water work during construction.	Aquatic species mortality risk is considered equal for both concepts. The risk of spills and construction debris entering the water is considered the same. Both concepts will require in-water work during construction.
Maintain and improve air quality	Air quality	Change in number and diversity of trees and canopy cover	<ul style="list-style-type: none"> <li>Area and type of vegetative cover</li> </ul>	<b>Baseline</b> – there is minimal ornamental vegetation around the zone	<b>Concept A (Park Marina)</b> – will include more vegetation and greenspace.  <b>Concept B (Ontario Port)</b> – includes more open-air canopies and potential future commercial space.	Concept A provides more opportunity for vegetation and greenspace.
Maintain and improve air quality	Air quality	Change in local air or greenhouse gas (GHG) emission levels	<ul style="list-style-type: none"> <li>Ability to use or travel within the site without producing emissions (e.g., walk, run, cycle)</li> <li>Number and type of continuous emissions sources after implementation</li> </ul>	<b>Baseline</b> – currently accommodates up to 240 motored vessels from May to October.	<b>Concept A (Park Marina)</b> – the number of motored vessels using the site is anticipated to be about the same after implementation. Provides more opportunity to include vegetation throughout the zone.  <b>Concept B (Ontario Port)</b> – the number of motored vessels using the is anticipated to be about the same after implementation.	Concept A provides the opportunity to include more trees; however, both concepts are anticipated to continue to accommodate gas and diesel fueled vessels that will contribute to GHG emission levels at the zone.
<b>Summary of Natural Environment</b>				<ul style="list-style-type: none"> <li>Provides more opportunity for vegetation and greenspace.</li> <li>Includes the continued use of gas and diesel fueled vessels.</li> <li>Both concepts will alter the shoreline to address grading and flooding issues associated with this zone</li> </ul>	<ul style="list-style-type: none"> <li>Includes the continued use of gas and diesel fueled vessels.</li> <li>Both concepts will alter the shoreline to address grading and flooding issues associated with this zone</li> </ul>	Generally, both concepts are considered equal; however, Concept A provides more opportunity to increase vegetation and greenspace.

Table F-3.2. Evaluation of the Social Environment – The Marina.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Concept A (Park Marina)	Concept B (Ontario Port)	Results/Rational
Social acceptability (i.e., outcome of a collective judgement or opinion of a project or plan)	Create a concept that is acceptable to the public and area users	Change in public and local perception of Ontario Place	<ul style="list-style-type: none"> <li>Feedback received during consultation and engagement</li> </ul>	<b>Baseline</b> – there will be no change to the existing perception of this zone.	<b>Concept A (Park Marina)</b> – was generally well-received by the public. Within this concept, feedback favours the open concept and increased green space in Concept A.	<b>Concept B (Ontario Port)</b> – was generally well-received by the public. Within this concept, feedback favours the potential for commercial opportunities and the potential for a variety of food and beverage options.	Results of the October 2022 engagement event indicate a general preference for Concept A; however, opportunities for food and beverage pavilions can include sustainable choices and healthy food options that were suggested for Concept B.
Social acceptability (i.e., outcome of a collective judgement or opinion of a project or plan)	Acceptable noise and light pollution on surrounding communities	Change in noise and light pollution	<ul style="list-style-type: none"> <li>Addition of land mass/earthworks and tree clusters</li> <li>Use of full cut-off fixtures and downlighting; minimized use of uplighting</li> </ul>	<b>Baseline</b> – this zone is noisiest from May to October when boat use is higher. Noise from the airport and Budweiser Stage is also noticeable at the Marina.	<b>Concept A (Park Marina)</b> – noise will continue within this zone based on the level of human activity and site/park users at any given time. Concept A may provide additional vegetated planting that may help create quieter areas. Lighting will be limited to future commercial areas and safety lighting.	<b>Concept B (Ontario Port)</b> – noise will continue within this zone based on the level of human activity and site/park users at any given time. Concept B is intended to allow for more commercial activity which may create more noise during peak seasonal use. Lighting will be limited to future commercial areas and safety lighting.	Concept A has slightly more potential to reduce noise with areas surrounded by vegetation.
Facilitate recreational opportunities	Provide access to the water	Change in area or length of accessible shoreline	<ul style="list-style-type: none"> <li>Area of accessible shoreline created or removed</li> <li>Ability for all site visitors to access the shoreline (e.g., pedestrians, cyclists, wheelchair, strollers)</li> <li>Number and type (e.g., paved vs. gravel) of trails leading to and/or access points to the shoreline</li> </ul>	<b>Baseline</b> – the Marina currently includes paved surfaces that allow site visitors to access the waterfront.	<b>Concept A (Park Marina)</b> – no shoreline will be added or removed in this zone. Existing shoreline will remain accessible. Surfaces will include pavement or wooden boardwalks that are accessible for all site visitors.	<b>Concept B (Ontario Port)</b> – no shoreline will be added or removed in this zone. Existing shoreline will remain accessible. Surfaces will include pavement or wooden boardwalks that are accessible for all site visitors. Concept B includes wooden boardwalks along both sides of the Marina allowing users to get closer to the water and provides an opportunity to put small vessels (e.g., kayak, canoe) into the water.	Concept B provides more opportunity to get closer to the water with the addition of timber boardwalks on both sides of the Marina.
Facilitate recreational opportunities	Tenant integration and connectivity	Ability to move from one site opportunity to the next without obstruction (e.g., connected to Martin Goodman trail)	<ul style="list-style-type: none"> <li>Number of access points</li> <li>Clear legible access to all tenant sites from the public realm</li> <li>Visible integration of tenant landscapes with public realm design</li> </ul>	<b>Baseline</b> – the Marina borders private development to the west.	<b>Concept A (Park Marina)</b> – includes access to and from private development to the west, the pod structures to the north and Cinesphere to the northwest as well as the Public Waterfront and Forum zones in the public realm The Marina is accessible from a variety of points across the zone, including boating into the Marina itself.	<b>Concept B (Ontario Port)</b> – includes access to and from private development to the west, the pod structures to the north and Cinesphere to the northwest as well as the Public Waterfront and Forum zones in the public realm The Marina is accessible from a variety of points across the zone, including boating into the Marina itself.	Both concepts provide an equal opportunity for access throughout the site, connecting with tenant and other parts of the public realm zones.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Facilitate recreational opportunities	Provide recreational opportunities for users	Ability for users to participate in recreational activities	<ul style="list-style-type: none"> <li>Number of pathways/overall area of pathway for walking, cycling, running, etc. and access to water for kayaking, swimming</li> <li>Incorporate amenities for public use (e.g., washrooms, changerooms)</li> <li>Multi-functional and multi-seasonal spaces (e.g., use for all seasons)</li> </ul>	<b>Baseline</b> – the Marina currently offers private washrooms, shower and laundry facilities. Rentals (e.g., kayak, canoe) are available as seasonal rentals. The Marina boat slips are generally available from May to October.	<b>Concept A (Park Marina)</b> –the intent of the Park Marina is to provide areas for picnics, barbeques and public greenspace within the zone. Amenities will include washrooms and multi-functional spaces (e.g., pop-up event plaza) as well as a boardwalk and lighthouse areas. Opportunities for potential future commercial use will exist throughout the zone.	<b>Concept B (Ontario Port)</b> – the intent of the Ontario Port is to provide vibrant areas for potential future restaurants and shops. A public plaza and lighthouse will compliment shaded canopies and terraced decks. Concept B allows small vessels (e.g., kayaks, canoes) to get into the water.	Both concepts will enhance the areas around the water for park users and include amenities such as washrooms and food and beverage pavilions; however, Concept B provides a greater opportunity to access the water for kayaking or canoeing.
Facilitate educational opportunities	Provide educational opportunities for users	Ability for users to participate in educational activities	<ul style="list-style-type: none"> <li>Number and type of educational/interpretive opportunities, including opportunities for Indigenous peoples and treaty-rights holders (e.g., MCFN)</li> <li>No cost or non-ticketed</li> </ul>	<b>Baseline</b> – there will be no change to existing conditions.	<b>Concept A (Park Marina)</b> – there is no cost for entering or enjoying the outdoor space at the Marina; however, renting a boat slip, buying food or participating in other potential commercial use will involve payment.	<b>Concept B (Ontario Port)</b> – includes an area for a “Cultural Hub” intended as a placeholder to for specific educational/interpretive design opportunities. There is no cost for entering or enjoying the outdoor space; however, renting a boat slip, buying food or participating in other potential commercial use will involve payment.	Concept B provides greater opportunities for including educational activities for park users.
Provide a comfortable environment for site visitors	Year-round comfort (e.g., shade in the summer; pathways clear of snow in winter, wind protection in the winter and shoulder seasons)	Ability for users to use and enjoy the site comfortably throughout the year	<ul style="list-style-type: none"> <li>Areas with shade, cover, seating, protection from wind</li> <li>Creation of microclimate</li> <li>Access to food and beverages, and supporting facilities/sun and precipitation protected cover/pavilion</li> </ul>	<b>Baseline</b> – the shipwreck break wall provides protection from wave uprush to the inner marina. Few areas offer protection from shade or wind. Seating is available intermittently throughout.	<b>Concept A (Park Marina)</b> – includes more areas with shade along the waterfront and green areas throughout the zone for shade. The shipwreck break wall provides protection from wave uprush to the inner marina. Canopies and areas for seating will be available year-round.	<b>Concept B (Ontario Port)</b> –the shipwreck break wall provides protection from wave uprush to the inner marina. Access to food and beverage options and canopies for seating are available year-round.	Both concepts provide an opportunity to include areas with shade and cover from wind and rain. Opportunities to facilitate food and beverage amenities are included in both concepts.
Provide a comfortable environment for site visitors	Comfortable environment for site visitors	Overall site accessibility, or ability for the concept to offer accessible services (e.g., compliance with accessibility standards)	<ul style="list-style-type: none"> <li>Building code, public spaces, AODA, NYC Universal Design Guidelines (exceed ADA minimums), CPTED</li> </ul>	<b>Baseline</b> – infrastructure currently on site was built according to codes and standards applicable at the time of construction.	<b>Concept A (Park Marina)</b> – All codes and AODA guidelines to be met during design development.	<b>Concept B (Ontario Port)</b> – All codes and AODA guidelines to be met during design development.	Both concepts include accessibility standards and include area for all park users to walk along the shoreline (e.g., wooden boardwalk). Terraced seating opportunities will include wheelchair ramps.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Provide a comfortable environment for site visitors	Provide a safe and comfortable environment for site visitors	Maintain safe access to the site throughout phased construction	<ul style="list-style-type: none"> <li>▪ Preparation and implementation of Health and Safety plans, Traffic Control plans, etc. during construction</li> <li>▪ Ease of access for emergency vehicles</li> </ul>	<b>Baseline</b> – does not require construction; therefore, safe access throughout this zone would be maintained.	<b>Concept A (Park Marina)</b> – will implement approved plans during construction. Once construction is complete, emergency vehicles will be able to access the zone, as needed.	<b>Concept B (Ontario Port)</b> – will implement approved plans during construction. Once construction is complete, emergency vehicles will be able to access the zone, as needed.	Both concepts will maintain safe access throughout construction.
Provide a comfortable environment for site visitors	Provide a safe comfortable environment for site visitors	Ability to implement safety features for site visitors (e.g., lighting, safety call/button, Security staff)	<ul style="list-style-type: none"> <li>▪ Number and efficiency of safety features available to site visitors</li> <li>▪ Sense of safety by site visitors</li> <li>▪ Design and incorporate measures for safety to meet and exceed CPTED standards</li> </ul>	<b>Baseline</b> – the Marina currently provides 24/7 security services while operating.	<b>Concept A (Park Marina)</b> – provides an opportunity to install effective safety lighting and consider the implementation of a safety call button. Rails along the land-based boardwalk will be designed to reduce the potential for users to fall in the water.	<b>Concept B (Ontario Port)</b> – provides an opportunity to install effective safety lighting and consider the implementation of a safety call button. Rails along the land-based boardwalk will be designed to reduce the potential for users to fall in the water.	Both concepts are equal in their ability to implement safety features.
Provide a comfortable environment for site visitors	Provide a safe and comfortable environment for site visitors	Reduce roads and vehicle use within the site to lower potential for accidents with site visitors (e.g., reduce amount of heavy equipment needed during implementation/operation, timed access when users are not present)	<ul style="list-style-type: none"> <li>▪ Designated trail use</li> <li>▪ Design for non-vehicle traffic only (e.g., width of trail)</li> <li>▪ Design discrete servicing routes to minimize use of open space while providing aesthetic appeal and pedestrian use when not used for servicing</li> </ul>	<b>Baseline</b> – there will be no change to the existing environment for site visitors.	<b>Concept A (Park Marina)</b> – will require heavy equipment during construction. The Marina will continue to see boat/marine vessel use. Pathways and the boardwalk area provide access to the Water’s Edge and to the West Island and are intended for regular non-vehicle use only.	<b>Concept B (Ontario Port)</b> – will require heavy equipment during construction. The Marina will continue to see boat/marine vessel use. Pathways and the boardwalk area provide access to the Water’s Edge and to the West Island and are intended for regular non-vehicle use only.	Both concepts will require vehicles and heavy equipment to be on site throughout construction; however, the work area will be blocked for public use during this time to ensure safety. The zone is designated for non-vehicular traffic on land.
<b>Summary of Social Environment</b>					<ul style="list-style-type: none"> <li>▪ Results of the October 2022 engagement event indicate a general preference for Concept A.</li> <li>▪ Has greater potential to reduce noise with areas surrounded by vegetation.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provides greater opportunities for including educational activities for park users.</li> <li>▪ Provides more opportunity to get closer to the water with the addition of wood boardwalks along both sides of the Marina.</li> </ul>	Generally, both concepts are equal, providing for access throughout the site, connecting with tenant and other parts of the public realm zones. However, results of the October 2022 event indicate a preference for Concept A which provides more greenspace/vegetation.

Table F-3.3. Evaluation of the Cultural Environment –The Marina.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Concept A (Park Marina)	Concept B (Ontario Port)	Results/Rational
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes as per Ontario Place Strategic Conservation Plan	Compatible with identified built heritage resources and cultural heritage landscapes	Ability to conserve and promote identified built heritage features and cultural heritage landscapes	<ul style="list-style-type: none"> <li>Meets conservation strategies to reduce negative impacts of the proposed concept on cultural heritage resources and landscapes</li> </ul>	<b>Baseline</b> – existing conditions views of Lake Ontario, pathways and pedestrian trails but do not protect against flooding.	<b>Concept A (Park Marina)</b> – Concept A does not retain heritage attributes in situ and proposes changes to the current built environment and however mitigation measures in the design will meet the following conservation strategies: Public Realm, Climate Change (Flooding), Accessibility Requirements, Ontario Place Branding, Interpretation, Circulation and Water Features.	<b>Concept B (Ontario Port)</b> – Concept B does not retain heritage attributes in situ and proposes changes to the current built environment and however mitigation measures in the design will meet the following conservation strategies: Public Realm, Climate Change (Flooding), Accessibility Requirements, Ontario Place Branding, Interpretation, Circulation and Water Features.	Both concepts meet the same amount of conservation strategies.
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes	Compatibility with the original vision for Ontario Place (Hough design)	Preservation and/or restoration of existing shoreline and shoreline amenities, landforms and ecological habitat	<ul style="list-style-type: none"> <li>Implement Hough design principles</li> <li>Enhance safe public access to waterfront</li> <li>Reintroduction of a destination marina environment</li> </ul>	<b>Baseline</b> – the Marina has existing heritage structures from the original Ontario Place designs; however, these structures are currently unusable and deteriorating.	<b>Concept A (Park Marina)</b> – will enhance public access to the shoreline and reintroduce the Marina as a destination environment.	<b>Concept B (Ontario Port)</b> – will enhance public access to the shoreline and reintroduce the Marina as a destination environment. Concept B provides more opportunities to get closer to the water with the wood boardwalks.	Concept B provides greater opportunity to reintroduce the Marina as a destination environment for park users.
<u>Indigenous Cultural:</u> Reflect Indigenous perspectives	Design that is reflective of Indigenous input and feedback and that facilitates traditional and cultural activities	Ability for the concept to integrate Indigenous input and perspectives into various aspects of design as they relate to different assessment criteria	<ul style="list-style-type: none"> <li>Integration of feedback from Indigenous communities into design options to ensure appropriate management of environment and opportunities for traditional and cultural activities</li> <li>Change in the presence of culturally significant plant species and mature trees</li> </ul>	<b>Baseline</b> – existing conditions does not reflect the integration of feedback from Indigenous communities.	<b>Concept A (Park Marina)</b> – can integrate input from Indigenous communities and perspectives such as a Welcome Bridge or Indigenous artist residences.	<b>Concept B (Ontario Port)</b> – can integrate input from Indigenous communities and perspectives such as a Welcome Bridge, Indigenous artist residences or a Cultural Pavilion.	Concept B provides a greater opportunity to integrate feedback into the overall design concept by including the Cultural Pavilion. Other ideas that may be implemented into the final (detailed) design includes Indigenous art.
<u>Indigenous Cultural:</u> Respect and reflect treaty history and current cultural landscapes	Respect and reflect treaty history and current cultural landscapes	Integration of Indigenous design principles and programming	<ul style="list-style-type: none"> <li>Design concepts which appropriately reflect local Indigenous culture based on input received from Indigenous communities.</li> </ul>	<b>Baseline</b> – existing conditions does not reflect the integration of feedback from Indigenous communities.	<b>Concept A (Park Marina)</b> – will include Indigenous design principles and programming into the final design by continuing to engage with Indigenous communities regarding ideas such as implementing the Welcome Bridge or Indigenous artist residences. Siting Indigenous public art in the Marina highlights the	<b>Concept B (Ontario Port)</b> – will include Indigenous design principles and programming into the final design by continuing to engage with Indigenous communities regarding ideas such as implementing the Welcome Bridge, Indigenous artist residences and the Cultural Pavilion. Siting Indigenous public art in the Marina highlights the	Concept B provides a greater opportunity to integrate Indigenous design principles and planning.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Summary of the Cultural Environment					important relationship to water.  <ul style="list-style-type: none"> <li>▪ Both concepts meet the same amount of conservation strategies.</li> </ul>	important relationship to water.  <ul style="list-style-type: none"> <li>▪ Both concepts meet the same amount of conservation strategies.</li> <li>▪ Provides greater opportunity to reintroduce the Marina as a destination environment for park users.</li> <li>▪ Provides more opportunity to integrate Indigenous design principles and planning objectives ultimately increasing the change to include more feedback/ideas from Indigenous communities into the overall design concept.</li> </ul>	Concept B meets the objectives of the Cultural Environment more than Concept A.

Table F-3.4. Evaluation of the Technical Environment – The Marina.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Potential for the concept to be easily implemented	Constructability	Ease of construction and construction techniques	<ul style="list-style-type: none"> <li>Identified construction techniques</li> </ul>	<p><b>Baseline</b> – no activities are required for implementation.</p> <p><b>Concept A (Park Marina)</b> – will include additional fill material to raise the grades and address flooding issues.</p> <p><b>Concept B (Ontario Port)</b> – will include additional fill material to raise the grades and address flooding issues.</p>	Both concepts will require the same general construction techniques.
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Reasonable permitting abilities and timelines	<ul style="list-style-type: none"> <li>Permitting requirements and known timelines</li> <li>Ability to obtain permit (e.g., SARA permit)</li> </ul>	<p><b>Baseline</b> – no permits are required to maintain the site in its current state.</p> <p><b>Concept A (Park Marina)</b> – Prior to the start of work a Notice of Activity is required under the <i>Endangered Species Act</i>, for activities that may impact barn swallow habitat. A permit under the <i>Endangered Species Act</i> may be required where work has the potential to impact American eel and barn swallow habitat.</p> <p><b>Concept B (Ontario Port)</b> – Prior to the start of work a Notice of Activity is required under the <i>Endangered Species Act</i>, for activities that may impact barn swallow habitat. A permit under the <i>Endangered Species Act</i> may be required where work has the potential to impact American eel and barn swallow habitat.</p>	Both concepts align with regulatory requirements equally and will have approximately the same permitting and approval timelines.
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Meets applicable planning objectives and standards (e.g., PPS, A Place to Grow: Growth Plan for the GGH, City of Toronto)	<ul style="list-style-type: none"> <li>Identify and maintain compliance with applicable planning objectives and standards</li> </ul>	<p><b>Baseline</b> – no additional compliance with applicable planning objectives and standards is required.</p> <p><b>Concept A (Park Marina)</b> – meets the objectives of applicable planning requirements (e.g., providing public access to the shoreline as outlined in the PPS).</p> <p><b>Concept B (Ontario Port)</b> – meets the objectives of applicable planning requirements (e.g., providing public access to the shoreline as outlined in the PPS).</p>	Both concepts meet the objectives of applicable planning requirements equally, including the PPS, A Place to Grow: Growth Plan for the GGH, and City of Toronto Official Plan).
Facilitate multi-modal access	Roadway/vehicle access to the site	Change in ability for site visitors to access the site by vehicle or water	<ul style="list-style-type: none"> <li>Number of safe drop-off locations and parking opportunities</li> <li>Overall area of onsite parking</li> <li>Facilitates water-born transportation (e.g., ferries, water taxis, private watercraft)</li> </ul>	<p><b>Baseline</b> – boats currently use the Marina based on seasonal and daily availability. There is no parking associated with this zone.</p> <p><b>Concept A (Park Marina)</b> – will improve the Marina to facilitate water-born transportation to and from Ontario Place.</p> <p><b>Concept B (Ontario Port)</b> – will improve the Marina to facilitate water-born transportation to and from Ontario Place.</p>	Both concepts facilitate water-born transportation.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Concept A (Park Marina) – N/A	Concept B (Ontario Port) – N/A	Results/Rational
Facilitate multi-modal access	Multi-modal connections to and within the site	Change in ability for site visitors to access the site by transit	<ul style="list-style-type: none"> <li>Number of public transit stops/hubs to the site</li> <li>Multi-modal hubs (e.g., public transit [first/last mile connections], tour/shuttle bus, vehicle pickup and drop-off)</li> <li>Accommodate looping/terminating surface transit routes</li> </ul>	Baseline – N/A	Concept A (Park Marina) – N/A	Concept B (Ontario Port) – N/A	This criterion is not applicable to the Marina since access to the site for transit users is through the Mainland.
Facilitate multi-modal access	Pedestrian and cycling network to and within site	Change in existing pedestrian and cycling network (e.g., bridges, trails)	<ul style="list-style-type: none"> <li>Number and type of cycling and pedestrian network</li> <li>Ability to access the site from adjacent venues, including Exhibition Place and Ontario Line Exhibition Place Station</li> <li>Connectivity for site visitors through the site (i.e., the improvements to the Martin Goodman Trail)</li> <li>Address conflicts between cyclists/pedestrians and cyclists/vehicles in intersection and access design</li> </ul>	Baseline – there will be no change in the existing pedestrian and cycling network.	Concept A (Park Marina) – existing networks will be enhanced. This zone is intended as a hub for social activities and there are no designated networks; however, pedestrians and cyclists can still get use the Marina.	Concept B (Ontario Port) – existing networks will be enhanced. This concept includes a wooden boardwalk along both sides of the Marina, including wood boardwalks for park users to get close to the water. This zone is intended as a hub for social activities and there are no designated networks; however, pedestrians and cyclists can still get use the Marina.	Concept B provides greater opportunity to enhance the pedestrian network by allowing park users to get closer to the water via a wooden boardwalk feature.
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of impervious surfaces	<ul style="list-style-type: none"> <li>Overall area of pervious vs. impervious surfaces across the site</li> <li>Reduce hardscape areas</li> <li>Provide sustainable permeable solutions including greening of the surface parking lots</li> </ul>	Baseline – this zone is currently mostly pavement and open water.	Concept A (Park Marina) – Marina will continue to consist mainly of hardscape areas (e.g., interlocking pavers, sheet pile) in order to protect the shoreline and offer protection from flooding. Wooden boardwalks will be incorporated into this design.	Concept B (Ontario Port) – Marina will continue to consist mainly of hardscape areas (e.g., interlocking pavers, sheet pile) in order to protect the shoreline and offer protection from flooding. Wooden boardwalks will be incorporated into this design.	Both concepts will result in the same amount of hardscape and pervious surfaces.
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of increased elevation	<ul style="list-style-type: none"> <li>Minimum design elevations that meet or exceed 100-year storm event</li> </ul>	Baseline – this zone currently experiences flooding.	Concept A (Park Marina) – flood protection will be incorporated by raising the elevation of the Marina to avoid flooding by high water levels and a 100-year storm event.	Concept B (Ontario Port) – flood protection will be incorporated by raising the elevation of the Marina to avoid flooding by high water levels and a 100-year storm event.	Both concepts will include flood protection measures that meet or exceed the 100-year storm event.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Sediment management	Improve sediment management processes	Change in sediment management practices or volume	<ul style="list-style-type: none"> <li>Volume of removed sediment</li> <li>Beneficial reuse</li> <li>Ability to integrate sediment stabilization/capture into construction or integration</li> <li>Efficacy of erosion and sediment control strategies implemented to reduce sediment laden runoff from leaving the work area</li> <li>Need for dredging after implementation</li> </ul>	<p><b>Baseline</b> – no change to existing conditions.</p> <p><b>Concept A (Park Marina)</b> – will not require dredging after implementation. During construction, routine erosion and sediment control strategies will be implemented.</p> <p><b>Concept B (Ontario Port)</b> – will not require dredging after implementation. During construction, routine erosion and sediment control strategies will be implemented.</p>	Both concepts will manage sediment and erosion during construction.
Remediate existing contamination	Improve soil and/or water quality	Change in soil and water contamination	<ul style="list-style-type: none"> <li>Disturbance of contamination during construction/implementation.</li> <li>Ability for the site to maintain or improve conditions (i.e., not increase contamination)</li> </ul>	<p><b>Baseline</b> – currently offers gasoline and clear diesel fuel for boat users. Locations across the Marina that consists of artificial fill contain known soil (e.g., mercury) and groundwater (e.g., polycyclic aromatic hydrocarbons) parameter exceedances.</p> <p><b>Concept A (Park Marina)</b> – includes boat traffic and mooring. Gas and diesel fuel will continue to be offered to boat operators that may contribute to potential ongoing contamination. Soil contamination will be managed during construction, as needed.</p> <p><b>Concept B (Ontario Port)</b> – includes boat traffic and mooring. Gas and diesel fuel will continue to be offered to boat operators that may contribute to potential ongoing contamination. Soil contamination will be managed during construction, as needed.</p>	Both concepts will manage existing contamination equally during construction with the intention of improving existing conditions Both concepts include ongoing use of boats, including providing fuel throughout operations.
Upgrade or replace infrastructure and buildings	Improve infrastructure conditions for long-term use	Change in infrastructure and building condition	<ul style="list-style-type: none"> <li>Conserve and adapt extant structures where possible</li> <li>Number and magnitude of change in buildings and supporting site infrastructure (e.g., utilities)</li> <li>Decommission and remove old infrastructure along with design and construction of new buildings and supporting site infrastructure</li> </ul>	<p><b>Baseline</b> – existing buildings will be decommissioned and removed (e.g., East Marina Village Building, Marina North Washroom).</p> <p><b>Concept A (Park Marina)</b> – includes a new office and amenities building, canopies, a light house and boardwalk that will ultimately improve infrastructure conditions for long-term use.</p> <p><b>Concept B (Ontario Port)</b> – includes terraced decks, space for potential future commercial buildings, shade canopies, a Cultural Hub and a lighthouse that will ultimately improve infrastructure conditions for long-term use.</p>	Both concepts include removing old infrastructure and replacing it with buildings, boardwalks and pavilions that will be designed according to conditions at this zone and will be constructed for long-term use.
Maintain flexibility for future programming	Optionality for future use (i.e., more than one fixed use)	Flexibility for use	<ul style="list-style-type: none"> <li>Number of feasible event ideas (paid or free events)</li> <li>Number and type of utilities needed</li> </ul>	<p><b>Baseline</b> – existing utilities exist to service the operating Marina (e.g., fuel, washrooms, shower and laundry services, wireless internet). This site is generally used as a Marina area only.</p> <p><b>Concept A (Park Marina)</b> – will continue to offer the existing features at the Marina. Concept A also includes a pop-up event plaza providing a flexible space for future uses.</p> <p><b>Concept B (Ontario Port)</b> – will continue to offer the existing features at the Marina.</p>	Concept A includes the pop-up event plaza that will provide a flexible space for future uses, in addition to the Marina space.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
<p>Summary of the Technical Environment</p>				<ul style="list-style-type: none"> <li>▪ Includes the pop-up event plaza that will provide a flexible space for future uses, in addition to the Marina space.</li> <li>▪ Provides greater opportunity for pedestrians to get closer to the water by using the boardwalk feature.</li> </ul>	<p>Both concepts are generally equal in terms of meeting the objectives established for the Technical Environment by improving infrastructure, increasing flood protection, and facilitating water-borne transportation. Features from both concepts can be integrated into the design to achieve the best outcome (e.g., flexible space, boardwalk).</p>

Table F-3.5. Evaluation of the Economic Environment – The Marina.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational	
Construction costs	Estimated construction cost	Cost relative to other concepts	<ul style="list-style-type: none"> <li>Change in cost</li> </ul>	<p><b>Baseline</b> – there are no construction costs.</p> <p><b>Concept A (Park Marina)</b> – are similar to Concept B.</p> <p><b>Concept B (Ontario Port)</b> – are similar to Concept A.</p>	Both concepts have similar construction costs.	
Operation and Maintenance	Estimated annual operating costs for staff resources, ongoing operation, and maintenance activities	Cost relative to other concepts	<ul style="list-style-type: none"> <li>Change in cost</li> </ul>	<p><b>Baseline</b> – existing operating costs include maintaining the Marina for boats/water vessels.</p> <p><b>Concept A (Park Marina)</b> – staff will continue to be required to maintain the Marina following construction. Routine park maintenance will be required, including garbage collection as well as trail and public space maintenance.</p> <p><b>Concept B (Ontario Port)</b> – staff will continue to be required to maintain the Marina following construction. Routine park maintenance will be required, including garbage collection as well as trail and public space maintenance.</p>	Both concepts are anticipated to have about the same level of operation and maintenance activities. Boat slips and boardwalks in both concepts will be designed for year-round use, reducing the current level of maintenance required for those features.	
Economic benefits	Ability to offer contract procurement, jobs, or other economic benefits from constructing and operating the park	Change in economic opportunities	<ul style="list-style-type: none"> <li>Rentals (e.g., water use equipment)</li> <li>Food and beverage sales</li> <li>Job opportunities that are inclusive of equity deserving communities</li> <li>Provide skill training</li> </ul>	<p><b>Baseline</b> – existing economic opportunities include rentals (e.g., kayak), seasonal operation of the Marina (e.g., boat slip rentals, fuel sales) and shops.</p> <p><b>Concept A (Park Marina)</b> – seasonal operation of the Marina will continue. Additional future opportunities include commercial areas (e.g., restaurants). Construction will provide job opportunities and support skill training to the extent possible.</p> <p><b>Concept B (Ontario Port)</b> – seasonal operation of the Marina will continue. Additional future opportunities include commercial areas (e.g., food and beverage areas). Construction will provide job opportunities and support skill training to the extent possible.</p>	Both concepts will include job opportunities and skill training during construction. The Marina will continue to operate seasonally following construction.	
<b>Summary of the Economic Environment</b>				<ul style="list-style-type: none"> <li>Both concepts have similar construction and maintenance costs.</li> <li>Both concepts have similar economic opportunities (e.g., jobs).</li> </ul>	<ul style="list-style-type: none"> <li>Both concepts have similar construction and maintenance costs.</li> <li>Both concepts have similar economic opportunities (e.g., jobs).</li> </ul>	Both concepts have similar costs in regard to construction and maintenance, and provide similar economic benefits.

Table F-3.6. Evaluation of Sustainability – The Marina.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Reduce contribution to climate change	Low atmospheric emissions (e.g., air, GHG) associated with the concept	Air and GHG emissions during construction (vehicle and heavy equipment emissions) and “operation/implementation” (e.g., air conditioning, use of fossil fuel)	<ul style="list-style-type: none"> <li>Change in emissions relative to “Do-Nothing” baseline concept</li> </ul>	<p><b>Baseline</b> – there are no emissions associated with construction vehicles or heavy equipment.</p> <p><b>Concept A (Park Marina)</b> – will require the use of heavy equipment and vehicles during construction. The Marina office will require heating and cooling in the appropriate seasons. This zone will continue to offer fuel for motorized vessels.</p> <p><b>Concept B (Ontario Port)</b> – will require the use of heavy equipment and vehicles during construction. The Cultural Hub will require heating and cooling in the appropriate seasons. This zone will continue to offer fuel for motorized vessels.</p>	The use of heavy equipment and vehicles will be relatively similar for both concepts in terms of air and GHG emissions throughout construction. Both concepts include buildings that will require seasonal heating and cooling throughout operations.
Reduce contribution to climate change	Heat island effect	Ability for the concept to increase vegetation and reduce unnatural hard surfaces (e.g., concrete)	<ul style="list-style-type: none"> <li>Overall area of vegetation (trees, green roofs) and ability to provide shade throughout the site</li> <li>Overall area of hard surfaces</li> </ul>	<p><b>Baseline</b> – the amount of existing vegetation and hard surface contributes to the heat island effect at Ontario Place.</p> <p><b>Concept A (Park Marina)</b> – will increase the area of vegetation throughout the zone.</p> <p><b>Concept B (Ontario Port)</b> – provides more area for shade canopies.</p>	Concept A provides an opportunity to increase overall vegetation in this zone.
Include sustainable infrastructure and buildings	Building resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles, wildfires)	Ability for the concept to align with all applicable building codes (e.g., Canadian Standards Association)	<ul style="list-style-type: none"> <li>Compliance with codes and standards (as-built/design documents)</li> </ul>	<p><b>Baseline</b> – some infrastructure in this zone will be decommissioned and removed due to age and associated building condition.</p> <p><b>Concept A (Park Marina)</b> – all infrastructure (e.g., washrooms, office, canopies, lighthouse, boardwalk) will be in compliance with applicable codes and standards.</p> <p><b>Concept B (Ontario Port)</b> – all infrastructure (e.g., washrooms, office, canopies, lighthouse, boardwalk) will be in compliance with applicable codes and standards.</p>	Both concepts provide an equal ability to align with all applicable codes and standards.
Include sustainable infrastructure and buildings	Infrastructure resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles)	Adaptability and resilience of infrastructure to withstand a changing climate	<ul style="list-style-type: none"> <li>Infrastructure and site to withstand severe weather and temperatures</li> <li>Designed for longevity</li> </ul>	<p><b>Baseline</b> – existing conditions will continue to be impacted by flooding and stagnant water.</p> <p><b>Concept A (Park Marina)</b> – will provide adaptability and resilience in a changing climate by reinforcing the shoreline areas and building the land-based areas above the flood limit. Buildings will be designed to withstand severe weather events and temperatures.</p> <p><b>Concept B (Ontario Port)</b> – will provide adaptability and resilience in a changing climate by reinforcing the shoreline areas and building the land-based areas above the flood limit. Buildings will be designed to withstand severe weather events and temperatures.</p>	Both concepts are being designed to withstand severe weather and temperatures, and will be designed for longevity to protect against a changing climate.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Include sustainable infrastructure and buildings	Green Infrastructure design and build	<ul style="list-style-type: none"> <li>Compliance with applicable design standards and guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>Number or size of certified buildings, as applicable</li> <li>Building approvals</li> <li>Zero Carbon Emissions</li> <li>Waterfront design</li> <li>Requirements identified throughout design development</li> <li>SITES certification (i.e., sustainable sites)</li> <li>Waterfront Edge Design Guidelines</li> </ul>	<p><b>Baseline</b> – existing conditions will continue to be impacted by flooding and stagnant water.</p> <p><b>Concept A (Park Marina)</b> – this concept incorporates the intent and design strategies outlined in the Waterfront Edge Design Guidelines to the extent possible (e.g., avoid or reduce coastal hazards, improve connections to the water).</p> <p><b>Concept B (Ontario Port)</b> – this concept incorporates the intent and design strategies outlined in the Waterfront Edge Design Guidelines to the extent possible (e.g., avoid or reduce coastal hazards, improve connections to the water).</p>	Both concepts meet the intent and design strategies outlined in the Waterfront Edge Design Guidelines.
Sustainable Communities	Community-based solutions	Environmental and/or socio-economic benefits	<ul style="list-style-type: none"> <li>Green infrastructure solutions (e.g., permeable paving, green roofs)</li> <li>Climate change solutions (e.g., design new building to have zero carbon emissions, reduce parking on-site, potential for solar power)</li> <li>Transportation facilities: trails and multi-use pathways</li> <li>Community greenspace: parks</li> </ul>	<p><b>Baseline</b> – existing conditions provide existing trails but limited park space for this zone.</p> <p><b>Concept A (Park Marina)</b> – includes pathways connecting to the West Island and the Water’s Edge. Concept A provides more opportunity to include a greener marina concept and is focused on maximizing public space.</p> <p><b>Concept B (Ontario Port)</b> – includes pathways connecting to the West Island and the Water’s Edge. Concept B is more commercial-focused; however public space and gathering areas are included.</p>	Both concepts provide pathways and transportation facilities for water vessels; however, Concept A provides a greater opportunity to include a greener marina concept that is focused on maximizing public space.
Summary for Sustainability.				<ul style="list-style-type: none"> <li>Provides an opportunity to increase overall vegetation in this zone.</li> <li>Both concepts include buildings that will require seasonal heating and cooling throughout operations.</li> <li>Both concepts are being designed to withstand severe weather and temperatures, and will be designed for longevity to protect against a changing climate.</li> </ul>	<ul style="list-style-type: none"> <li>Both concepts include buildings that will require seasonal heating and cooling throughout operations.</li> <li>Both concepts are being designed to withstand severe weather and temperatures, and will be designed for longevity to protect against a changing climate.</li> </ul> <p>Generally, both concepts meet the Sustainability objectives, with Concept A providing the opportunity for more vegetation throughout the zone.</p>

**Brigantine Cove**

Table F-4.1. Evaluation of the Natural Environment – Brigantine Cove.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Concept A (Event & Activities)	Concept B (Wetland & Nature)	Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in habitat availability	<ul style="list-style-type: none"> <li>Overall area of available habitat</li> <li>Number of natural features and linkages for aquatic species movement (e.g., along the shore from shallow water to deeper offshore water)</li> </ul>	<b>Baseline</b> – current aquatic habitat includes vertical concrete walls, boulder, or rip-rap that provide no or little refuge spaces for fish, nutrient collection or potential spawning locations	<b>Concept A (Event &amp; Activities)</b> – may increase the area of overall riparian habitat by adding aquatic plants (e.g., rushes, sedges). Linkages for aquatic species to other areas of Lake Ontario (e.g., Bridge 1 at the Centre Entrance) will remain. Linkages may be improved by providing more opportunity to increase water flow and remove stagnant water and debris build-up (e.g., rebuilding the causeway at the East Gateway).	<b>Concept B (Wetland &amp; Nature)</b> – has a greater potential to increase overall riparian habitat by improving water quality and adding more aquatic plants (e.g., rushes, sedges) which provide habitat. Creating wetland conditions will help establish ecosystems where aquatic species may thrive. Aquatic linkages may be improved by providing more opportunity to increase water flow and remove stagnant water and debris build-up (e.g., opening the East Causeway by building a bridge).	<p>Concept B provides more potential to increase the overall area of riparian habitat. There is greater potential to include natural features (e.g., vegetation).</p> <p>Ongoing design and consultation with floating wetland experts will confirm final wetland location and design (i.e., can be brought closer to the shoreline to better provide aquatic habitat).</p>
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Potential increase or decrease in water quality parameters (e.g., TSS, contaminants, sand from volleyball courts, salt from parking lots and access)</li> <li>Sensory disturbance (e.g., vibrations) that may reduce the quality of available habitat</li> </ul>	<b>Baseline</b> – water quality is likely to decrease under existing conditions due to a number of existing anthropogenic influences including runoff from Remembrance Drive and parking lots. There is shallow slow moving water with soft substrates (e.g., silt, sand) and open water areas. Water quality has become an increasing issue at Brigantine Cove.	<b>Concept A (Event &amp; Activities)</b> – may improve water quality parameters by increasing aquatic plants around the cove edges; however potential harder edges that will facilitate event space cannot filter contaminants and runoff as well as a vegetated edge and may require chemical application to maintain the lawn area. Linkages may be improved by providing more opportunity to increase water flow and remove stagnant water and debris build-up (e.g., rebuilding the causeway at the East Gateway).	<b>Concept B (Wetland &amp; Nature)</b> – wetlands typically increase water quality including nutrient levels, suspended solids and microbes, and will help filter anthropogenic pollutants. Aquatic linkages may be improved by providing more opportunity to increase water flow and remove stagnant water and debris build-up (e.g., introducing fountains, opening the East Causeway by replacing it with the East Bridge).	Concept B has greater potential to improve water quality. Both concepts will require in-water work during construction; however, equipment will not be allowed in the water unless it is clean and free of fluid leaks.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Concept A (Event & Activities)	Concept B (Wetland & Nature)	Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in water quality	<ul style="list-style-type: none"> <li>Potential to increase or decrease in water quality parameters (e.g., TSS, contamination, salt) due to existing conditions or spills during construction</li> <li>Weight of contaminants absorbed</li> </ul>	<b>Baseline</b> – water quality parameters are likely to decrease under existing conditions due to a number of existing anthropogenic influences including runoff from Remembrance Drive and parking lots. There is shallow slow moving water with soft substrates (e.g., silt, sand) and open water areas. Water quality has become an increasing issue at Brigantine Cove.	<b>Concept A (Event &amp; Activities)</b> – may improve water quality parameters by increasing aquatic plants around the cove edges; however potential harder edges that will facilitate event space cannot filter contaminants and runoff as well as a vegetated edge and may require chemical application to maintain the lawn area. Linkages may be improved by providing more opportunity to increase water flow and remove stagnant water and debris build-up (e.g., rebuilding the causeway at the East Gateway).	<b>Concept B (Wetland &amp; Nature)</b> – wetland vegetation can increase water quality including nutrient levels, suspended solids and microbes, and will help filter anthropogenic pollutants. Aquatic linkages may be improved by providing more opportunity to increase water flow and remove stagnant water and debris build-up (e.g., introducing fountains, opening the East Causeway by replacing it with the East Bridge).	Concept B provides a greater opportunity to increase water quality by improving water circulation and flow, decreasing stagnant water and debris build-up, filtering runoff and contaminants, and providing dissolved oxygen to the water column.
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in Lake Ontario Shoreline systems (e.g., sensitive bluffs, dynamic beach)	<ul style="list-style-type: none"> <li>Impacts on shoreline</li> <li>Ability for the concept to meet the recommendations of the Shoreline and Hazard Assessment</li> </ul>	<b>Baseline</b> - the shoreline around Brigantine cove is artificially constructed and consists of vertical concrete walls and boulders.	<b>Concept A (Event &amp; Activities)</b> – will maintain a concrete wall along the north shore and stabilize shoreline edge with large stone and vegetation.	<b>Concept B (Wetland &amp; Nature)</b> – will maintain a concrete edge along the north shore and include shoreline enhancements along the south shore.	Both concepts will create a positive change in the shoreline around Brigantine Cove. Both concepts maintain recommendations from the Shoreline and Hazard Assessment (e.g., improvements or maintenance to continue to function and minimize flooding).
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Stormwater management and infrastructure	<ul style="list-style-type: none"> <li>Ability to establish appropriate, effective, and sustainable stormwater management practices and infrastructure</li> <li>Potential to mitigate or protect against flood risks from Lake Ontario (e.g., wave uprush)</li> </ul>	<b>Baseline</b> – this area will continue to flood under existing conditions. Climate change has resulted in raising lake levels which have flooded the shoreline.	<b>Concept A (Event &amp; Activities)</b> – will increase stormwater management through the layered edges that will prevent flooding of the existing paved site (north of the cove).	<b>Concept B (Wetland &amp; Nature)</b> – will increase stormwater management since the wetland area will allow for flexibility in managing occasional flooding. Wetlands are generally resistant through flood conditions.	Both concepts offer appropriate, effective and sustainable stormwater management to protect against flood risks.
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in hydrological function	<ul style="list-style-type: none"> <li>Disturbance to physical hydraulic properties of soil/land above or below the water table (e.g., grading, backfilling)</li> </ul>	<b>Baseline</b> – there will be no change to the existing physical hydraulic properties at the zone.	<b>Concept A (Event &amp; Activities)</b> – hydraulic function around Brigantine Cove would have been disturbed during original construction. Grading along the shoreline is anticipated to be minimal. Dewatering at this zone is not anticipated.	<b>Concept B (Wetland &amp; Nature)</b> – hydraulic function along Brigantine Cove would have been disturbed during original construction. Grading along the shoreline is anticipated to be minimal. Dewatering at this zone is not anticipated.	A negligible change to hydraulic function may occur from either concept. Both concepts are considered to be equal in terms of disturbance to physical hydraulic properties.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Concept A (Event & Activities)	Concept B (Wetland & Nature)	Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in quantity	<ul style="list-style-type: none"> <li>Area of pervious surface (to allow the infiltration of water into the soil)</li> </ul>	<b>Baseline</b> – the current shoreline is a mix of armoured stone and concrete rubble and rip rap.	<b>Concept A (Event &amp; Activities)</b> – may incorporate areas of paved surfaces for the land-based boardwalk areas. Lawn areas may require chemical applications during operations.	<b>Concept B (Wetland &amp; Nature)</b> – is all pervious except for the surface underlying the Children's Play Area.	Concept B provides a better opportunity to create a positive change to managing water quantity.
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in quality	<ul style="list-style-type: none"> <li>Potential for increased or decreased in water quality parameters compared to existing conditions</li> </ul>	<b>Baseline</b> – the Phase 2 Environmental Site Assessment indicates there are no groundwater exceedances around Brigantine Cove.	<b>Concept A (Event &amp; Activities)</b> – maintenance of the pathways/walkways or vegetation around Brigantine Cove may contribute to groundwater quality (e.g., deicing salt, pesticides).	<b>Concept B (Wetland &amp; Nature)</b> – maintenance of the pathways/walkways or vegetation around Brigantine Cove may contribute to groundwater quality (e.g., deicing salt, pesticides). The vegetation surrounding Brigantine Cove may provide a better opportunity to filter contaminants before entering the water.	<p>Concept B provides a better opportunity to filter contaminants before entering Brigantine Cove.</p> <p>During construction, all efforts will be made to reduce the potential for spills and waste will not be deposited into the lake. It is not anticipated that fertilizer will be used to maintain any of the vegetation implemented by either concept.</p>
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the area and connectivity of available habitat	<ul style="list-style-type: none"> <li>Area of habitat created or removed including mature trees, other native and non-native vegetation, wetlands, and structures</li> <li>Connectivity of habitat (e.g., linkages to other parks, migration routes)</li> <li>Number of habitat features impacted (e.g., turtle basking areas, shoreline)</li> <li>Number of species impacted</li> </ul>	<b>Baseline</b> – no habitat will be created or removed. The cove provides existing habitat for a variety of species. Some buildings surrounding the cover (e.g., Entrance Plaza Hut, Round Hut) provide nesting opportunities for birds, including barn swallows. Based on the Natural Heritage report, the southern shore provides an opportunity for landbird, bat and small mammal habitat creation, and the cove provides an opportunity for waterfowl, wetland bird and small mammal habitat creation.	<b>Concept A (Event &amp; Activities)</b> – increases potential for trees around the lawn areas and shoreline. Connectivity to other areas of Lake Ontario (e.g., Bridge 1 at the Centre Entrance) will remain. Linkages may be improved by providing more opportunity to increase water flow and remove stagnant water and debris build-up (e.g., rebuilding the causeway at the East Gateway).	<b>Concept B (Wetland &amp; Nature)</b> – improves habitat for some insects, waterfowl, amphibians, aquatic reptiles, and marsh breeding birds. Connectivity to other areas of Lake Ontario (e.g., Bridge 1 at the Centre Entrance) will remain. Aquatic linkages may be improved by providing more opportunity to increase water flow and remove stagnant water and debris build-up (e.g., rebuilding the causeway at the East Gateway).	Concept B provides greater opportunities for adding and improving habitat by creating wetlands and planting more vegetation around the cove. The Entrance Plaza Hut and Round Hut are likely to be demolished regardless of which design concept is implemented.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Concept A (Event & Activities)	Concept B (Wetland & Nature)	Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Sensory disturbance (e.g., noise, dust, light, vibrations)</li> <li>Increase or decrease of forest structure (canopy, sub-canopy, understory)</li> <li>Interference of habitat by buildings/structures (e.g., glass/mirrored buildings alongside bird habitat)/people (e.g., encroachment on habitat)/suitability of habitat</li> </ul>	<b>Baseline</b> – no change to existing conditions. Existing sensory disturbance from human activity and park use will remain.	<b>Concept A (Event &amp; Activities)</b> – includes trees and vegetated area around the cove which will increase the amount of trees. The McMillan Treehouse, a children’s play area and washrooms will be built which are not likely to be used for nesting due to the level of human activity.	<b>Concept B (Wetland &amp; Nature)</b> – includes a greater increase in the amount of trees around the cove area. A playground will be built which will likely not be used for nesting due to the level of human activity.	Concept B provides a greater opportunity to increase the forest structure at this zone. Sensory disturbance during construction activities is anticipated to be the same for both concepts.
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in vegetation communities and species, including vegetation communities of concern	<ul style="list-style-type: none"> <li>Overall area of vegetation</li> <li>Occurrences of invasive plant species</li> </ul>	<b>Baseline</b> – existing vegetation includes some trees and shrubs surrounding the cove area as well as Japanese knotweed which is an invasive species which may continue to spread (via wind, water, animals, humans).	<b>Concept A (Event &amp; Activities)</b> – includes trees and vegetated area around the cove.	<b>Concept B (Wetland &amp; Nature)</b> – includes a greater increase in overall vegetation within the cove (e.g., wetlands) and around the cove.	Concept B provides a greater opportunity to increase the overall area of vegetation at this zone. Invasive species can be effectively eliminated/reduced or managed during construction for both concepts.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Terrestrial wildlife, including species at risk (SAR)	Change in movement (e.g., migration, access to water)	<ul style="list-style-type: none"> <li>Barriers (e.g., open excavation during construction, buildings) or filters (e.g., fencing) to wildlife movement reducing connectivity of habitat whether existing (e.g., structures already in place) or part of the alternative design (e.g., new infrastructure)</li> <li>Retention or creation of nesting opportunities for species at risk (e.g., barn swallow)</li> </ul>	<b>Baseline</b> – no change to existing conditions.	<b>Concept A (Event &amp; Activities)</b> – the McMillan Treehouse, Children’s Play Area and washrooms are planned for this area which are not anticipated to become a barrier to wildlife movement or create nesting opportunities considering the level of human activity likely to occur. Rebuilding the causeway at the East Gateway may provide nesting opportunities for some birds (e.g., barn or cliff swallows) and improve connectivity between habitat areas.	<b>Concept B (Wetland &amp; Nature)</b> – a playground and washrooms are planned for this concept which are not anticipated to become a barrier to wildlife movement or create nesting opportunities considering the level of human activities likely to occur. Rebuilding the causeway at the East Gateway may provide nesting opportunities for some birds (e.g., barn or cliff swallows) and improve connectivity between habitat areas.	Both concepts should provide equal access to the water for terrestrial wildlife. Both concepts will include the removal of the Entrance Plaza Hut and round Hut outside of the breeding bird active nesting season.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Concept A (Event & Activities)	Concept B (Wetland & Nature)	Result/Rational
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Terrestrial wildlife species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Wildlife fatality occurrence(s)</li> <li>Protected species listing</li> <li>Increase chance of fatality (e.g., glass buildings and birds)</li> </ul>	<b>Baseline</b> – no change to existing conditions. The cove provides existing habitat for a variety of species. Some buildings surrounding the cover (e.g., Entrance Plaza Hut, Round Hut) provide nesting opportunities for birds, including barn swallows.	<b>Concept A (Event &amp; Activities)</b> – wildlife fatalities may occur during construction. There are no glass buildings included in this concept.	<b>Concept B (Wetland &amp; Nature)</b> – wildlife fatalities may occur during construction. There are no glass buildings included in this concept.	Both concepts will increase the chance of wildlife mortality during construction equally; however, best practices and mitigation measures will reduce the chance of mortality risk to the extent possible. Both concepts will include the removal of the Entrance Plaza Hut and round Hut outside of the breeding bird active nesting season. Neither concept is anticipated to increase wildlife mortality once implemented.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in movement	<ul style="list-style-type: none"> <li>Barriers to aquatic species movement due to temporary or permanent structures or infilling creating habitat fragmentation</li> <li>Water current changes that may impact species ability to use the water</li> </ul>	<b>Baseline</b> – the current shoreline is a mix of armoured stone and concrete rubble and rip rap that previously placed in the water creating a barrier to aquatic species movement.	<b>Concept A (Event &amp; Activities)</b> – shoreline reconstruction and enhancement will be required which will impact aquatic movement during construction. Rebuilding the causeway at the East Gateway and introducing fountains that will circulate the water may improve aquatic movement.	<b>Concept B (Wetland &amp; Nature)</b> – no infilling is required for this concept; however, in-water work will be completed for shoreline reconstruction and enhancement as well as to build the wetland habitat in this area which will impact aquatic movement. Rebuilding the causeway at the East Gateway and introducing fountains that will circulate the water may improve aquatic movement.	Both concepts will require in-water work during construction to install fountains, restore the shoreline and/or create wetland habitat that may restrict aquatic species movement. Both concepts include rebuilding the East Gateway and installing fountains which will ultimately improve water circulation and aquatic species movement.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Fatality occurrence(s)</li> <li>Spills into water (volume)</li> <li>Construction debris water entering the lake (volume)</li> </ul>	<b>Baseline</b> – no change to existing conditions.	<b>Concept A (Event &amp; Activities)</b> – will require in-water work during construction. During operations, chemical applications to the lawn area may be required and has a lower chance of being filtered be the smaller vegetated edges.	<b>Concept B (Wetland &amp; Nature)</b> – will require in-water work during construction. The vegetation surrounding Brigantine Cove may provide a better opportunity to filter contaminants before entering the water.	Aquatic species mortality risk is considered equal for both concepts. The risk of spills and construction debris entering the water is considered the same. Both concepts will require in-water work during construction.
Maintain and improve air quality	Air quality	Change in number and diversity of trees and canopy cover	<ul style="list-style-type: none"> <li>Area and type of vegetative cover</li> </ul>	<b>Baseline</b> – no change in area or diversity of vegetative cover.	<b>Concept A (Event &amp; Activities)</b> – trees and vegetation will be planted around the cove area.	<b>Concept B (Wetland &amp; Nature)</b> – Concept B provides a better opportunity to increase the area and type of vegetative cover.	Concept B has more potential to increase air quality considering the overall increase in area and type of vegetation in this zone.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Concept A (Event & Activities)	Concept B (Wetland & Nature)	Result/Rational
Maintain and improve air quality	Air quality	Change in local air or greenhouse gas (GHG) emission levels	<ul style="list-style-type: none"> <li>▪ Ability to use or travel within the site without producing emissions (e.g., walk, run, cycle)</li> <li>▪ Number and type of continuous emissions sources after implementation</li> </ul>	<b>Baseline</b> – no change in air or GHG emission levels.	<b>Concept A (Event &amp; Activities)</b> – the public will be able to use the site without producing emissions. Heavy equipment and vehicles will be used during construction. There are no sources of continuous emissions after implementation.	<b>Concept B (Wetland &amp; Nature)</b> – the public will be able to use the site without producing emissions. Heavy equipment and vehicles will be used during construction. There are no sources of continuous emissions after implementation.	Potential effects regarding air and GHG emissions are considered equal for both concepts.
<b>Summary of Natural Environment</b>					<ul style="list-style-type: none"> <li>▪ Concept A will provide a positive change in the shoreline around Brigantine Cove (similar to Concept B).</li> <li>▪ Concept A offers appropriate and effective stormwater management to protect against flood risks (similar to Concept B).</li> <li>▪ Concept A will introduce vegetation and trees in this zone but to a lesser extent than Concept B.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Concept B will increase the area of wetlands and vegetation providing riparian and terrestrial habitat.</li> <li>▪ Concept B has the potential to improve water quality by introducing wetland habitat and vegetation by supporting nutrient levels, suspended solids and microbes, and helping filter anthropogenic pollutants.</li> <li>▪ Concept B has more potential to increase air quality considering the overall increase in area and type of vegetation in this zone.</li> </ul>	<p>Concept B is considered preferable for a number of criteria, specifically increasing the area of wetland and vegetation. This is anticipated to have a positive effect on terrestrial and aquatic habitat quality and availability, overall water quality, and air quality.</p> <p>Both concepts are considered equal in terms of stormwater management to protect against flood risk and improving the shoreline around Brigantine Cove.</p>

Table F-4.2. Evaluation of the Social Environment – Brigantine Cove.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Concept A (Event & Activities)	Concept B (Wetland & Nature)	Results/Rational
Social acceptability (i.e., outcome of a collective judgement or opinion of a project or plan)	Create a concept that is acceptable to the public and area users	Change in public and local perception of Ontario Place	<ul style="list-style-type: none"> <li>Feedback received during consultation and engagement</li> </ul>	<b>Baseline</b> – there will be no change to the existing perception of this zone.	<b>Concept A (Event &amp; Activities)</b> – there was no strong opposition to this concept throughout consultation and engagement. Some participants support the idea of reinstating the Hough edge.	<b>Concept B (Wetland &amp; Nature)</b> – participants generally support the increase in wetland area which will provide more green space and potential habitat opportunities.	Results from the October 2022 event indicate an overall preference for Concept B (Wetlands & Nature) while incorporating passive recreational opportunities. The original Hough design will be incorporate and expanded on.
Social acceptability (i.e., outcome of a collective judgement or opinion of a project or plan)	Acceptable noise and light pollution on surrounding communities	Change in noise and light pollution	<ul style="list-style-type: none"> <li>Addition of land mass/earthworks and tree clusters</li> <li>Use of full cut-off fixtures and downlighting; minimized use of uplighting</li> </ul>	<b>Baseline</b> – existing sources of noise in this zone include traffic from Lakeshore Boulevard, Remembrance Drive and Ontario Place Boulevard, Budweiser Stage, and daily park use. The northern part of this zone is not very well lit.	<b>Concept A (Event &amp; Activities)</b> – includes the addition of tree clusters around the cove area as well as the potential to install lighting along the public walkways.	<b>Concept B (Wetland &amp; Nature)</b> – provides a better opportunity to increase the amount of tree clusters as well as the potential to install lighting along the public walkways.	Concept B provides a better opportunity to decrease noise in this zone through the use of vegetation and tree clusters. Both concepts are equal in terms of providing lighting.
Facilitate recreational opportunities	Provide access to the water	Change in area or length of accessible shoreline	<ul style="list-style-type: none"> <li>Area of accessible shoreline created or removed</li> <li>Ability for all site visitors to access the shoreline (e.g., pedestrians, cyclists, wheelchair, strollers)</li> <li>Number and type (e.g., paved vs. gravel) of trails leading to and/or access points to the shoreline</li> </ul>	<b>Baseline</b> – there will be no change in the existing area of accessible shoreline	<b>Concept A (Event &amp; Activities)</b> – the land-based boardwalk area provides a greater opportunity to access the edges of the cove around more of the zone. The land-based boardwalk is accessible by foot; however, may not be able to accommodate all site visitors (e.g., strollers, wheelchairs) due to the stony/uneven surfaces.	<b>Concept B (Wetland &amp; Nature)</b> – the boardwalk allows site visitors to walk around the cove edge and interact with the water. The boardwalk is accessible by foot, wheelchair and for people with strollers (or equivalent). Water access is limited to specific areas (e.g., kayak launch, Echo Beach) and not along the boardwalk.	Both concepts provide access to the water. Concept A allows from greater access along the shoreline of the cove and Concept B includes the boardwalk allowing park users to walk around the cove area.
Facilitate recreational opportunities	Tenant integration and connectivity	Ability to move from one site opportunity to the next without obstruction (e.g., connected to Martin Goodman trail)	<ul style="list-style-type: none"> <li>Number of access points</li> <li>Clear legible access to all tenant sites from the public realm</li> <li>Visible integration of tenant landscapes with public realm design</li> </ul>	<b>Baseline</b> – Brigantine Cove is accessed by the mainland (Central Bridge and East Causeway). Site visitors can easily access Budweiser Stage, Trillium Park and the existing East Island.	<b>Concept A (Event &amp; Activities)</b> – Access to Brigantine Cove from the Central Bridge and East Causeway will remain. Following construction, site visitors can easily access the Forum, the Water’s Edge, Trillium Park and Budweiser Stage.	<b>Concept B (Wetland &amp; Nature)</b> – Access to Brigantine Cove from the Central Bridge and East Causeway will remain. Following construction, site visitors can easily access the Forum, the Water’s Edge, Trillium Park and Budweiser Stage.	Both concepts provide the same number of access points to Brigantine Cove itself, and provide the same opportunities to access the rest of Ontario Place.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Concept A (Event & Activities)	Concept B (Wetland & Nature)	Results/Rational
Facilitate recreational opportunities	Provide recreational opportunities for users	Ability for users to participate in recreational activities	<ul style="list-style-type: none"> <li>▪ Number of pathways/overall area of pathway for walking, cycling, running, etc. and access to water for kayaking, swimming</li> <li>▪ Incorporate amenities for public use (e.g., washrooms, changerooms)</li> <li>▪ Multi-functional and multi-seasonal spaces (e.g., use for all seasons)</li> </ul>	<b>Baseline</b> – there will be no change in the existing pathway or access to shoreline. The Echo Beach concert venue is currently operating.	<b>Concept A (Event &amp; Activities)</b> –will create a land-based boardwalk and access to the cove for recreational activities (e.g., kayak, canoe). The wooden boardwalk will be accessible for all site visitors; however, access along the shoreline of the cove may only be possible on foot. Trails and pathways associated with Concept A are designed for pedestrian use except for the land-based boardwalk that may also accommodate bicycles, roller blades/skates, skateboards, etc. The large lawn area will create a place for personal events (e.g., picnic, parties) and activities that can be used during all seasons. Concept A includes the McMillan Treehouse as well as a Children’s Play Area.	<b>Concept B (Wetland &amp; Nature)</b> – will create a boardwalk as well as trails/pathways that are all accessible and designed for pedestrian use, including wheelchairs and strollers; however, bicycles and roller blades/skates, skateboards, etc. may not be permitted on the boardwalk. The boardwalk and access to the water (e.g., kayak launch, Echo Beach) may be closed during icy or unsafe conditions or times when the water level is very high. Concept B includes a playground.	Concept A provides a greater opportunity for users to participate in recreational activities since it includes a large area for informal events (e.g., picnic, celebration) as well as a larger play area for children.
Facilitate educational opportunities	Provide educational opportunities for users	Ability for users to participate in educational activities	<ul style="list-style-type: none"> <li>▪ Number and type of educational/interpretive opportunities, including opportunities for Indigenous peoples and treaty-rights holders (e.g., MCFN)</li> <li>▪ No cost or non-ticketed</li> </ul>	<b>Baseline</b> – there is currently no charge or ticket required to access this zone for daily use. There are no existing formal educational or interpretive opportunities.	<b>Concept A (Event &amp; Activities)</b> – will not require a charge or ticket to access. Concept A may provide a variety of education or interpretive opportunities including Indigenous plant name markers, educational modules or QR codes, and panels or signage along the waterfront.	<b>Concept B (Wetland &amp; Nature)</b> – will not require a charge or ticket to access. Concept B may provide a variety of education or interpretive opportunities including Indigenous plant name markers, educational modules or QR codes, and panels or signage along the waterfront.	Both concepts provide an equal opportunity for users to participate in educational activities.
Provide a comfortable environment for site visitors	Year-round comfort (e.g., shade in the summer; pathways clear of snow in winter, wind protection in the winter and shoulder seasons)	Ability for users to use and enjoy the site comfortably throughout the year	<ul style="list-style-type: none"> <li>▪ Areas with shade, cover, seating, protection from wind</li> <li>▪ Creation of microclimate</li> <li>▪ Access to food and beverages, and supporting facilities/sun and precipitation protected cover/pavilion</li> </ul>	<b>Baseline</b> – currently offers some areas with shade and benches or protection from the wind. There are existing food and beverage facilities (e.g., Echo Beach Bar).	<b>Concept A (Event &amp; Activities)</b> – will create areas offering shade and protection from the wind. Seating will be incorporated either by benches or raised stone edges. There are additional no formal food and beverage stands planned for this zone.	<b>Concept B (Wetland &amp; Nature)</b> – will create areas offering shade along the trails on land around the cove area and the passive recreation nooks. The boardwalk does not offer much protection from sun or wind. Wetlands have the ability to form or support a microclimate by regulating thermal and water properties in the area. No additional food or beverage stands are planned for this zone.	Concept B offers more shade as well as supports the creation of a microclimate with the wetland areas being able to regulate thermal and water properties.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Concept A (Event & Activities)	Concept B (Wetland & Nature)	Results/Rational
Provide a comfortable environment for site visitors	Comfortable environment for site visitors	Overall site accessibility, or ability for the concept to offer accessible services (e.g., compliance with accessibility standards)	<ul style="list-style-type: none"> <li>Building code, public spaces, AODA, NYC Universal Design Guidelines (exceed ADA minimums), CPTED</li> </ul>	<b>Baseline</b> – infrastructure currently on site was built according to codes and standards applicable at the time of construction.	<b>Concept A (Event &amp; Activities)</b> – All codes and AODA guidelines to be met during design development.	<b>Concept B (Wetland &amp; Nature)</b> – All codes and AODA guidelines to be met during design development.	Both concepts will include accessibility standards. Both concepts have accessible pathways which allow views to the water while sheltering visitors from wave uprush and flooding. Both designs keep the main pathway accessible all year round.
Provide a comfortable environment for site visitors	Provide a safe and comfortable environment for site visitors	Maintain safe access to the site throughout phased construction	<ul style="list-style-type: none"> <li>Preparation and implementation of Health and Safety plans, Traffic Control plans, etc. during construction</li> <li>Ease of access for emergency vehicles</li> </ul>	<b>Baseline</b> – does not require construction; therefore, safe access throughout this zone would be maintained.	<b>Concept A (Event &amp; Activities)</b> – will implement approved plans during construction. Once construction is complete, emergency vehicles will be able to access the zone, as needed.	<b>Concept B (Wetland &amp; Nature)</b> – will implement approved plans during construction. Once construction is complete, emergency vehicles will be able to access the zone, as needed.	Both concepts will maintain safe access throughout construction.
Provide a comfortable environment for site visitors	Provide a safe comfortable environment for site visitors security	Ability to implement safety features for site visitors (e.g., lighting, safety call/button, Security staff)	<ul style="list-style-type: none"> <li>Number and efficiency of safety features available to site visitors</li> <li>Sense of safety by site visitors</li> <li>Design and incorporate measures for safety to meet and exceed CPTED standards</li> </ul>	<b>Baseline</b> – there is little lighting along the northern part of this zone. Lighting along the southern edge of Brigantine Cove exists.	<b>Concept A (Event &amp; Activities)</b> – provides an opportunity to install effective safety lighting and consider the implementation of a safety call button. Rails along the land-based boardwalk will be designed to reduce the potential for users to fall in the water.	<b>Concept B (Wetland &amp; Nature)</b> provides an opportunity to install effective safety lighting and consider the implementation of a safety call button. Rails along the wooden boardwalk will be designed to reduce the potential for users to fall in the water.	Both concepts are equal in their ability to implement safety features.
Provide a comfortable environment for site visitors	Provide a safe and comfortable environment for site visitors	Reduce roads and vehicle use within the site to lower potential for accidents with site visitors (e.g., reduce amount of heavy equipment needed during implementation/operation, timed access when users are not present)	<ul style="list-style-type: none"> <li>Designated trail use</li> <li>Design for non-vehicle traffic only (e.g., width of trail)</li> <li>Design discrete servicing routes to minimize use of open space while providing aesthetic appeal and pedestrian use when not used for servicing</li> </ul>	<b>Baseline</b> – there will be no change to the existing environment for site visitors.	<b>Concept A (Event &amp; Activities)</b> – will require heavy equipment during construction. Ontario Place Boulevard will continue to see vehicle use. Trails and pathways in this concept are generally provided for access to the Cove and Children’s Play Area and designated for non-vehicular traffic only.	<b>Concept B (Wetland &amp; Nature)</b> – will require heavy equipment during construction. Ontario Place Boulevard will continue to see vehicle use. Trails and pathways in this concept are generally provided for access to the Cove, boardwalk and playground, and designated for non-vehicular traffic only.	Both concepts will require vehicles and heavy equipment to be on site throughout construction; however, the work area will be blocked for public use during this time to ensure safety. The zone is designated for non-vehicular traffic.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects		Results/Rational
Summary of Social Environment					<ul style="list-style-type: none"> <li data-bbox="1759 286 2113 423">▪ Concept A provides a greater opportunity for users to participate in recreational activities.</li> <li data-bbox="2125 286 2480 483">▪ Concept B provides a better opportunity to decrease noise in this zone through the use of vegetation and tree clusters.</li> <li data-bbox="2125 491 2480 705">▪ Concept B offers more shade as well as supports the creation of a microclimate with the wetland areas being able to regulate thermal and water properties.</li> </ul>	Both concepts provide an opportunity to implement a variety of objectives important to the social environment, including access to the water (e.g., kayak, canoe), implementation of safety features, educational opportunities, and safe access during construction.

Table F-4.3. Evaluation of the Cultural Environment –Brigantine Cove.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes as per Ontario Place Strategic Conservation Plan	Compatible with identified built heritage resources and cultural heritage landscapes	Ability to conserve and promote identified built heritage features and cultural heritage landscapes	<ul style="list-style-type: none"> <li>Meets conservation strategies to reduce negative impacts of the proposed concept on cultural heritage resources and landscapes</li> </ul>	<b>Baseline</b> – existing conditions provide views of the cove, pathways, and pedestrian trails but do not protect against flooding.	<b>Concept A (Event &amp; Activities)</b> – Concept A does not retain heritage attributes in situ and proposes changes to the current built environment, however proposed mitigation measures in the design will meet the following conservation strategies: Public Realm, Climate Change (Flooding), Accessibility Requirements, Ontario Place Branding, Interpretation, Circulation, Vegetation, Landforms and Water Features. Artwork may be relocated to Brigantine Cove.	<b>Concept B (Wetland &amp; Nature)</b> – Concept B does not retain heritage attributes in situ and proposes changes to the current built environment, however proposed mitigation measures in the design will meet the following conservation strategies: Public Realm, Climate Change (Flooding), Accessibility Requirements, Ontario Place Branding, Interpretation, Circulation, Vegetation, Landforms and Water Features. Artwork may be relocated to Brigantine Cove.	Both concepts meet the same amount of conservation strategies; however, Concept B has the opportunity to provide more greenspace, vegetation and restoring lookouts.
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes	Compatibility with the original vision for Ontario Place (Hough design)	Preservation and/or restoration of existing shoreline and shoreline amenities, landforms and ecological habitat	<ul style="list-style-type: none"> <li>Implement Hough design principles</li> <li>Enhance safe public access to waterfront</li> <li>Reintroduction of a destination marina environment</li> </ul>	<b>Baseline</b> – generally provides safe public access to view the cove.	<b>Concept A (Event &amp; Activities)</b> – includes plans to reinstate the Hough edge.	<b>Concept B (Wetland &amp; Nature)</b> – includes plans to evolve the original Hough edge along the cove shoreline.	Both concepts will integrate the original Hough plan to some degree, and will provide safe public access to the cove.
<u>Indigenous Cultural:</u> Reflect Indigenous perspectives	Design that is reflective of Indigenous input and feedback and that facilitates traditional and cultural activities	Ability for the concept to integrate Indigenous input and perspectives into various aspects of design as they relate to different assessment criteria	<ul style="list-style-type: none"> <li>Integration of feedback from Indigenous communities into design options to ensure appropriate management of environment and opportunities for traditional and cultural activities</li> <li>Change in the presence of culturally significant plant species and mature trees</li> </ul>	<b>Baseline</b> – There are currently no culturally significant plant species at this zone but Brigantine Cove does provide habitat for some wildlife species.	<b>Concept A (Event &amp; Activities)</b> – can integrate input from Indigenous communities and perspectives such as areas for medicinal plants, integrating flood areas and considering climbing stones in the children’s play area.	<b>Concept B (Wetland &amp; Nature)</b> – can integrate input from Indigenous communities and perspectives such as increasing flood and wetland area, working with nature, the Great Turtle Play Mounds, Cardinal Landing, Tree of Life and Beaver Dam Lookout.	Concept B provides a greater opportunity to integrate feedback into the overall design through the increase of wetlands, promoting the environment via submergent/emergent vegetation, medicinal plants, and climbing stones for children’s play.
<u>Indigenous Cultural:</u> Respect and reflect treaty history and current cultural landscapes	Respect and reflect treaty history and current cultural landscapes	Integration of Indigenous design principles and programming	<ul style="list-style-type: none"> <li>Design concepts which appropriately reflect local Indigenous culture based on input received from Indigenous communities.</li> </ul>	<b>Baseline</b> – existing conditions at Brigantine Cove do not reflect Indigenous design principles and programming.	<b>Concept A (Event &amp; Activities)</b> – provides an opportunity for integrating medicinal plants and native vegetation as well as climbing stones in the children’s play area.	<b>Concept B (Wetland &amp; Nature)</b> – provides a greater opportunity for integrating submergent and emergent vegetation, medicinal plants and native vegetation, and climbing stones in the playground area.	Concept B provides more opportunity to reflect local Indigenous culture based on input from Indigenous communities which includes the creation of flood areas, creation of wetlands, integrating submergent and emergent vegetation as well as native or medicinal plants, and climbing stones for the children’s play area.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects		Results/Rational
Summary of the Cultural Environment				<ul style="list-style-type: none"> <li>▪ Concept A meets a number of conservation strategies as outlined in the Strategic Conservation Plan.</li> <li>▪ Concept A plans to reinstate the original Hough edge.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Concept B meets a number of conservation strategies as outlined in the Strategic Conservation Plan.</li> <li>▪ Concept B allows for greater integration of feedback from Indigenous communities and integration of Indigenous design principles and programming.</li> </ul>	<p>Concept B provides more opportunity to implement objectives important to the cultural environment including more greenspace, vegetation and restoration of lookouts as well as the ability to integrate feedback from Indigenous communities.</p> <p>Both concepts meet the same amount of conservation strategies; however, Concept B has the opportunity to provide more greenspace, vegetation and restoring lookouts.</p>

Table F-4.4. Evaluation of the Technical Environment – Brigantine Cove.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Potential for the concept to be easily implemented	Constructability	Ease of construction and construction techniques	<ul style="list-style-type: none"> <li>Identified construction techniques</li> </ul>	<p><b>Baseline</b> – no activities are required for implementation.</p> <p><b>Concept A (Event &amp; Activities)</b> – includes routine construction for implementation (e.g., boardwalk, play areas, washrooms) as well as in-water work to accommodate shoreline and habitat restoration/enhancement.</p> <p><b>Concept B (Wetland &amp; Nature)</b> – includes routine construction for implementation (e.g., boardwalk, play areas, washrooms) as well as in-water work to accommodate shoreline and habitat restoration/enhancement.</p>	Both concepts include routine construction required for implementation.
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Reasonable permitting abilities and timelines	<ul style="list-style-type: none"> <li>Permitting requirements and known timelines</li> <li>Ability to obtain permit (e.g., SARA permit)</li> </ul>	<p><b>Baseline</b> – no implementation is required.</p> <p><b>Concept A (Event &amp; Activities)</b> – a permit under the <i>Endangered Species Act</i> may be required where work has the potential to impact barn swallow habitat (e.g., existing Round Hut). Per the City of Toronto Redevelopment Checklist, a Natural Heritage Impact Study has been completed.</p> <p><b>Concept B (Wetland &amp; Nature)</b> – a permit under the <i>Endangered Species Act</i> may be required where work has the potential to impact barn swallow habitat (e.g., existing Round Hut). Per the City of Toronto Redevelopment Checklist, a Natural Heritage Impact Study has been completed.</p>	Both concepts align with regulatory requirements equally, and will have approximately the same permitting and approval timelines.
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Meets applicable planning objectives and standards (e.g., PPS, A Place to Grow: Growth Plan for the GGH, City of Toronto)	<ul style="list-style-type: none"> <li>Identify and maintain compliance with applicable planning objectives and standards</li> </ul>	<p><b>Baseline</b> – no implementation is required.</p> <p><b>Concept A (Event &amp; Activities)</b> – meets the objectives of applicable planning requirements (e.g., providing public access to the shoreline as outlined in the PPS).</p> <p><b>Concept B (Wetland &amp; Nature)</b> – meets the objectives of applicable planning requirements (e.g., providing public access to the shoreline as outlined in the PPS).</p>	Both concepts meet the objectives of applicable planning requirements equally, including the PPS, A Place to Grow: Growth Plan for the GGH, and City of Toronto Official Plan).

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational		
Facilitate multi-modal access	Roadway/vehicle access to the site	Change in ability for site visitors to access the site by vehicle or water	<ul style="list-style-type: none"> <li>Number of safe drop-off locations and parking opportunities</li> <li>Overall area of onsite parking</li> <li>Facilitates water-born transportation (e.g., ferries, water taxis, private watercraft)</li> </ul>	<p><b>Baseline</b> – Current pickup and drop-off locations exist along Remembrance Drive. There is a small municipal parking lot north of Brigantine Cove that experiences flooding. You can access Brigantine Cove via small water vessels (e.g., kayak) under the Central bridge (Bridge 1).</p>	<p><b>Concept A (Event &amp; Activities)</b> – Brigantine Cove does not include specific pick-up or drop-off locations; however, this is the first zone site visitors will have access to after entering the park through the Mainland. This zone does not include parking options. Rebuilding the causeway at the East Gateway may provide additional opportunity for water-born transportation for small vessels depending on final design.</p>	<p><b>Concept B (Wetland &amp; Nature)</b> – Brigantine Cove does not include specific pick-up or drop-off locations; however, this is the first zone site visitors will have access to after entering the park through the Mainland. This zone does not include parking options. Rebuilding the causeway at the East Gateway may provide additional opportunity for water-born transportation for small vessels depending on final design.</p>	Both concepts either maintain existing access to the site or include the same potential to increase access to the site by water.
Facilitate multi-modal access	Multi-modal connections to and within the site	Change in ability for site visitors to access the site by transit	<ul style="list-style-type: none"> <li>Number of public transit stops/hubs to the site</li> <li>Multi-modal hubs (e.g., public transit [first/last mile connections], tour/shuttle bus, vehicle pickup and drop-off)</li> <li>Accommodate looping/terminating surface transit routes</li> </ul>	<b>Baseline</b> – N/A	<b>Concept A (Event &amp; Activities)</b> – N/A	<b>Concept B (Wetland &amp; Nature)</b> – N/A	N/A: this criterion is not applicable to the Water's Edge Zone since access to the site is through the Mainland Zone.
Facilitate multi-modal access	Pedestrian and cycling network to and within site	Change in existing pedestrian and cycling network (e.g., bridges, trails)	<ul style="list-style-type: none"> <li>Number and type of cycling and pedestrian network</li> <li>Ability to access the site from adjacent venues, including Exhibition Place and Ontario Line Exhibition Place Station</li> <li>Connectivity for site visitors through the site (i.e., the improvements to the Martin Goodman Trail)</li> <li>Address conflicts between cyclists/pedestrians and cyclists/vehicles in intersection and access design</li> </ul>	<b>Baseline</b> – there will be no change in the existing pedestrian and cycling network. Brigantine Cove can be accessed via Ontario Place Boulevard (connected to Martin Goodman Trail) and the existing Central Bridge.	<b>Concept A (Event &amp; Activities)</b> – includes pedestrian access to the cove shoreline and pathways for water access. Cycling trails are not part of the redesign of Brigantine Cove.	<b>Concept B (Wetland &amp; Nature)</b> – includes pedestrian access to the cove shoreline, pathways for water access and the boardwalk around the cove. Cycling trails are not part of the redesign of Brigantine Cove.	Concept B provides a greater opportunity to increase the available pedestrian network with the addition of the boardwalk. Connectivity throughout the site will remain.
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of impervious surfaces	<ul style="list-style-type: none"> <li>Overall area of pervious vs. impervious surfaces across the site</li> <li>Reduce hardscape areas</li> <li>Provide sustainable permeable solutions including greening of the surface parking lots</li> </ul>	<b>Baseline</b> – no change to existing conditions.	<b>Concept A (Event &amp; Activities)</b> – the land-based boardwalk and Children's Play Area may be built using impervious surfaces. Other areas of this concept will be pervious, including the lawn and shoreline area which are pervious.	<b>Concept B (Wetland &amp; Nature)</b> – includes wetland edges, the boardwalk and Echo Beach, all of which are pervious surfaces. The playground area will be impervious.	Concept B allows for more pervious surface area across the zone.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of increased elevation	<ul style="list-style-type: none"> <li>Minimum design elevations that meet or exceed 100-year storm event</li> </ul>	<p><b>Baseline</b> – the existing Water’s Edge will continue to experience flooding.</p> <p><b>Concept A (Event &amp; Activities)</b> – will provide a series of terraces that are sloping toward the cove that can accommodate rising water levels.</p> <p><b>Concept B (Wetland &amp; Nature)</b> – includes wetland edges that can slow the momentum of flood water or storm surge.</p>	Both concepts provide a high degree of elevation or ability to meet the 100-year storm event.
Sediment management	Improve sediment management processes	Change in sediment management practices or volume	<ul style="list-style-type: none"> <li>Volume of removed sediment</li> <li>Beneficial reuse</li> <li>Ability to integrate sediment stabilization/capture into construction or integration</li> <li>Efficacy of erosion and sediment control strategies implemented to reduce sediment laden runoff from leaving the work area</li> <li>Need for dredging after implementation</li> </ul>	<p><b>Baseline</b> – no change to existing conditions.</p> <p><b>Concept A (Event &amp; Activities)</b> – the stones along the shoreline edge will reduce the potential for shoreline erosion; however, sandy shorelines/beach area have a high potential for erosion under certain conditions.</p> <p><b>Concept B (Wetland &amp; Nature)</b> – following implementation, sedimentation management is crucial since wetland productivity can be reduced (degrading habitat) due to sediment accumulation.</p>	Both concepts will integrate sediment management and erosion control during construction and design equally.
Remediate existing contamination	Improve soil and/or water quality	Change in soil and water contamination	<ul style="list-style-type: none"> <li>Disturbance of contamination during construction/implementation</li> <li>Ability for the site to maintain or improve conditions (i.e., not increase contamination)</li> </ul>	<p><b>Baseline</b> – Existing soil contamination will remain on site.</p> <p><b>Concept A (Event &amp; Activities)</b> – soil contamination will be managed during construction, as needed.</p> <p><b>Concept B (Wetland &amp; Nature)</b> – soil contamination will be managed during construction, as needed.</p>	Both concepts will manage existing contamination equally during construction with the intention of improving existing conditions.
Upgrade or replace infrastructure and buildings	Improve infrastructure conditions for long-term use	Change in infrastructure and building condition	<ul style="list-style-type: none"> <li>Conserve and adapt extant structures where possible</li> <li>Number and magnitude of change in buildings and supporting site infrastructure (e.g., utilities)</li> <li>Decommission and remove old infrastructure along with design and construction of new buildings and supporting site infrastructure</li> </ul>	<p><b>Baseline</b> – existing infrastructure is located along the south edge of Brigantine Cove including Centre Entrance Retail, Entrance Plaza Open Air Bar, Round Hut and East Causeway Gatehouse.</p> <p><b>Concept A (Event &amp; Activities)</b> – redevelopment plans include removal of existing buildings surrounding Brigantine Cove.</p> <p><b>Concept B (Wetland &amp; Nature)</b> – redevelopment plans include removal of existing buildings surrounding Brigantine Cove.</p>	Both concepts include the removal of old infrastructure and building of new washrooms.
Maintain flexibility for future programming	Optionality for future use (i.e., more than one fixed use)	Flexibility for use	<ul style="list-style-type: none"> <li>Number of feasible event ideas (paid or free events)</li> <li>Number and type of utilities needed</li> </ul>	<p><b>Baseline</b> – existing programming will be updated.</p> <p><b>Concept A (Event &amp; Activities)</b> includes event and activity space intended to be used for small, informal events such as family/group events (e.g., picnic, birthday).</p> <p><b>Concept B (Wetland &amp; Nature)</b> - does not include flexibility for future use and is not anticipated to have more than one fixed use (e.g., park and public space).</p>	Concept A provides greater flexibility for more than one fixed use.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational	
<p>Summary of the Technical Environment</p>				<ul style="list-style-type: none"> <li>▪ Concept A provides greater flexibility for more than one fixed use.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Concept B allows for more pervious surface area across the zone.</li> <li>▪ Concept B provides a greater opportunity to increase the available pedestrian network with the addition of the boardwalk.</li> </ul>	<p>Both concepts have the ability to implement a variety of objectives important to the Technical Environment such as meeting design criteria for flood events, maintain existing access to the site and the water, and alignment with regulatory requirements.</p>

Table F-4.5. Evaluation of the Economic Environment – Brigantine Cove.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Construction costs	Estimated construction cost	Cost relative to other concepts	<ul style="list-style-type: none"> <li>Change in cost</li> </ul>	<p><b>Baseline</b> – there are no construction costs.</p> <p><b>Concept A (Event &amp; Activities)</b> – this option may require additional surfacing for play areas and less softscape overall. Play structures may be custom built and require specific materials.</p> <p><b>Concept B (Wetland &amp; Nature)</b> – wetlands along the shoreline and boardwalks may require shoreline engineering.</p>	Construction costs are anticipated to be similar.
Operation and Maintenance	Estimated annual operating costs for staff resources, ongoing operation and maintenance activities	Cost relative to other concepts	<ul style="list-style-type: none"> <li>Change in cost</li> </ul>	<p><b>Baseline</b> – existing operating costs include trail and vegetation maintenance.</p> <p><b>Concept A (Event &amp; Activities)</b> – will require routine maintenance of the event/activity space if it is a lawn/grass area. Walkways/pathways around Brigantine Cove will require maintenance, especially in the winter months to remain accessible.</p> <p><b>Concept B (Wetland &amp; Nature)</b> – will require routine maintenance along the walkways/pathways around Brigantine Cove, especially in the winter months to remain accessible. The boardwalk may be closed in the winter to reduce safety issues.</p>	Based on consultation with TRCA, it is likely that Concept B will require more maintenance resulting in higher costs during the operation and maintenance phase.
Economic benefits	Ability to offer contract procurement, jobs, or other economic benefits from constructing and operating the park	Change in economic opportunities	<ul style="list-style-type: none"> <li>Rentals (e.g., water use equipment)</li> <li>Food and beverage sales</li> <li>Job opportunities that are inclusive of equity deserving communities</li> <li>Provide skill training</li> </ul>	<p><b>Baseline</b> – there are currently no economic opportunities at this site aside from the existing food and beverage stand (e.g., Echo Beach Bar).</p> <p><b>Concept A (Event &amp; Activities)</b> – economic opportunities may exist during construction only since there are no food and beverage stands or rentals.</p> <p><b>Concept B (Wetland &amp; Nature)</b> – economic opportunities may exist during construction only since there are no food and beverage stands or rentals.</p>	Both concepts provide the same type of economic opportunity during construction (e.g., jobs).

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
<p>Summary of the Economic Environment</p>				<ul style="list-style-type: none"> <li>▪ Concept A requires less routine and seasonal maintenance compared to Concept B.</li> <li>▪ Both concepts provide the same type of economic opportunity during construction (e.g., jobs).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Both concepts provide the same type of economic opportunity during construction (e.g., jobs).</li> </ul> <p>Construction costs and economic opportunities are anticipated to be similar; however, Concept B has higher maintenance costs.</p>

Table F-4.6. Evaluation of Sustainability – Brigantine Cove.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Reduce contribution to climate change	Low atmospheric emissions (e.g., air, GHG) associated with the concept	Air and GHG emissions during construction (vehicle and heavy equipment emissions) and “operation/implementation” (e.g., air conditioning, use of fossil fuel)	<ul style="list-style-type: none"> <li>Change in emissions relative to “Do-Nothing” baseline concept</li> </ul>	<p><b>Baseline</b> – there are no emissions associated with construction vehicles or heavy equipment. Current buildings on site were previously approved for demolition; therefore, no existing sources of emissions exist.</p> <p><b>Concept A (Event &amp; Activities)</b> – will require the use of heavy equipment and vehicles during construction. Washrooms are planned for this zone which will not require air conditioning or the use of fossil fuel.</p> <p><b>Concept B (Wetland &amp; Nature)</b> – will require the use of heavy equipment and vehicles during construction. Washrooms are planned for this zone which will not require air conditioning or the use of fossil fuel.</p>	Neither concept will result in continuous emissions during operations/ implementation. The use of heavy equipment and vehicles will be relatively similar in terms of air and GHG emissions throughout construction.
Reduce contribution to climate change	Heat island effect	Ability for the concept to increase vegetation and reduce unnatural hard surfaces (e.g., concrete)	<ul style="list-style-type: none"> <li>Overall area of vegetation (trees, green roofs) and ability to provide shade throughout the site</li> <li>Overall area of hard surfaces</li> </ul>	<p><b>Baseline</b> – the amount of existing vegetation and hard surface contributes to the heat island effect at Ontario Place.</p> <p><b>Concept A (Event &amp; Activities)</b> – will increase the area of vegetation along the shoreline of the cove and the associated lawn areas. The land-based boardwalk may be created using concrete.</p> <p><b>Concept B (Wetland &amp; Nature)</b> – will increase the area of vegetation via wetland edges and vegetation surrounding the cove area. Few, if any, paved pathways to the wetland area will be implemented. Remaining pathways are going to be wooden boardwalks.</p>	Concept B has more potential to increase vegetation and reduce unnatural hard surfaces. Concept B will reduce the Project’s contribution to climate change, and, ultimately, is expected to have a positive effect on existing climate change trends through the implementation of a wetland system in an urban environment.
Include sustainable infrastructure and buildings	Building resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles, wildfires)	Ability for the concept to align with all applicable building codes (e.g., Canadian Standards Association)	<ul style="list-style-type: none"> <li>Compliance with codes and standards (as-built/design documents)</li> </ul>	<p><b>Baseline</b> – some infrastructure in this zone will be decommissioned and removed due to age and associated building condition.</p> <p><b>Concept A (Event &amp; Activities)</b> - all infrastructure (e.g., washrooms) at this zone will be built in compliance with applicable codes and standards.</p> <p><b>Concept B (Wetland &amp; Nature)</b> - all infrastructure (e.g., washrooms) at this zone will be built in compliance with applicable codes and standards.</p>	Both concepts provide an equal ability to align with all applicable codes and standards.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Include sustainable infrastructure and buildings	Infrastructure resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles)	Adaptability and resilience of infrastructure to withstand a changing climate	<ul style="list-style-type: none"> <li>▪ Infrastructure and site to withstand severe weather and temperatures</li> <li>▪ Designed for longevity</li> </ul>	<b>Baseline</b> – the existing shoreline is currently impacted by high lake levels and intense wind events.	<b>Concept A (Event &amp; Activities)</b> – will provide adaptability and resilience in a changing climate through proper landscaping and planting of trees (to mitigate potential effects from severe weather events). The staggered cove boundary will withstand changing water levels and freeze/thaw cycles.	<b>Concept B (Wetland &amp; Nature)</b> – will provide adaptability and resilience in a changing climate through proper landscaping and planting of trees. Wetlands may be impacted by natural freeze/thaw cycles (e.g., nitrogen and phosphorus cycling).	Concept A provides more resilience to changing climate trends.
Include sustainable infrastructure and buildings	Green Infrastructure design and build	Compliance with: <ul style="list-style-type: none"> <li>▪ Waterfront Edge Design Guidelines</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number or size of certified buildings, as applicable</li> <li>▪ Building approvals</li> <li>▪ Zero Carbon Emissions</li> <li>▪ Waterfront design</li> <li>▪ Requirements identified throughout design development</li> <li>▪ SITES certification (i.e., sustainable sites)</li> </ul>	<b>Baseline</b> – the existing shoreline will continue to be impacted high lake levels and high wind events	<b>Concept A (Event &amp; Activities)</b> – this concept incorporates the intent and design strategies outlined in the Waterfront Edge Design Guidelines to the extent possible (e.g., improve connections to the water, provide public access to the waterfront).	<b>Concept B (Wetland &amp; Nature)</b> – this concept incorporates the intent and design strategies outlined in the Waterfront Edge Design Guidelines to the extent possible (e.g., ecological sensitivity, improve connections to the water, provide public access to the waterfront)	Both concepts meet the intent and design strategies outlined in the Waterfront Edge Design Guidelines.
Sustainable Communities	Community-based solutions	Environmental and/or socio-economic benefits	<ul style="list-style-type: none"> <li>▪ Green infrastructure solutions (e.g., permeable paving, green roofs)</li> <li>▪ Climate change solutions (e.g., design new building to have zero carbon emissions, reduce parking on-site, potential for solar power)</li> <li>▪ Transportation facilities: trails and multi-use pathways</li> <li>▪ Community greenspace: parks</li> </ul>	<b>Baseline</b> –existing conditions provide limited trails and park space in this zone.	<b>Concept A (Event &amp; Activities)</b> –will include community greenspace around Brigantine Cove as well as permeable paving to the extent possible.	<b>Concept B (Wetland &amp; Nature)</b> – will include more community greenspace around and on Brigantine Cove as well as permeable paving along the walkways/pathways to the extent possible.	Concept B provides more greenspace and permeable paving.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Summary				<ul style="list-style-type: none"> <li>▪ Concept A provides more resilience to changing climate trends.</li> <li>▪ Concept B provides more greenspace and permeable paving.</li> <li>▪ Concept B has more potential to increase vegetation and reduce unnatural hard surfaces. Concept B will reduce the Project's contribution to climate change.</li> </ul>	<p>Concept B has more vegetation, greenspace and permeable paving along with an urban environment wetlands system.</p>

## The Mainland

Table F-5.1. Evaluation of the Natural Environment – The Mainland.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Concept A	Concept B	Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in habitat availability	<ul style="list-style-type: none"> <li>Overall area of available habitat</li> <li>Number of natural features and linkages for aquatic species movement (e.g., along the shore from shallow water to deeper offshore water)</li> </ul>	<b>Baseline</b> – the existing shoreline along the Mainland consists of two areas of concrete capped timber crib breakwater and three areas of steel sheet pile wall that do not provide habitat for fish.	<b>Concept A (Urban and Active)</b> – it is anticipated that redevelopment activities will ultimately result in an increase to aquatic habitat through the introduction of a rock berm wall that will support the loading support system along the shoreline wall.	<b>Concept B (Green Gateway)</b> – it is anticipated that redevelopment activities will ultimately result in an increase to aquatic habitat through the introduction of a rock berm wall that will support the loading support system along the shoreline wall.	Both concepts are anticipated to result in increased habitat availability as a result of redevelopment activities.
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Potential increase or decrease in water quality parameters (e.g., TSS, contaminants, sand from volleyball courts, salt from parking lots and access)</li> <li>Sensory disturbance (e.g., vibrations) that may reduce the quality of available habitat</li> </ul>	<b>Baseline</b> – the existing shoreline along the Mainland consists of two areas of concrete capped timber crib breakwater and three areas of steel sheet pile wall that do not provide habitat for fish.	<b>Concept A (Urban and Active)</b> – potential aquatic habitat along the Mainland shoreline wall will be influenced by human activity above the water, such as a cantilever or floating deck; however, these decks are planned for specific locations along the shoreline only. Small amounts of sand from the Urban Beach may reach Brigantine Cove.	<b>Concept B (Green Gateway)</b> – potential aquatic habitat along the Mainland shoreline wall will be influenced by human activity above the water, such as a cantilever or floating deck; however, these decks are planned for specific locations along the shoreline only.	Concept B provides a better opportunity to increase habitat quality since there is no sand or debris associated with the design that may enter the water. Sand associated with the final design will be managed so that it does not enter Brigantine Cove.
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in water quality	<ul style="list-style-type: none"> <li>Potential to increase or decrease in water quality parameters (e.g., TSS, contamination, salt) due to existing conditions or spills during construction</li> <li>Weight of contaminants absorbed (by cattail in floating islands vs. no removal)</li> </ul>	<b>Baseline</b> – water quality parameters are likely to decrease under existing conditions due to a number of existing anthropogenic influences as well as the corroding areas along the steel sheet pile wall.	<b>Concept A (Urban and Active)</b> – small amounts of sand from the Urban Beach may reach Brigantine Cove.	<b>Concept B (Green Gateway)</b> – wetland vegetation will help filter water that may flow toward Brigantine Cove.	Both concepts include the potential for spills during construction; however, Concept B has greater potential to increase water quality parameters following implementation.
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in Lake Ontario Shoreline systems (e.g., sensitive bluffs, dynamic beach)	<ul style="list-style-type: none"> <li>Impacts on shoreline</li> <li>Ability for the concept to meet the recommendations of the Shoreline and Hazard Assessment</li> </ul>	<b>Baseline</b> – the existing shoreline along the Mainland consists of two areas of concrete capped timber crib breakwater and three areas of steel sheet pile wall.	<b>Concept A (Urban and Active)</b> – N/A	<b>Concept B (Green Gateway)</b> – N/A	Not applicable since work specifically for the Mainland shoreline is included in a previous scope of work that will improve the overall state of the wall.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Concept A	Concept B	Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Stormwater management and infrastructure	<ul style="list-style-type: none"> <li>Ability to establish appropriate, effective, and sustainable stormwater management practices and infrastructure</li> <li>Potential to mitigate or protect against flood risks from Lake Ontario (e.g., wave uprush)</li> </ul>	<b>Baseline</b> – the existing shoreline will continue to flood under certain conditions and will continue to experience stormwater management issues.	<b>Concept A (Urban and Active)</b> – includes a stormwater management strategy that will direct stormwater away from Brigantine Cove.	<b>Concept B (Green Gateway)</b> – includes a stormwater management strategy that will direct stormwater away from Brigantine Cove.	Both concepts include management strategies that will direct stormwater away from Brigantine Cove.
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in hydrological function	<ul style="list-style-type: none"> <li>Disturbance to physical hydraulic properties of soil/land above or below the water table (e.g., grading, backfilling)</li> </ul>	<b>Baseline</b> – there will be no change to the existing physical hydraulic properties at the zone.	<b>Concept A (Urban and Active)</b> – hydraulic function along the Mainland would have been disturbed during original construction. Grading will occur on land to direct stormwater away from Brigantine Cove.	<b>Concept B (Green Gateway)</b> – hydraulic function along the Mainland would have been disturbed during original construction. Grading will occur on land to direct stormwater away from Brigantine Cove.	A negligible change to hydraulic function may occur from either concept. Both concepts are considered to be equal in terms of disturbance to physical hydraulic properties.
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in quantity	<ul style="list-style-type: none"> <li>Area of pervious surface (to allow the infiltration of water into the soil)</li> </ul>	<b>Baseline</b> – the existing surface of the Mainland is generally pavement.	<b>Concept A (Urban and Active)</b> – will result in more pervious surface than existing conditions; however, overall pervious surface will be less than Concept B	<b>Concept B (Green Gateway)</b> – will result in more pervious surface than Concept A.	Concept B provides more opportunity to increase the overall area of pervious surface.
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in quality	<ul style="list-style-type: none"> <li>Potential for increased or decreased in water quality parameters compared to existing conditions</li> </ul>	<b>Baseline</b> – there are no known groundwater parameter exceedances along the Mainland.	<b>Concept A (Urban and Active)</b> – deicing salt will be used during operations; however, grading and stormwater management systems are being designed to reduce potential for contaminants to enter the water.	<b>Concept B (Green Gateway)</b> – deicing salt will be used during operations; however, grading and stormwater management systems are being designed to reduce potential for contaminants to enter the water.	Both concepts have the same potential to protect groundwater quality following implementation.  During construction, all efforts will be made to reduce the potential for spills and waste will not be deposited into the water.
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the area and connectivity of available habitat	<ul style="list-style-type: none"> <li>Area of habitat created or removed including mature trees, other native and non-native vegetation, wetlands, and structures</li> <li>Connectivity of habitat (e.g., linkages to other parks, migration routes)</li> <li>Number of habitat features impacted (e.g., turtle basking areas, shoreline)</li> <li>Number of species impacted</li> </ul>	<b>Baseline</b> – there is currently very little vegetation in the Mainland Zone which includes trees and ornamental shrubs as well as some invasive species. Some native tree species (e.g., white spruce) are located on the Mainland. Bridges and structures provide suitable nesting habitat for terrestrial species (e.g., barn swallow).	<b>Concept A (Urban and Active)</b> – is designed to be an active and urban use zone which will integrate areas of dense vegetation, where possible.	<b>Concept B (Green Gateway)</b> – is designed to integrate more green character with extensive planting and reduced hardscape.	Concept B will create more terrestrial habitat and provide more connectivity among habitat throughout the park. The Mainland Zone provides an opportunity to increase vegetation and associated wildlife habitat. Both concepts include removing one of the existing parking lots and incorporating planting beds and more dense tree areas.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Concept A	Concept B	Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Sensory disturbance (e.g., noise, dust, light, vibrations)</li> <li>Increase or decrease of forest structure (canopy, sub-canopy, understory)</li> <li>Interference of habitat by buildings/structures (e.g., glass/mirrored buildings alongside bird habitat)/people (e.g., encroachment on habitat)/suitability of habitat</li> </ul>	<b>Baseline</b> – there is currently very little vegetation in the area within the Mainland zone which includes trees and ornamental shrubs as well as some invasive species. Bridges and structures provide suitable nesting habitat for terrestrial species (e.g., barn swallow).	<b>Concept A (Urban and Active)</b> – sensory disturbance will occur during construction and operation. Concept A will integrate dense vegetation, where possible. A building for science programming is proposed, and is not anticipated to be a glass building.	<b>Concept B (Green Gateway)</b> – sensory disturbance will occur during construction and operation. Concept B provides more vegetated areas throughout the zone. A building for science programming is proposed, and is not anticipated to be a glass building.	Both concepts include sensory disturbance during construction and operations, as well as a new science programming building. Concept B provides a better opportunity to increase vegetation and greenspace throughout the zone.
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in vegetation communities and species, including vegetation communities of concern	<ul style="list-style-type: none"> <li>Overall area of vegetation</li> <li>Occurrences of invasive plant species</li> </ul>	<b>Baseline</b> – there is currently very little vegetation in the area within the Mainland zone which includes trees and ornamental shrubs. Invasive species Japanese knotweed and common reed are located along the south and west portion of the zone.	<b>Concept A (Urban and Active)</b> – is designed to be an active and urban use zone which will integrate areas of dense vegetation, where possible.	<b>Concept B (Green Gateway)</b> – is designed to integrate more green character with extensive planting and reduced hardscape.	Concept B provides a better opportunity to increase vegetation and greenspace throughout the zone. Invasive species will be managed during construction.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Terrestrial wildlife, including species at risk (SAR)	Change in movement (e.g., migration, access to water)	<ul style="list-style-type: none"> <li>Barriers (e.g., open excavation during construction, buildings) or filters (e.g., fencing) to wildlife movement reducing connectivity of habitat whether existing (e.g., structures already in place) or part of the alternative design (e.g., new infrastructure)</li> <li>Retention or creation of nesting opportunities for species at risk (e.g., barn swallow)</li> </ul>	<b>Baseline</b> – wildlife movement will continue as there will be no change to existing conditions. Existing infrastructure is aging. Thirty-one barn swallow nests were identified at Bridge 1, which connects the Mainland Central Entrance to the Forum.	<b>Concept A (Urban and Active)</b> – construction activities will create temporary barriers or filters to wildlife movement. Redevelopment activities will result in existing structures being removed and two new buildings on site (i.e., Transit Hub and Science Pavilion). Redevelopment activities will facilitate future widening of Bridge 1.	<b>Concept B (Green Gateway)</b> – construction activities will create temporary barriers or filters to wildlife movement. Redevelopment activities will result in existing structures being removed and two new buildings on site (i.e., Transit Hub and Science Pavilion). Redevelopment activities will facilitate future widening of Bridge 1.	Both concepts will create an equal change in wildlife movement during construction and after implementation. Fencing and open excavation will be required during construction activities; however, no permanent fencing is anticipated.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Terrestrial wildlife species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Wildlife fatality occurrence(s)</li> <li>Protected species listing</li> <li>Increase chance of fatality (e.g., glass buildings and birds)</li> </ul>	<b>Baseline</b> – no change to existing conditions. Thirty-one barn swallow nests were identified at Bridge 1, which connects the Mainland Central Entrance to the Forum.	<b>Concept A (Urban and Active)</b> – wildlife fatalities may occur during construction. There are no glass buildings included in this concept.	<b>Concept B (Green Gateway)</b> – wildlife fatalities may occur during construction. There are no glass buildings included in this concept.	Both concepts will increase the chance of wildlife mortality during construction equally; however, best practices and mitigation measures will reduce the chance of mortality risk to the extent possible. Neither concept is anticipated to increase wildlife mortality once implemented.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Concept A	Concept B	Result/Rational
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in movement	<ul style="list-style-type: none"> <li>Barriers to aquatic species movement due to temporary or permanent structures or infilling creating habitat fragmentation</li> <li>Water current changes that may impact species ability to use the water</li> </ul>	<b>Baseline</b> – no change to existing conditions.	<b>Concept A (Urban and Active)</b> – it is anticipated that redevelopment activities introduce a rock berm wall that will support the loading support system along the shoreline wall. The rock berm may present an initial barrier to aquatic movement; however, this feature will ultimately provide and protect aquatic habitat along the shoreline.	<b>Concept B (Green Gateway)</b> – it is anticipated that redevelopment activities introduce a rock berm wall that will support the loading support system along the shoreline wall. The rock berm may present an initial barrier to aquatic movement; however, this feature will ultimately provide and protect aquatic habitat along the shoreline.	Both concepts present the same potential change to aquatic movement.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Fatality occurrence(s)</li> <li>Spills into water (volume)</li> <li>Construction debris water entering the lake (volume)</li> </ul>	<b>Baseline</b> – no change to existing conditions.	<b>Concept A (Urban and Active)</b> – spills may occur during construction.	<b>Concept B (Green Gateway)</b> – Spills may occur during construction.	Both concepts may result in construction debris or spills.
Maintain and improve air quality	Air quality	Change in number and diversity of trees and canopy cover	<ul style="list-style-type: none"> <li>Area and type of vegetative cover</li> </ul>	<b>Baseline</b> – no change in area or diversity of vegetative cover.	<b>Concept A (Urban and Active)</b> – will increase vegetative cover compared to existing conditions.	<b>Concept B (Green Gateway)</b> – will increase vegetative cover more than Concept A.	Concept B provides greater opportunity to increase the overall area and type of vegetative cover.
Maintain and improve air quality	Air quality	Change in local air or greenhouse gas (GHG) emission levels	<ul style="list-style-type: none"> <li>Ability to use or travel within the site without producing emissions (e.g., walk, run, cycle)</li> <li>Number and type of continuous emissions sources after implementation</li> </ul>	<b>Baseline</b> – no change in air or GHG emissions. Currently sources of emissions include vehicles to and from the parking lots and on surrounding roads.	<b>Concept A (Urban and Active)</b> – will reduce the amount of parking on site, and Remembrance Drive will be removed. There are no sources of continuous emissions following construction.	<b>Concept B (Green Gateway)</b> – will reduce the amount of parking on site, and Remembrance Drive will be removed. There are no sources of continuous emissions following construction.	Both concepts are anticipated to have similar sources and amounts of air and GHG emissions.
<b>Summary of Natural Environment</b>					<ul style="list-style-type: none"> <li>Will reduce areas of impervious surfaces overall; however, the urban, active concept still includes additional areas of hardscaping.</li> <li>Will increase the overall area of vegetation compared to existing conditions.</li> </ul>	<ul style="list-style-type: none"> <li>Provides more opportunity to increase the overall area of pervious surface.</li> <li>Will create more terrestrial habitat and provide more connectivity among habitat throughout the park since more vegetation/greenspace can be introduced.</li> </ul>	Overall, Concept B provides more greenspace which will reduce impervious surfaces and increase potential habitat throughout the park.

Table F-5.2. Evaluation of the Social Environment – The Mainland.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Social acceptability (i.e., outcome of a collective judgment or opinion of a project or plan)	Create a concept that is acceptable to the public and area users	Change in public and local perception of Ontario Place	<ul style="list-style-type: none"> <li>Feedback received during consultation and engagement</li> </ul>	<p><b>Baseline</b> – there will be no change to the existing perception of this zone.</p> <p><b>Concept A (Urban and Active)</b> – has been well received by the public with comments favouring the urban beach and active space.</p> <p><b>Concept B (Green Gateway)</b> – has been well received by the public with comments favouring additional greenspace.</p>	Results of the October 2022 event indicate a slight preference for Concept B; however, a lot of comments favoured Concept A as well as a hybrid idea including features from both.
Social acceptability (i.e., outcome of a collective judgement or opinion of a project or plan)	Acceptable noise and light pollution on surrounding communities	Change in noise and light pollution	<ul style="list-style-type: none"> <li>Addition of land mass/earthworks and tree clusters</li> <li>Use of full cut-off fixtures and downlighting; minimized use of uplighting</li> </ul>	<p><b>Baseline</b> – existing sources of noise include traffic from surrounding vehicles and transit use (e.g., buses), motorized vessels at the boat slips, and from Budweiser Stage.</p> <p><b>Concept A (Urban and Active)</b> – includes more active use areas that has the potential to increase noise in the zone.</p> <p><b>Concept B (Green Gateway)</b> – includes sheltered, enclosed public spaces that may reduce noise from existing sources.</p>	Concept B provides more opportunity for some areas with reduced noise; however, this zone is intended for pickup/drop-off, transit connections and human activity. Therefore, noise will not be reduced to the same levels as other zones.
Facilitate recreational opportunities	Provide access to the water	Change in area or length of accessible shoreline	<ul style="list-style-type: none"> <li>Area of accessible shoreline created or removed</li> <li>Ability for all site visitors to access the shoreline (e.g., pedestrians, cyclists, wheelchair, strollers)</li> <li>Number and type (e.g., paved vs. gravel) of trails leading to and/or access points to the shoreline</li> </ul>	<p><b>Baseline</b> – existing conditions do not allow for access to the water.</p> <p><b>Concept A (Urban and Active)</b> – includes potential for cantilever or floating docks which will allow park users to get closer to the water.</p> <p><b>Concept B (Green Gateway)</b> – includes potential for cantilever or floating docks which will allow park users to get closer to the water.</p>	Each concept has been purposely designed to not allow direct access to the water for safety reasons; however, both concepts allow park users to get closer to the water through the introduction of a boardwalk feature along the shoreline. Redevelopment of the Mainland will result in a longer distance for water users to carry a kayak or canoe into the site.
Facilitate recreational opportunities	Tenant integration and connectivity	Ability to move from one site opportunity to the next without obstruction (e.g., connected to Martin Goodman trail)	<ul style="list-style-type: none"> <li>Number of access points</li> <li>Clear legible access to all tenant sites from the public realm</li> <li>Visible integration of tenant landscapes with public realm design</li> </ul>	<p><b>Baseline</b> – the area currently provides access to the entire park.</p> <p><b>Concept A (Urban and Active)</b> – will provide access to the rest of the park, including public and tenant sites. This concept is visibly integrated with the tenant areas at the Mainland.</p> <p><b>Concept B (Green Gateway)</b> – will provide access to the rest of the park, including public and tenant sites. This concept is visibly integrated with the tenant areas at the Mainland.</p>	Both concepts provide access to the rest of the site, including tenant areas.
Facilitate recreational opportunities	Provide recreational opportunities for users	Ability for users to participate in recreational activities	<ul style="list-style-type: none"> <li>Number of pathways/overall area of pathway for walking, cycling, running, etc. and access to water for kayaking, swimming</li> <li>Incorporate amenities for public use (e.g., washrooms, changerooms)</li> <li>Multi-functional and multi-seasonal spaces (e.g., use for all seasons)</li> </ul>	<p><b>Baseline</b> – there are currently no recreational activities at this zone.</p> <p><b>Concept A (Urban and Active)</b> – provides recreational areas such as an urban beach or volleyball court.</p> <p><b>Concept B (Green Gateway)</b> – includes areas for passive recreational opportunities (e.g., shaded hammock).</p>	Both concepts will include amenities such as washroom food and beverage opportunities. Concept A includes more recreational opportunities; however, the beach area will only provide open space during the winter (i.e., is not a multi-seasonal space as currently designed). Both concepts will result in a longer distance for water users to carry a kayak or canoe into the site.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Facilitate educational opportunities	Provide educational opportunities for users	Ability for users to participate in educational activities	<ul style="list-style-type: none"> <li>Number and type of educational/interpretive opportunities, including opportunities for Indigenous peoples and treaty-rights holders (e.g., MCFN)</li> <li>No cost or non-ticketed</li> </ul>	<p><b>Baseline</b> – there are no educational opportunities currently at this site.</p> <p><b>Concept A (Urban and Active)</b> – includes science programming that will require a ticket or fee to enter.</p> <p><b>Concept B (Green Gateway)</b> – includes science programming that will require a ticket or fee to enter.</p>	Both concepts include the same educational opportunities.
Provide a comfortable environment for site visitors	Year-round comfort (e.g., shade in the summer; pathways clear of snow in winter, wind protection in the winter and shoulder seasons)	Ability for users to use and enjoy the site comfortably throughout the year	<ul style="list-style-type: none"> <li>Areas with shade, cover, seating, protection from wind</li> <li>Creation of microclimate</li> <li>Access to food and beverages, and supporting facilities/sun and precipitation protected cover/pavilion</li> </ul>	<p><b>Baseline</b> – areas of shade and protection from wind are generally from trees surrounding the zone.</p> <p><b>Concept A (Urban and Active)</b> – includes sheltered areas such as plazas, umbrellas and trees throughout the site. Food and beverage facilities include a covered seating area.</p> <p><b>Concept B (Green Gateway)</b> – includes sheltered areas such as planted areas that will provide shade. Food and beverage facilities include a covered seating area.</p>	Concept A provides more opportunity for useful shade (i.e., areas where park users can sit out of the sun) or sheltered areas considering the umbrellas that have been included.
Provide a comfortable environment for site visitors	Comfortable environment for site visitors	Overall site accessibility, or ability for the concept to offer accessible services (e.g., compliance with accessibility standards)	<ul style="list-style-type: none"> <li>Building code, public spaces, AODA, NYC Universal Design Guidelines (exceed ADA minimums), CPTED</li> </ul>	<p><b>Baseline</b> – existing infrastructure and park design met the codes and guidelines applicable at the time of construction.</p> <p><b>Concept A (Urban and Active)</b> – will be designed according to appropriate accessibility standards.</p> <p><b>Concept B (Green Gateway)</b> – will be designed according to appropriate accessibility standards.</p>	Both concepts will meet AODA requirements and CPTED principles. Universal washrooms and change rooms will be built in this zone.
Provide a comfortable environment for site visitors	Provide a safe and comfortable environment for site visitors	Maintain safe access to the site throughout phased construction	<ul style="list-style-type: none"> <li>Preparation and implementation of Health and Safety plans, Traffic Control plans, etc. during construction</li> <li>Ease of access for emergency vehicles</li> </ul>	<p><b>Baseline</b> – does not require construction; therefore, safe access throughout this zone would be maintained.</p> <p><b>Concept A (Urban and Active)</b> – will implement approved plans during construction. This zone may also require a Traffic Control Plan during operations. Once construction is complete, emergency vehicles will be able to access the zone, as needed.</p> <p><b>Concept B (Green Gateway)</b> – will implement approved plans during construction. This zone may also require a Traffic Control Plan during operations. Once construction is complete, emergency vehicles will be able to access the zone, as needed.</p>	Both concepts will maintain safe access throughout construction equally.
Provide a comfortable environment for site visitors	Provide a safe environment for site visitors	Ability to implement safety features for site visitors (e.g., lighting, safety call/button, Security staff)	<ul style="list-style-type: none"> <li>Number and efficiency of safety features available to site visitors</li> <li>Sense of safety by site visitors</li> <li>Design and incorporate measures for safety to meet and exceed CPTED standards</li> </ul>	<p><b>Baseline</b> – existing conditions do not provide a variety of safety features.</p> <p><b>Concept A (Urban and Active)</b> – a number of safety features can be implemented at this zone including adequate lighting and the potential for a safety call station/button.</p> <p><b>Concept B (Green Gateway)</b> – a number of safety features can be implemented at this zone including adequate lighting and the potential for a safety call station/button.</p>	Both concepts provide an equal opportunity to integrate safety features.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Provide a comfortable environment for site visitors	Provide a safe environment for site visitors	Reduce roads and vehicle use within the site to lower potential for accidents with site visitors (e.g., reduce amount of heavy equipment needed during implementation/operation, timed access when users are not present)	<ul style="list-style-type: none"> <li>▪ Designated trail use</li> <li>▪ Design for non-vehicle traffic only (e.g., width of trail)</li> <li>▪ Design discrete servicing routes to minimize use of open space while providing aesthetic appeal and pedestrian use when not used for servicing</li> </ul>	<b>Baseline</b> – there will be no change to the existing environment for site visitors.	<b>Concept A (Urban and Active)</b> – redevelopment activities include removing Remembrance Drive which will ultimately increase designated trail use and reduce vehicle use within the site.	<b>Concept B (Green Gateway)</b> – redevelopment activities include removing Remembrance Drive which will ultimately increase designated trail use and reduce vehicle use within the site.	Both concepts provide trails and are designed for non-vehicle traffic aside from required maintenance.
<b>Summary of Social Environment</b>					<ul style="list-style-type: none"> <li>▪ Public feedback favours features (e.g., Urban Beach or other recreational opportunities) from Concept A as well as a hybrid idea including features from both (e.g., more wetland/vegetative features included).</li> <li>▪ Includes more recreational opportunities (passive and active).</li> <li>▪ Provides more opportunity for useful shade (i.e., areas where park users can get out of the sun) or sheltered areas by adding tables/umbrellas.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public feedback has a slight preference for Concept B, specifically the increase in vegetation and greenspace.</li> <li>▪ Includes areas for passive recreational uses (e.g., hammocks) throughout the zone.</li> <li>▪ Includes more overall greenspace.</li> </ul>	Overall, a lot of the key messages from public feedback are included in both concepts (e.g., reduce aboveground parking, dedicated drop-off/pickup zones).

Table F-5.3. Evaluation of the Cultural Environment –The Mainland.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational	
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes as per Ontario Place Strategic Conservation Plan	Compatible with identified built heritage resources and cultural heritage landscapes	Ability to conserve and promote identified built heritage features and cultural heritage landscapes	<ul style="list-style-type: none"> <li>Meets conservation strategies to reduce negative impacts of the proposed concept on cultural heritage resources and landscapes</li> </ul>	<b>Baseline</b> – the existing Sault and The Passage artwork are located within the Mainland.	<p><b>Concept A (Urban and Active)</b> – does not require the removal of existing heritage attributes. Will provide dedicated pick-up and drop-off locations, connections to the Martin Goodman Trail, an arrival plaza, public promenade and urban beach. Concept A meets the following conservation strategies: Public Realm, Accessibility Requirements, Ontario Place Branding, Visual Relationships, Circulation, and Vegetation. However, building the Science Pavilion may impact approach views.</p> <p><b>Concept B (Green Gateway)</b> – Does not require the removal of existing heritage attributes. Will provide dedicated pick-up and drop-off locations, connections to the Martin Goodman Trail, an arrival plaza, public promenade and urban beach. Concept A meets the following conservation strategies: Public Realm, Accessibility Requirements, Ontario Place Branding, Visual Relationships, Circulation, and Vegetation. However, building the Science Pavilion may impact approach views.</p>	Both concepts provide meet conservation strategies equally. Both concepts include the integration of buildings that may interfere with approach views along the Mainland.  Artwork may be relocated east of the Central Entrance.
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes	Compatibility with the original vision for Ontario Place (Hough design)	Preservation and/or restoration of existing shoreline and shoreline amenities, landforms and ecological habitat	<ul style="list-style-type: none"> <li>Implement Hough design principles</li> <li>Enhance safe public access to waterfront</li> <li>Reintroduction of a destination marina environment</li> </ul>	<b>Baseline</b> – few features from the original Hough design remain on site.	<p><b>Concept A (Urban and Active)</b> – the Cloud Gateway is inspired by the Hough design of the original marina building forms. The Cloud Gateway utilizes heritage structure shapes to create a unique entrance gate.</p> <p><b>Concept B (Green Gateway)</b> – includes the integration of more trees and vegetation that support Hough’s vision of having tree canopy on site.</p>	Although Concept B supports Hough’s design principles of including a tree canopy on site, Concept A has a stronger connection to the original Ontario Place heritage.
<u>Indigenous Cultural:</u> Reflect Indigenous perspectives	Design that is reflective of Indigenous input and feedback and that facilitates traditional and cultural activities	Ability for the concept to integrate Indigenous input and perspectives into various aspects of design as they relate to different assessment criteria	<ul style="list-style-type: none"> <li>Integration of feedback from Indigenous communities into design options to ensure appropriate management of environment and opportunities for traditional and cultural activities</li> <li>Change in the presence of culturally significant plant species and mature trees</li> </ul>	<b>Baseline</b> – there are some native tree species currently at the Mainland (e.g., white spruce); however, other vegetation is generally ornamental (e.g., shrubs).	<p><b>Concept A (Urban and Active)</b> – includes more urban and active spaces that will include areas for additional trees and vegetation.</p> <p><b>Concept B (Green Gateway)</b> – includes more opportunity to integrate extensive planting with minimal hardscape.</p>	Both concepts will increase the amount of vegetation that is currently on site; however, Concept B provides more area for increasing greenspace.
<u>Indigenous Cultural:</u> Respect and reflect treaty history and current cultural landscapes	Respect and reflect treaty history and current cultural landscapes	Integration of Indigenous design principles and programming	<ul style="list-style-type: none"> <li>Design concepts which appropriately reflect local Indigenous culture based on input received from Indigenous communities.</li> </ul>	<b>Baseline</b> – existing conditions at the Mainland do not reflect Indigenous design principles and programming.	<p><b>Concept A (Urban and Active)</b> – will include Indigenous design principles and programming into the final design by continuing to engage with Indigenous communities regarding ideas such as creating greenspace</p> <p><b>Concept B (Green Gateway)</b> – will include Indigenous design principles and programming into the final design by continuing to engage with Indigenous communities regarding ideas such as creating greenspace</p>	This zone provides opportunities to create greenspace and connections and to enhance the existing gateways with cultural heritage elements. Both concepts include consideration for integrating Indigenous design principles and programming.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Summary of the Cultural Environment					<p>and enhancing the existing gateways with Indigenous art.</p> <ul style="list-style-type: none"> <li>▪ Both concepts meet conservation strategies equally. Artwork could be relocated east of the Central Entrance.</li> <li>▪ Includes more tree canopy areas around public amenity space, supporting Hough's vision of having tree canopy on site. Includes a "Cloud Gateway" that is an interpretation of the original park features.</li> <li>▪ Will increase trees and vegetation compared to existing conditions.</li> </ul>	<p>and enhancing the existing gateways with Indigenous art.</p> <ul style="list-style-type: none"> <li>▪ Both concepts meet conservation strategies equally. Artwork could be relocated east of the Central Entrance.</li> <li>▪ Includes integration of more trees and vegetation that support Hough's vision of having tree canopy on site.</li> <li>▪ Provides the most area for increasing greenspace which is preferred by Indigenous communities.</li> </ul>	<p>Concept B provides more opportunity to incorporate feedback from Indigenous communities.</p>

Table F-5.4. Evaluation of the Technical Environment – The Mainland.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Potential for the concept to be easily implemented	Constructability	Ease of construction and construction techniques	<ul style="list-style-type: none"> <li>Identified construction techniques</li> </ul>	<p><b>Baseline</b> – no activities are required for implementation.</p> <p><b>Concept A (Urban and Active)</b> – includes the urban beach which is anticipated to require more routine construction.</p> <p><b>Concept B (Green Gateway)</b> – may require more involved construction techniques to implement the waterfront wetland.</p>	<p>Both concepts include the same amount and types of buildings, green paving of the remaining parking spots and potential cantilever and floating docks.</p> <p>Considering the remaining components, Concept A will likely be easier to implement.</p>
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Reasonable permitting abilities and timelines	<ul style="list-style-type: none"> <li>Permitting requirements and known timelines</li> <li>Ability to obtain permit (e.g., SARA permit)</li> </ul>	<p><b>Baseline</b> – no permits are required to maintain the site in its current state.</p> <p><b>Concept A (Urban and Active)</b> – no permits under the <i>Fisheries Act</i> or <i>Endangered Species Act</i> are required for this zone.</p> <p><b>Concept B (Green Gateway)</b> – no permits under the <i>Fisheries Act</i> or <i>Endangered Species Act</i> are required for this zone.</p>	<p>Both concepts align with regulatory requirements equally. Redevelopment activities will facilitate the widening of Bridge 1 which contains barn swallow habitat. Authorization under the <i>Endangered Species Act</i> may be required for this work.</p>
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Meets applicable planning objectives and standards (e.g., PPS, A Place to Grow: Growth Plan for the GGH, City of Toronto)	<ul style="list-style-type: none"> <li>Identify and maintain compliance with applicable planning objectives and standards</li> </ul>	<p><b>Baseline</b> – no additional compliance with applicable planning objectives and standards is required.</p> <p><b>Concept A (Urban and Active)</b> – meets the objectives of applicable planning requirements (e.g., providing public access to the shoreline as outlined in the PPS).</p> <p><b>Concept B (Green Gateway)</b> – meets the objectives of applicable planning requirements (e.g., providing public access to the shoreline as outlined in the PPS).</p>	<p>Both concepts meet the objectives of applicable planning requirements equally.</p>
Facilitate multi-modal access	Roadway/vehicle access to the site	Change in ability for site visitors to access the site by vehicle or water	<ul style="list-style-type: none"> <li>Number of safe drop-off locations and parking opportunities</li> <li>Overall area of onsite parking</li> <li>Facilitates water-born transportation (e.g., ferries, water taxis, private watercraft)</li> </ul>	<p><b>Baseline</b> – the Zone does not currently offer adequate designated drop-off/pick-up locations. Parking is available across the Mainland.</p> <p><b>Concept A (Urban and Active)</b> – includes a designated drop-off/pick-up location. One parking lot (P1) will be relocated underground. Vehicles will be able to access the site; however, Remembrance Drive will be removed to reduce the amount of vehicle use within the Zone.</p> <p><b>Concept B (Green Gateway)</b> – includes a designated drop-off/pick-up location. One parking lot (P1) will be relocated underground. Vehicles will be able to access the site; however, Remembrance Drive will be removed to reduce the amount of vehicle use within the Zone.</p>	<p>Both concepts include the same number of safe drop-off locations. The existing P1 parking lot will be relocated underground. Remaining parking stalls will be redeveloped using green pave technology.</p>

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Facilitate multi-modal access	Multi-modal connections to and within the site	Change in ability for site visitors to access the site by transit	<ul style="list-style-type: none"> <li>Number of public transit stops/hubs to the site</li> <li>Multi-modal hubs (e.g., public transit [first/last mile connections], tour/shuttle bus, vehicle pickup and drop-off)</li> <li>Accommodate looping/terminating surface transit routes</li> </ul>	<p><b>Baseline</b> – there are currently few city transit routes that travel to the area and one seasonal route that goes to Ontario Place. The Go Transit line (Exhibition Station) is an approximate 15-minute walk from Ontario Place.</p> <p><b>Concept A (Urban and Active)</b> – the Zone will be designed to accommodate potential transit stops. Designated drop-off/pick-up areas and an arrival plaza are intended to accommodate multi-modal connections to the site.</p> <p><b>Concept B (Green Gateway)</b> – the Zone will be designed to accommodate potential transit stops. Designated drop-off/pick-up areas and an arrival plaza are intended to accommodate multi-modal connections to the site.</p>	Both concepts include increased potential to accommodate more options for transit stops. Both concepts include designated drop-off/pick-up locations and an arrival plaza to facilitate multi-modal connections to the site.
Facilitate multi-modal access	Pedestrian and cycling network to and within site	Change in existing pedestrian and cycling network (e.g., bridges, trails)	<ul style="list-style-type: none"> <li>Number and type of cycling and pedestrian network</li> <li>Ability to access the site from adjacent venues, including Exhibition Place and Ontario Line Exhibition Place Station</li> <li>Connectivity for site visitors through the site (i.e., the improvements to the Martin Goodman Trail)</li> <li>Address conflicts between cyclists/pedestrians and cyclists/vehicles in intersection and access design</li> </ul>	<p><b>Baseline</b> – the Martin Goodman Trail provides direct access to the site. Exhibition Place is an approximate 15-minute walk to Ontario Place. There are currently few safe options for pedestrian and cyclists to cross Lakeshore Boulevard.</p> <p><b>Concept A (Urban and Active)</b> – includes connections from the Martin Goodman Trail as well as connections from Lakeshore Boulevard. Remembrance Drive will be replaced with a Public Promenade to help reduce conflicts between cyclists/pedestrians and vehicles.</p> <p><b>Concept B (Green Gateway)</b> – includes connections from the Martin Goodman Trail as well as connections from Lakeshore Boulevard. Remembrance Drive will be replaced with a Public Promenade to help reduce conflicts between cyclists/pedestrians and vehicles.</p>	The design of the Mainland will include improved pedestrian, bicycle and transit links to Exhibition Place and the Exhibition transit hub for both concepts. Remembrance Drive will be replaced with a Public Promenade to improve cycling and pedestrian networks and reduce potential conflict with vehicles at the site.
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of impervious surfaces	<ul style="list-style-type: none"> <li>Overall area of pervious vs. impervious surfaces across the site</li> <li>Reduce hardscape areas</li> <li>Provide sustainable permeable solutions including greening of the surface parking lots</li> </ul>	<p><b>Baseline</b> – most of the Mainland zone is currently parking and asphalt areas.</p> <p><b>Concept A (Urban and Active)</b> – includes relocating one parking lot (P1) underground and the remaining parking will be redeveloped to include green pave technology.</p> <p><b>Concept B (Green Gateway)</b> – includes relocating one parking lot (P1) underground and the remaining parking will be redeveloped to include green pave technology. Additional greenspace associated with this Concept will increase pervious surfaces to the extent possible.</p>	Concept B provides greater opportunity to increase pervious surfaces and reduce hardscaped areas. Remaining aboveground parking will be redeveloped using green pave technology.
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of increased elevation	<ul style="list-style-type: none"> <li>Minimum design elevations that meet or exceed 100-year storm event</li> </ul>	<p><b>Baseline</b> – areas of the Mainland are currently subject to flooding. Current grading at the site leads to localized flooding.</p> <p><b>Concept A (Urban and Active)</b> – includes raising the elevation at the site to prevent flooding.</p> <p><b>Concept B (Green Gateway)</b> – includes raising the elevation at the site to prevent flooding.</p>	Both concepts are anticipated to address flooding within this zone.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Sediment management	Improve sediment management processes	Change in sediment management practices or volume	<ul style="list-style-type: none"> <li>Volume of removed sediment</li> <li>Beneficial reuse</li> <li>Ability to integrate sediment stabilization/capture into construction or integration</li> <li>Efficacy of erosion and sediment control strategies implemented to reduce sediment laden runoff from leaving the work area</li> <li>Need for dredging after implementation</li> </ul>	<p><b>Baseline</b> – there are no known sediment issues (e.g., build up) in this Zone.</p> <p><b>Concept A (Urban and Active)</b> – will integrate sediment stabilization and runoff reduction strategies in the overall design. There is no need for dredging at this Zone.</p> <p><b>Concept B (Green Gateway)</b> – will integrate sediment stabilization and runoff reduction strategies in the overall design. There is no need for dredging at this Zone.</p>	Both concepts are anticipated to manage and sediment laden runoff from the Zone.
Remediate existing contamination	Improve soil and/or water quality	Change in soil and water contamination	<ul style="list-style-type: none"> <li>Disturbance of contamination during construction/implementation.</li> <li>Ability for the site to maintain or improve conditions (i.e., not increase contamination)</li> </ul>	<p><b>Baseline</b> – there are no known groundwater parameter exceedances along the Mainland. There are known soil parameter exceedances (e.g., benzene) toward the east area of the Mainland.</p> <p><b>Concept A (Urban and Active)</b> – the parking lot on the east side of the Zone (i.e., P2) will remain. Construction will include breaking up the existing asphalt surface to properly implement the preferred design in this zone.</p> <p><b>Concept B (Green Gateway)</b> – the parking lot on the east side of the Zone (i.e., P2) will remain. Construction will include breaking up the existing asphalt surface to properly implement the preferred design in this zone.</p>	Both concepts include breaking up concrete where there are known areas of contamination. Existing contamination will be managed in accordance with best practices and standards during construction.
Upgrade or replace infrastructure and buildings	Improve infrastructure conditions for long-term use	Change in infrastructure and building condition	<ul style="list-style-type: none"> <li>Conserve and adapt extant structures where possible</li> <li>Number and magnitude of change in buildings and supporting site infrastructure (e.g., utilities)</li> <li>Decommission and remove old infrastructure along with design and construction of new buildings and supporting site infrastructure</li> </ul>	<p><b>Baseline</b> – existing structures include the Central Entrance and Offices; however, demolition of these buildings has been previously approved.</p> <p><b>Concept A (Urban and Active)</b> – will include a Science Pavilion, Transit Hub and Forecourt, Central Gateway and designated drop-off/pick-up location.</p> <p><b>Concept B (Green Gateway)</b> – will include a Science Pavilion, Transit Hub and Forecourt, Central Gateway and designated drop-off/pick-up location.</p>	Both concepts include the same number and type of planned infrastructure.
Maintain flexibility for future programming	Optionality for future use (i.e., more than one fixed use)	Flexibility for use	<ul style="list-style-type: none"> <li>Number of feasible event ideas (paid or free events)</li> <li>Number and type of utilities needed</li> </ul>	<p><b>Baseline</b> – existing optionality will remain the same.</p> <p><b>Concept A (Urban and Active)</b> – includes some small event use within the activity zone. This zone may be easier to accommodate future uses and development, as needed.</p> <p><b>Concept B (Green Gateway)</b> – does not include any event space, and it will be more difficult to accommodate future uses and development considering the wetland features.</p>	Concept A provides more opportunity to introduce small event space, and provides more optionality for future use.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational	
<p>Summary of the Technical Environment</p>				<ul style="list-style-type: none"> <li>▪ Overall, easier to implement.</li> <li>▪ Will reduce the overall areas of impervious surfaces compared to existing conditions.</li> <li>▪ Multi-modal connections to/from and within the site will be improved with designated drop-off/pick-up locations and the arrival plaza.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Includes some features that require more work for implementation (e.g., wetland areas).</li> <li>▪ Provides greater opportunity to include pervious surfaces.</li> <li>▪ Multi-modal connections to/from and within the site will be improved with designated drop-off/pick-up locations and the arrival plaza.</li> </ul>	<p>Overall, Concept A is easier to implement while reducing existing areas of impervious surfaces and increasing multi-modal connections.</p>

Table F-5.5. Evaluation of the Economic Environment – The Mainland.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational	
Construction costs	Estimated construction cost	Cost relative to other concepts	<ul style="list-style-type: none"> <li>Change in cost</li> </ul>	<p><b>Baseline</b> – there are no construction costs associated with this option.</p> <p><b>Concept A (Urban and Active)</b> – routine construction techniques and associated costs are anticipated.</p> <p><b>Concept B (Green Gateway)</b> – required infrastructure to support the potential wetland structures are likely to cost more to construct.</p>	<p>Concept B will likely involve higher construction costs.</p> <p>Costs associated with new infrastructure will be the same for both concepts.</p>	
Operation and Maintenance	Estimated annual operating costs for staff resources, ongoing operation, and maintenance activities	Cost relative to other concepts	<ul style="list-style-type: none"> <li>Change in cost</li> </ul>	<p><b>Baseline</b> – existing maintenance costs specific to the public realm area will remain the same.</p> <p><b>Concept A (Urban and Active)</b> – will require regular maintenance of the beach and active areas. Umbrellas and other equipment are required.</p> <p><b>Concept B (Green Gateway)</b> – routine maintenance of vegetated areas will be required. Passive recreational opportunities may be provided by the park (e.g., hammocks).</p>	<p>Both concepts will likely require routine maintenance.</p>	
Economic benefits	Ability to offer contract procurement, jobs, or other economic benefits from constructing and operating the park	Change in economic opportunities	<ul style="list-style-type: none"> <li>Rentals (e.g., water use equipment)</li> <li>Food and beverage sales</li> <li>Job opportunities that are inclusive of equity deserving communities</li> <li>Provide skill training</li> </ul>	<p><b>Baseline</b> – there are currently no economic opportunities at the Mainland associated with the public realm lands.</p> <p><b>Concept A (Urban and Active)</b> – in addition to jobs during construction, economic opportunities may exist for staffing the science building and arrival plaza as well as food and beverage opportunities during operations.</p> <p><b>Concept B (Green Gateway)</b> – in addition to jobs during construction, economic opportunities may exist for staffing the science building and arrival plaza as well as food and beverage opportunities during operations.</p>	<p>Both concepts provide the same type of economic opportunities during construction and operation.</p>	
<b>Summary of the Economic Environment</b>				<ul style="list-style-type: none"> <li>Will have lower construction and maintenance costs.</li> <li>Provides economic opportunities during construction and operation.</li> </ul>	<ul style="list-style-type: none"> <li>Will have higher construction and maintenance costs.</li> <li>Provides economic opportunities during construction and operation.</li> </ul>	<p>Concept A is preferred due to lower construction and maintenance costs.</p>

Table F-5.6. Evaluation of Sustainability – The Mainland.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Reduce contribution to climate change	Low atmospheric emissions (e.g., air, GHG) associated with the concept	Air and GHG emissions during construction (vehicle and heavy equipment emissions) and “operation/implementation” (e.g., air conditioning, use of fossil fuel)	<ul style="list-style-type: none"> <li>Change in emissions relative to “Do-Nothing” baseline concept</li> </ul>	<p><b>Baseline</b> – existing emission sources are from vehicles travelling on or around the Mainland.</p> <p><b>Concept A (Urban and Active)</b> – will require the use of heavy equipment and vehicles during construction. The science building and arrival plaza may require ongoing heating and cooling during the appropriate seasons.</p> <p><b>Concept B (Green Gateway)</b> – will require the use of heavy equipment and vehicles during construction. The science building and arrival plaza may require ongoing heating and cooling during the appropriate seasons.</p>	Both concepts will result in the same number and type of infrastructure on site that requires heating and cooling during the appropriate season.
Reduce contribution to climate change	Heat island effect	Ability for the concept to increase vegetation and reduce unnatural hard surfaces (e.g., concrete)	<ul style="list-style-type: none"> <li>Overall area of vegetation (trees, green roofs) and ability to provide shade throughout the site</li> <li>Overall area of hard surfaces</li> </ul>	<p><b>Baseline</b> – the existing Mainland contains expansive parking and asphalt areas.</p> <p><b>Concept A (Urban and Active)</b> – includes a mix of hard and soft landscaping with trees and other vegetation planted throughout. The remaining parking lot will include green pave technology. Green roofs are being considered for all new buildings on site.</p> <p><b>Concept B (Green Gateway)</b> – includes more green character with extensive planting and minimal hardscape. The remaining parking lot will include green pave technology. Green roofs are being considered for all new buildings on site.</p>	<p>Concept B provides more opportunity to increase the amount of overall vegetation and natural shade throughout the Mainland.</p> <p>Both concepts include green pave technology for the remaining parking on site, and consideration for green roofs on new infrastructure.</p>
Include sustainable infrastructure and buildings	Building resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles, wildfires)	Ability for the concept to align with all applicable building codes (e.g., Canadian Standards Association)	<ul style="list-style-type: none"> <li>Compliance with codes and standards (as-built/design documents)</li> </ul>	<p><b>Baseline</b> – existing infrastructure at this Zone was designed according to the applicable codes at the time of construction.</p> <p><b>Concept A (Urban and Active)</b> – all infrastructure (e.g., Science Pavilion) will be built in compliance with applicable codes and standards.</p> <p><b>Concept B (Green Gateway)</b> – all infrastructure (e.g., Science Pavilion) will be built in compliance with applicable codes and standards.</p>	Both concepts will be built in compliance with applicable codes and standards.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Include sustainable infrastructure and buildings	Infrastructure resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles)	Adaptability and resilience of infrastructure to withstand a changing climate	<ul style="list-style-type: none"> <li>▪ Infrastructure and site to withstand severe weather and temperatures</li> <li>▪ Designed for longevity</li> </ul>	<p><b>Baseline</b> – the existing hardscaping can withstand severe weather events (e.g., precipitation, snowfall); however, this Zone does experience flooding under certain conditions.</p>	<p><b>Concept A (Urban and Active)</b> – will help support adaptability and resilience in a changing climate by reducing asphalt and increasing trees. Buildings will be designed to withstand a changing climate.</p>	<p><b>Concept B (Green Gateway)</b> – will provide adaptability and resilience in a changing climate through proper landscaping and planting of additional trees. Wetlands may be impacted by natural freeze/thaw cycles (e.g., nitrogen and phosphorus cycling). Buildings will be designed to withstand a changing climate.</p>	<p>Concept B will provide more opportunity to increase adaptability and resilience with the integration of additional greenspaces and wetlands; however, the wetland areas may be impacted by natural freeze/thaw cycles.</p>
Include sustainable infrastructure and buildings	Green Infrastructure design and build	Compliance with applicable design standards and guidelines.	<ul style="list-style-type: none"> <li>▪ Number or size of certified buildings, as applicable</li> <li>▪ Building approvals</li> <li>▪ Zero Carbon Emissions</li> <li>▪ Waterfront design</li> <li>▪ Requirements identified throughout design development</li> <li>▪ SITES certification (i.e., sustainable sites)</li> <li>▪ Waterfront Edge Design Guidelines</li> </ul>	<p><b>Baseline</b> – buildings and infrastructure on site were not built with consideration for sustainability.</p>	<p><b>Concept A (Urban and Active)</b> – incorporates the intent and design strategies outlined in the Waterfront Edge Design Guidelines to the extent possible (e.g., choose an appropriate edge strategy, providing public access to the waterfront).</p>	<p><b>Concept B (Green Gateway)</b> – incorporates the intent and design strategies outlined in the Waterfront Edge Design Guidelines to the extent possible (e.g., providing public access to the waterfront, maintain and restore biodiversity).</p>	<p>Both concepts meet the intent and design strategies outlined in the Waterfront Edge Design Guidelines.</p>

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Sustainable Communities	Community-based solutions	Environmental and/or socio-economic benefits	<ul style="list-style-type: none"> <li>▪ Green infrastructure solutions (e.g., permeable paving, green roofs)</li> <li>▪ Climate change solutions (e.g., design new building to have zero carbon emissions, reduce parking on-site, potential for solar power)</li> <li>▪ Transportation facilities: trails and multi-use pathways</li> <li>▪ Community greenspace: parks</li> </ul>	<p><b>Baseline</b> – this Zone is comprised of poor-quality landscape (e.g., asphalt). Existing trails and pathways provide access to the rest of Ontario Place.</p> <p><b>Concept A (Urban and Active)</b> – all new infrastructure will consider green infrastructure solutions. Aboveground parking lots will be reduced, and remaining parking will use green pave technology. The Public Promenade will replace Remembrance Drive, reducing vehicle use within the Zone. This concept will increase the amount of existing greenspace.</p> <p><b>Concept B (Green Gateway)</b> – all new infrastructure will consider green infrastructure solutions. Aboveground parking lots will be reduced, and remaining parking will use green pave technology. The Public Promenade will replace Remembrance Drive, reducing vehicle use within the Zone. This concept will increase greenspace with extensive plantings and minimal hardscape.</p>	Both concepts are being designed to incorporate green infrastructure designs to the extent possible and will reduce asphalt parking lots. Concept B provides more opportunity for greenspace, overall.
				<ul style="list-style-type: none"> <li>▪ Will increase the overall area of vegetation compared to existing conditions.</li> <li>▪ Is designed to withstand severe weather and is anticipated to exist in a changing climate. The trees and vegetation will be native to the area and chosen based on resiliency.</li> </ul>	<ul style="list-style-type: none"> <li>▪ More opportunity to increase the amount of overall vegetation throughout the Mainland.</li> <li>▪ Will require some routine maintenance to withstand the impacts of climate change. For example, additional resources will be required during times of low precipitation or extreme temperatures.</li> </ul> <p>The increased vegetation is generally better for the environment, but the wetland features will require support to withstand severe weather.</p>

## The Forum

Table F-6.1. Evaluation of the Natural Environment – The Forum.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect			Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in habitat availability	<ul style="list-style-type: none"> <li>Overall area of available habitat</li> <li>Number of natural features and linkages for aquatic species movement (e.g., along the shore from shallow water to deeper offshore water)</li> </ul>	Baseline – N/A	Concept A (Fountain & Flexible Space) – N/A	Concept B (Sports & Recreation Hub) – N/A	This criterion is not applicable to the Forum since there is no aquatic habitat in this zone.
Protect and enhance terrestrial and aquatic natural features and linkages	Riparian/aquatic systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Potential increase or decrease in water quality parameters (e.g., TSS, contaminants, sand from volleyball courts, salt from parking lots and access)</li> <li>Sensory disturbance (e.g., vibrations) that may reduce the quality of available habitat</li> </ul>	Baseline – N/A	Concept A (Fountain & Flexible Space) – N/A	Concept B (Sports & Recreation Hub) – N/A	This criterion is not applicable to the Forum since there is no aquatic habitat in this zone.
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in water quality	<ul style="list-style-type: none"> <li>Potential to increase or decrease in water quality parameters (e.g., TSS, contamination, salt) due to existing conditions or spills during construction</li> <li>Weight of contaminants absorbed (by cattail in floating islands vs. no removal)</li> </ul>	Baseline – N/A	Concept A (Fountain & Flexible Space) – N/A	Concept B (Sports & Recreation Hub) – N/A	This criterion is not applicable to the Forum since there is no aquatic habitat in this zone.
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Change in Lake Ontario Shoreline systems (e.g., sensitive bluffs, dynamic beach)	<ul style="list-style-type: none"> <li>Impacts on shoreline</li> <li>Ability for the concept to meet the objectives of the Shoreline and Hazard Assessment</li> </ul>	Baseline – N/A	Concept A (Fountain & Flexible Space) – N/A	Concept B (Sports & Recreation Hub) – N/A	This criterion is not applicable to the Forum since there is no shoreline in this zone.
Protect and enhance terrestrial and aquatic natural features and linkages	Surface water systems	Stormwater management and infrastructure	<ul style="list-style-type: none"> <li>Ability to establish appropriate, effective, and sustainable stormwater management practices and infrastructure</li> <li>Potential to mitigate or protect against flood risks from Lake Ontario (e.g., wave uprush)</li> </ul>	Baseline – there will be no change to the existing stormwater management and infrastructure. This zone currently sees a high degree of runoff and other stormwater management issues.	Concept A (Fountain & Flexible Space) – can accommodate routine stormwater management infrastructure to help manage ongoing issues at this zone.	Concept B (Sports & Recreation Hub) – includes a bioswale east of the main promenade and west of the recreation area that will help capture, treat and infiltrate stormwater runoff before leaving the site.	Concept B provides greater stormwater management options to help treat runoff at the site.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect			Result/Rational
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in hydrological function	<ul style="list-style-type: none"> <li>Disturbance to physical hydraulic properties of soil/land above or below the water table (e.g., grading, backfilling)</li> </ul>	<b>Baseline</b> – N/A	<b>Concept A (Fountain &amp; Flexible Space)</b> – N/A	<b>Concept B (Sports &amp; Recreation Hub)</b> – N/A	This criterion is not applicable since there are no activities with the potential to disturb the water table.
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in quantity	<ul style="list-style-type: none"> <li>Area of pervious surface (to allow the infiltration of water into the soil)</li> </ul>	<b>Baseline</b> – this zone is comprised of poor-quality landscape (e.g., asphalt).	<b>Concept A (Fountain &amp; Flexible Space)</b> – allows for a mix of hard and soft landscaping to reduce the amount of impervious surface.	<b>Concept B (Sports &amp; Recreation Hub)</b> – will be primarily hard landscaping reducing the potential for pervious surfaces.	Concept A provides a better opportunity to increase the overall area of pervious surface across the zone.
Protect and enhance terrestrial and aquatic natural features and linkages	Groundwater quality and quantity	Change in quality	<ul style="list-style-type: none"> <li>Potential for increased or decreased in water quality parameters compared to existing conditions</li> </ul>	<b>Baseline</b> – existing sources of potential groundwater contamination will remain.	<b>Concept A (Fountain &amp; Flexible Space)</b> – activities that may influence groundwater quality (e.g., rainwater and contaminant management) will be included in the final design.	<b>Concept B (Sports &amp; Recreation Hub)</b> – activities that may influence groundwater quality (e.g., rainwater and contaminant management) will be included in the final design.	Both concepts offer the same potential for managing groundwater quality.
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the area and connectivity of available habitat	<ul style="list-style-type: none"> <li>Area of habitat created or removed including mature trees, other native and non-native vegetation, wetlands, and structures</li> <li>Connectivity of habitat (e.g., linkages to other parks, migration routes)</li> <li>Number of habitat features impacted (e.g., turtle basking areas, shoreline)</li> <li>Number of species impacted</li> </ul>	<b>Baseline</b> – there is an existing bat maternity roost tree (good condition) located on the western edge of the Forum and bat maternity roost tree (moderate condition) located on the northwest portion of the Forum. The existing Riverwalk Washroom may provide habitat for common nighthawk.	<b>Concept A (Fountain &amp; Flexible Space)</b> – includes planting or protecting trees around the zone that will create habitat and provide connectivity for terrestrial species throughout the park. Trees and structures on site that provide habitat for terrestrial species may be removed.	<b>Concept B (Sports &amp; Recreation Hub)</b> – includes planting or protecting trees around the zone that will create habitat and provide connectivity for terrestrial species throughout the park. Trees and structures on site that provide habitat for terrestrial species may be removed.	Both concepts will increase the amount of vegetation in this zone equally. Habitat features that may be removed will be done during the appropriate timing window (e.g., outside of the active bat season).
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in the quality of available habitat	<ul style="list-style-type: none"> <li>Sensory disturbance (e.g., noise, dust, light, vibrations)</li> <li>Increase or decrease of forest structure (canopy, sub-canopy, understory)</li> <li>Interference of habitat by buildings/structures (e.g., glass/mirrored buildings alongside bird habitat)/people (e.g., encroachment on habitat)/suitability of habitat</li> </ul>	<b>Baseline</b> – existing vegetation includes common tree species surrounding this zone.	<b>Concept A (Fountain &amp; Flexible Space)</b> – sensory disturbance will occur during construction. Human activity within this zone is anticipated to increase after implementation of the fountain and flexible space. Washrooms are the only buildings/structure planned for this concept. Forest area is expected to increase around the Forum.	<b>Concept B (Sports &amp; Recreation Hub)</b> – sensory disturbance will occur during construction. Human activity within this zone is anticipated to increase after implementation of the sports and recreation hub. Washrooms and change rooms are planned for this concept. Forest area is expected to increase around the Forum.	Both concepts provide an equal opportunity to increase available habitat surrounding the Forum.

Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Result/Rational	
Protect and enhance terrestrial and aquatic natural features and linkages	Terrestrial systems and habitat	Change in vegetation communities and species, including vegetation communities of concern	<ul style="list-style-type: none"> <li>Overall area of vegetation</li> <li>Occurrences of invasive plant species</li> </ul>	<b>Baseline</b> – there is currently very little vegetation in the area surrounding the Forum zone which includes commonly planted trees, shrubs and manicured lawn areas. No invasive plant species were identified in this zone.	<b>Concept A (Fountain &amp; Flexible Space)</b> – trees and vegetation will be included in the areas surrounding the fountain and flexible space.  <b>Concept B (Sports &amp; Recreation Hub)</b> – trees and vegetation will be included in the areas surrounding the sports and recreation hub.	Both concepts offer the same potential for increased vegetative cover.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Terrestrial wildlife, including species at risk (SAR)	Change in movement (e.g., migration, access to water)	<ul style="list-style-type: none"> <li>Barriers (e.g., open excavation during construction, buildings) or filters (e.g., fencing) to wildlife movement reducing connectivity of habitat whether existing (e.g., structures already in place) or part of the alternative design (e.g., new infrastructure)</li> <li>Retention or creation of nesting opportunities for species at risk (e.g., barn swallow)</li> </ul>	<b>Baseline</b> – wildlife movement will continue as there will be no change to existing conditions.	<b>Concept A (Fountain &amp; Flexible Space)</b> – wildlife movement may be restricted during construction. Existing nesting areas (e.g., common nighthawk) may be removed during construction.  <b>Concept B (Sports &amp; Recreation Hub)</b> – wildlife movement may be restricted during construction. Existing nesting areas (e.g., common nighthawk) may be removed during construction.	Both concepts will reduce wildlife movement during construction.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Terrestrial wildlife species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Wildlife fatality occurrence(s)</li> <li>Protected species listing</li> <li>Increase chance of fatality (e.g., glass buildings and birds)</li> </ul>	<b>Baseline</b> – no change to existing conditions.	<b>Concept A (Fountain &amp; Flexible Space)</b> – wildlife fatalities may occur during construction. There are no glass buildings included in this concept.  <b>Concept B (Sports &amp; Recreation Hub)</b> – wildlife fatalities may occur during construction. There are no glass buildings included in this concept.	Both concepts will increase the chance of wildlife mortality during construction equally; however, best practices and mitigation measures will reduce the chance of mortality risk to the extent possible. Neither concept is anticipated to increase wildlife mortality once implemented.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in movement	<ul style="list-style-type: none"> <li>Barriers to aquatic species movement due to temporary or permanent structures or infilling creating habitat fragmentation</li> <li>Water current changes that may impact species ability to use the water</li> </ul>	<b>Baseline</b> – N/A	<b>Concept A (Fountain &amp; Flexible Space)</b> – N/A  <b>Concept B (Sports &amp; Recreation Hub)</b> – N/A	This criterion is not applicable to the Forum since there is no aquatic habitat in this zone.
Protect terrestrial and aquatic species including birds, mammals, fish and insects	Aquatic species, including SAR	Change in mortality risk	<ul style="list-style-type: none"> <li>Fatality occurrence(s)</li> <li>Spills into water (volume)</li> <li>Construction debris water entering the lake (volume)</li> </ul>	<b>Baseline</b> – N/A	<b>Concept A (Fountain &amp; Flexible Space)</b> – N/A  <b>Concept B (Sports &amp; Recreation Hub)</b> – N/A	This criterion is not applicable to the Forum since there is no aquatic habitat in this zone.

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Objective	Criteria	Indicator	Measure/Parameter	Potential Effect	Result/Rational	
Maintain and improve air quality	Air quality	Change in number and diversity of trees and canopy cover	<ul style="list-style-type: none"> <li>Area and type of vegetative cover</li> </ul>	<b>Baseline</b> – there is currently very little vegetation in the area surrounding the Forum zone.	<p><b>Concept A (Fountain &amp; Flexible Space)</b> – trees and vegetation will be included in the areas surrounding the fountain and flexible space.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – trees and vegetation will be included in the areas surrounding the sports and recreation hub.</p>	Both concepts offer the same potential for increased vegetative cover.
Maintain and improve air quality	Air quality	Change in local air or greenhouse gas (GHG) emission levels	<ul style="list-style-type: none"> <li>Ability to use or travel within the site without producing emissions (e.g., walk, run, cycle)</li> <li>Number and type of continuous emissions sources after implementation</li> </ul>	<b>Baseline</b> – vehicles currently access this zone. Building on site	<p><b>Concept A (Fountain &amp; Flexible Space)</b> – site visitors can use or travel within the site without producing emissions. Ongoing operations may require the use of a forklift to move large equipment for events; however, these emissions should be negligible.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – site visitors can use or travel within the site without producing emissions. Winter activities may require a Zamboni for winter maintenance; however, consideration for an electric unit will be integrated into the concept.</p>	Both concepts offer the same potential to use the site without producing emissions. Any sources of emissions after implementation are anticipated to be intermittent, contributing a negligible amount of emissions.
<b>Summary of Natural Environment</b>				<ul style="list-style-type: none"> <li>Can accommodate routine stormwater management infrastructure to help manage ongoing issues at this zone.</li> <li>Allows for a mix of hard and soft landscaping to reduce the amount of impervious surface.</li> <li>Includes planting or protecting trees around the zone to create habitat and provide connectivity for terrestrial species throughout the park.</li> </ul>	<ul style="list-style-type: none"> <li>Includes a bioswale that will help capture, treat and infiltrate stormwater runoff before leaving the site.</li> <li>Will be primarily hard landscaping reducing the potential for pervious surfaces.</li> <li>Includes planting or protecting trees around the zone to create habitat and provide connectivity for terrestrial species throughout the park.</li> </ul>	Both concepts will increase the existing vegetation on site. Preferred features from Concept A (e.g., mix of hard and soft landscape) and Concept B (e.g., bioswale for stormwater management) can be combined to enhance the natural environment.

Table F-6.2. Evaluation of the Social Environment – The Forum.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Social acceptability (i.e., outcome of a collective judgement or opinion of a project or plan)	Create a concept that is acceptable to the public and area users	Change in public and local perception of Ontario Place	<ul style="list-style-type: none"> <li>Feedback received during consultation and engagement</li> </ul>	<b>Baseline</b> – there will be no change to the existing perception of this zone.	<b>Concept A (Fountain &amp; Flexible Space)</b> – has been well-received by the public, with the majority of comments favouring the flexibility of the space, additional green space and reduced hard pavement.	<b>Concept B (Sports &amp; Recreation Hub)</b> – has been well-received by the public, with the majority of comments favouring recreational opportunities provided by this concept, specifically the skate track.	Results from the October 2022 event indicate a general preference for Concept B (Sports & Recreation Hub) or a hybrid of both concepts (i.e., certain features from both be combined). Feedback also indicates having additional greenspace is ideal.
Social acceptability (i.e., outcome of a collective judgement or opinion of a project or plan)	Acceptable noise and light pollution on surrounding communities	Change in noise and light pollution	<ul style="list-style-type: none"> <li>Addition of land mass/earthworks and tree clusters</li> <li>Use of full cut-off fixtures and downlighting; minimized use of uplighting</li> </ul>	<b>Baseline</b> – existing sources of noise in this zone include Budweiser Stage and noise from surrounding airports.	<b>Concept A (Fountain &amp; Flexible Space)</b> – will provide trees surrounding the Forum; however, noise from events at Budweiser Stage are difficult to buffer in this zone. Opening this area to activities and play areas will increase noise within the zone, which is considered acceptable daily park use. Adequate lighting will be installed to ensure the zone is safe to use.	<b>Concept B (Sports &amp; Recreation Hub)</b> – will provide trees surrounding the Forum; however, noise from events at Budweiser Stage are difficult to buffer in this zone. Opening this area to recreational and play use will increase noise within the zone, which is considered acceptable daily park use. Adequate lighting will be installed to ensure the zone is safe to use.	Both concepts include trees surrounding the Forum, and both concepts are anticipated to increase the level of existing noise within this zone.
Facilitate recreational opportunities	Provide access to the water	Change in area or length of accessible shoreline	<ul style="list-style-type: none"> <li>Area of accessible shoreline created or removed</li> <li>Ability for all site visitors to access the shoreline (e.g., pedestrians, cyclists, wheelchair, strollers)</li> <li>Number and type (e.g., paved vs. gravel) of trails leading to and/or access points to the shoreline</li> </ul>	<b>Baseline</b> – N/A	<b>Concept A (Fountain &amp; Flexible Space)</b> – N/A	<b>Concept B (Sports &amp; Recreation Hub)</b> – N/A	This criterion is not applicable to the Forum since this zone does not provide access to the shoreline.
Facilitate recreational opportunities	Tenant integration and connectivity	Ability to move from one site opportunity to the next without obstruction (e.g., connected to Martin Goodman trail)	<ul style="list-style-type: none"> <li>Number of access points</li> <li>Clear legible access to all tenant sites from the public realm</li> <li>Visible integration of tenant landscapes with public realm design</li> </ul>	<b>Baseline</b> – this zone currently provides access to the Budweiser Stage and Trillium Park. The Forum can be accessed through the Mainland from the East and Central entrance areas.	<b>Concept A (Fountain &amp; Flexible Space)</b> – will allow users to move from the Mainland to Budweiser Stage, Brigantine Cove and the Water's Edge without obstruction. The western edge of the Forum will be designed for consideration of the Live Nation tenanted lands.	<b>Concept B (Sports &amp; Recreation Hub)</b> – will allow users to move from the Mainland to Budweiser Stage, Brigantine Cove and the Water's Edge without obstruction. The western edge of the Forum will be designed for consideration of the Live Nation tenanted lands.	Both concepts provide an equal opportunity to move from one zone to the next and provide access to the Budweiser Stage and Trillium Park.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Concept A (Fountain & Flexible Space)	Concept B (Sports & Recreation Hub)	Results/Rational
Facilitate recreational opportunities	Provide recreational opportunities for users	Ability for users to participate in recreational activities	<ul style="list-style-type: none"> <li>Number of pathways/overall area of pathway for walking, cycling, running, etc. and access to water for kayaking, swimming</li> <li>Incorporate amenities for public use (e.g., washrooms, changerooms)</li> <li>Multi-functional and multi-seasonal spaces (e.g., use for all seasons)</li> </ul>	<b>Baseline</b> – there are currently some basketball court lines painted on the surface of the Forum. This area is currently used for a variety of activities such as informal music events, drive-in movies and winter lights festival.	<b>Concept A (Fountain &amp; Flexible Space)</b> – includes a path that connects from the Mainland and Brigantine Cove for walking, running, cycling, etc. Washrooms are included in this concept. This space is highly flexible to accommodate a wide range of programming and users. The moveable furniture can create different types of outdoor spaces. The activity lawn and play fountain areas have the ability to be used in a different manner in the winter season (e.g., ice rink).	<b>Concept B (Sports &amp; Recreation Hub)</b> – includes a path that connects from the Mainland and Brigantine Cove for walking, running, cycling, etc. Washrooms and change rooms are included in this concept. This space is less flexible with the defined sparts and recreational areas; however, things like the hockey rink can be used in a different manner during other seasons (e.g., basketball, volleyball).	Concept A provides more opportunity for flexibility and multi-use spaces throughout the year. Concept B is specifically designed to offer recreational opportunities and will include the appropriate amenities. Both concepts include pathways that can be used for walking, running, cycling, etc. Ideas from both concepts can be merged to create preferred recreational uses in this zone.
Facilitate educational opportunities	Provide educational opportunities for users	Ability for users to participate in educational activities	<ul style="list-style-type: none"> <li>Number and type of educational/interpretive opportunities, including opportunities for Indigenous peoples and treaty-rights holders (e.g., MCFN)</li> <li>No cost or non-ticketed</li> </ul>	<b>Baseline</b> – there is currently no charge or ticket required to access this zone. There are no existing formal educational or interpretive opportunities.	<b>Concept A (Fountain &amp; Flexible Space)</b> – will not require a charge or ticket to access. Concept A provides a few opportunities for education or interpretive designs such as Indigenous plant name markers.	<b>Concept B (Sports &amp; Recreation Hub)</b> – will not require a charge or ticket to access. Concept B provides a few opportunities for education or interpretive designs such as Indigenous plant name markers.	Both concepts provide an equal opportunity for users to participate in educational activities; however, the purpose of this zone is to provide recreational opportunities to park users. Educational opportunities will be established in surrounding areas of the park (e.g., Water’s Edge, Brigantine Cove).
Provide a comfortable environment for site visitors	Year-round comfort (e.g., shade in the summer; pathways clear of snow in winter, wind protection in the winter and shoulder seasons)	Ability for users to use and enjoy the site comfortably throughout the year	<ul style="list-style-type: none"> <li>Areas with shade, cover, seating, protection from wind</li> <li>Creation of microclimate</li> <li>Access to food and beverages, and supporting facilities/sun and precipitation protected cover/pavilion</li> </ul>	<b>Baseline</b> – the zone is currently a wide open, paved section of land that offers minimal shade around the edges. There are no structures that provide protection from wind or rain.	<b>Concept A (Fountain &amp; Flexible Space)</b> – umbrellas are included in the furniture offered at this site. Additional trees around and throughout the zone will offer additional shade. There are no specific structures that will provide protection from wind or rain. Food and beverage opportunities will be included in future design iterations. A berm area at the southern edge of the zone will be built which offers wind protection and supports the creation of a microclimate.	<b>Concept B (Sports &amp; Recreation Hub)</b> – includes trees around and throughout the zone for shade. There are no specific structures that will provide protection from wind or rain, although change room facilities will be on site for use, as needed. Food and beverage opportunities will be included in future design iterations. A berm area at the southern edge of the zone will be built which offers wind protection and supports the creation of a microclimate.	Concept A provides more opportunity to provide shade for park users. Tables with umbrellas can be used and moved according to the time of day.

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Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Provide a comfortable environment for site visitors	Comfortable environment for site visitors	Overall site accessibility, or ability for the concept to offer accessible services (e.g., compliance with accessibility standards)	<ul style="list-style-type: none"> <li>Building code, public spaces, AODA, NYC Universal Design Guidelines (exceed ADA minimums), CPTED</li> </ul>	<b>Baseline</b> – existing infrastructure and park design met the codes and guidelines applicable at the time of construction.	<b>Concept A (Fountain &amp; Flexible Space)</b> – will be designed according to appropriate accessibility standards. The fountain space may have some stepped seating areas that will be designed to ensure AODA compliance.	<b>Concept B (Sports &amp; Recreation Hub)</b> – will be designed according to appropriate accessibility standards. The ice track may present difficulty in accessing the areas inside the track; however, alternate design options will be implemented to resolve this issue, should the ice track feature become part of the preferred design.	Both concepts will meet AODA requirements and CPTED principles. Universal washrooms and change rooms will be built in this zone.
Provide a comfortable environment for site visitors	Provide a safe and comfortable environment for site visitors	Maintain safe access to the site throughout phased construction	<ul style="list-style-type: none"> <li>Preparation and implementation of Health and Safety plans, Traffic Control plans, etc. during construction</li> <li>Ease of access for emergency vehicles</li> </ul>	<b>Baseline</b> – does not require construction; therefore, safe access throughout this zone would be maintained.	<b>Concept A (Fountain &amp; Flexible Space)</b> – will implement approved plans during construction. Once construction is complete, emergency vehicles will be able to access the zone, as needed.	<b>Concept B (Sports &amp; Recreation Hub)</b> – will implement approved plans during construction. Once construction is complete, emergency vehicles will be able to access the zone, as needed.	Both concepts will maintain safe access throughout construction equally.
Provide a comfortable environment for site visitors	Provide a safe comfortable environment for site visitors	Ability to implement safety features for site visitors (e.g., lighting, safety call/button, Security staff)	<ul style="list-style-type: none"> <li>Number and efficiency of safety features available to site visitors</li> <li>Sense of safety by site visitors</li> <li>Design and incorporate measures for safety to meet and exceed CPTED standards</li> </ul>	<b>Baseline</b> – existing conditions do not provide a variety of safety features.	<b>Concept A (Fountain &amp; Flexible Space)</b> – a number of safety features can be implemented at this zone including adequate lighting and the potential for a safety call station/button.	<b>Concept B (Sports &amp; Recreation Hub)</b> – a number of safety features can be implemented at this zone including adequate lighting and the potential for a safety call station/button.	Both concepts provide an equal opportunity for safety features (e.g., lighting, safety call/button).
Provide a comfortable environment for site visitors	Provide a safe and comfortable environment for site visitors	Reduce roads and vehicle use within the site to lower potential for accidents with site visitors (e.g., reduce amount of heavy equipment needed during implementation/operation, timed access when users are not present)	<ul style="list-style-type: none"> <li>Designated trail use</li> <li>Design for non-vehicle traffic only (e.g., width of trail)</li> <li>Design discrete servicing routes to minimize use of open space while providing aesthetic appeal and pedestrian use when not used for servicing</li> </ul>	<b>Baseline</b> – there will be no change to the existing environment for site visitors.	<b>Concept A (Fountain &amp; Flexible Space)</b> – includes a designated trail around the entire zone that connects to the surrounding zones. This zone is being designed for non-vehicle traffic aside from necessary maintenance vehicles. Heavy equipment and vehicles will be required on site during construction. Maintenance vehicles (e.g., forklift) will be stored on site).	<b>Concept B (Sports &amp; Recreation Hub)</b> – includes a designated trail around the entire zone that connects to the surrounding zones. This zone is being designed for non-vehicle traffic aside from necessary maintenance vehicles. Heavy equipment and vehicles will be required on site during construction. Maintenance vehicles (e.g., Zamboni) will be stored on site).	Both concepts provide trails and are designed for non-vehicle traffic aside from required maintenance vehicles which will be stored on site.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
<p>Summary of Social Environment</p>					<ul style="list-style-type: none"> <li>▪ Feedback from the October 2022 event indicates having additional greenspace is important.</li> <li>▪ Provides more opportunity for flexibility and multi-use spaces throughout the year.</li> <li>▪ Provides more opportunity to provide shade for park users. Tables with umbrellas can be used and moved according to the time of day.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Results from the October 2022 event indicate a general preference for or a hybrid of both concepts (i.e., certain features from both be combined).</li> <li>▪ This concept is specifically designed to offer recreational opportunities and will include the appropriate amenities.</li> </ul>	<p>Overall, the concepts are generally equal with Concept A providing more flexible space and shaded areas. Ideally, features from both concepts can be integrated into one overall preferred design.</p>

Table F-6.3. Evaluation of the Cultural Environment –The Forum.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes as per Ontario Place Strategic Conservation Plan	Compatible with identified built heritage resources and cultural heritage landscapes	Ability to conserve and promote identified built heritage features and cultural heritage landscapes	<ul style="list-style-type: none"> <li>Meets conservation strategies to reduce negative impacts of the proposed concept on cultural heritage resources and landscapes</li> </ul>	<b>Baseline</b> – existing conditions at this zone include hardscaping (asphalt), flooding, and park use.	<b>Concept A (Fountain &amp; Flexible Space)</b> – will provide an opportunity to increase the integration of private and government-led design, increase wayfinding and signage standards, reduce potential for flooding, create AODA compliant landscaping, support new circulation systems, and new naturalizing part of the landscape. Concept A will meet the following conservation strategies: Public Realm, Climate Change, AODA requirements, Circulation and Vegetation.	<b>Concept B (Sports &amp; Recreation Hub)</b> – will provide an opportunity to increase the integration of private and government-led design, increase wayfinding and signage standards, reduce potential for flooding, create AODA compliant landscaping, support new circulation systems, and new naturalizing part of the landscape. Concept A will meet the following conservation strategies: Public Realm, Climate Change, AODA requirements, Circulation and Vegetation.	Both concepts meet conservation strategies equally.
<u>Built Heritage:</u> Conserve and promote the cultural heritage value and attributes of the property, including built heritage resources and cultural heritage landscapes	Compatibility with the original vision for Ontario Place (Hough design)	Preservation and/or restoration of existing shoreline and shoreline amenities, landforms and ecological habitat	<ul style="list-style-type: none"> <li>Implement Hough design principles</li> <li>Enhance safe public access to waterfront</li> <li>Reintroduction of a destination marina environment</li> </ul>	<b>Baseline</b> – the current design does not include any original Hough design principles.	<b>Concept A (Fountain &amp; Flexible Space)</b> – relocating the play fountain from the West Island to the forum supports the original Hough principles by bringing excitement back to this area. A berm is planned for the southern area of the Forum which may offer a view to the waterfront from the top.	<b>Concept B (Sports &amp; Recreation Hub)</b> – creating recreational space and activity areas may support the original Hough principle by bringing excitement back to this area. A berm is planned for the southern area of the Forum which may offer a view to the waterfront from the top.	Both concepts provide an opportunity to implement some of the original Hough design principles.
<u>Indigenous Cultural:</u> Reflect Indigenous perspectives	Design that is reflective of Indigenous input and feedback and that facilitates traditional and cultural activities	Ability for the concept to integrate Indigenous input and perspectives into various aspects of design as they relate to different assessment criteria	<ul style="list-style-type: none"> <li>Integration of feedback from Indigenous communities into design options to ensure appropriate management of environment and opportunities for traditional and cultural activities</li> <li>Change in the presence of culturally significant plant species and mature trees</li> </ul>	<b>Baseline</b> – the current design of this area does not include the integration of current feedback from Indigenous communities.	<b>Concept A (Fountain &amp; Flexible Space)</b> – engagement with Indigenous communities to date indicates there is an opportunity to host Indigenous festivals in this area. Additionally, this zone has the potential to include native plants and increase biodiversity around the edges of the Forum as well as teaching kiosks throughout the zone.	<b>Concept B (Sports &amp; Recreation Hub)</b> – engagement with Indigenous communities to date indicates is an opportunity to host Indigenous festivals in this area. Concept B has the potential to include native plants and increase biodiversity around the edges of the Forum as well as integrating teaching kiosks throughout the zone.	Both concepts provide a large, flexible area that will accommodate activities such as Indigenous festivals. Additional feedback, such as planting native species and increasing biodiversity, can be integrated into the vegetated areas of this zone.
<u>Indigenous Cultural:</u> Respect and reflect treaty history and	Respect and reflect treaty history and	Integration of Indigenous design principles and programming	<ul style="list-style-type: none"> <li>Design concepts which appropriately reflect local Indigenous culture based on</li> </ul>	<b>Baseline</b> – the current design of the Forum does not reflect	<b>Concept A (Fountain &amp; Flexible Space)</b> – provides an	<b>Concept B (Sports &amp; Recreation Hub)</b> – provides an opportunity to increase	Both concepts provide an equal opportunity for increasing native

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Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects		Results/Rational	
current cultural landscapes	current cultural landscapes		input received from Indigenous communities.	Indigenous design principles and programming.	opportunity to increase native vegetation and biodiversity.	native vegetation and biodiversity.	vegetation and biodiversity around the zone.
<b>Summary of the Cultural Environment</b>					<ul style="list-style-type: none"> <li>▪ Meets applicable strategies outlined in the Strategic Conservation Plan.</li> <li>▪ Relocating the play fountain from the West Island to the forum supports the original Hough principles by bringing excitement back to this area</li> </ul>	<ul style="list-style-type: none"> <li>▪ Meets applicable strategies outlined in the Strategic Conservation Plan.</li> <li>▪ Creating recreational space and activity areas may support the original Hough principle by bringing excitement back to this area.</li> </ul>	Both concepts meet the objectives of the Cultural Environment equally.

Table F-6.4. Evaluation of the Technical Environment – The Forum.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Potential for the concept to be easily implemented	Constructability	Ease of construction and construction techniques	<ul style="list-style-type: none"> <li>Identified construction techniques</li> </ul>	<p><b>Baseline – no activities are required for implementation.</b></p> <p><b>Concept A (Fountain &amp; Flexible Space) –</b> requires installation of water infrastructure to operate the play fountain. Other areas of this concept utilize routine construction techniques (e.g., activity lawn, paving).</p> <p><b>Concept B (Sports &amp; Recreation Hub) –</b> includes installation of recreational areas (e.g., basketball court), activity lawn and promenade which utilize routine construction techniques. This concept requires installation of running track/ice trail and ice rink which requires water and cooling installation (i.e., radiant piping). This concept also includes the installation of change rooms.</p>	Concept A is considered easier in terms of construction and implementation since there are fewer features requiring specialized components (e.g., radiant piping).
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Reasonable permitting abilities and timelines	<ul style="list-style-type: none"> <li>Permitting requirements and known timelines</li> <li>Ability to obtain permit (e.g., SARA permit)</li> </ul>	<p><b>Baseline – no implementation is required.</b></p> <p><b>Concept A (Fountain &amp; Flexible Space) –</b>Per the City of Toronto Redevelopment Checklist, a Natural Heritage Impact Study has been completed.</p> <p><b>Concept B (Sports &amp; Recreation Hub) –</b>Per the City of Toronto Redevelopment Checklist, a Natural Heritage Impact Study has been completed.</p>	Both concepts align with regulatory requirements equally, and will have approximately the same permitting and approval timelines.
Potential for the concept to be easily implemented	Alignment with regulatory requirements (e.g., building codes, permits, environmental approvals)	Meets applicable planning objectives and standards (e.g., PPS, A Place to Grow: Growth Plan for the GGH, City of Toronto)	<ul style="list-style-type: none"> <li>Identify and maintain compliance with applicable planning objectives and standards</li> </ul>	<p><b>Baseline – no implementation is required.</b></p> <p><b>Concept A (Fountain &amp; Flexible Space) –</b> meets the objectives of applicable planning requirements (e.g., providing public access to the shoreline as outlined in the PPS).</p> <p><b>Concept B (Sports &amp; Recreation Hub) –</b> meets the objectives of applicable planning requirements (e.g., providing public access to the shoreline as outlined in the PPS).</p>	Both concepts meet the objectives of applicable planning requirements equally, including the PPS, A Place to Grow: Growth Plan for the GGH, and City of Toronto Official Plan).
Facilitate multi-modal access	Roadway/vehicle access to the site	Change in ability for site visitors to access the site by vehicle or water	<ul style="list-style-type: none"> <li>Number of safe drop-off locations and parking opportunities</li> <li>Overall area of onsite parking</li> <li>Facilitates water-born transportation (e.g., ferries, water taxis, private watercraft)</li> </ul>	<p><b>Baseline – N/A</b></p> <p><b>Concept A (Fountain &amp; Flexible Space) – N/A</b></p> <p><b>Concept B (Sports &amp; Recreation Hub) – N/A</b></p>	This criterion is not applicable since the site is accessed through the Mainland (i.e., safe drop-off and pick-up locations), there is no parking associated with the zone, and this zone is not accessible by water.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects			Results/Rational
Facilitate multi-modal access	Multi-modal connections to and within the site	Change in ability for site visitors to access the site by transit	<ul style="list-style-type: none"> <li>Number of public transit stops/hubs to the site</li> <li>Multi-modal hubs (e.g., public transit [first/last mile connections], tour/shuttle bus, vehicle pickup and drop-off)</li> <li>Accommodate looping/terminating surface transit routes</li> </ul>	Baseline – N/A	Concept A (Fountain & Flexible Space) – N/A	Concept B (Sports & Recreation Hub) – N/A	This criterion is not applicable to the Forum since access to the site is through the Mainland.
Facilitate multi-modal access	Pedestrian and cycling network to and within site	Change in existing pedestrian and cycling network (e.g., bridges, trails)	<ul style="list-style-type: none"> <li>Number and type of cycling and pedestrian network</li> <li>Ability to access the site from adjacent venues, including Exhibition Place and Ontario Line Exhibition Place Station</li> <li>Connectivity for site visitors through the site (i.e., the improvements to the Martin Goodman Trail)</li> <li>Address conflicts between cyclists/pedestrians and cyclists/vehicles in intersection and access design</li> </ul>	Baseline – there will be no change in the existing pedestrian and cycling network.	Concept A (Fountain & Flexible Space) – will include a pedestrian and cycling network that connects this zone to the rest of the park. Pathways will be marked for cyclists to reduce potential conflicts between cyclists and pedestrians in this area. Vehicles will not use this zone with the exception of maintenance and emergency vehicles, as needed.	Concept B (Sports & Recreation Hub) – will include a pedestrian and cycling network that connects this zone to the rest of the park. Pathways will be marked for cyclists to reduce potential conflicts between cyclists and pedestrians in this area. Vehicles will not use this zone with the exception of maintenance and emergency vehicles, as needed.	Both concepts will create an equal opportunity to improve the existing pedestrian and cycling networks. The anticipated width of the walkway will allow for specific cycling and walking.
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of impervious surfaces	<ul style="list-style-type: none"> <li>Overall area of pervious vs. impervious surfaces across the site</li> <li>Reduce hardscape areas</li> <li>Provide sustainable permeable solutions including greening of the surface parking lots</li> </ul>	Baseline – this zone is currently asphalt that experiences flooding.	Concept A (Fountain & Flexible Space) – includes a mix of soft and hard landscaping to reduce the amount of impervious surface and existing hardscaping.	Concept B (Sports & Recreation Hub) – is primarily hardscaping to accommodate a variety of recreational uses.	Concept A provides a better opportunity to reduce impervious surfaces.
Floodplain management	Floodplain (flooding and slope erosion risk)	Area of increased elevation	<ul style="list-style-type: none"> <li>Minimum design elevations that meet or exceed 100-year storm event</li> </ul>	Baseline – this zone is currently asphalt that experiences flooding	Concept A (Fountain & Flexible Space) – the site will be graded appropriately and connected to a stormwater management system to reduce flooding during high precipitation events.	Concept B (Sports & Recreation Hub) – the site will be graded appropriately and connected to a stormwater management system to reduce flooding during high precipitation events.	Both concepts include grading during construction and connection to upgraded stormwater management systems to reduce the potential for flooding.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Sediment management	Improve sediment management processes	Change in sediment management practices or volume	<ul style="list-style-type: none"> <li>Volume of removed sediment</li> <li>Beneficial reuse</li> <li>Ability to integrate sediment stabilization/capture into construction or integration</li> <li>Efficacy of erosion and sediment control strategies implemented to reduce sediment laden runoff from leaving the work area</li> <li>Need for dredging after implementation</li> </ul>	<p><b>Baseline</b> – there are a series of drains in the zone; however, the area currently produces a high amount of runoff that may contribute to sediment in surrounding areas.</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – will integrate sediment stabilization of capture in the design to reduce runoff from leaving the zone. There is no need for dredging at this zone.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – will integrate sediment stabilization of capture in the design to reduce runoff from leaving the zone. A bioswale is planned east of the main promenade and west of the recreation area that will help capture, treat and infiltrate stormwater runoff before leaving the site. There is no need for dredging at this zone.</p>	Concept B includes a bioswale that will help capture, treat and infiltrate stormwater runoff before leaving the site.
Remediate existing contamination	Improve soil and/or water quality	Change in soil and water contamination	<ul style="list-style-type: none"> <li>Disturbance of contamination during construction/implementation.</li> <li>Ability for the site to maintain or improve conditions (i.e., not increase contamination)</li> </ul>	<p><b>Baseline</b> – contamination will not be disturbed during construction. There is known historical use of hydraulic oil at the northern part of this zone.</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – construction will include breaking up the existing asphalt surface to properly implement the preferred design in this zone.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – construction will include breaking up the existing asphalt surface to properly implement the preferred design in this zone.</p>	Both concepts include breaking up the existing asphalt which may disturb contaminated areas. Existing contamination will be managed in accordance with best practices and standards during construction.
Upgrade or replace infrastructure and buildings	Improve infrastructure conditions for long-term use	Change in infrastructure and building condition	<ul style="list-style-type: none"> <li>Conserve and adapt extant structures where possible</li> <li>Number and magnitude of change in buildings and supporting site infrastructure (e.g., utilities)</li> <li>Decommission and remove old infrastructure along with design and construction of new buildings and supporting site infrastructure</li> </ul>	<p><b>Baseline</b> – existing structures at this site include the IO administration and maintenance buildings, the River Walk washroom, and the Entrance Plaza Hut.</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – old, existing infrastructure will be decommissioned and removed to accommodate public features. Concept A will require utilities such as clean water for the play fountain, and utilities for the washroom.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – old, existing infrastructure will be decommissioned and removed to accommodate public features. Concept B will require utilities for the washroom and change room.</p>	Both concepts include the decommissioning and removal of existing infrastructure that will accommodate construction of the new park design.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Maintain flexibility for future programming	Optionality for future use (i.e., more than one fixed use)	Flexibility for use	<ul style="list-style-type: none"> <li>▪ Number of feasible event ideas (paid or free events)</li> <li>▪ Number and type of utilities needed</li> </ul>	<p><b>Baseline</b> – access to this zone is currently free, offering areas for recreational activities (e.g., basketball) and washrooms.</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – is designed to offer free access for a variety of programming and uses (e.g., activity lawn, play fountain, gathering areas, artwork). Utilities required include clean water for the play fountain and routine utilities for the washroom.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – is designed to offer free access for a variety of recreational activities (e.g., hockey, basketball, activity lawn). Concept B will require utilities for the washroom and change room. Radiant piping is required to cool the ice trail which is only used in the winter season.</p>	Both concepts provide a high degree of flexibility in offering free event ideas; however, Concept B requires more utilities (e.g., radiant piping) to cool the ice track which is only used in the winter season.
Summary of the Technical Environment				<ul style="list-style-type: none"> <li>▪ Considered easier in terms of construction and implementation since there are fewer features requiring specialized components (e.g., radiant piping).</li> <li>▪ Provides a better opportunity to reduce impervious surfaces.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Includes a bioswale that will help capture, treat and infiltrate stormwater runoff before leaving the site.</li> <li>▪ Requires more utilities (e.g., radiant piping) to cool the ice track which is only used in the winter season.</li> </ul> <p>Concept A is generally preferred in terms of ease of construction, and reducing impervious surfaces.</p>

Table F-6.5. Evaluation of the Economic Environment – The Forum.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Construction costs	Estimated construction cost	Cost relative to other concepts	<ul style="list-style-type: none"> <li>Change in cost</li> </ul>	<p><b>Baseline</b> – there are no construction costs.</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – includes a fountain area which has a large cost range based on final design.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – is anticipated to have lower construction costs.</p>	Concept B will likely have a lower construction cost; however, final design of the fountain in Concept A will need to be finalized.
Operation and Maintenance	Estimated annual operating costs for staff resources, ongoing operation, and maintenance activities	Cost relative to other concepts	<ul style="list-style-type: none"> <li>Change in cost</li> </ul>	<p><b>Baseline</b> – existing maintenance costs specific to the public realm area will remain the same.</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – the activity lawn will require routine maintenance. Larger components in the flexible space area (e.g., large seating areas) will need to be moved by park staff. Some activities in this zone will need to be managed by a staff member (e.g., festivals, concerts).</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – the activity lawn will require routine maintenance. The ice rink will require routine maintenance throughout the winter season. The ice track requires ongoing cooling. Some activities in this zone will need to be managed by a staff member (e.g., festivals, concerts).</p>	Concept A is anticipated to have lower maintenance costs since there are no features that require ongoing cooling for use (e.g., ice track).
Economic benefits	Ability to offer contract procurement, jobs, or other economic benefits from constructing and operating the park	Change in economic opportunities	<ul style="list-style-type: none"> <li>Rentals (e.g., water use equipment)</li> <li>Food and beverage sales</li> <li>Job opportunities that are inclusive of equity deserving communities</li> <li>Provide skill training</li> </ul>	<p><b>Baseline</b> – there are currently no economic opportunities at this site.</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – economic opportunities may exist during construction as well as during operation (e.g., food and beverage stands).</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – economic opportunities may exist during construction as well as during operation (e.g., food and beverage stands).</p>	Both concepts are equal in terms of economic opportunities n.
<b>Summary of the Economic Environment</b>				<ul style="list-style-type: none"> <li>Concept A is anticipated to have lower maintenance costs; however, some activities will likely need to be managed by a staff member (e.g., festivals, concerts).</li> </ul> <p>Higher maintenance costs since the ice rink will require routine maintenance throughout the winter season, and the ice track requires ongoing cooling. Concept B will also include activities that will likely need to be managed by a staff member (e.g., festivals, concerts).</p>	Concept A is preferred since costs will be lower following implementation.

Table F-6.6. Evaluation of Sustainability – The Forum.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Reduce contribution to climate change	Low atmospheric emissions (e.g., air, GHG) associated with the concept	Air and GHG emissions during construction (vehicle and heavy equipment emissions) and “operation/implementation” (e.g., air conditioning, use of fossil fuel)	<ul style="list-style-type: none"> <li>Change in emissions relative to “Do-Nothing” baseline concept</li> </ul>	<p><b>Baseline</b> – there are no emissions associated with construction vehicles or heavy equipment.</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – will require the use of heavy equipment and vehicles during construction. Washrooms are planned for this zone which will not require air conditioning or the use of fossil fuel.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – will require the use of heavy equipment and vehicles during construction. Washrooms are planned for this zone which will not require air conditioning or the use of fossil fuel; however, change rooms on site will require heating and cooling during the appropriate season. Winter activities may require a Zamboni for winter maintenance; however, consideration for an electric unit will be integrated into the concept</p>	The use of heavy equipment and vehicles will be relatively similar in terms of air and GHG emissions throughout construction; however, Concept A will not require the use of air conditioning or fossil fuel once implemented.
Reduce contribution to climate change	Heat island effect	Ability for the concept to increase vegetation and reduce unnatural hard surfaces (e.g., concrete)	<ul style="list-style-type: none"> <li>Overall area of vegetation (trees, green roofs) and ability to provide shade throughout the site</li> <li>Overall area of hard surfaces</li> </ul>	<p><b>Baseline</b> – the amount of existing vegetation and hard surface contributes to the heat island effect at Ontario Place.</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – offers a mix of hard and soft landscaping options. Trees will surround the zone.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – will require primarily hard landscaping with trees surrounding the zone.</p>	Concept A provides more opportunity for pervious landscaping. Both concepts will include a forested or vegetated area surrounding the zone.
Include sustainable infrastructure and buildings	Building resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles, wildfires)	Ability for the concept to align with all applicable building codes (e.g., Canadian Standards Association)	<ul style="list-style-type: none"> <li>Compliance with codes and standards (as-built/design documents)</li> </ul>	<p><b>Baseline</b> – existing infrastructure at this Zone was designed according to the applicable codes at the time of construction.</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – all infrastructure (e.g., washrooms) at this zone will be built in compliance with applicable codes and standards.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – all infrastructure (e.g., washrooms, change rooms) at this zone will be built in compliance with applicable codes and standards.</p>	Both concepts provide an equal ability to align with all applicable codes and standards.

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Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
Include sustainable infrastructure and buildings	Infrastructure resilience to climate change (temperature, rain, wind, snow and ice, freeze thaw cycles)	Adaptability and resilience of infrastructure to withstand a changing climate	<ul style="list-style-type: none"> <li>Infrastructure and site to withstand severe weather and temperatures</li> <li>Designed for longevity</li> </ul>	<p><b>Baseline</b> – the existing hard surface can withstand severe weather events.</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – includes a berm area at the southern edge of the Forum that will provide wind protection and support the creation of a microclimate.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – includes a berm area at the southern edge of the Forum that will provide wind protection and support the creation of a microclimate.</p>	Both concepts will be designed and built for longevity and will withstand severe weather events.
Include sustainable infrastructure and buildings	Green Infrastructure design and build	Compliance with applicable design standards and guidelines.	<ul style="list-style-type: none"> <li>Number or size of certified buildings, as applicable</li> <li>Building approvals</li> <li>Zero Carbon Emissions</li> <li>Waterfront design</li> <li>Requirements identified throughout design development</li> <li>SITES certification (i.e., sustainable sites)</li> <li>Waterfront Edge Design Guidelines</li> </ul>	<p><b>Baseline</b> – There are some administration and maintenance buildings on site that may produce carbon emissions (e.g., air conditioning).</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – this concept includes washrooms that will not require carbon emitting infrastructure.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – this concept includes change rooms on site that will require heating and cooling during the appropriate season.</p>	Both concepts will comply with applicable design standards and guidelines.
Sustainable Communities	Community-based solutions	Environmental and/or socio-economic benefits	<ul style="list-style-type: none"> <li>Green infrastructure solutions (e.g., permeable paving, green roofs)</li> <li>Climate change solutions (e.g., design new building to have zero carbon emissions, reduce parking on-site, potential for solar power)</li> <li>Transportation facilities: trails and multi-use pathways</li> <li>Community greenspace: parks</li> </ul>	<p><b>Baseline</b> – this zone is comprised of poor-quality landscape (e.g., asphalt). There are some administration and maintenance buildings on site that may produce carbon emissions (e.g., air conditioning).</p> <p><b>Concept A (Fountain &amp; Flexible Space)</b> – offers a mix of hard and soft landscaping options. Universal washrooms are included that will require heating or cooling. An activity lawn is included in the Forum, and park space (e.g., trees) will surround the space.</p> <p><b>Concept B (Sports &amp; Recreation Hub)</b> – will require primarily hard landscaping. Universal washrooms and change rooms will be built (change rooms will require heating and cooling during appropriate times of the year). An activity lawn is included in the Forum, and park space (e.g., trees) will surround the space.</p>	Concept A provides more opportunity for pervious landscaping and reduced carbon emissions associated with buildings. Both concepts will include an activity lawn and forested areas surrounding the zone as well as pathways connecting this zone to other areas of the park.

Objective:	Criteria	Indicator	Measure/Parameter	Potential Effects	Results/Rational
				<ul style="list-style-type: none"> <li>▪ Will not require the use of air conditioning or fossil fuel once implemented.</li> <li>▪ Provides more opportunity for pervious landscaping</li> <li>▪ Includes a forested or vegetated area surrounding the zone.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Includes a forested or vegetated area surrounding the zone.</li> </ul> <p>Concept A has a lower contribution to climate change following construction, since it will not require the use of air conditioning or fossil fuel and there is more pervious landscaping possible.</p>