

Appendix H

Comparison of Alternative 4WS and Alternative 4WS Amended by Environmental Factors

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As described in Section 5.5.1.1, Alternative 4WS and Alternative 4WS Amended were compared using the criteria developed in Step 4 to confirm that the refinements to the design envisioned in Alternative 4WS Amended is equally preferred as, or more preferred than, those included in the original design of Alternative 4WS. The comparison of the alternatives was undertaken to ensure that refinements to the design meet the DMNP EA objectives.

The refinements presented in Alternative 4WS Amended is the result of enhancements made to Alternative 4WS during the Port Lands Acceleration Initiative (PLAI) process. The PLAI put the DMNP EA process on hold and called for a re-examination of the short list of alternatives identified in the original EA to determine the opportunity to reduce project implementation costs, phase development, and maximize developable land within the Lower Don Lands.

The following sections compare Alternative 4WS to Alternative 4WS Amended by five key environmental factors: the Natural, Economic, Social, Cultural, and Built Environments. Each factor is comprised of environmental components that are described in Chapter 3. Together, the components satisfy the definition of the environment that is described in the Ontario *Environmental Assessment Act (EA Act)*. Further details explaining the similarities and differences between both Alternatives are described below.

Natural Environment

(Aquatic Environment; Terrestrial Environment; Wetland Environment; Geology and Soils; Groundwater Quality)

Overall, Alternative 4WS is preferred over Alternative 4WS Amended with regard to the natural environment. Alternative 4WS Amended has a slightly shorter river channel length, provides a smaller naturalized area, and results in a greater amount of wetland habitat fragmentation than Alternative 4WS. However, the capital costs to naturalize Alternative 4WS Amended are anticipated to be lower than what is required to naturalize Alternative 4WS based on the smaller naturalized area. Both alternatives require similar amounts of soil remediation / risk management.

Economic Environment

(Economic Base; Existing Land Use)

Regarding the economic environment, Alternative 4WS Amended is more preferred overall than Alternative 4WS as it displaces fewer existing land uses. Additionally, as Alternative 4WS Amended requires the removal of fewer dockwalls during construction compared to Alternative 4WS, less mooring revenue is lost. Lastly, the costs required for armouring the river valley are lower for Alternative 4WS Amended than Alternative 4WS due to its shorter length.

Social Environment

(Land-based and Marine Recreation)

Regarding the social environment, Alternative 4WS Amended is more preferred than Alternative 4WS. Although Alternative 4WS Amended provides less parkland, this alternative has fewer impacts to recreational boating in the Inner Harbour, more developable area, better linkages for potential transit routes, and a greater amenity value created by the new river channel and naturalized areas (i.e., larger area of terrestrial habitat abutting the development area). It should be noted that both alternatives provide functional trail linkages to existing pedestrian and bicycle commuter routes.

Cultural Environment

(Archaeological Resources; Aboriginal Interests; Cultural Landscape Resources)

Alternative 4WS and Alternative 4WS Amended result in similar impacts to archaeological resources as well as cultural landscapes and resources as the type of disruption is similar for both options. In addition, consultation with Aboriginal communities has confirmed that neither alternative is anticipated to have impacts on traditional uses of lands by Aboriginal communities.

Built Environment

(Built Heritage Resources; Flooding; Infrastructure and Utilities; Existing Land Use)

With regard to the built environment, both Alternative 4WS and Alternative 4WS Amended present similar benefits. Both alternatives provide similar flood protection benefits, being capable of removing 240 hectares from flood risk which will allow for the redevelopment and revitalization of the Lower Don Lands. While Alternative 4WS Amended requires fewer modifications to existing infrastructure, it has a greater potential to displace built heritage resources relative to Alternative 4WS.

Conclusion

The discussion above indicates that Alternative 4WS Amended is more preferred than Alternative 4WS overall with regards to environmental factors. While Alternative 4WS is more preferred than Alternative 4WS Amended for the natural environment factor, Alternative 4WS Amended is more preferred than Alternative 4WS for the economic and social environmental factors. Both alternatives present similar benefits for the cultural and built environmental factors.