Evaluation of Alternative Solutions

Evaluation Criteria Components	Do Nothing – Maintain the Bridge in its current condition	Remove Bridge	Rehabilitation of the Existing Bridge	Replace the Existing Bridge
Natural Environment	The bridge condition would remain as is. No impacts to the natural environment are anticipated.	Potential impacts and disruption to species at risk (SAR), wildlife habitat and fish habitat during bridge removal/demolition. Environmental mitigation measures are available to address potential impacts to the natural environment during removal/demolition. Potential for long-term improvements to wildlife and fish habitat, as removal presents potential for the natural habitat to be restored.	Potential impacts to SAR, wildlife habitat and fish habitat during bridge rehabilitation. Environmental mitigation measures are available to address potential impacts to the natural environment. Potential for continued long-term impacts to wildlife and fish habitat due to ongoing maintenance to the existing bridge. Construction, including potential in-water works, would be completed in accordance with applicable environmental approvals/ permits.	Potential impacts to SAR, wildlife habitat and fish habitat during bridge replacement. Environmental mitigation measures are available to address potential impacts to the natural environment. Potential for long-term improvements to wildlife and fish habitats. A new bridge will require less maintenance to the structure. Construction, including potential in-water works, would be completed in accordance with applicable environmental approvals or permits,

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				as required based on detail design requirements.
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Social/Cultural Environment	No change to the identified cultural heritage value or interest (CHVI) of the structure. The existing bridge is closed to all modes of transportation and travelers would be required to continue with current, inefficient routes.	The existing bridge has identified CHVI, which would be impacted as a result of removal of the structure. Mitigation options are recommended to incorporate salvaged bridge components into new structures, future conservation work, or displays to commemorate the existing bridge prior to demolition. No crossing provided to all modes of transportation and travelers would be required to continue with current, inefficient routes.	Rehabilitation of the existing bridge with safety modifications has the highest potential to maintain the CHVI of the structure. Rehabilitation of the bridge would provide a safe and efficient pedestrian and cyclist path. Anticipated ongoing maintenance of the structure may require additional closures of the bridge to pedestrians and cyclists.	The existing bridge has identified CHVI, which would be impacted as a result of removal of the structure. Mitigation options are recommended to replace the structure using sympathetic bridge design features in recognition of the bridge’s heritage value, and/or construct a new bridge with replication of the appearance. Bridge components from the existing structure may be salvaged for incorporation into the new structure, future conservation, or displays.

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				Replacement of the bridge would provide a safe and efficient pedestrian and cyclist path.
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Technical Environment	The bridge would remain as is, and structural problems would not be addressed.	Removal of the structure does not address the problem/opportunity to provide a safe and efficient trail crossing.	Rehabilitation of the existing structure would temporarily address structural concerns. The bridge would require ongoing maintenance, and would lead to the eventual replacement of the structure once it reaches its end-of-life.	Replacement of the existing structure with a new bridge addresses all structural needs, and would ensure a safe and reliable structure over the long-term.
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Cost	Ongoing costs would be required for maintenance and may not preclude structural failure.	Demolition costs would be required to remove the existing bridge and safely restore the area.	Ongoing maintenance costs would be required and would be higher than if the bridge remained closed. Rehabilitation does not provide a long-term cost-effective solution for the crossing.	Replacement of the existing bridge with a new structure would present the most significant upfront costs. Long-term maintenance costs are reduced by using current bridge design standards.

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				Funding for replacement of the structure has been secured.
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Overall	Do Nothing does not address the problem/ opportunity to provide a safe and efficient bridge crossing for pedestrians and cyclists. **This alternative is not recommended to be carried forward.**	Removal of the existing structure would eliminate a CHVI structure, and does not address the problem/ opportunity to provide a safe and efficient bridge crossing for pedestrians and cyclists. **This alternative is not recommended to be carried forward.**	Rehabilitation of the existing bridge crossing maintains CHVI, and provides a short-term solution for use of the structure. Long-term operating costs and continued maintenance become cost prohibitive, and inevitably leads to the eventual replacement of the structure. **This alternative is not recommended to be carried forward.**	Replacement of the bridge crossing will incorporate design elements of the existing bridge CHVI into a new structure. This alternative addresses the problem/ opportunity to provide a safe and efficient bridge crossing for pedestrians and cyclists, and provides the most feasible and cost-effective short-term and long-term solution.

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				This alternative is carried forward as the preferred solution.
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