

MILL CREEK PEDESTRIAN BRIDGE REPLACEMENT AND APPROACH TRAIL UPGRADES

Environmental Impact Assessment

RECOMMENDATION

That Urban Planning Committee recommend to City Council:

That the Environmental Impact Assessment for the Mill Creek Pedestrian Bridge Replacement and Approach Trail Upgrades project, as outlined in Attachment 1 of the April 26, 2022, Integrated Infrastructure Services report IIS00759, be approved.

Report Purpose

Council decision required.

This report requests City Council's approval of the Environmental Impact Assessment for the replacement of the existing Mill Creek Bridge (B278) and upgrades of the trail approaches, in accordance with the North Saskatchewan River Valley Area Redevelopment Plan - Bylaw 7188.

Executive Summary

- This report requests City Council's approval of the Environmental Impact Assessment included in Attachment 1 for the replacement of the existing Mill Creek Ravine Bridge and Approach Trail Upgrades. Mill Creek Ravine Bridge Replacement and Approach Trail Upgrades (the "Project") will be constructed starting in the summer of 2022 with a planned completion date in summer 2023.
- The Environmental Impact Assessment for the Project concludes that any potential adverse impacts related to the construction of the replacement bridge can be alleviated by applying appropriate mitigation measures during construction.
- Approval of this report demonstrates the City's commitment to project environmental reviews, environmental permitting, achieving an environmentally sound design, and achieving the City's environmental stewardship outcome to ensure the City of Edmonton's environmental objectives are met during the construction of this project.

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REPORT

The existing Mill Creek Pedestrian Bridge (B278) is a 2.6 metre wide timber structure that is over 30 years old. The bridge railings consist of timber posts and top rails with painted steel pickets (vertical supports).

The bridge approach trails are part of the Mill Creek Ravine lower trail system and connect with a multi-use trail located higher up the slope of the ravine; the approach trails descend through an existing forested area and across the bridge crossing of Mill Creek in a north/south direction. The bridge will continue to provide access and active transportation opportunities in alignment with City plans and policies including the City Plan and the Bike Plan.

Mill Creek Ravine Bridge is located in the Mill Creek Ravine, a tributary of the North Saskatchewan River. The ravine is situated within the boundaries of the City of Edmonton's Bylaw 7188 - North Saskatchewan River Valley Area Redevelopment Plan. As a result, any work within the area governed by this bylaw requires an environmental review pursuant to the referenced bylaw.

As part of the City's regular monitoring and inspection program, extensive evidence of wood rot was observed on the existing bridge structure. It has been determined that maintenance work will not extend the life of the bridge and the bridge must be replaced.

Planning and design have been completed for the bridge replacement and associated trail upgrades. The replaced bridge will occupy a similar alignment as the existing bridge and, therefore, a Site Location Study is not required. An Environmental Impact Assessment was completed for the work associated with the bridge replacement and trail upgrades, as per Attachment 1. The Environmental Impact Assessment outlines current conditions in the project area, evaluates potential risks, and identifies adverse impacts, focused on construction activities that must be eliminated, minimized or mitigated through design, landscaping and construction measures.

Some of the potential impacts and mitigations identified in the Environmental Impact Assessment include:

- Tree Damage, Vegetation Loss, Rare Plants and Invasive Species
 - Impacts include vegetation loss, loss of trees, the introduction of weeds or invasive species and loss of rare plants.
 - Mitigations include minimizing the removal of native plants and the development of a landscape/reclamation plan for revegetation with native species similar to existing conditions.
 - Other mitigations include the development of a Tree Protection Plan.
 - Cleaning equipment before moving into the project area will also help reduce weed species' potential transfer and spread.
- Erosion and Soil Contamination

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- Impacts include soil contamination by spills or leaks and soil erosion.
- Mitigation measures include the development of a Construction Management Plan and an Environmental Construction Operations Plan to manage activities during construction to prevent contamination of any soil system.
- **Wildlife and Wildlife Habitat**
 - The work will result in the loss of relatively small localized areas of natural habitat that will be cleared adjacent to the existing bridge prior to demolition and new bridge construction.
 - Mitigations include replanting native plant communities.
 - Further mitigations include a review of the timing of vegetation clearing and tree removal to minimize disruption to wildlife, including scheduling demolition and vegetation clearing to occur outside the breeding bird period to reduce the risk of roosting individual bats.
 - Further mitigation includes ensuring the contractor's Environmental Construction Operations plan includes worker/wildlife encounter protocols.
- **Fish and Fish Habitat, Water Quality and Surface Water**
 - The proposed work will involve alterations to the existing stream, mild interruption to fish habitat (mainly frog and fish community).
 - The work may also result in the potential release of harmful substances into the creek due to rainfall events during construction.
 - Mitigation measures include the development of a Construction Management Plan and an Environmental Construction Operations Plan to manage activities during construction to minimize disruption to fish and fish habitat.
 - Further mitigation includes ensuring the contractor's Environmental Construction Operations plan includes erosion and sediment control measures and halting construction operations during periods of heavy precipitation.
- **Ecological Connectivity/Wildlife Passage**
 - The replaced bridge will maintain similar conditions for wildlife passage compared to existing conditions. It is determined that no additional mitigation measures are required.
- **Socio-Economic**
 - Impacts include interruption of public trails and park open area use.
 - Mitigation measures include the development and implementation of the public safety protocol and limiting public access to staging and construction sites.

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- Further mitigation includes posting construction notices and trail detours at appropriate locations.
- Historical Resources
 - The project received Historical Resources Act Approval from Alberta Culture, Multiculturalism and Status of Women on November 2, 2021, indicating no further studies are required and the project is not anticipated to affect known historical resources.
 - If historical or archaeological resources are discovered during construction, all work will be immediately suspended and the Alberta Culture, Multiculturalism and Status of Women will be contacted.

Budget/Financial Implications

The Mill Creek Pedestrian Bridge replacement and Approach Trail Upgrades project is funded through the City's Environmental Renewal Program (CM-34-0000) as part of the 2019 to 2022 Capital Budget. The total anticipated cost for the design and construction of the Mill Creek Pedestrian Bridge Replacement and Approach Trail Upgrades is estimated at \$3 million.

Legal Implications

Section 3.4.3 of the North Saskatchewan River Valley Area Redevelopment Plan (Bylaw 7188) requires City Council to approve the attached Environmental Impact Assessment for the planned replacement of the Mill Creek Ravine Bridge (B278) and Approach Trail Upgrades before the proposed development can proceed to construction.

Community Insight

The project team reached out to stakeholders, including environmental groups, community and recreation groups, to present project information and to raise awareness of the project. One-on-one information sessions were conducted with Paths for People, Edmonton River Valley Conservation Coalition, Strathcona Community League and Cloverdale Community League.

Due to COVID-19 public health restrictions, in-person gatherings and face-to-face stakeholder meetings were prohibited. Therefore, these information-sharing sessions were held online in February 2022. At the sessions, details were shared about the design of the pedestrian bridge replacement and approach trails. Topics discussed also included project scope and timeline, preferred bridge design, environmental impacts and mitigations, and anticipated construction details. These sessions were designed to encourage discussion and allowed multiple opportunities for stakeholders to ask questions.

The project team gained valuable feedback from these stakeholder meetings, which will be taken into consideration during the next stages of the project. The main themes of discussion during the

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meetings were: project progress communication; impacts on trees and vegetation; public safety during construction; construction access and potential damage to the existing access road.

Stakeholders were informed about the timing and content of future communication, noting it would include:

- Updates after the contract is awarded and prior to the start of construction;
- Additional information via construction bulletins will be passed along to community members through the existing communication channels; and
- Project information will be made available on the City of Edmonton's website prior to construction commencement.

GBA+

The project team is committed to integrating Gender-Based Analysis Plus (GBA+) to reduce inequality, reduce discrimination, and ensure equality for employees and communities served on municipal projects. Several aspects of the project show that GBA+ has been an inherent consideration, simply through the nature of the scope and the entire team's approach to ensure successful project delivery.

Project information is being shared with adjacent residents, community groups, people who use the Mill Creek Ravine area to bike and walk, and anyone who is interested in learning more about the project, and to share feedback through the project website or direct email from the project manager. Diverse methods are being used to communicate, including email and virtual meetings and a publicly accessible website.

GBA+ considerations are also reflected in this project through the design process. One consideration includes barrier-free access, ensuring that people of diverse backgrounds, ages and physical abilities can be users of the bridge and the trails. This will be achieved by accommodating active modes of transportation on-site, considering the grades of existing trails, upgraded trails and overall bridge slopes and width. Wayfinding trail signage may be used as components of this project and could include simple navigational displays to assist people of various backgrounds and cultures.

The equity measures that have been identified and will be implemented include sharing information about the construction activities and trail closures and to ensure the safety of all users during construction. In addition to the engagement and communication activities identified earlier, the City of Edmonton's Neighborhood Resource Coordinator for this area will be contacted to ensure that appropriate community notification has been completed.

ATTACHMENT

1. Environmental Impact Assessment Mill Creek Ravine Pedestrian Bridge #278 Rehabilitation and Trail Upgrades