

Community Services Report to
Calgary Planning Commission
2020 June 04

ISC: UNRESTRICTED
CPC2020-0497

Eau Claire Public Realm Improvements

EXECUTIVE SUMMARY

This report presents for information, three complex and public-facing infrastructure projects proposed along the Bow River Pathway in Eau Claire and Chinatown: the Downtown Flood Barrier and Eau Claire Promenade, Eau Claire Plaza, and the Jaipur Bridge Replacement. The boundary of these three projects extends from Eau Claire Plaza and Jaipur Bridge to Reconciliation Bridge, and from the Bow River to 3 Avenue S.

Together, these three projects will be delivered to provide a distinct experience for Calgarians and visitors to the area while building flood resiliency for residents and businesses throughout our downtown – these projects are key components of Calgary’s overall downtown flood protection strategy. To provide seamless design and execution of these complex projects, coordination with internal and external stakeholders will continue through the Eau Claire Public Realm Infrastructure Program.

This report includes a summary of six years of engagement and three years of planning and design work. There are three prime consultants for design that have worked together to coordinate regulatory applications, design details, construction scheduling and construction drawing packages.

For the Downtown Flood Barrier and Eau Claire Promenade, and Jaipur Bridge Replacement detailed design is scheduled for completion in Q3 2020 and construction is anticipated to begin Q1 2021 with completion expected in Q2 2023. The Eau Claire Plaza will be starting detailed design in Q2 2020 with phased construction to follow in Q2 2023.

ADMINISTRATION RECOMMENDATION:

That Calgary Planning Commission **RECEIVE** this report for the Corporate Record.

PREVIOUS COUNCIL DIRECTION / POLICY

Council approved the *Centre City Plan* in May 2007. This Plan establishes the vision for making Calgary’s Centre City a liveable, caring and thriving place, and provides a comprehensive and long-term framework for the creative transformation of the Centre City into a world-class area.

The Eau Claire Public Realm Plan (ECPRP) (Attachment 1: Eau Claire Public Realm Plan) is a guiding visionary document for The City of Calgary to provide a coordinated implementation of the public realm to support a high-quality urban fabric for residents, workers, recreators and visitors to the area.

The *Calgary Transportation Plan* (CTP) along with the *Municipal Development Plan* (MDP) have set guiding principles for the Centre City Mobility Plan which reinforces the pedestrian and cyclist connections through Eau Claire.

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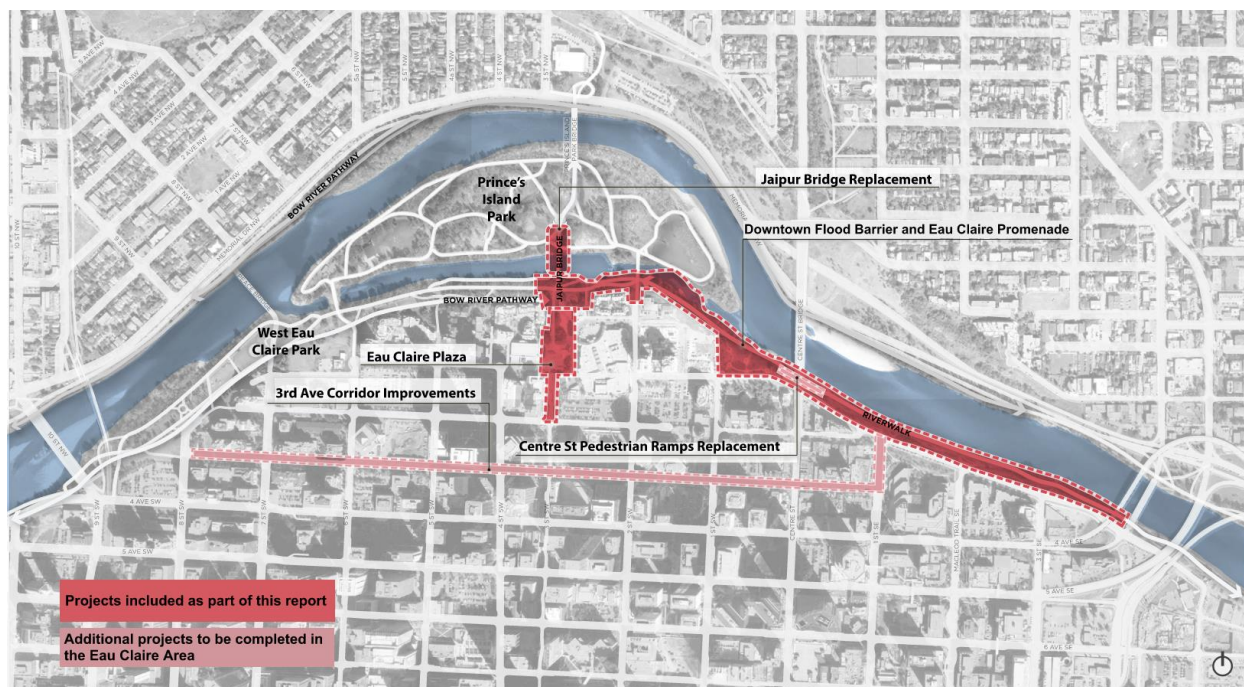
On December 02, 2014, Council approved Administration's Implementation Plan for River Flood Mitigation and Establishing Corporate Resiliency (PFC 2014-0777).

In May 2014, Council accepted an updated version of the previously approved transportation infrastructure investment plan, Investing in Mobility 2015-2024. The replacement of the Jaipur Bridge is funded through the Lifecycle and Asset Management category within Investing in Mobility 2015-2024, from funding allocated for the upgrading and replacement of pedestrian bridges.

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BACKGROUND

Location Map



The Eau Claire area is at the northern edge of the Centre City and next to the Bow River. The location draws many businesses, residents, and visitors to the area. One of the key attributes of the area are the number of events that utilize the Eau Claire Plaza, the pathway system, and Prince's Island Park. Three key projects, the Downtown Flood Barrier and Eau Claire Promenade, Eau Claire Plaza, and Jaipur Bridge Replacement, have developed six program level goals:

1. Build resiliency for the downtown area
2. Improve connectivity with better access and circulation
3. Optimize return on investment
4. Support area vibrancy during and after construction
5. Improve safety beyond the Eau Claire area
6. Design a complete experience

These three projects, much like the West Eau Claire redevelopment completed in 2018, present the need for a coordinated and collaborative approach to completing several major infrastructure projects in close proximity. In 2018, the Eau Claire Public Realm Infrastructure Program was created to coordinate all the projects in the vicinity. Delivering the downtown flood barrier is currently the highest priority for local flood resiliency project in the city. This group of projects will be delivered by Urban Initiatives, Calgary Parks, Water Resources, Transportation Infrastructure, Roads, Calgary Recreation, and Livable Streets and will be coordinated through the Centre City Implementation portfolio within Urban Initiatives.

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To accomplish the goals, the program has coordinated construction scheduling with events and other adjacent projects such as the Centre Street Pedestrian Ramps Replacement, 3rd Avenue Corridor Improvements, Sunnyside Flood Barrier, Green Line, and private development in the area. Relationships developed in the area through the previous West Eau Claire project continue to be leveraged with ongoing stakeholder updates within the community and with event organizers.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Eau Claire Public Realm Plan and Infrastructure Program

Significant coordination has taken place between all projects with respect to regulatory applications with the Federal and Provincial governments, public engagements and communications. This has been critical considering the overlapping project boundaries and schedules. Presenting to the public as a program has reinforced the program goals and continues to provide a unified City voice.

The Downtown Flood Barrier and Eau Claire Promenade, Eau Claire Plaza, and Jaipur Bridge Replacement presented to the Urban Development Review Panel (UDRP) panel as a collective program on September 18, 2019 (Attachment 2: Urban Design Review Panel comments). While the projects are technical in nature, there are significant opportunities for enhancement that allow the projects to seamlessly integrate, connecting physically and conceptually; resulting in a compelling visual experience. This has resulted in a new structure and design for Jaipur Bridge and several details to be coordinated between all projects.

The culmination of this coordinated approach has led to the identification of other projects that also have an interface with the program. A separate project, the 3rd Avenue Corridor Improvements project, will be a permanent expansion of the downtown mobility network and will serve as a detour option for pathway users during construction reducing the volumes experienced in the localised pathway detours.

The Centre Street Pedestrian Ramp, which require replacement due to their poor existing condition and will improve accessibility; the Ramps will improve upon the existing steep switch-backed condition seamlessly connecting into the Promenade, the Bow River Pathway, Sien Lok Park, and Riverwalk.

More than ever Calgarians have recognised the necessity of open public spaces that provide opportunities for social interactions, physical exercise, and outdoor experiences – all at a safe distance. The design of all three projects improves the existing infrastructure and addresses these needs.

Downtown Flood Barrier and Eau Claire Promenade

The Eau Claire Promenade is an extension of the West Eau Claire Park and connects to the Jack and Jean Leslie Riverwalk. The experience and design are seamless where engineered structures are integrated and embedded into design features or elements. A goal of the project is to build 1:200 year plus 0.5 metre freeboard flood protection for downtown and to enhance

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the public realm. The new barrier, connecting to the existing barrier in West Eau Claire Park, will extend from the Peace Bridge to Reconciliation Bridge. (Attachment 3: Downtown Flood Barrier and Eau Claire Promenade).

The project undertook a detailed site analysis to understand the current challenges and opportunities in the area. The analysis considered the necessary requirement of constructing a large flood barrier and how to best integrate it into its surroundings. Necessary improvements to the public realm are being considered to provide safe movement of pedestrians, cyclists, and other non-motorized modes of travel with additional space for distancing. The disruption of building a permanent flood barrier along with the safe movement of people resulted in the preferred solution that has been adopted. Alternative materials were investigated for the flood barrier including cast-in-place concrete. The adopted solution of metal sheet pile has proven the most cost effective, aesthetically pleasing, and least disruptive. Materials for the public realm have been based off those implemented successfully in West Eau Claire Park.

The vision of the project “Eau Claire Promenade and the Jack and Jean Leslie RiverWalk are connected to create a safe, efficient, and beautiful riverfront promenade and cycle network that integrates public amenities with flood mitigation measures” will be realised through the installation:

- 830 lineal metres of new dedicated bike paths;
- 830 lineal metres of new pedestrian promenade;
- 130 new trees;
- 50 new light poles (including bollards);
- 1400 lineal metres of new floodwall protecting downtown, and;
- 130 lineal metres of accessible lagoon edge + increased accessibility throughout.

Eau Claire Plaza

There are significant changes within the vicinity of Eau Claire Plaza that have prompted the need to redevelop this public space. These include flood mitigation measures including a floodwall and associated promenade, raising the plaza elevation to the 1:100 flood elevation, redevelopment plans for the Eau Claire Market and adjacent properties, realignment of Riverfront Avenue SW, integration with the future Green Line, and the redevelopment of the pedestrian bridges connecting the Plaza with Prince’s Island (Attachment 4 – Eau Claire Plaza).

Eau Claire Plaza is a space where nature and the urban fabric collide, sculpting an iconic landscape designed as a stage for public life.

The site is loosely organized into subspaces - character areas - to support a diversity of programmed and informal activities and uses, year-round, day and night. Key attributes of these character areas, as they relate to the unified plaza, include:

- highly permeable, active edges;
- strong physical, visual, and programmatic relationships with compatible adjacent uses;

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- an open “podium” with infrastructure (power, water) to support a range of small to medium/large programming and events;
- central green to provide casual use and small-scale programming;
- an urban play plaza;
- new water plaza and urban beach;
- relocated and expanded 1886 building;
- coordinated interface with the Riverwalk promenade to “extend” the plaza through to the lagoon and water’s edge;
- enhanced buffering for the adjacent residential; and
- two primary gateways to the plaza to/from 1) the Bow River lagoon and Riverwalk promenade and 2) the downtown core.

Jaipur Bridge Replacement

The timing of the Jaipur Bridge replacement fits well with the Eau Claire Promenade. Increasing the elevation of the new bridge allows the Promenade to create a higher permanent berm for protection at the Eau Claire Plaza entrance. The project entails the lifecycle replacement of the existing Jaipur pedestrian bridge connecting the Eau Claire Plaza to Prince’s Island Park. The existing bridge’s poor condition and design make full replacement the best option to address the current bridge’s deficiencies. Replacement of the Jaipur Bridge will also allow the City to improve its flood resiliency by raising the bridge above the 1:100 flood elevation.

In September and October of 2019, the recommended bridge type received stakeholder feedback leading the team to revisit the project evaluation criteria. The evaluation criteria were revised, and different structure types considered. Based on the revised evaluation criteria, a three-span bridge is the recommend bridge type for the site. The three-span bridge will allow for views of the surrounding landscape while lending itself to customizations including an elegant handrail and unique lighting.

The design of the new three span bridge features a material palette that is coordinated with the adjacent projects that includes weathering steel, stainless steel, wood and textured concrete. Construction of a new bridge offers the opportunity to improve the crossing’s function, including:

- increased deck width from 3.785 metres to 6 metres to meet the access needs of emergency services while allowing people to exit the area, and meeting future traffic demand;
- railings that meet current design guidelines and safety codes;
- new low maintenance lighting to improve user safety; and
- increased clearance of the structure over the lagoon to improve flood resiliency of the bridge.

The existing structure is currently closed, but was well used by people visiting Prince’s Island Park, attending events hosted on Prince’s Island Park, enjoying the regional pathway system and commuting to downtown. The new bridge will better serve users by providing a safer crossing and will encourage increased use by all active modes (Attachment 5 – Jaipur Bridge).

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Stakeholder Engagement, Research and Communication

The City's Engage Resource Unit has developed an Engagement Plan for the Program. This Engagement Plan applies to all individual projects, which ensures consistent and equitable treatment to individual communities across the program (Attachment 6: What We Heard Report – Eau Claire Public Realm Plan).

Stakeholder meetings and sessions were held in early April with organizations and businesses that would be directly impacted by the construction. Working with stakeholders as soon as a construction schedule was formulated allowed administration to find alternate solutions for impacted events and bookings a year in advance of impact. It is an important goal of the program to balance construction and the social and economic impact to the area where possible.

Prior to construction commencement, a public event will be hosted in the fall of 2020 to provide an update on the program construction schedule, associated impacts, and provide contact information. The exact date and format will be coordinated with the overall City's communication strategy and will be sensitive to the current state of the province.

Each project has also had varying stakeholder engagement, research and communication work prior to the creation of the program. They are noted below by project:

Downtown Flood Barrier and Eau Claire Promenade

Between November 2017 and October 2019 three public open houses were held so attendees could learn about the proposed project and its impacts and provide feedback to the project team. Feedback was considered and how the feedback was addressed was communicated back to the public through subsequent open houses and online (Attachment 7- What We Heard Reports – Downtown Flood Barrier and Eau Claire Promenade).

Eau Claire Plaza

After the major flood in 2013 a revised concept plan for Eau Claire Plaza was required. The concept builds on the extensive site investigation, public engagement process (Attachment 8 – What We Heard Reports - Plaza), preliminary conceptual designs from stakeholder input and engagement sessions in 2005/2006, and public engagement in 2009. The most recent concept was presented to stakeholders in 2016, the public response to the conceptual designs was that Eau Claire Plaza is an important public gathering space for the City and participants are excited for its transformation into a “cool + beautiful gathering place!”

This Eau Claire Plaza design was presented to Urban Design Review Panel (UDRP) in September 2019; the concept design was evolved to include a larger and more accessible water feature based on comments received from the panel.

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Jaipur Bridge Replacement

Stakeholders including impacted City departments were invited to participate in the project chartering session held in October 2018. Input into the project charter document was subsequently solicited from participants. One on one meetings were also held with key internal stakeholders on site to gather site specific input on topics such as trees, natural areas, Crime Prevention through Environmental Design, utilities and site amenities. Public communication on the project has been delivered as part of the overall Eau Claire Program.

Strategic Alignment

The Eau Claire Public Realm Improvements program aligns with other corporate programs and policies including: The MDP, CTP, Urban Forestry Plan, Investing in Mobility 2015-2024 program, and other City led initiatives including the Resiliency Strategy. Further, the projects within this program align with many Council Priorities (Attachment 9 – Alignment with Council Priorities). A few examples are highlighted below:

A Prosperous City:

Priority P8 – Respond to the needs of an aging population. The design of the promenade and plaza will consider accessibility and age friendly strategy in the public realm design solution and construction.

A City That Moves:

Priority M4 – Invest in active transportation infrastructure, including cycling and pedestrian networks as funding becomes available. New promenade, bridge and ramps to Centre Street upper deck will support active models and be accessible.

A City of Inspiring Neighborhoods:

Priority N3 – Enhance the capacity and resiliency to prepare and respond to pandemics, natural disasters and emergency situations. The flood barrier along the Bow Pathway from The Peace Bridge to Reconciliation Bridge will provide resiliency and reduce disruption during a flood event. The new Jaipur Bridge will be wider and will allow for better pedestrian movements during an emergency.

A Healthy and Green City:

Priority H7 – Foster healthy lifestyles through a range of accessible and affordable recreational programs and opportunities that encourage active daily living. The integrated design approach includes a focus on the programming elements to the area that will support active modes of transportation, and the exploration of nature and parks space with accessibility in mind. The projects are for the public's enjoyment and in the public realm.

A Well-Run City:

Priority W8 – Increase collaboration across the organization, including alignment of budgets with service delivery to achieve City priorities. Collaboration with a number of different business units required for success including Urban Initiatives, Calgary Parks, Water Resources, Roads, Transportation Infrastructure, Calgary Recreation and Green Line.

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Social, Environmental, Economic (External)

Social

The public realm includes the streets, parks, pathways, plaza and the adjacent businesses that support a citizen's daily life. The Eau Claire area is not only a home and place of employment to many people, but also a destination. Access for all ages and abilities to public open space and nature has health benefits (mental, social and physical) and provides opportunities for people to meet others in their community. The new design of these public spaces will improve the safety and comfort for year-round use which is important for a winter city like Calgary.

During the recent pandemic, requiring citizens to physically distance we have seen the importance of providing spaces that Calgarians can engage in distanced social experiences. A common theme to all the projects is providing wider, more accessible spaces that allow for everyone to enjoy the public spaces safely.

Economic

The Centre City is a primary employment and tax base that supports economic vitality. In the past 10 years, the Centre City has seen \$8.5 billion of private developer investment. The Eau Claire area is an attractive location for redevelopment with its proximity to the river, while being in the centre city. Eau Claire Market recently sold for redevelopment and there are still large parcels of land available for future development. As seen in East Village, City investment in public realm draws positive attention that can be a catalyst for new development activity.

The area is a draw for cultural events, a destination for visitors and Calgarians, bringing in economic benefit to the shops and restaurants in the area. The events that take place in Eau Claire draw approximately 1.1 million participants, which generate \$6.9 million in economic benefit, \$3.9 million in charitable donations and bring together Calgarians with 63,206 volunteer hours. With future Green Line stations proposed around 2 Avenue SW and 2 Street SW this will only increase the number of visitors, residents and employees to the area. Since the 2013 flood, more than \$150 million has been committed to flood mitigation, reducing our risk of river flood damage by approximately one third. This includes the \$25 million for the Downtown flood barrier. Considerable investment from all orders of government are needed for flood mitigation and to date City, Provincial, and Federal governments are working together on these measures.

The current pandemic has introduced significant financial challenges for Calgary; these projects represent significant investment into the adjacent communities and economies including construction jobs.

Environmental

Through the provision of active modes of transportation, new dedicated pathway systems, public transit and recreational opportunities with access to the river, this program supports a decrease of auto dependency and CO2 emissions. The design of the projects celebrates and enhances the natural ecosystems along the river by protecting vegetated edges where possible, carefully selecting native plant species and providing a variety of succession planting. Further,

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the public realm and infrastructure improvements increase the urban forest canopy providing environmental benefits. The flood barrier work along the river's edge protects the overall downtown infrastructure and resiliency for the centre city.

Financial Capacity

Current and Future Operating Budget

Investment in the Centre City that is beyond the typical operational and maintenance practices can only be achieved if additional operating funds are provided. Current operating budgets are at capacity, as a result, the projects have been carefully designed to reduce anticipated maintenance costs.

Current and Future Capital Budget

All projects with the exception of Eau Claire Plaza are funded from the One Calgary and previous budget cycles and other external funding sources. Construction budgets are under review and projects will not exceed approved budgets.

The capital funding for the Downtown Flood Barrier consists of partnership with the Provincial Government through the Alberta Community Resilience Program (ACRP) grant and pending approval of funding through the Investing in Canada Infrastructure Program (ICIP) grant through the Federal Government.

The Eau Claire Plaza is currently only partially funded, and without full funding the construction of the plaza will require an interim solution to blend into the Eau Claire Promenade and Jaipur Bridge which will physically be at a higher elevation as part of the flood barrier work.

Risk Assessment

With multiple projects occurring in the same area, lack of project coordination could result in technical issues, cost over runs, reputation risk with the community, disjointed design elements and incomplete projects. This risk was mitigated through the creation of the ECPRI charter and early identification of the risk of not proceeding in a coordinated manner by Urban Initiatives.

The Green Line stations proposed in the area are a risk as the impacts to the area are unknown. To minimize this risk, the program has provided the Green Line team with the most recent technical reports and drawings completed, and the Green Line team does attend the regular project update meetings. Procurement strategies are being investigated to provide flexibility in critical locations. Collaboration with Green Line will continue to minimize these risks.

Not proceeding with these projects at this time would result in safety issues, as the Jaipur Bridge and Centre Street Ramps require replacement with a new and wider spans to serve the many Calgarians that visit the area, and every year the flood barrier is not complete the downtown is at risk of flooding. A condition of the Provincial ACRP funding is that the barrier be complete by 2022.

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REASON(S) FOR RECOMMENDATION(S):

The Eau Claire Public Realm Infrastructure Program consists of a multidisciplinary cross corporate team that will capitalize on the coordination completed to date and during construction. They will deliver on many projects in the area, which include: Downtown Flood Barrier and Eau Claire Promenade, Eau Claire Plaza and Jaipur Bridge which comprehensively will complete the remaining highest local flood barrier project for Calgary and enhance a key public space along the Bow River at the centre of Calgary's downtown through the construction of resiliency and vibrancy assets.

ATTACHMENT(S)

1. Eau Claire Public Realm Plan
2. Urban Design Review Panel Comments
3. Downtown Flood Barrier and Eau Claire Promenade
4. Eau Claire Plaza Renderings
5. Jaipur Bridge Replacement Renderings
6. What We Heard Report – Eau Claire Public Realm Plan
7. What We Heard Report – Downtown Flood Barrier and Eau Claire Promenade
8. What We Heard Report – Eau Claire Plaza
9. Alignment with Council Priorities