



sustainable urbanism

2023



urban
design
awards

Stanley A. Milner Library Renewal



FIG 1

On Edmonton's Winston Churchill Square, the dynamic new Stanley A. Milner Library ignites the cultural civic square by stretching out and opening up toward nearby landmarks.

The Stanley A. Milner Library Renewal was conceived to reimagine and reshape the existing library as a physical expression of EPL's forward-thinking values and civic role—The Library of the Future. The building's skin and circulation orchestrate the experience of the library. The multi-storey atrium creates a variety of inspiring spaces, interconnects multiple program spaces and destinations, woven together by an intuitive and accessible circulation path. With 21st century library amenities including a third space, large galleria spaces, café, children's library, makerspace, teaching kitchen and an Indigenous gathering space (designed in collaboration with local Cree Elders) the renewed building supports the library's position as a social and creative hub.

Inspiration for the dynamic exterior began with the desire for the new "skin" of the building to be more than a cosmetic application. Introduced as a continuous wrap around the building, the new skin was offset and stretched off the original building making visual connections to adjacent landmarks. By stretching and opening out to the City, a meaningful relationship is created where the surrounding urban environment helps shape the life of the Library and vice versa. As part of the renewal, an accessible, civic plaza space was restored, a new public galleria connects Sir Winston Churchill Square and Centennial Square, and connections to the new LRT station inside and out.

Sustainability was an integral component of the design of the renewed library. For the creation of a highly durable, high-performance envelope a zinc metal was chosen to work with the form of the building and reflect the timelessness of the design.

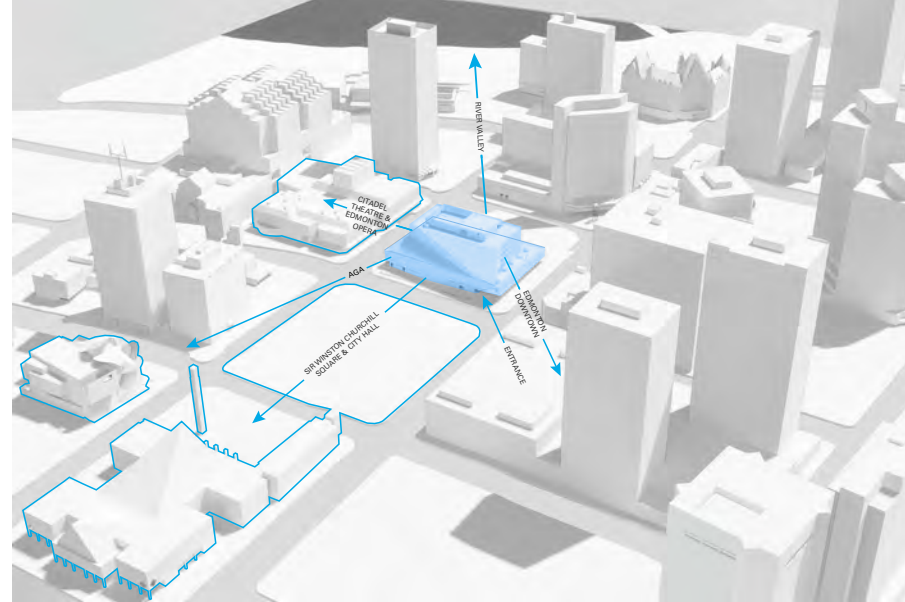


FIG 2

The building's outward-looking form maximizes visual connections to adjacent buildings and public spaces.



FIG 4

Key moments of transparency, coloured skylights, glazing panels and EPL signage, combined with a new plaza with clear views into the library's programming, invite the public inside.



FIG 3

The renewed library is a welcoming portal between Sir Winston Churchill Square to the north and Centennial Square to the south in the heart of downtown Edmonton.



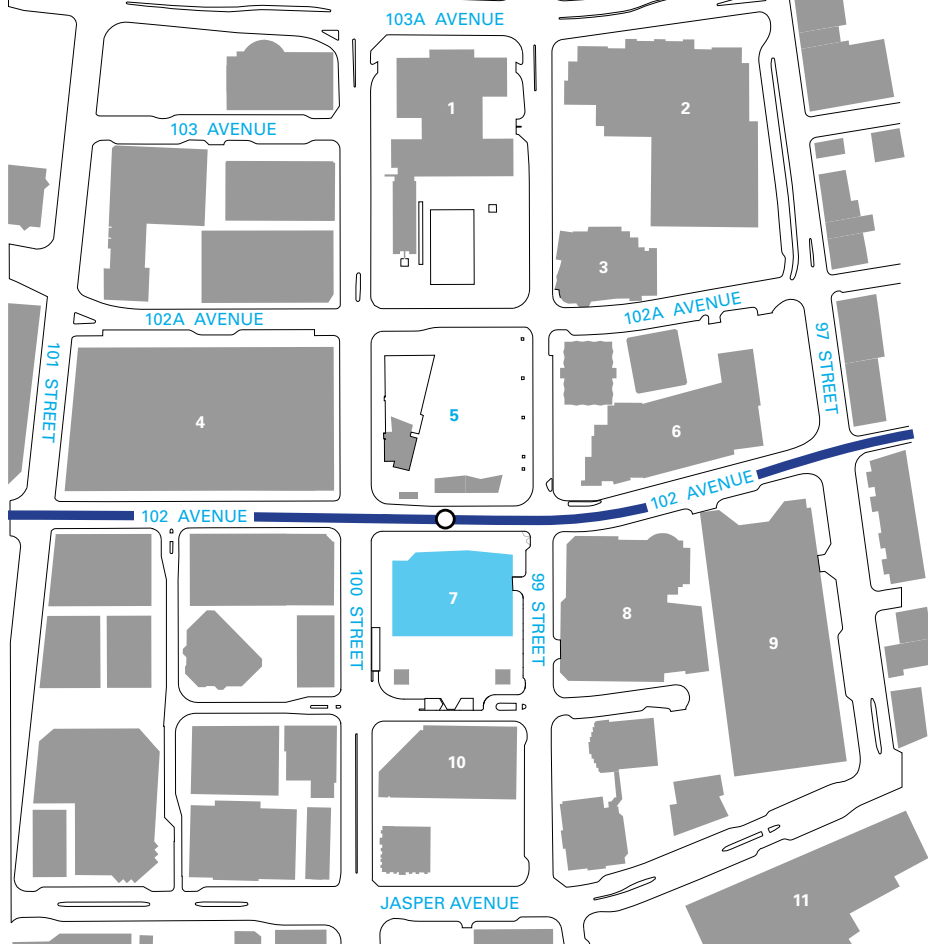
FIG 5

View of the exterior north entry plaza. On the ground floor, a colourful galleria seating area provides users with views of the bustling city and entices passersby to enter the building.



FIG 6

The renewal activates the civic space around the building and provides a new gateway to Centennial Plaza to the south.

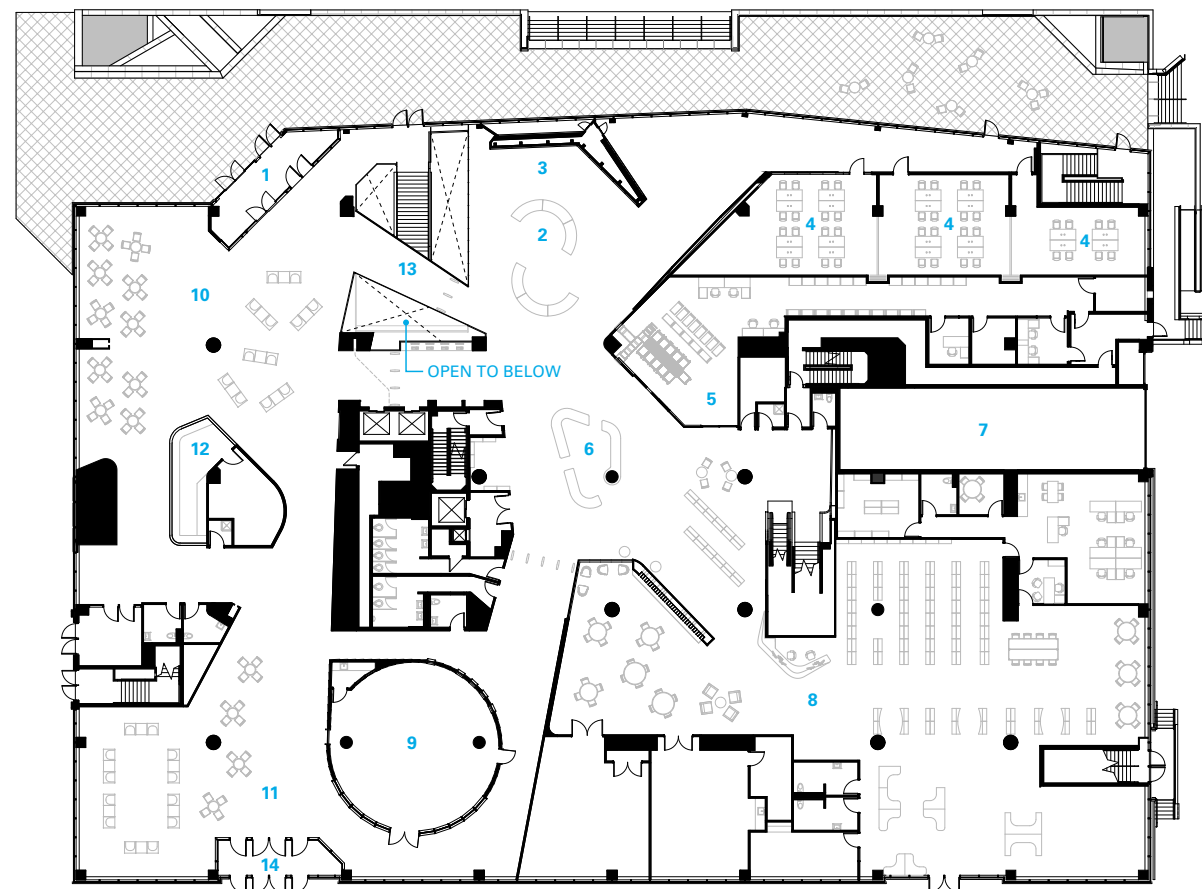
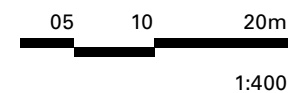


Legend

- | 1 | City Hall
 - | 2 | Law Courts
 - | 3 | Art Gallery of Alberta
 - | 4 | Edmonton City Centre
 - | 5 | Sir Winston Churchill Square
 - | 6 | Winspear Centre
 - | 7 | Stanley A. Milner Library Renewal
 - | 8 | Citadel Theatre
 - | 9 | Canada Place
 - | 10 | Westin Hotel
 - | 11 | Shaw Conference Centre
- Valley Line LRT
 - Churchill Station



CONTEXT PLAN



Legend

- | 1 | North Entrance
- | 2 | Multi-storey Atrium
- | 3 | Digital Wall
- | 4 | Programs Room
- | 5 | Sorting Room
- | 6 | Service Desk
- | 7 | Loading Dock
- | 8 | Children's Library
- | 9 | Indigenous Gathering Space
- | 10 | North Galleria
- | 11 | South Galleria
- | 12 | Future Café
- | 13 | Entrance Bridge
- | 14 | South Entrance



GROUND FLOOR

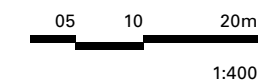


FIG 7

Context Plan: Taking advantage of the building's prominent location in Edmonton's city centre, the renewed building actively supports the library's position as a key social and creative hub.

FIG 8

Ground Floor Plan: The reimagined interior spatial organization features a variety of dramatic and inspiring spaces that enhance visual interconnection. Visitors now enter into a bright and welcoming six-storey atrium defined by a sweeping new "reading ramp".



FIG 9

The building's southwest corner; the exterior is in dialogue with the city, inviting users inside.

FIG 10

The new building envelope is composed of durable, high-performance zinc with generous expanses of glazing. Its dynamic form was conceived to relate directly to its urban context—literally stretching out and opening up toward nearby landmarks. The building's skin in turn shapes a network of intuitive circulation paths and inspiring new spaces.

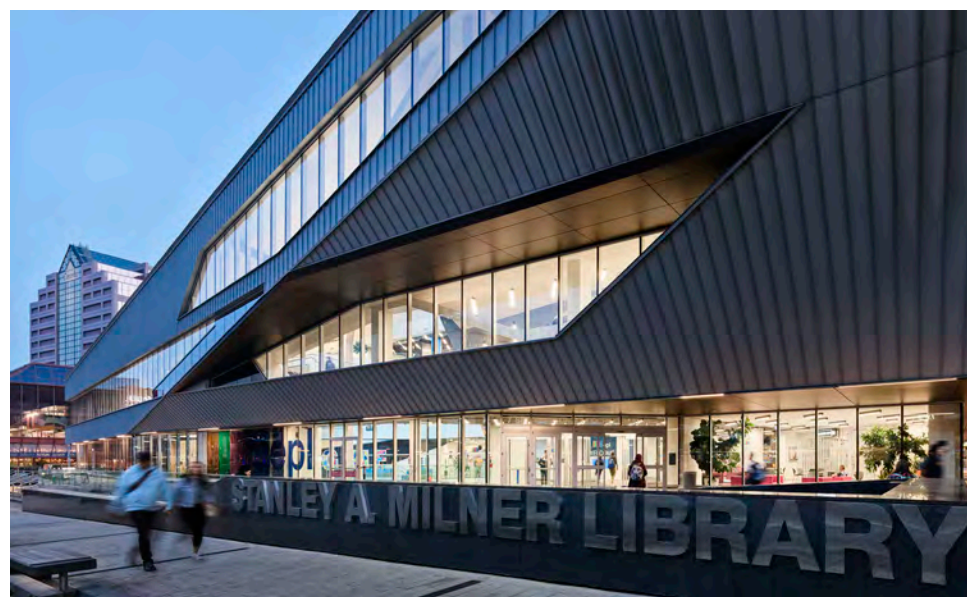
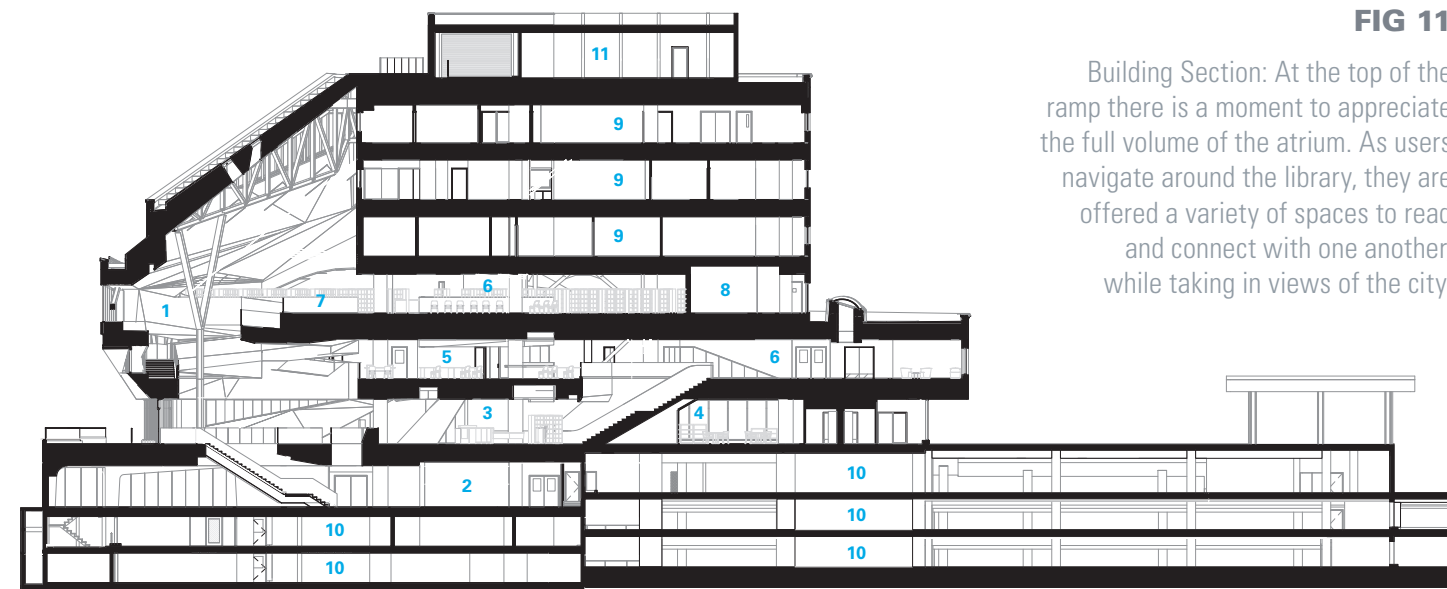
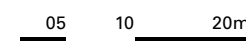


FIG 11

Building Section: At the top of the ramp there is a moment to appreciate the full volume of the atrium. As users navigate around the library, they are offered a variety of spaces to read and connect with one another, while taking in views of the city.



NORTH-SOUTH BUILDING SECTION



Legend

- | 1 | Atrium
- | 2 | Theatre Lobby
- | 3 | Circulation Desk
- | 4 | Children's Library
- | 5 | Computers
- | 6 | Collection
- | 7 | Civic Room
- | 8 | Daycare
- | 9 | Offices
- | 10 | Parkade
- | 11 | Mechanical Room



tawatinā Bridge over the North Saskatchewan River



Churchill Stop



Glenora Stop



105/106 Street Stop



Misericordia Station

VALLEY LINE LRT - SUSTAINABLE URBAN INTEGRATION

In 2009, City Council adopted a long-term LRT Network Plan to ensure Edmonton's infrastructure capacity could keep up with its transportation needs as the population climbs towards one million. Upon review, the City selected the Valley Line, extending twenty-seven kilometers from the Downtown core to Mill Woods in Edmonton's southeast (Stage 1), and Lewis Farms in Edmonton's west (Stage 2).

The City had also a deeper vision for the Valley Line: to create a high-quality, universally accessible, safe, efficient, and environmentally sustainable LRT network that would maximize passenger experience and support transit-oriented land use policies. The design team set out to help the City achieve these ambitious goals.

Through two years of research and public consultation, the design team devised a philosophy called Sustainable Urban Integration (SUI) and created extensive guidelines full of best practices required to achieve the City's vision. SUI looks beyond the building of tracks and trains to create neighbourhoods that are safe, attractive, and connected. It aims to design livable, pedestrian-friendly environments; invests in landscape, streetscape, and architectural features to improve visual appeal; and adds enhancements that reflect the feel and character of each community along the LRT corridor.

To make sure the City's vision for the Valley Line would be executed, significant aspects of the SUI Guidelines were incorporated into the design and construction requirements for both Stages of the Valley Line LRT. As part of the procurement of P3 consortia, the team developed an SUI Guide that outlined the project's SUI goals and principles through narratives, illustrations and roll plans. Bidding teams were required to meet mandatory SUI requirements as set out in the Project Agreement and the Design Guide and name an SUI Lead as a Key Individual, tasked with maintaining SUI best practices in the winning team's designs. Although developed specifically for Edmonton's Valley Line, SUI terminology and framework is starting to be adopted as best industry practice for new LRT projects and other urban infrastructure projects across the country.

Strathcona Back Street

Strathcona Back Street is a pilot project that implemented Low Impact Development (LID), thoughtfully integrated as public realm enhancements. In years preceding project funding, businesses, community and City staff recognized area transformational potential and unfunded concepts were developed. The result borne of collaboration features conversion of two parking lots and an alley into pedestrian plazas and a shared street built on green infrastructure. Constructed in 2021, ongoing monitoring of outcomes have indicated environmental, social, and economic benefits:

- Preliminary monitoring results indicate reduction of stormwater pollutants including average removal of total suspended solids, total phosphorous, and total dissolved phosphorous by 79.5%, 69.9%, and 76.9% respectively. The project is designed to retain a 1:2 year storm event and increases resiliency of the drainage system and reduces runoff volume discharged into the river valley.
- A steady increase in public use: colourful tables and chairs were added as community-led placemaking, and festivals and events such as the Art Walk, Farmer's Market, and Fringe Festival program the spaces.
- Improved universal accessibility and visibility to businesses facing the alley and the back street.

- Increased business activity and redevelopment. Since approval, new businesses have activated the spaces with retail frontages and patios. Nearby businesses such as the Strathcona Hotel and Farmers' Market have announced recent and complimentary redevelopment plans.

Being the first of its kind in Edmonton the project navigated multiple challenges. These included defining and refining City policies for shared streets, securing funding, and collaboration with diverse stakeholders. Technical challenges include retrofitting environmental infrastructure into a constrained urban context.

The project initiated with minimum funding to repave the alley right-of-way only. Analysis of flood modelling data indicated the site experiences surface ponding and combined sewer overflow during large storm events. The project subsequently became eligible for LID funding under EPCOR's program, and the project sought and was subsequently awarded a grant from the Green Municipal Fund (GMF) through the Federation of Canadian Municipalities. The grant is awarded to projects that:

"reflect the very best examples of municipal leadership in sustainable development - feasibility studies and pilot projects that are expected to lead to high environmental benefit."



2019 Back Street Concepts - Courtesy Kirstin Smith, City Of Edmonton



Project Rendering - 2020



West Plaza - Summer 2023



East Plaza Festival Use & Programming Summer 2023



Aerial View - West & East Plazas From 83 Avenue 2022



Aerial View - West Plaza 2022



Pre-Existing Context: Parking Lot (East Plaza) 2021



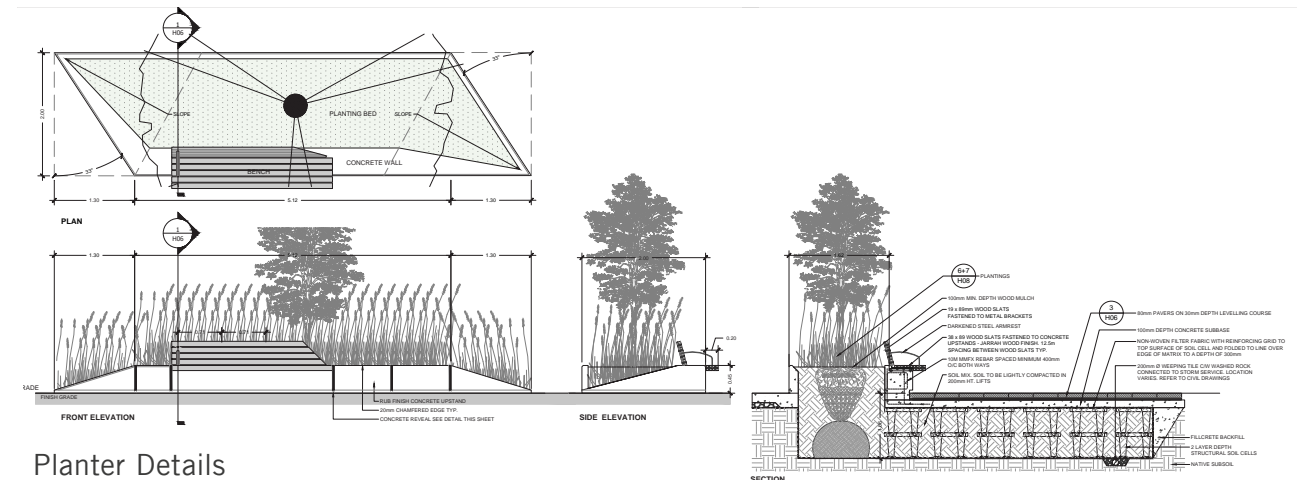
Pre-Existing Context: Parking Lot (West Plaza) 2021



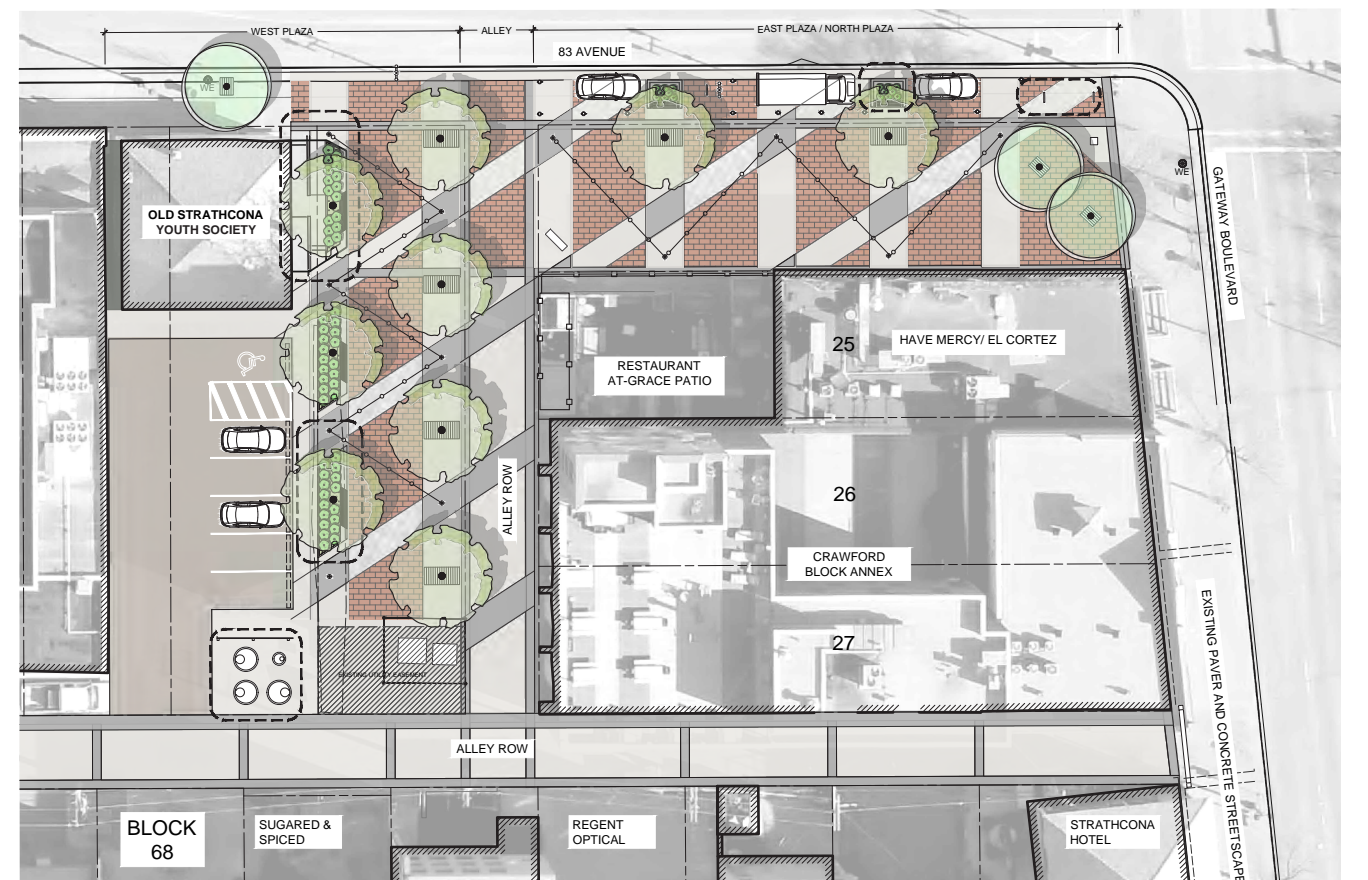
Drainage Analysis - Project Driving Force That Led To Key Minimum Project Funding Sources



'Cultural Canvas' Concept Recognized an Existing Rich Context to Support Businesses & Festivals - Rendering 2020



Planter Details



Approved Site Plan - Includes Elements Approved At Preliminary Design For Future Implementation



East Plaza All Seasons Use Considerations - Rendering 2020



West Plaza Soil Cells Under Construction in 2021

Glenora School Parking Lot Renewal

13520 102 Avenue NW, Edmonton Ab.



Reconfigured student drop off



Waste enclosure screened with student art



Community garden adjacent to playground

This project was initiated to respond to changing traffic patterns due to the new west LRT alignment; to provide onsite drop-off and parking functions for the school. While prioritizing the safety of the students, the project team developed an innovative urban design which satisfied the transportation needs while promoting the characteristics of the site and community.

The design enhanced several key community characteristics, including restoring natural play spaces, community gardens and displaying student artwork which already exists around the school. The student artwork was photographed and integrated into vinyl wraps on the transformer and garbage enclosure, which have elevated student pride and ownership of the project.

Sustainability and water efficiency are invaluable in design. The project incorporates sustainable interventions by utilizing captured stormwater and

low-water-requiring plant materials. An LID soil cell system treats drainage from parking lot and the roof areas and contributes water to trees in a prominent front plaza to enhance their growth.

The inclusion of meaningful gathering spaces such as the front plaza extends around the school. Accessible sidewalks provide interface with the school, community garden, and playground. Raised concrete planters in the entry plazas provide definition to the space while offering students a passive place to climb, play, and engage with one another. The design of these spaces and amenities reflect value not only for the school but also for the entire community.

Extensive planting throughout the site provides visual relief and reduces heat island effect, contributing to an enhanced environment. The use of vines on the façade of blank walls provides aesthetic value and a thermal buffer,

complementing historic vine coverage on other parts of the school. Retaining existing trees and significantly increasing the urban canopy has further reinforced the project's commitment to enhancing health and wellness.

The project sets a high standard for sustainable and community-focused urban design. With technical prowess and thoughtful considerations, it successfully addressed user conflicts, retained natural assets, and integrated artistic elements.

The project's commitment to water efficiency, climate resilience, and the well-being of the community showcases dedication to creating spaces that enriches lives and fosters a strong sense of belonging.



Accessible tree grates



Student artwork incorporated into transformer wrap



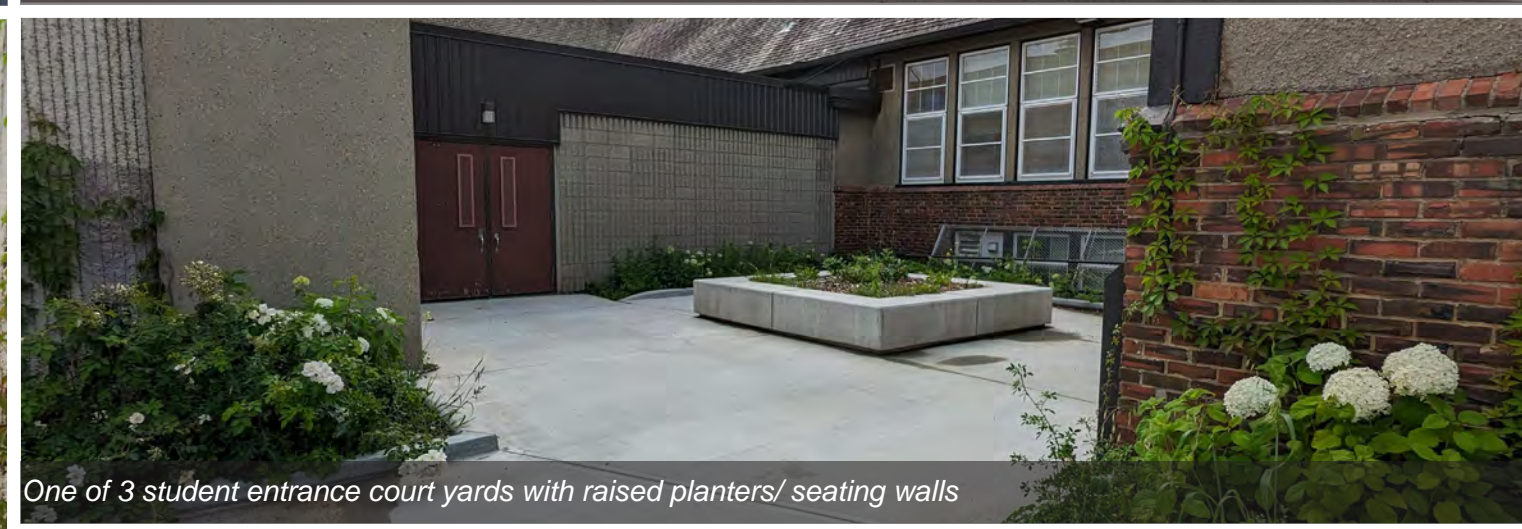
Intensive planting providing buffer from blank concrete walls providing a 'green' backdrop



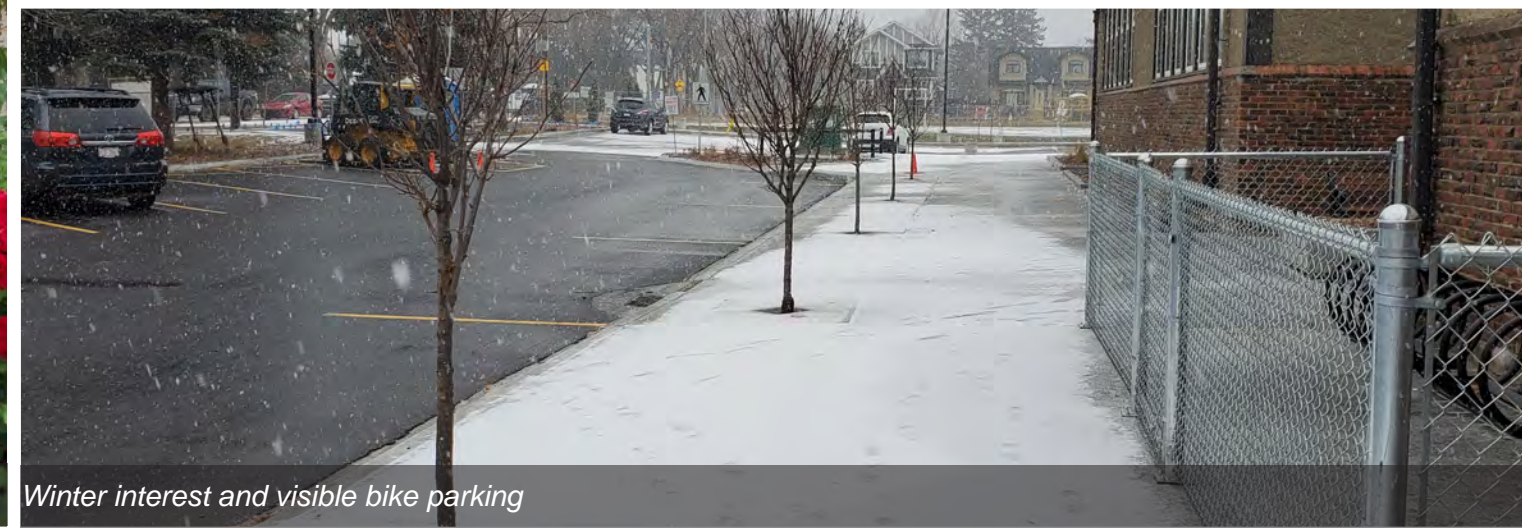
Teacher parking and accessible curbs lined with Elm and Lilac Trees



Intensive planting providing buffer from blank concrete



One of 3 student entrance court yards with raised planters/ seating walls



Winter interest and visible bike parking



LID system tied to parking lot and building

Beaumaris Lake Open Space

Built in the late 1970s, Beaumaris Lake is Edmonton's first and largest stormwater lake. The lake serves as both a stormwater management facility and a recreation destination for residents and visitors. A complete rehabilitation of the public spaces surrounding the lake was completed in 2022. The redevelopment features a series of parks and plazas, nine viewing points, and a promenade, connected by over two kilometers of shared-use pathways.

The West Park is the outdoor hub of the community, with a winding accessible path and a grand staircase connecting the lakeside promenade to the nearby library and shopping precinct. A water feature anchors this civic space and provides an opportunity for informal play.

A more formal space, the Promenade has wood-like paving and feature walls with seating and planting. The façade of the wall also received a refresh with a contemporary composite material and bespoke locally manufactured railing.

Rest areas feature signage and space for fitness activities. New finishes and furnishings throughout, as well as new lighting, reinvigorate and will sustain Beaumaris Lake Open Space.



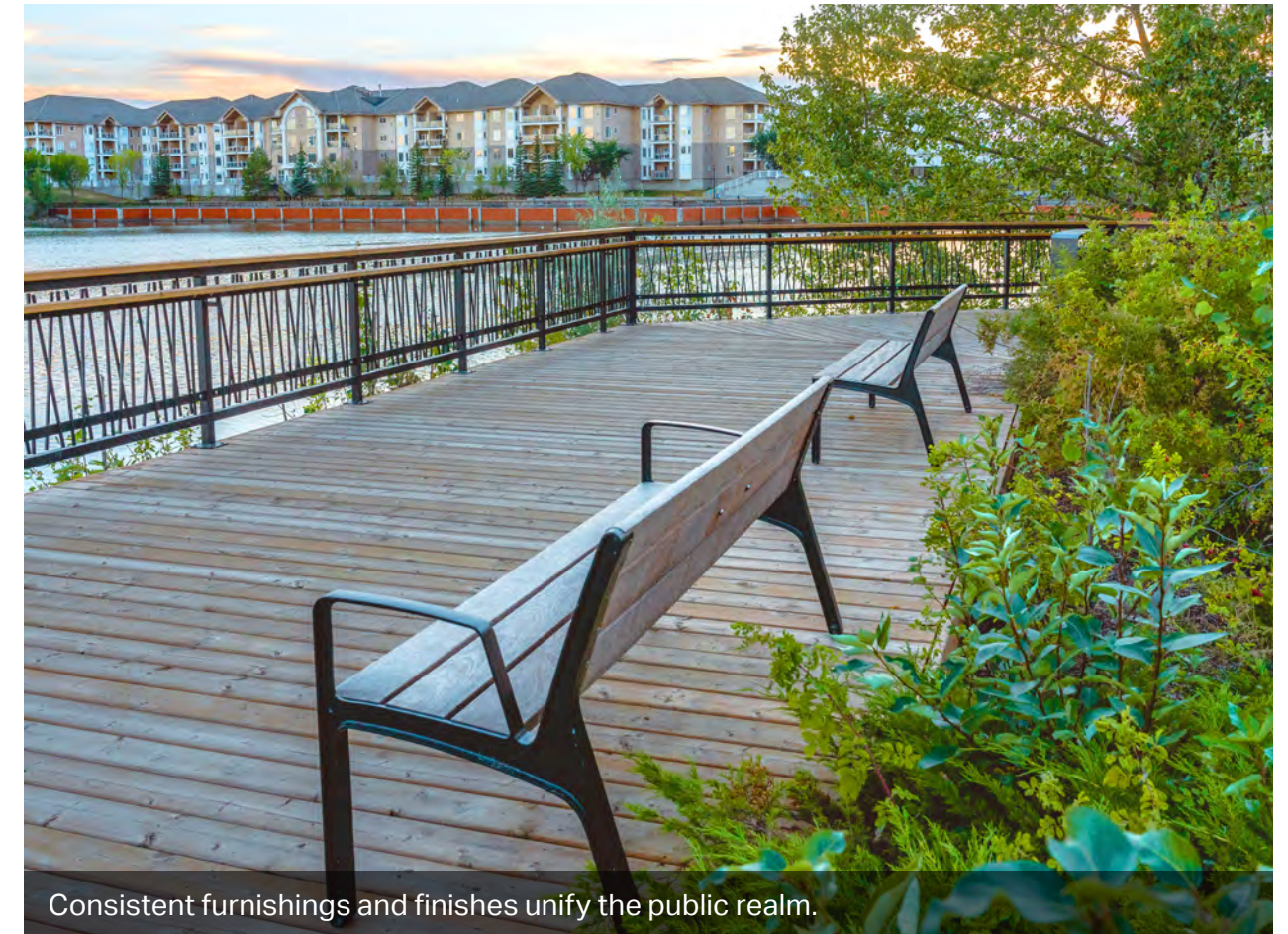
Fine detailing on the Promenade, paving, concrete, steel, and wood.



The community is reconnected to the lake via the East Park.



Integration of exemplary public realm, contemporary built forms and environmental design, A Rebuildable City.



Consistent furnishings and finishes unify the public realm.



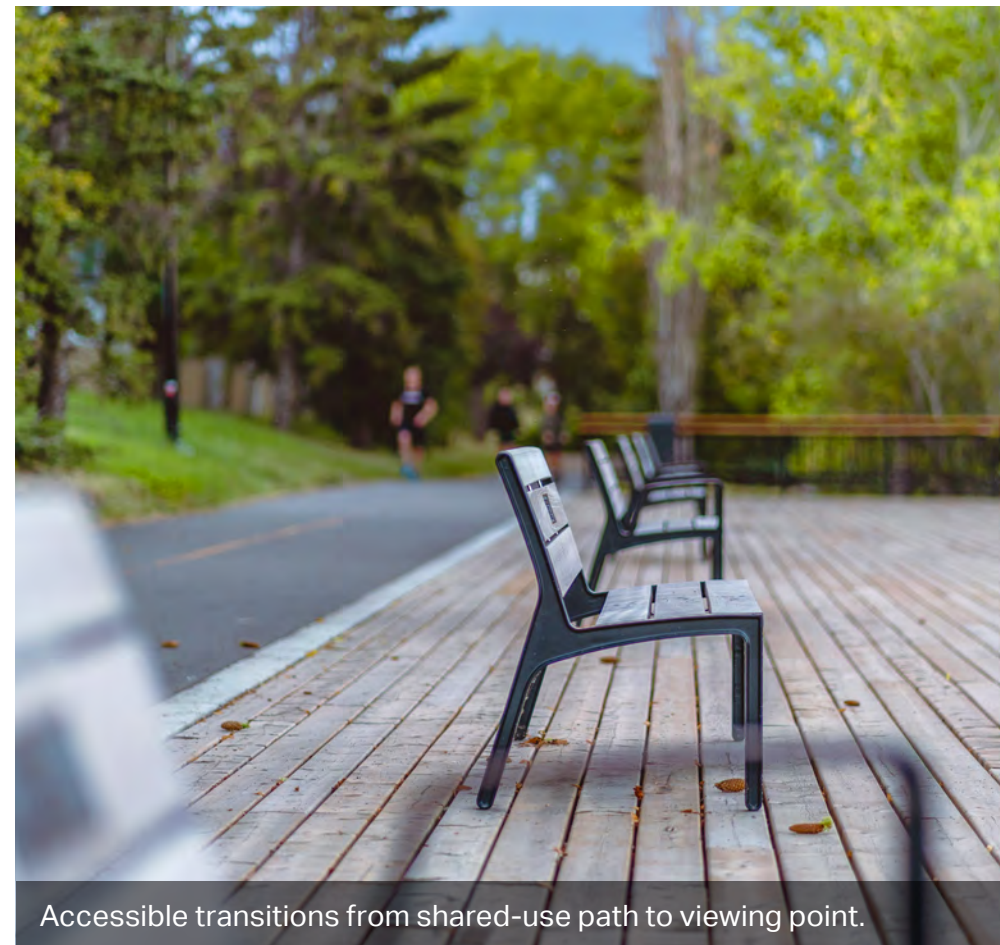
The low and meandering concrete walls provide informal play and create a stunning terrace to the lake edge.



The contemporary façade and bespoke railing sets the stage for the Promenade.



The planting design responds to the riparian lake edge planting.



Accessible transitions from shared-use path to viewing point.

Low impact development was integrated via hard and soft material selection, protection of the lake and surrounding habitat, bioswales, and an overall reduction in hardscape. Interpretive signage provides information on the local environment and function of the stormwater management facility.

The project team is incredibly proud to have delivered the public realm vision developed early in the project with the community: *“to provide a high quality, natural environment that supports healthy living by offering opportunities for: tranquility and rest, wildlife and stormwater management education, community gathering, and physical activity.”* Since completion, the City has received positive feedback from visitors – including *“great job!”* and appreciation for the *“overall feel and look of the place.”*

Big City Move: A Rebuildable City

“As Edmonton’s population grows, it is important that older as well as newer neighbourhoods purposefully adapt to future change and enable ongoing redevelopment” (City Plan, page 160). Due to its age and success as a community amenity, the open space was deteriorating, causing aesthetic and safety issues. The Beaumaris Lake Open Space rehabilitation embodies Rebuildable City principles by recreating and transforming the beauty, safety and capacity of the open space for current and future generations.