



AIRDRIE
MULTI-USE FACILITY
& PUBLIC LIBRARY

SCHEMATIC DESIGN REPORT

SEPTEMBER 9, 2022



CITY of
AIRDRIE
COMMUNITY & OPPORTUNITY



Airdrie Public
Library

CONTENTS

00	EXECUTIVE SUMMARY
01	PROGRAMMING
02	SITE ANALYSIS
03	CONCEPT DESIGN
04	schematic DESIGN
05	interior DESIGN
06	indigenous INCLUSIVITY
07	sustainability SUMMARY
08	accessibility SUMMARY
09	landscape SUMMARY

00

executive summary

00

EXECUTIVE SUMMARY

01

02

03

04

05

PROJECT VISION
EXECUTIVE SUMMARY
PROJECT PROCESS

06

07

PROJECT VISION

Airdrie is a friendly, vibrant, and growing community that continues to expand at an incredible pace. The development of a new Multi-Use Facility and Library is necessary to support the increasing needs among its residents, providing a collective gathering space for all members of the community that will engage and inspire.

The new facility will be located at 805 Main St. S, Airdrie, AB which currently contains a decommissioned fire hall and Municipal public works storage. The facility will include Multi-Use spaces totaling 25,000 square feet alongside a Library program of 60,000 square feet. Three Project Objectives outlined in the RFP have been the constant drivers for design decisions through both the Concept Design and Schematic Design Phases.





A facility that is a Catalyst for the Downtown

This library has the potential to be a catalytic project to bring the focus back downtown. It is about encouraging the connectivity to people and programs that nurture mental well-being and build a healthy and vibrant community. With the library being centrally located, it will be supportive of more walkable neighborhoods, further contributing to a complete community

A facility that has Multiple Uses and Activities

A future library should incorporate one or more uses inside of the building that is owned and operated by a different business such as a café, a different cultural resource, a co-working space or retail. This will anchor the library as a node drawing on different residents to visit the building for different reasons thereby stimulating the building as an activity center. It will elevate the building to add up to more than the sum of its parts.

A facility that is a Hub for Community Development

How libraries are used is changing. Historically they were a space used to house books. Today, libraries are a place where people gather and celebrate their community. This can be achieved through event programming and designing multi-purpose flex spaces that can accommodate a range of uses. This library is to be used and enjoyed by the entire community and a destination for all. Broadening the visitor base and establishing a patronage of users from all demographics is a critical part of building a community hub.



EXECUTIVE SUMMARY

GGA-Architecture and the entire extended design team are incredibly excited to present the Schematic Design of the Airdrie Multi-Use Facility and Library to City Council. The design team feels the project as detailed in this document meets the objectives of City Council, and is reflective of the extensive thinking, collaboration, and effort put in by the entire project team. Invaluable input from the City, library and team of consultants has culminated in the compelling state of the current design. With the milestone of a Schematic Design report we take this opportunity to reflect back on the vision that has guided the project from the beginning, as well as what we heard at the closure of Concept Design. The design of the project has always held to the importance of connectivity. Through an innovative programmatic layout of the building and a thoughtful arrangement of the site, the project facilitates the connection of people to programs, spaces, and other people. In addition, through its design, its material intent, and its overall form, the project expresses connectivity to both the natural and metropolitan aspects of the site, while being attentive to the Downtown Revitalization Plan. The diversity of spaces within the project, and Council’s continued effort to thoughtfully develop a multi-use program will ensure that this project is a hub for community development.

With the closure of Concept Design, we heard a re-iteration of Council’s desire for the project to be respectful of the surrounding context, to be accessible, inclusive, safe for all, and for the project to have an engaging and integrated site. Council’s support of the conceptual development allowed us to proceed through Schematic Design with confidence. The focus of Schematic Design has been primarily to solidify the general location on site of the building, expand upon and refine the layout presented in Concept Design, creating a floor plan with walls, doors, and glazing locations, and resolve this plan into a form. While much of the design requires further refinement and development in the design development stage, we are looking for support from Council to endorse the overall direction of the project. The Schematic Design process is an opportunity for us to test ideas, and share the excitement of the process. In Design Development, we will study in more detail the intricacies of the plan, especially with the engagement of the stakeholders on the Multi-Use components. We will refine the Library’s plan, focusing on the interior layout and finishes. Additionally, we will review the exterior material palette, establishing the glazing, envelope details and sustainable features of the project in conjunction with our consultant team and the City project team. We feel that the project as it is presented at this milestone aligns with project objectives. We are thrilled with the direction the project is headed and we very much look forward to Council’s input and feedback that will allow us to continue to refine our thinking, and continue to move our collective vision forward.

PROJECT PROCESS

This Schematic Design Report for the Airdrie Multi-Use Facility and Library project summarizes the progression and evolution of the design concepts that were outlined in the Concept Design Report issued on May 2, 2022.

As part of the Schematic Design process, the design consultant team developed floorplans that respond to both the Library functional program, the approved Multi-Use Facility Hybrid program and Airdrie’s Downtown Plan. Biweekly collaborative sessions with the project team helped to further refine the elements to be included within the floorplans. Midway through Schematic Design, Airdrie Council approved a modified version of the Multi-Use Facility program to include the Chamber of Commerce and Volunteer Airdrie as tenant organizations within the proposal.

The design of the site has also evolved to provide ample functional, programmable plaza space and incorporate a highly efficient layout for maximizing parking stalls without introducing parking on the western edge of the site. Grading and services on site have also been better investigated since the Concept Design phase. Encroachments into setback areas and realignment of services are being proposed in this report in order to overcome some of these constraints, however, as clarity to the multi-use facility programming continues to develop, site conflicts will be resolved.

The overall building design continues to build upon the values and project objectives outlined by Council. Building on the concept of an Atrium as a room, the interconnection of the Multi-Use Facility program with the Library Functional program, as well as a site-specific, Made-in-Airdrie solution, floorplans were further developed alongside the Project Coordination team.

The Schematic Design phase has established the design intent for the facility from a conceptual, massing, site design, material concept and programmatic perspective. This Schematic Design document will also form the basis of a Class-D cost estimate from the construction management team.

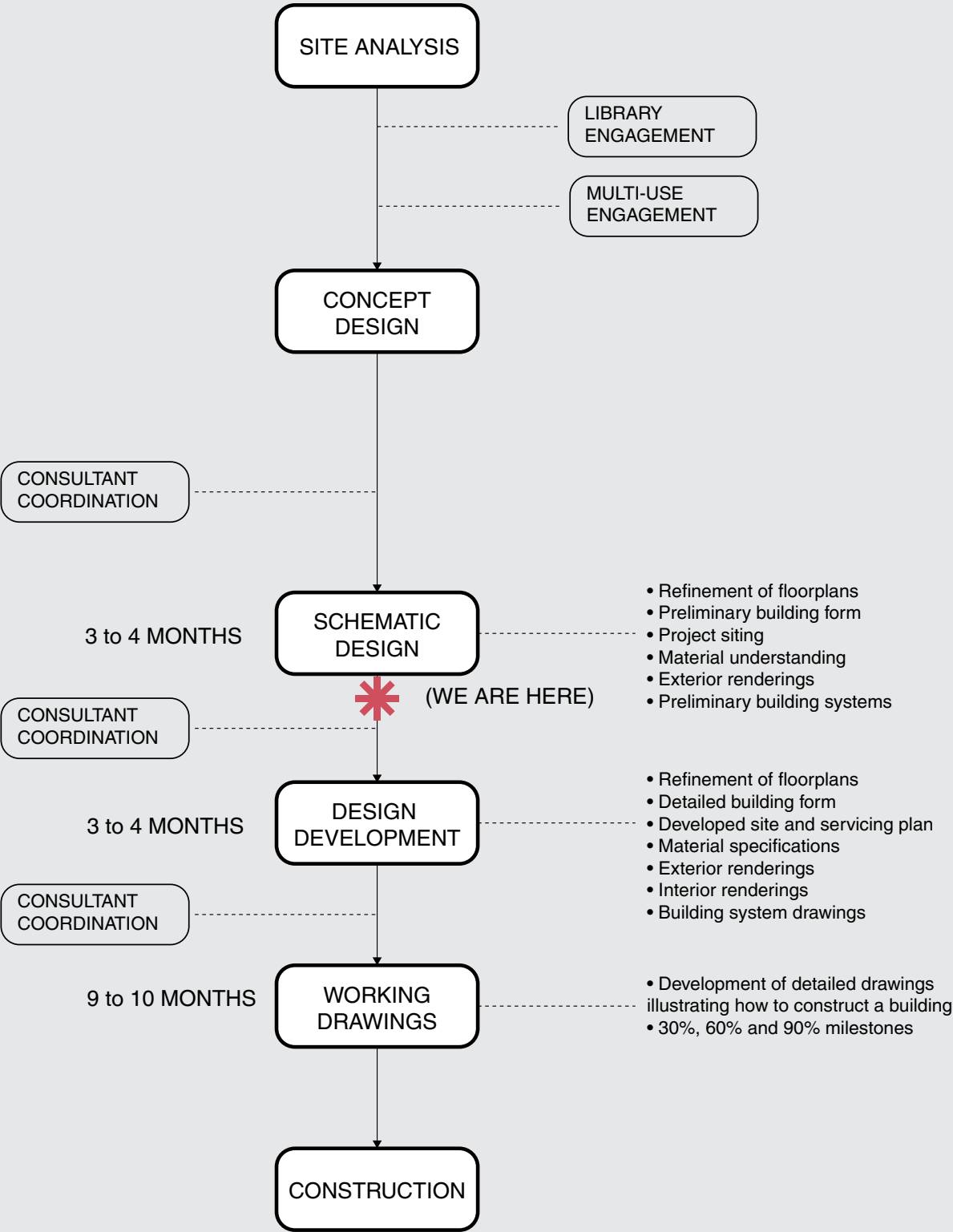
It is important to understand that Schematic Design marks a point in time of the project’s overall development. Capturing progress-to-date is important to generate a cost estimate, and capture the numerous design decisions that have been made through consultation with various stakeholders and the City Project team in order to chart a course for further refinement in the Design Development stage.

The upcoming Design Development phase is to further enhance the details of all the aforementioned components. It is also an opportunity to respond to any concerns that Council may have with the design progression. Final finishes and materials are yet to be determined, as are final program layouts, floorplans and furniture selections. Interior Design will be a key area of focus during Design Development with refinement of furniture layouts, and material selections being critical to this process. In general, Schematic Design is an opportunity to test broader ideas - materials, forms, layouts.

Elements that will be difficult to change include the positioning of the project on site that has been carried forward from Concept Design, major feature locations on site and the general size of the project. Beyond those items, much of what is explored in Schematic Design, including exterior materials, detailed program layouts, glazing, door locations, etc is still very much fluid, with continued refinement through Design Development.

Additionally, the project team has identified some potential risks to the design schedule that will need to be further understood and resolved in the next phase.

- **Impact of realignment of site services**
- **Pandemic cost escalation**
- **Finalized parking requirements**
- **Off-site signalization**



TYPICAL PROCESS

1. Concept Design Phase

In this phase, the Architect and the Client work closely, to make sure all the necessary building program needs are covered in the project design. general approach to the site, major access points, circulation networks, location of parking as well as relationship diagrams that indicate how spaces will be laid out in plan are developed. The Multi-use program will be identified in a space list and how this space interacts with the library component is illustrated. Site analysis and urban contextual analysis as well as potential shadow development plan is considered. Conceptual approach to how the project will be formed to reflect the values of Airdrie will be presented

Council has reviewed, at a 30,000 foot level, how the project relates to the context. Direction on the program, major architectural themes and organization of the building on site related to servicing has been given. The Schematic Design report has responded to any concerns and progressed the design based on initial feedback.

2. Schematic Design Phase

The schematic design begins to articulate spatial and architectural elements, initial plans, sections and elevations will be produced. Floor plans relate to massing, elevations and materials on the exterior. Preliminary understanding of systems and other engineering elements such as acoustics, signage&wayfinding and others are developed and coordinated with the architectural plan.

Council will be reviewing the plan and site plan to understand how the rooms and spaces layout in relation to the site and context. This will be an important review of council to approve the direction of the project from which subsequent reviews will be measured against. Level of detail will be at the room level and reflect massing configuration at the door and window level of detail. The design is not complete or resolved in full detail as this is a snapshot in the design process. The form of the building will be set and support of that in principle is being sought. The cost of the building is estimated at this point with the ability for council to provide direction as a result to discrepancies.

3. Design Development Phase

This phase develops the design from schematic concept into a more refined architectural idea. This is where the Architect will deep dive into finishes, materials, and systems integration. Documents typically includes a standard architectural drawing set: site plan, floor plans, sections, elevations, and details. This also includes structural drawings, MEP (mechanical, electrical, and plumbing) drawings, civil engineering drawings, and landscape architecture drawings. Other consultants such as acoustics, fire protection, and envelope may provide drawings and documents as well. A draft project outlining the specifications for the project is also included. Details relating to interior finishes and millwork requirements as well as furniture and equipment layouts are initiated

In this phase council has the ability to understand the form and finish of all major spaces and systems to decide if the development of the design is proceeding in the direction consistent with the feedback provided in the Schematic Design.

4. Construction Documents Phase

Construction documents are directions from the Architect to the Contractor. These documents describe precisely how the Contractor will make the Architect's design become a built object - through drawings and specifications. Construction documents serve two basic purposes: to obtain a building permit, and to get the design built.

With several milestones in the progress, the level of detail may be too complex and time consuming for council to evaluate . Council's focus will be on the progress level of information, consistency with their approved direction from the previous stage and the relationship of the design to the approved budget through milestone estimates.



	SEPTEMBER 2022																														OCTOBER 2022																														NOVEMBER 2022																														DECEMBER 2022																													
TENANT ENGAGEMENT	<div><div>Council Presentation of SD</div><div>Sustainability Workshops</div><div>RDS Requirements</div><div>Plans Interior Finishes</div><div>Final Review of DD</div><div>Sustainability Workshops 2</div><div>Council Presentation</div></div>																																																																																																																							
PROJECT TEAM																																																																																																																								
SPECIALTY ENGAGEMENT	<div><div>Sustainability Workshop</div><div>Massing External Material Workshops</div><div>Interior/ Exterior Finishes Massing</div><div>Building System + Signage</div><div>Detailed Plans</div><div>Sustainability Direction</div><div>DD Review</div></div>																																																																																																																							
Floor Plan Development	<div><div>Fitment Layout</div><div>Finalization of Plans and Details</div></div>																																																																																																																							
Massing/Elevations/Materials	<div><div>Detailed Floor Plan</div><div>Blow up Plans</div><div>Finalization of Elevations + Materials</div></div>																																																																																																																							
Interior/Detailing/Finishes	<div><div>Development of Room Data Sheets</div><div>Interior Finishes</div><div>Millwork + Feature Elements</div></div>																																																																																																																							
Site/Landscape/Civil	<div><div>Planting + Grading Plan</div><div>Servicing + Storm Water</div></div>																																																																																																																							
SME	<div><div>Structural Drawings</div><div>Mechanical Layout</div><div>Lighting Drawings</div><div>RCP Coordination</div><div>Detailing</div></div>																																																																																																																							
Acoustics/Signage/Accessibility	<div><div>Accessibility Audit</div><div>Brandind Review</div></div>																																																																																																																							

00
01
02
03
04
05

PROGRAMMING

FUNCTIONAL PROGRAM
HYBRID PROGRAM
INDIGENOUS ENGAGEMENT

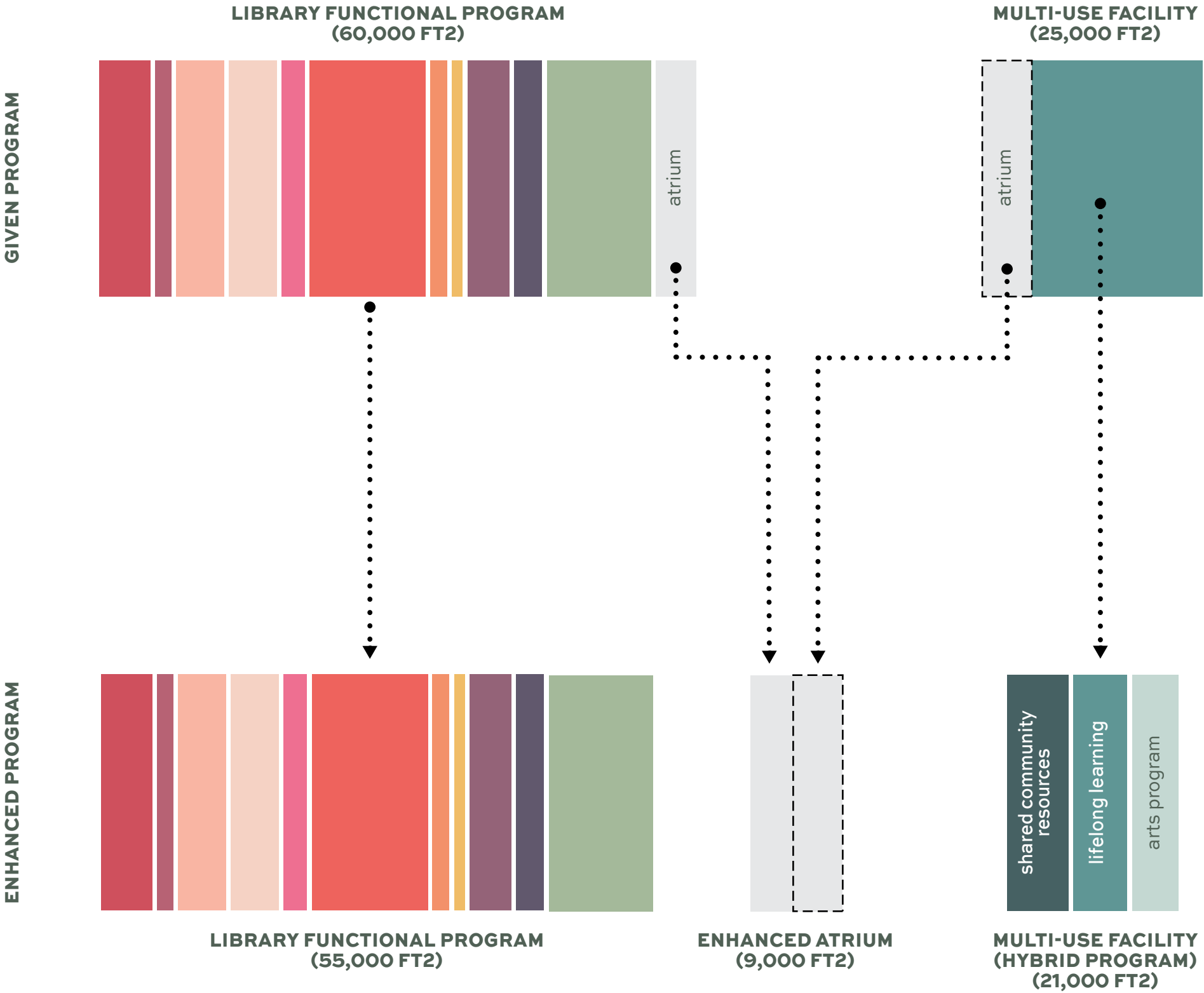
FUNCTIONAL PROGRAM

The program for the Airdrie Multi-use Facility and Library consists of two primary components: the Multi-use program and the Library program.

The approved Hybrid Multi-use Program endorsed by City Council on March 15, 2022 was further refined with Council’s informed decision in July, 2022. A portion of the Shared Community Resource space has been allocated to Volunteer Airdrie and Airdrie Chamber of Commerce. Modification to the square footage requirements have been captured as part of this Schematic Design Report, and is outlined in the following pages. As a result of these changes, the requirements of each of these organizations has not yet been understood or incorporated into the design. The design team has provided assumptions to the layouts of these different tenant spaces, as well as modifications to the reduced shared community spaces, but further engagement is still required.

A further update to the Multi-use Program was provided to the Project Team prior to the issuance of this Schematic Design Report in August. This report illustrates the most recent update with allotted square footages within the floorplans, but the design team recognizes that the finalization of this program is still outstanding.

01 programming



LEGEND

- entrance and large program room
- community living room
- pre-school children's area
- school age children's area
- young adult's area
- adult's area
- makerspace
- quiet study room
- staff workplace
- back of house functions
- atrium
- shared community resources
- lifelong learning
- arts program
- green space

HYBRID PROGRAM

The Multi-Use Hybrid Program consists of two primary components: Tenant Organizations and Municipal Programs. Currently, the Tenant Organizations consists of Lifelong Learning (Bow Valley College, CCIS, and RVS), Community Resources (Airdrie Chamber of Commerce and Volunteer Airdrie) and Shared Space for the tenant organizations. Municipal programs are broken down into Arts Development, Community Resources, and the Atrium Space. These broader components have evolved since Concept Design and are shown with relative sizes and areas indicated, including the modifications approved by Council in July. The adjacent table outlines the current program and forms the basis of area allocations for the proposal presented in this Schematic Design report. We are also in the process of developing the exterior program spaces which will emerge in more detail through the Design Development stage in concert with the operational considerations and the project budget.

The current program is based around the Hybrid program endorsed by council in April, where the design team proposed a program suited to supporting the Library and Multi-Use Facility based on Council feedback. As an example, direction from Council at that time indicated a desire for a 100 seat theatre that could host a myriad of functions that are not currently possible in Airdrie. It is important for this event space to work with the program of the Airdrie Public Library to enhance the multi-use nature of the facility. GGA has developed a program that provides flexibility for this event space to function as a lecture hall, small reception/banquet facility, recital hall, and small performance space. The design of the facility looked for opportunities to connect to the entrance to provide foyer space to the theatre. As directed by council this space was not identified to compete with the T&C or Bert Church in their size and events. In the design team’s experience, supporting spaces for a theatre this size would also require a green room and control booth. Similarly for art studios that could facilitate children’s art camps and after-hours adult education, studio sizes at commensurate facilities was proposed.

Currently, the City of Airdrie’s programming team is validating these assumptions with guidance from the design team, and finalizing room sizes and functional requirements based on operational considerations. Once this is complete, modifications to the ultimate program area, as well as further design refinement for these uses can occur in Design Development. Depending on the degree of proposed changes, the building footprint may need to be modified.

AMUFL - Multi-use Functional Program Summary

		Units	Unit SM	Net SM	Unit SF	Net SF	Responsibility
1.1	Program Area - Tenant Organizations						
	Bow Valley College - Lifelong Learning						
1.1.1	Medium Classroom (15 students)	4	37	148	398	1593	Bow Valley College
1.1.2	Small Classroom (5 students)	2	13	26	140	280	
1.1.3	Corporate Training Room/Boardroom	1	46	46	495	495	
1.1.4	Testing Room/Drop-in Office	1	8	8	86	86	
1.1.5	Circulation/Common Area	1	111	111	1195	1195	
1.1.6	Breakout Collaboration/Creative Area	1	70	70	754	754	
1.1.7	Open Office/Work Area	1	33	33	355	355	
1.1.8	Offices	2	8	16	86	172	
1.1.9	Reception	1	7	7	75	75	
1.1.10	IT Storage	1	8	8	86	86	
1.1.11	Staff Kitchen	1	9	9	97	97	
1.1.12	Washrooms (5 stalls)	1	25	25	269	269	
	Total Sub-Component Assignable Area Sub-Total			507		5458	
	CCIS - Lifelong Learning						
1.2.1	Small Meeting Room	1	12	12	129	129	CCIS
1.2.2	Offices	2	8	16	86	172	
	Total Sub-Component Assignable Area Sub-Total			28		301	
	Rocky View Schools Adult Learning (RVSAL) - Lifelong Learning						
1.3.1	Small Meeting Room	1	12	12	129	129	RVS
1.3.2	Offices	2	8	16	86	172	
	Total Sub-Component Assignable Area Sub-Total			28		301	
	Airdrie Chamber of Commerce - Community Resources						
1.4.1	Reception Area	1	20	20	215	215	Chamber of Commerce
1.4.2	Offices (for 6 staff)	6	10	60	108	646	
1.4.3	Storage	1	23	23	248	248	
	Total Sub-Component Assignable Area Sub-Total			103		1109	
	Volunteer Airdrie - Community Resources						
1.5.1	Office	1	15	15	161	161	Volunteer Airdrie
1.5.2	Work Stations	4	10	40	108	431	
1.5.3	Storage	1	38	38	409	409	
	Total Sub-Component Assignable Area Sub-Total			93		1001	
	Shared Space for Community Resource Tenants						
1.6.1	Kitchenette and Staff Lounge	1	20	20	215	215	Shared Space
1.6.2	Copier Room	1	10	10	108	108	
	Total Sub-Component Assignable Area Sub-Total			30		323	
	Component 1 Area Subtotal			789		8494	
	Pro-Rated Building Mechanical / Electrical / IT /Cust. 9.5%			75		807	
	Pro-Rated Walls and Structure 2.5%			20		212	
	Component 1 Area Total			884		9513	

		Units	Unit SM	Net SM	Unit SF	Net SF	Responsibility
2.1	Program Area - Municipal Programs						
	Arts Development						
2.1.1	Performance Space (160 standing; 100 theatre; 72 banquet)	1	150	150	1615	1615	City of Airdrie
2.1.2	Green Room	1	20	20	215	215	
2.1.3	Control Booth	1	20	20	215	215	
2.1.4	Art Studio	2	90	180	969	1938	
2.1.5	Art Storage	2	15	30	161	323	
2.1.6	City of Airdrie Offices	4	10	40	108	431	
2.1.7	Video Production Room	2	20	40	215	431	
	Total Sub-Component Assignable Area Sub-Total			480		5167	
	Community Spaces						
2.2.1	Conference Room	1	35	35	377	377	City of Airdrie
2.2.2	Small Meeting Rooms	4	15	60	161	646	
2.2.3	Washrooms	2	10	20	108	215	
2.2.4	Large Sub-dividable Multipurpose Room (90 auditorium, 70 class)	1	180	180	1938	1938	
2.2.5	Large MPR Storage	1	30	30	323	323	
2.2.6	Medium Multipurpose Room	1	50	50	538	538	
2.2.7	Medium MPR Storage	1	15	15	161	161	
	Total Sub-Component Assignable Area Sub-Total			390		4198	
	Atrium						
2.2.1	Atrium Component	1	658	658	7083	7083	City of Airdrie
2.2.2	Open Exhibition Space (Arts Development)	1	70	70	754	754	
2.2.3	Retail Pop-up Pods (Business Development)	3	20	60	215	646	
2.2.4	Visitor Information	1	15	15	161	161	
2.2.5	Café/Bistro	1	30	30	323	323	
2.2.6	Planters	1	20	20	215	215	
2.2.7	Servery Kitchen	1	20	20	215	215	
	Total Sub-Component Assignable Area Sub-Total			873		9398	
	Component 2 Area Subtotal			1743		18763	
	Pro-Rated Building Mechanical / Electrical / IT /Cust. 9.5%			166		1783	
	Pro-Rated Walls and Structure 2.5%			44		469	
	Component 2 Area Total			1952		21015	
	MULTIPURPOSE & ATRIUM GROSS AREA TOTAL			2836		30528	

Note: Multiuse exterior program is under development.

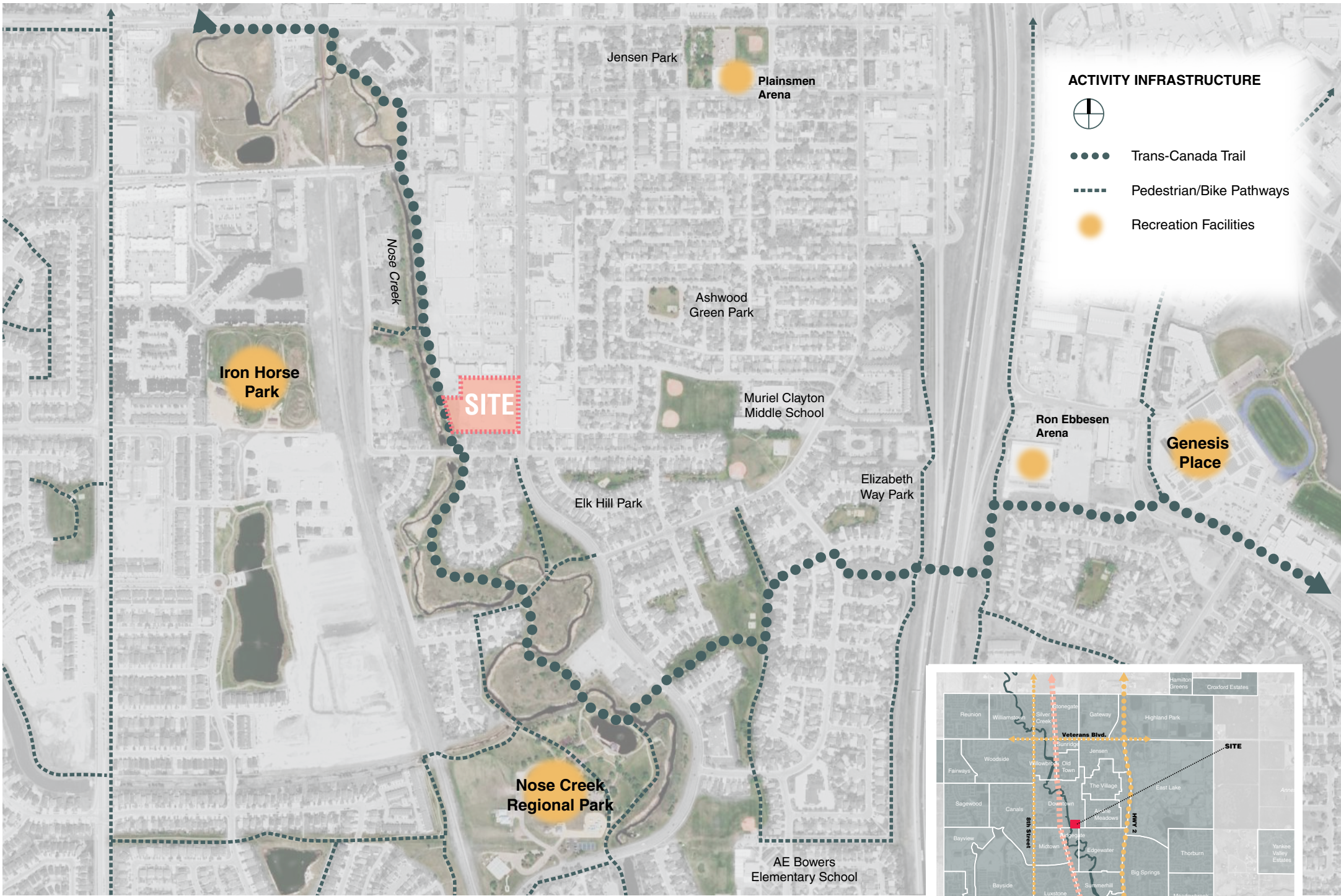
00
01
02
03
04
05
06

CITY CONTEXT
SITE CONTEXT
ZONING/BYLAW REVIEW
TOPOGRAPHY
PHOTOS

CITY
CONTEXT

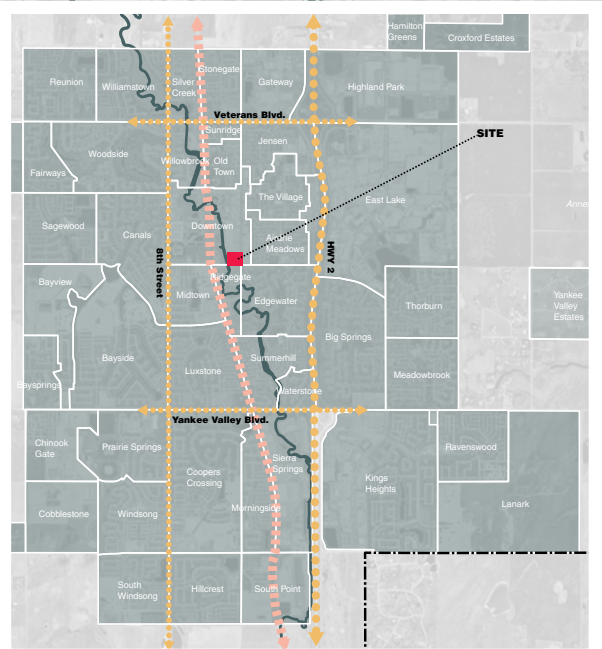
The project Site is located at the southern end of Downtown, Airdrie. It is bounded on the West by Nose Creek and on the East by Main Street. Within the larger City context the site is situated amidst a network of major transportation corridors. To the North is Veterans Boulevard and to the South is Yankee Valley Boulevard. To the West is the railway line which presents a significant barrier to east/west connections within the City. To the East is Highway 2 which bisects Airdrie and also impedes east/west connections across the City.

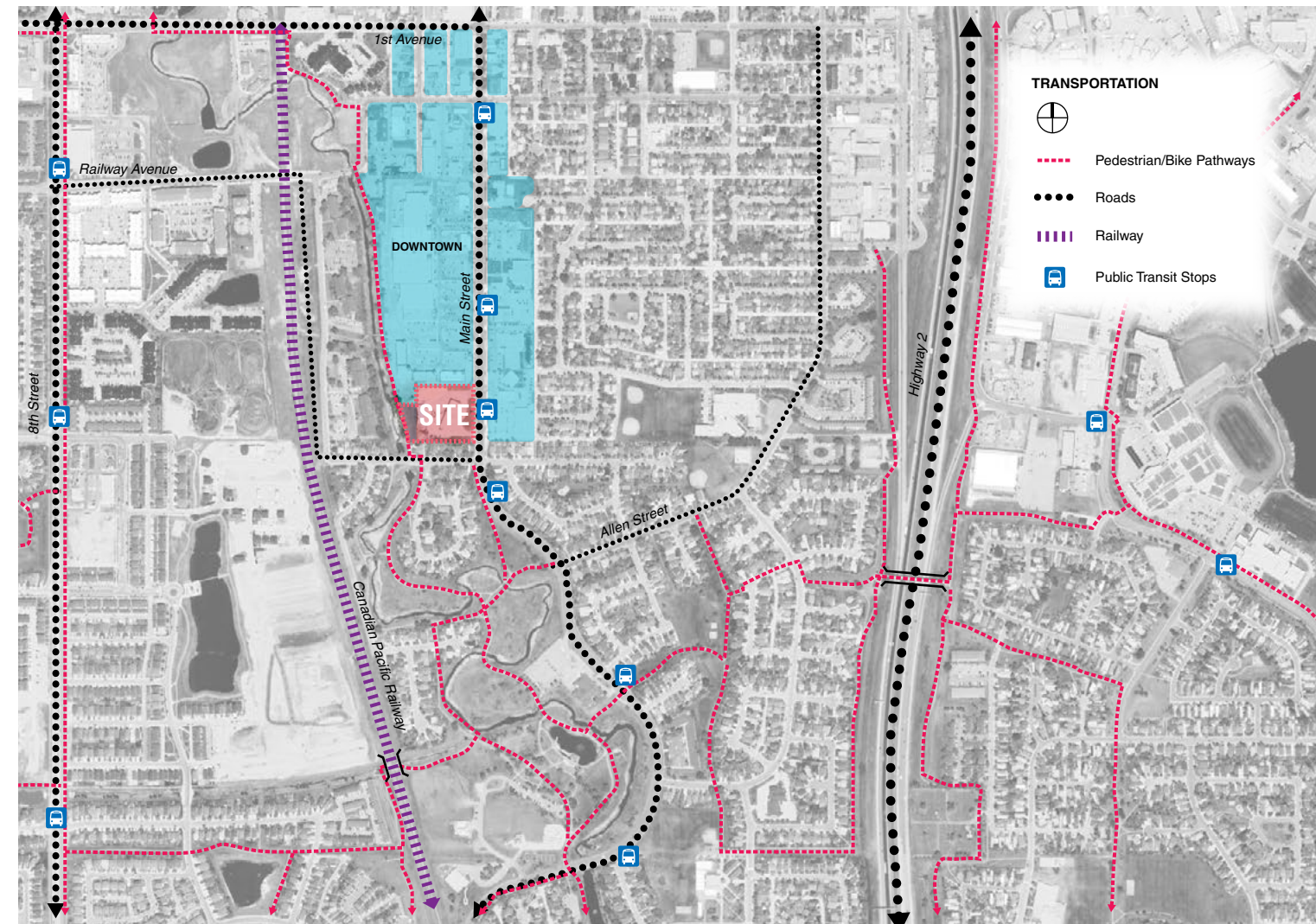
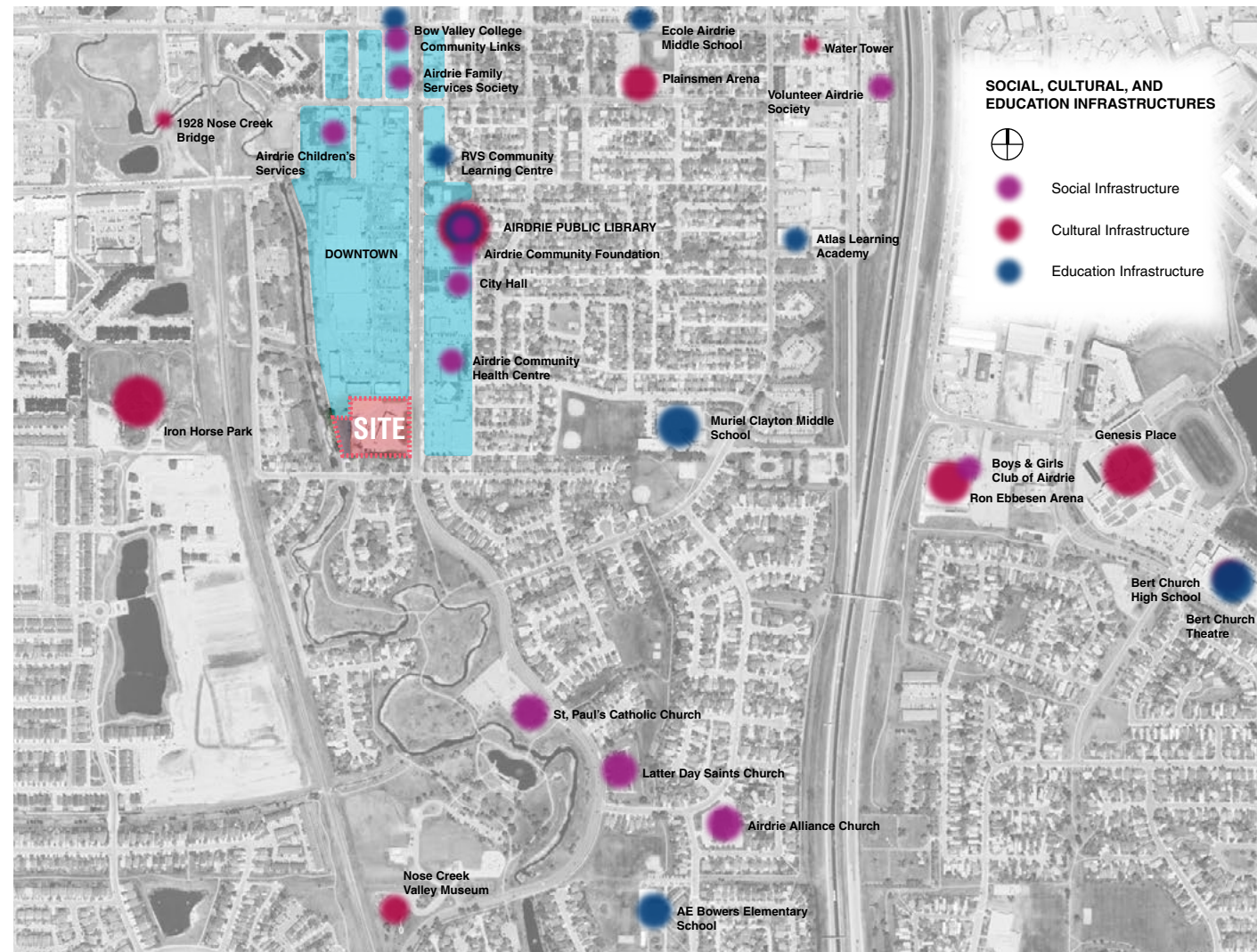
02 site analysis



ACTIVITY
infrastructure

Within the community context the project Site is situated amongst an extensive network of activity infrastructure comprised of pedestrian and bicycle pathways and recreation facilities. Most notably, the Site is immediately adjacent to the Trans-Canada Trail, a national network of multi-use recreational trails extending across the country. Within Airdrie, the Trans-Canada Trail provides opportunity for a pedestrian/cycle connection between major public and recreation nodes such as Genesis Place, Nose Creek Park, and the Library Site.



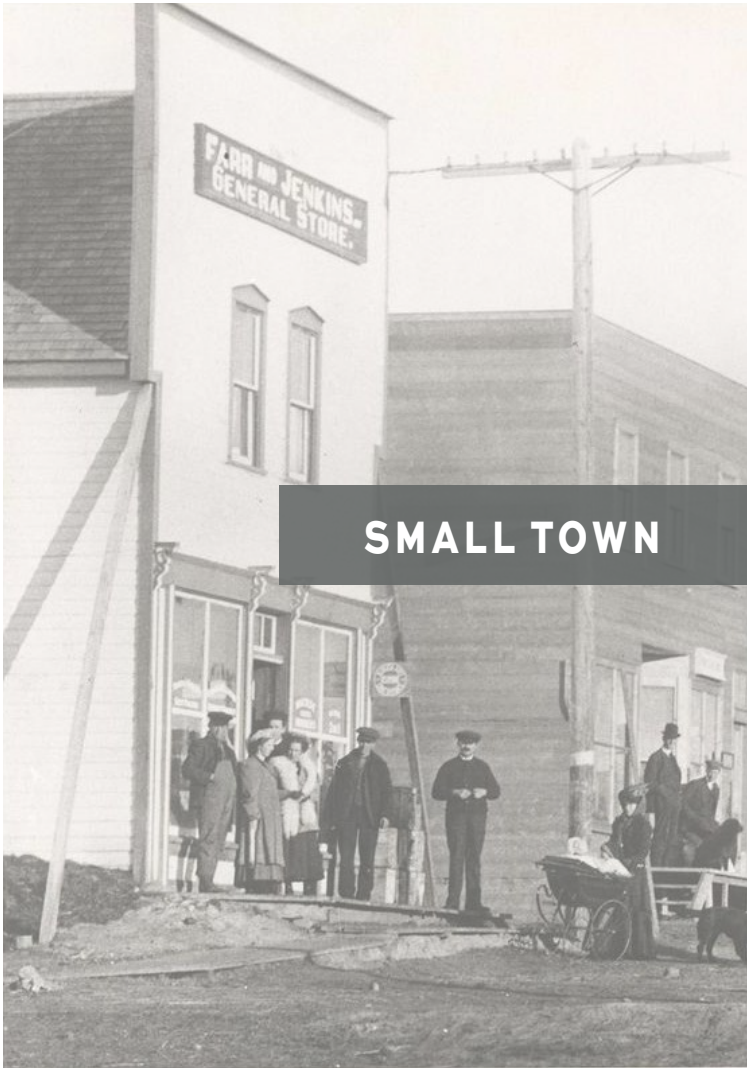


social, cultural, & education INFRASTRUCTURE

In addition to being located within an extensive network of Activity Infrastructure, the Site is also located amongst an extensive network of Social, Cultural and Education spaces and places. With both Multi-use (Lifelong Learning, Arts Development, Shared Community Resources) and Library program components, the project and its location form a critical part of this network offering Social, Cultural and Education spaces.

transportation NETWORKS

Located at the southern end of Downtown between Main Street and Nose Creek the project Site has immediate multi-modal accessibility. The site is accessible by walking, cycling, public transit, and vehicular transportation.



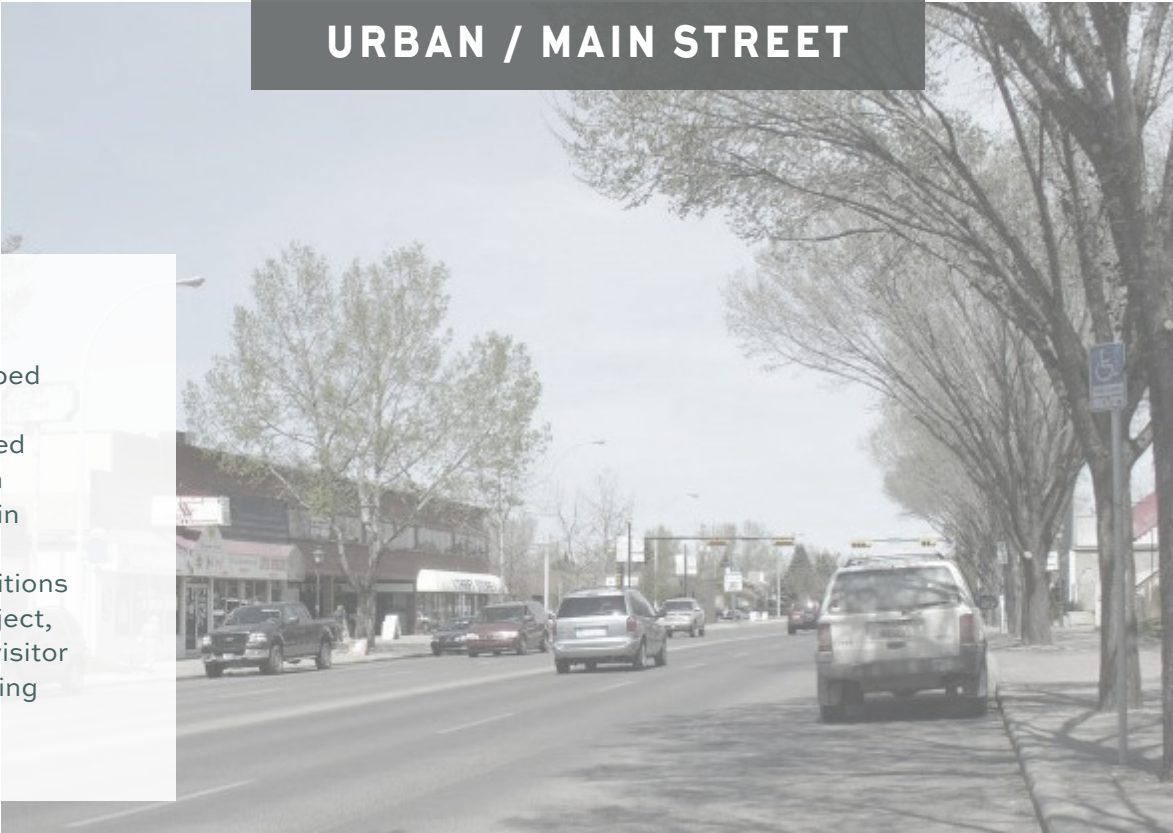
SMALL TOWN



URBAN CENTRE



NATURE / CREEK



URBAN / MAIN STREET

sense of
PLACE

In order to develop a solution solely dedicated to the unique values of Airdrie, the design consultant team engaged in multiple visioning sessions with City Council, the Airdrie Public Library Board as well as the Library Project Team. These sessions helped illustrate what makes Airdrie unique, and what values define the city. As a city growing at an incredible pace, Airdrie finds itself on a spectrum between many dualities; preserving history while embracing the future, respecting long-time citizens and welcoming the new, and maintaining the values of a friendly small-town while developing into a metropolitan centre.

SITE
concept

The site itself also exists between two distinct poles; a natural winding creekbed flanks the entire eastern edge of the site, offering a quiet, pedestrian-centred experience. This contrasts the western edge, where the urban condition of Main Street offers high levels of traffic and hardscaping. These two different conditions offer multiple opportunities for the project, allowing for the creation of a range of visitor experiences, and influencing the massing and orientation of the project.

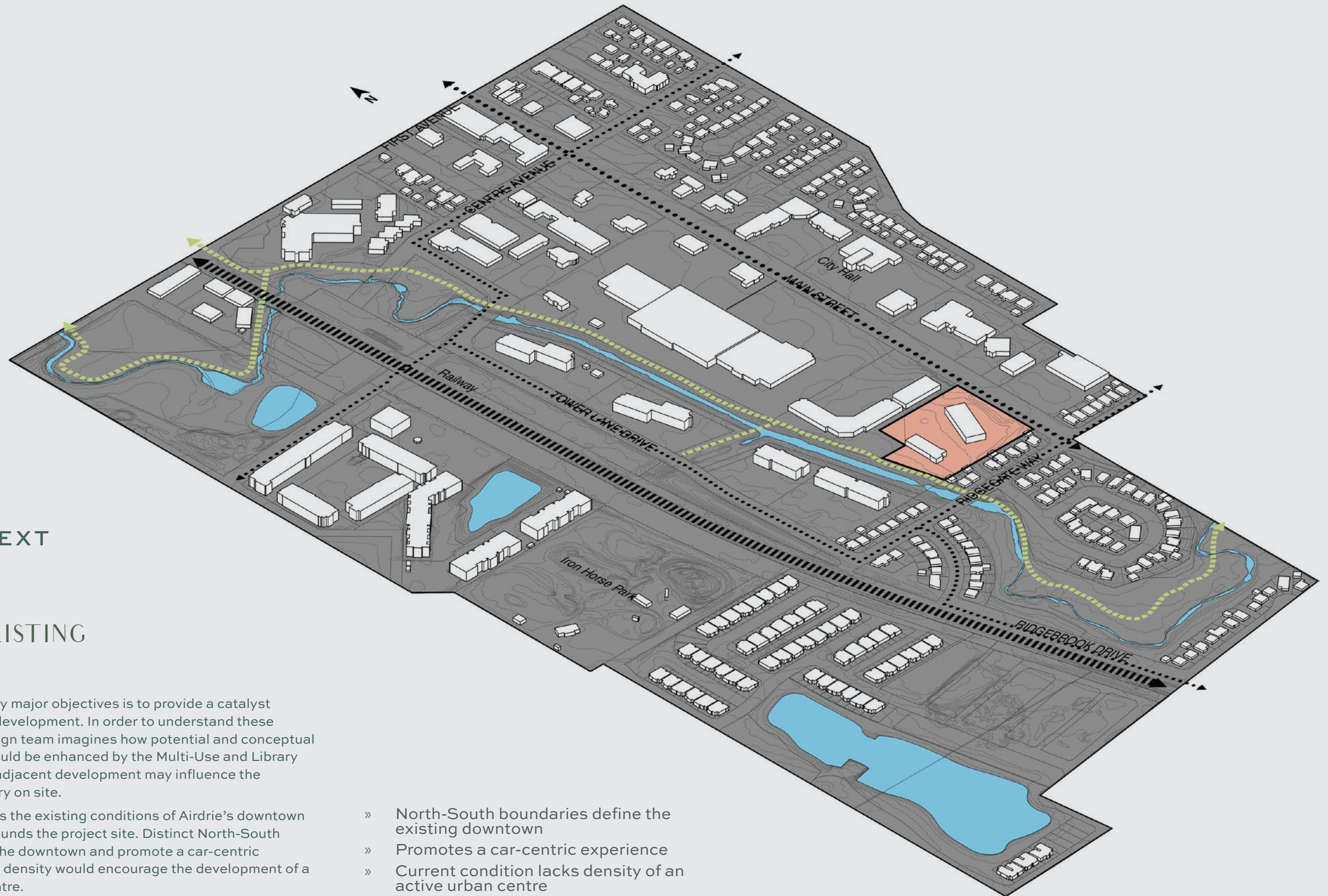
SITE CONTEXT

downtown EXISTING conditions

One of the project's key major objectives is to provide a catalyst for further downtown development. In order to understand these opportunities, the design team imagines how potential and conceptual future development could be enhanced by the Multi-Use and Library Facility, and how that adjacent development may influence the orientation of the library on site.

This diagram illustrates the existing conditions of Airdrie's downtown that immediately surrounds the project site. Distinct North-South thoroughfares define the downtown and promote a car-centric experience. Additional density would encourage the development of a more active, urban centre.

- » North-South boundaries define the existing downtown
- » Promotes a car-centric experience
- » Current condition lacks density of an active urban centre





encouraging downtown DENSIFICATION

In order to add the required density to the Downtown core, a potential strategy would be to enhance East-West connections, creating pathway loops for pedestrians or vehicles, and encouraging smaller parcels for higher-scale development. This would generate more street frontage, storefronts and corner plaza opportunities.

- » Establish grid
- » Secondary E-W pathways
- » Extend streets
- » Multi-modal public activity loops
- » Storefronts



GREENWAY / nose creek connections

The Nose Creek pathway could contribute to the development of additional E-W connections; multi-modal public activity loops do not necessarily need to be hardscaped roadways or pathways. Green park space would also encourage residents to cross over major barriers and enhance the pedestrian network.

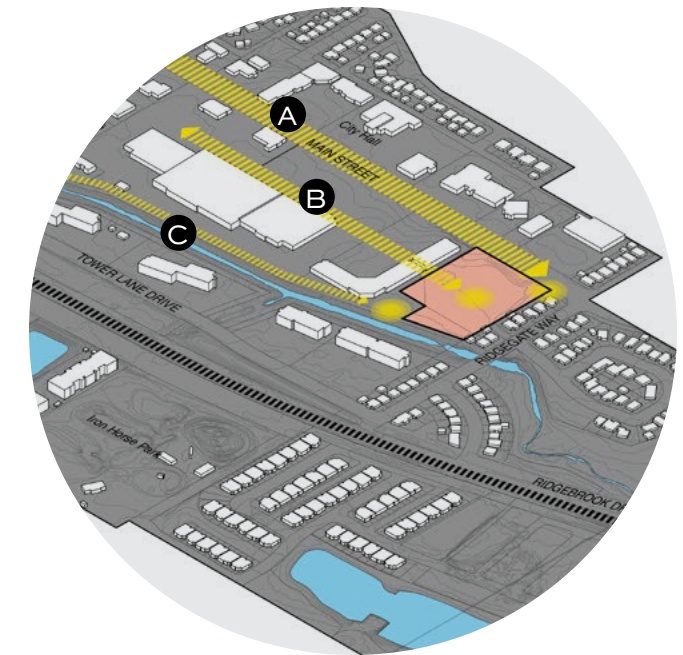
- » Extend green/pedestrian network
- » Some extensions are green (trees)
- » Some extensions are pathways
- » Nose Creek becomes new “thoroughfare”



potential adjacent DEVELOPMENT strategies

If enhancing E-W connections and increasing density on smaller parcels are desired strategies, a new, pedestrian-oriented “commercial commons” could offer a counterpoint to the car-centric experience on Main Street, encouraging increased density between the two N-S thoroughfares. While this illustration is highly conceptual, it suggests a potential opportunity for a unique pedestrian experience that would be enhanced by the positioning of a major community complex, such as the Multi-Use Facility and Library.

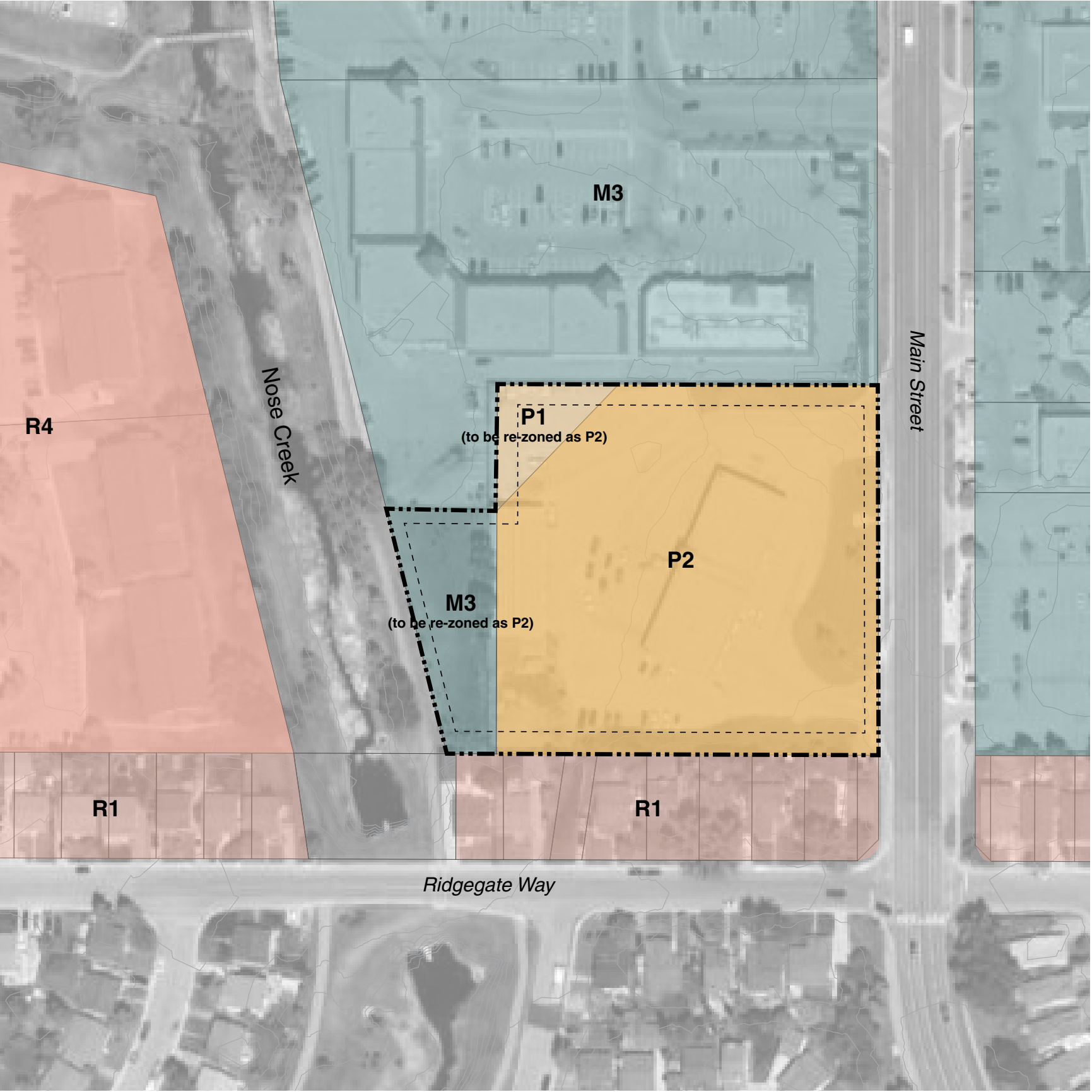
- » Commercial commons connecting to site
- » Active frontage along Main Street
- » Multi-use development
- » Densification
- » Engagement with Nose Creek thoroughfare



NEIGHBOURING influences

The site offers very distinct experiences that run N-S, and result in different anchor points on the project site. The design concept strives to recognize these opportunities with the siting and orientation of the project elements.

- A Main Street
- B Commercial Commons
- C Nose Creek thoroughfare



zoning &
BYLAW summary

The site currently captures three different zoning districts within it’s limits. These are P1, P2, and M3. Based on the Airdrie Land Use Bylaw BO12016 the relevant details of these districts are as such:

P1 PUBLIC OPEN SPACE DISTRICT

The intent of this district is to provide for low impact civic and community uses. This should primarily include various forms of open space and outdoor land uses.

Minimum exterior (front and rear) setback	4.0m
Minimum interior (side) setback	6.0m
Maximum building height	12.2 m
Maximum building coverage	20%

P2 PUBLIC FACILITIES DISTRICT

The purpose of this district is to provide for higher intensity civic and institutional uses that would normally exist within an urban context. This would include schools and more developed recreation uses, as well as Municipal offices, facilities and other essential public services.

Minimum exterior (front and rear) setback	4.0m
Minimum interior (side) setback	6.0m
Maximum building height	24m
Maximum building coverage	60%

M3 DOWNTOWN CORE MIXED USE DISTRICT

The intent of this district is to provide for low impact civic and community uses. This should primarily include various forms of open space and outdoor land uses.

Maximum front setback	3.0m
Maximum building height	8 storeys
Maximum building coverage	80%

To better align with the intended use for the site and to establish consistent requirements across the site, it is proposed that the existing P1 and M3 parcels on the site by re-zoned as P2 (Public Facilities District). The entire site will then be zoned as P2 which best suits the intended use for the site (library, educational, community resources, arts development). In addition, having consistent setback, building height and site converage requirements across the entire site will facilitate more integrated development of the site.



existing site SURVEY

A geolocated survey of the site was completed on October 25th, 2021 to capture the presence and location of existing buildings, utilities, vegetation, fences, hardscape, curbs, and other site features.

In addition, the survey of the site delineates the existing topography which slopes generally from east to west toward Nose Creek.

To facilitate the development of the Airdrie Multiuse Facility and Library the existing buildings will be demolished, existing utility locations will be coordinated with the proposed site layout, the topography will be graded to suit the intent of the project, and a new landscape plan will be developed.



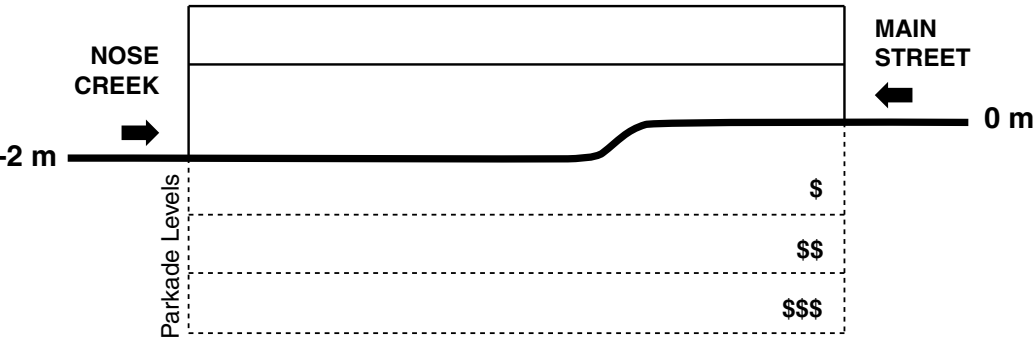
site TOPOGRAPHY

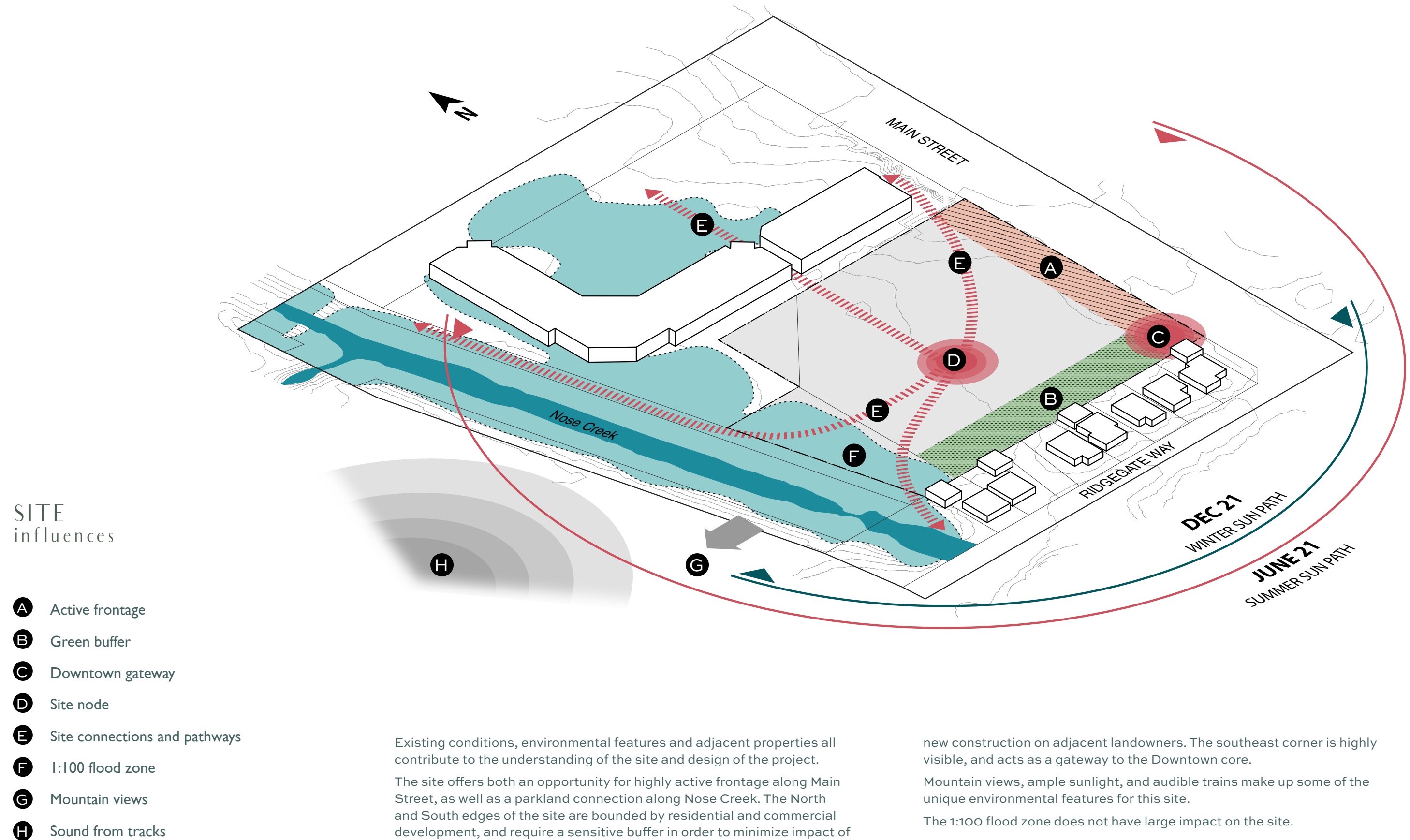
The site topography generally slopes from east to west with the steepest part of the slope adjacent to Main Street and the remainder of the site sloping more gradually. The elevation at the eastern boundary of the site is 1084.5 m above sea level. The elevation at the western boundary of the site is 1081.5 m above sea level. The 1:100 flood limit encroaches the western part of the site at approximately the 1082.0 m elevation. There also exist on the site several utility right of way (URW) corridors. It is understood that the underground URW running generally north-south through the middle of the site is abandoned and therefore developable (this URW is proposed to be removed during construction).

The 2m elevation difference between Main Street and the centre of the site provides an opportunity to create an urban street entrance and have a portion of the parking below grade. Below grade parking allows for more pedestrian scale access to the building from both Main Street and Nose Creek. A preliminary Parking Study estimated the required numbers of stalls to be in the range of 250-350. A forthcoming revised Parking Study will provide a more concrete recommendation of parking requirements.

The porosity and accessibility of having entries on both sides of the building creates walkability and a better interface with the urban and pedestrian environment. The diagram below illustrates how the existing site topography is used to facilitate a below grade parking strategy and desirable entries at grade.

The project is currently referencing the 1:100 Flood Map which is the highest level of flood data currently available from the Government of Alberta for Nose Creek. This is likely dated information, but at present, no additional information is available. Flood data will be further reviewed through Design Development to ensure that an appropriate metric is being used to inform the design.





The analysis undertaken culminates in the following illustration.

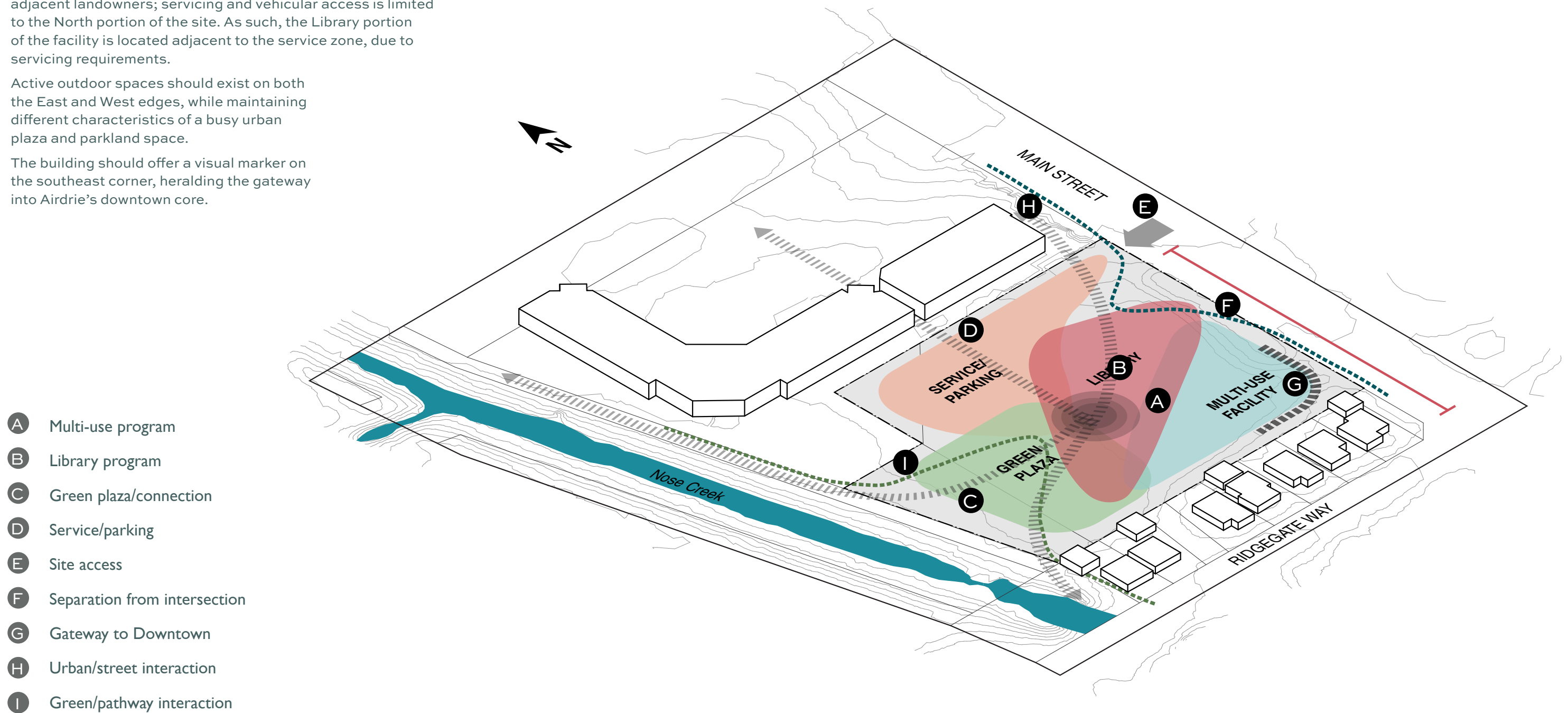
In order to best capture and encourage pedestrian use, access to the building needs to exist on both the East and West ends of the project.

Buffer zones to the North and South are required to protect adjacent landowners; servicing and vehicular access is limited to the North portion of the site. As such, the Library portion of the facility is located adjacent to the service zone, due to servicing requirements.

Active outdoor spaces should exist on both the East and West edges, while maintaining different characteristics of a busy urban plaza and parkland space.

The building should offer a visual marker on the southeast corner, heralding the gateway into Airdrie's downtown core.

site LAYOUT

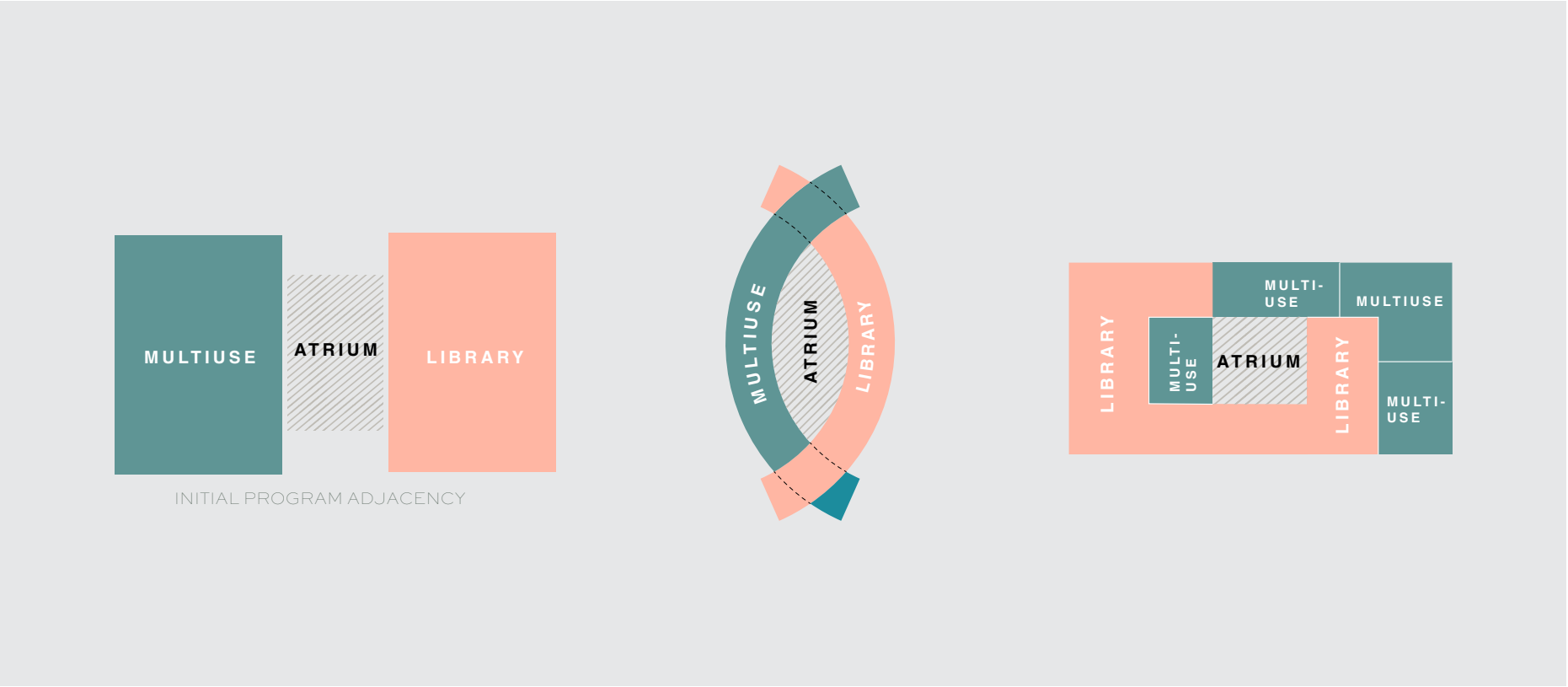


01
02
03
04
05
06
07

DIAGRAMS
MASSING

03

concept design



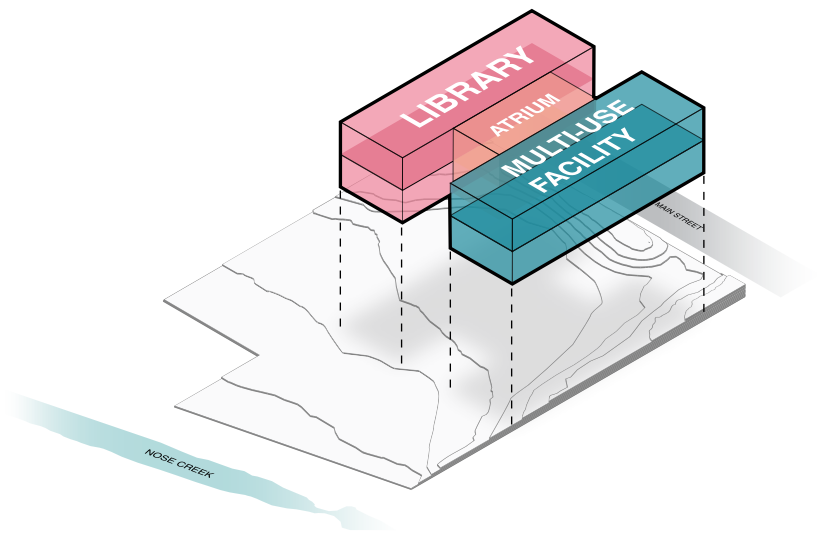
Using information learned from the site analysis and collaborative process, the design team developed two concept options for consideration. Much like the site conditions, a duality of program establishes a major unique component of this project, exploring how the Multi-Use and Library program elements interact.

Multiuse and Library functions conceptually intertwine to result in unique spatial conditions

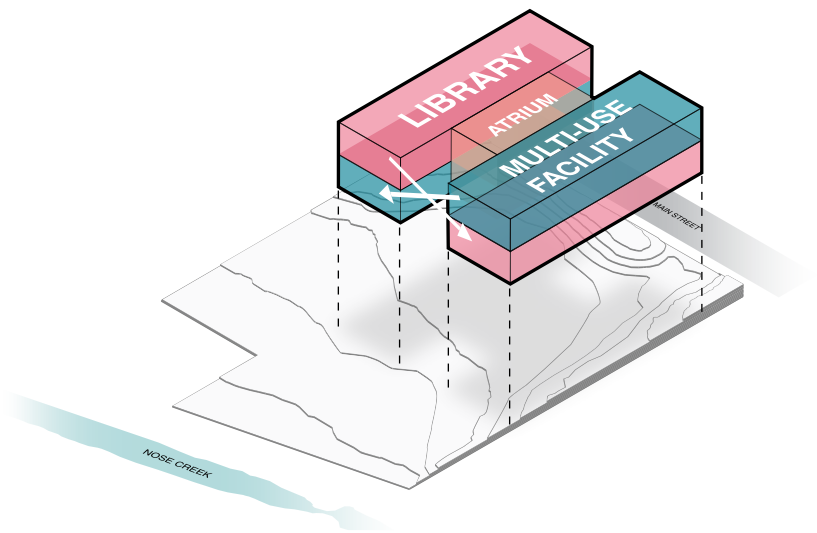
The atrium takes on a “room-like” quality, encouraging visitors to move between elements

CONCEPT DESIGN REPORT COMMENTS

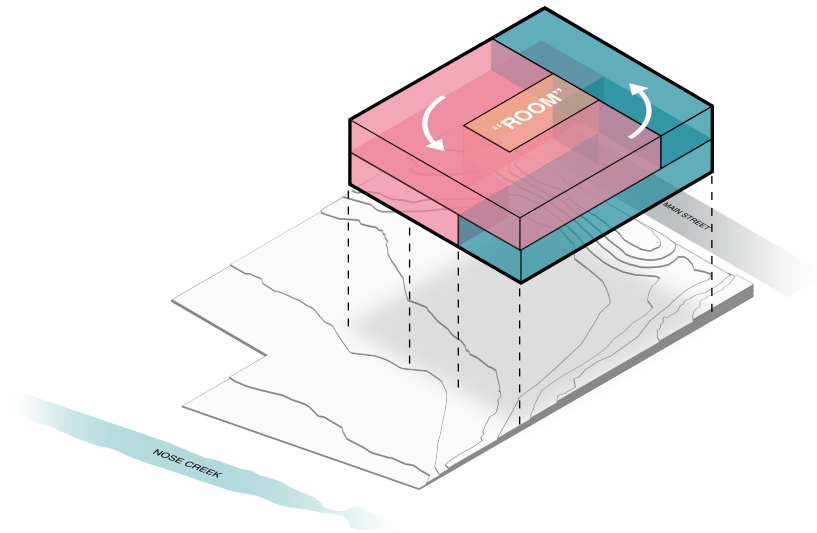
REVIEWER	REVIEW COMMENT	DESIGN TEAM RESPONSE
Library Board	There was a strong preference to leave the west green space completely open and without any parking. This green space should be for the enjoyment of the patrons and having parking there would reduce this as well as create some safety concerns with adjacent outdoor children spaces.	Parking counts will be further finalized and reviewed with neighboring sites. Through Schematic Design, the west green space has been left free of parking stalls and is dedicated to outdoor programs and activities.
City Council	Why there were no roof terraces on the multi-use side of the building?	The functional program for the library identified the need for outdoor spaces. To date, no conversations have been had with the multi-use tenants regarding the need for roof terraces.
City Council	There is a concern with having the multi-use portion of the building by the houses on the south instead of the library as these spaces will have later hours and create more noise.	The proximity to the residential development to the south has been addressed through the strategic use of material and screening (minimized glazing). As well, the volume of the building is stepped back on the south side to respond contextually to the height of the residential development. Programmed outdoor spaces have been pushed further north, away from the residences. Library servicing requirements require an adjacency to loading and servicing, which is ideally located on the north side of the site.
City Council	There should be accommodations for electric charging stations in the underground parking area.	The provision of EV charging stations is being considered through Design Development.
City Council	There are concerns regarding echoes in the double high atrium.	This will be addressed through design by selecting specific materials and geometries to help reduce echoes. Schematic design has begun to identify areas where acoustic baffles may be required. Additionally, an acoustic consultant will be engaged through the Design Development process.
City Council	Having the outdoor performance plaza shaded from the north winds is great but considerations should be taken to ensure safety and security as there is not a lot of visibility to that area.	In general, the landscape (including the performance plaza) has been designed to be highly visible and activated year round. The performance plaza specifically has been moved away from the southern boundary and faces in toward the main plaza for visibility.
City Council	Accessibility considerations should be taken to make sure that access from the parking lots and through the building is fully visible and easy to maneuver.	The project will adhere to or exceed all National Building Code requirements for accessibility, inclusivity and mobility. The scope of the project is currently considering Rick Hansen Certification.
City Council	Council unanimously endorsed option 1 of the concept report.	Schematic Design has proceeded with Option 1



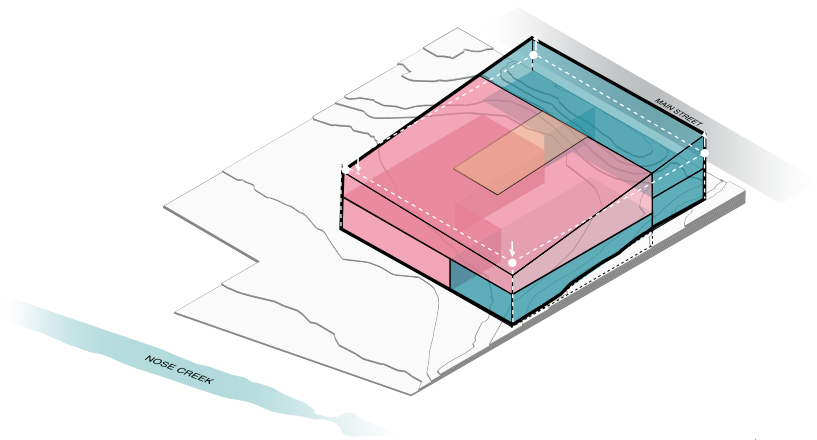
01. initial program adjacency
Multiuse and Library functions are separated by the atrium



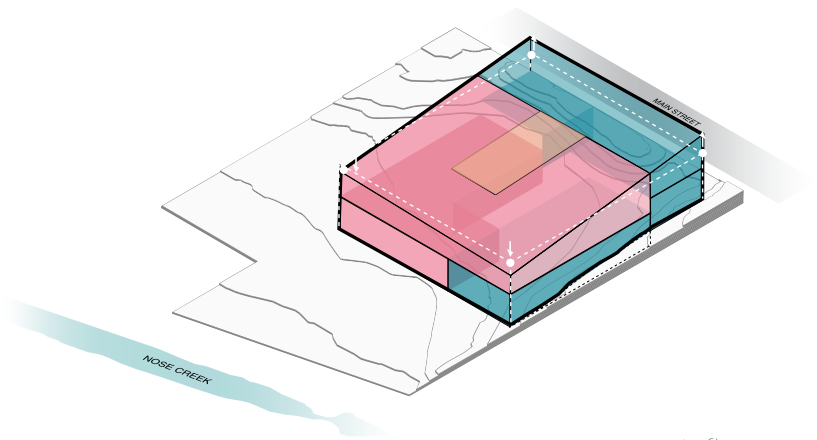
02. reorganize
Reorganize and split program stacking to enhance interaction between uses



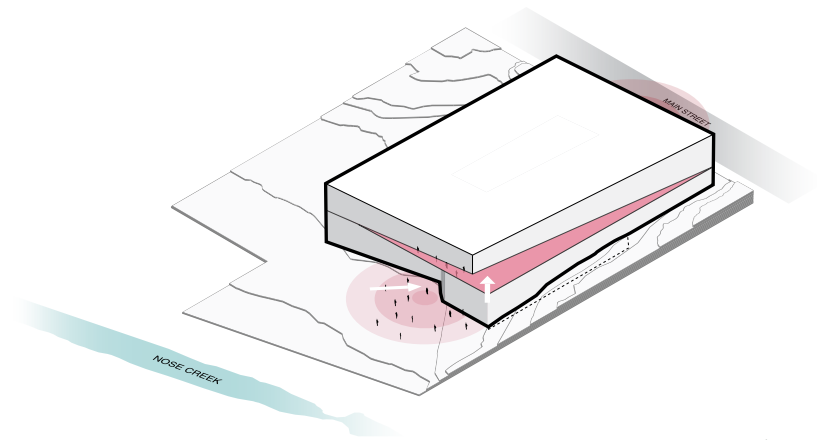
03. wrap
Wrap program around atrium to create room-like feel



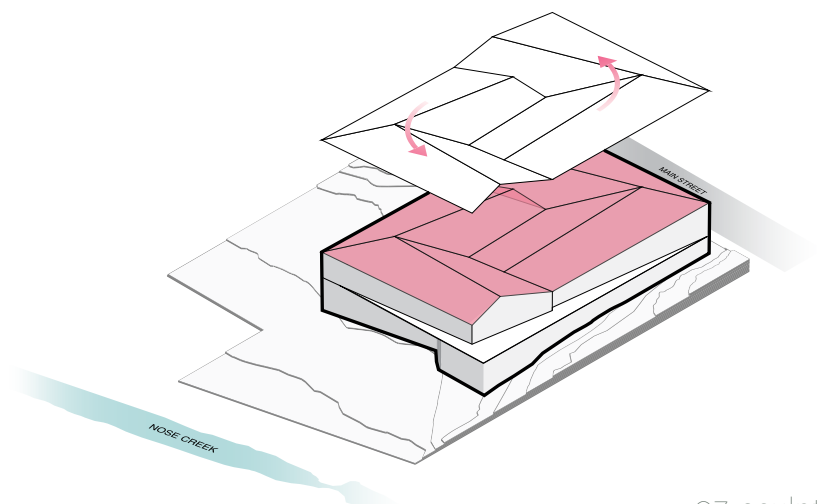
04. drape
Drape program on site, responding to topography



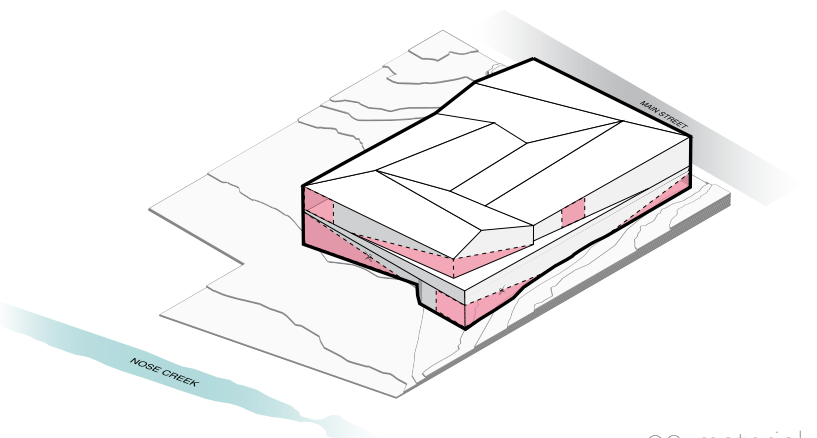
05. influences
Adapt massing to create Gateway/Street connection and Greenway/Creek connection



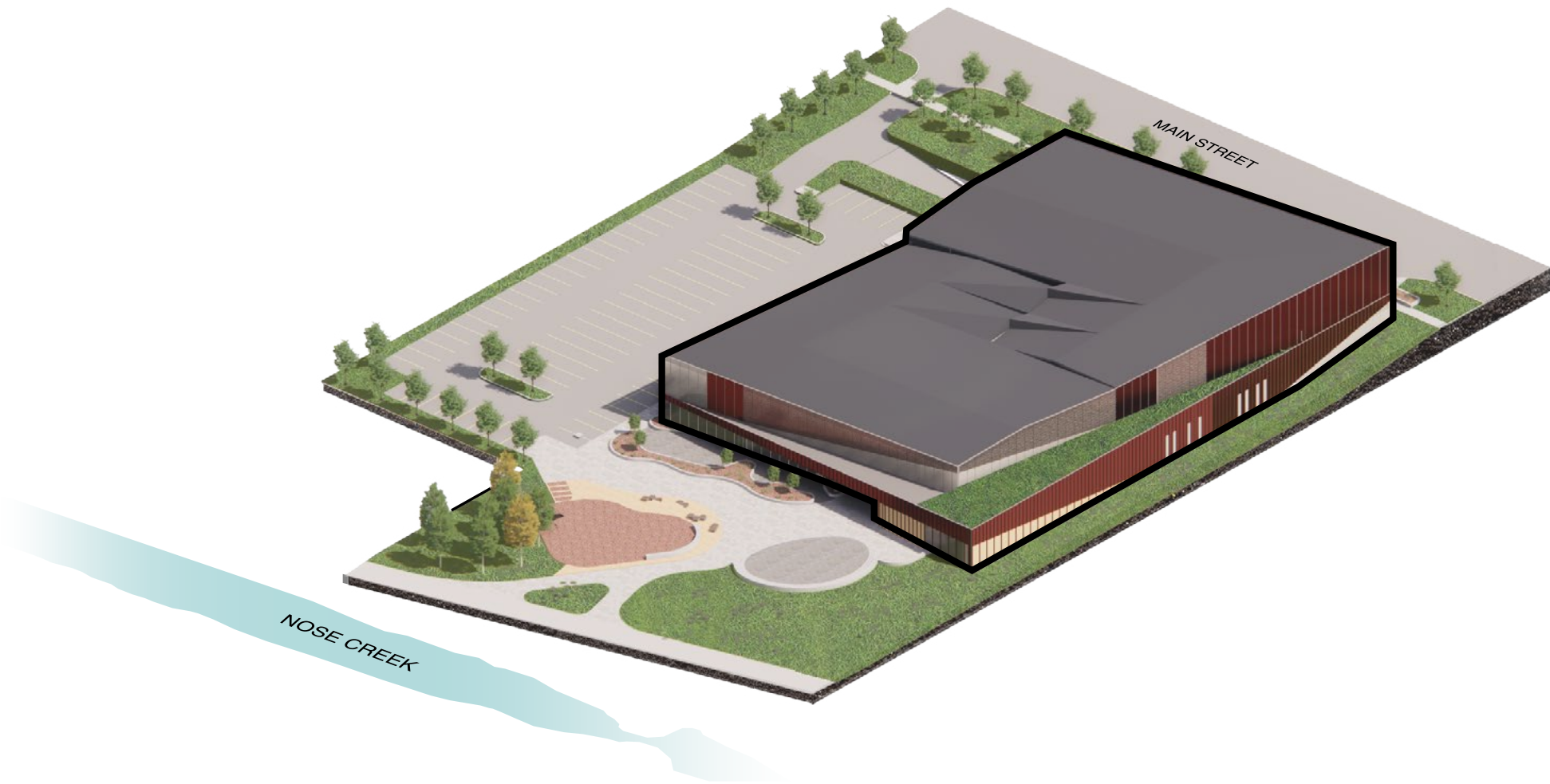
06. activate
Activate engagement with Main Street and Nose Creek with pedestrian entries



07. sculpt
To further express the notion of Atrium as Room, sculpting the roof to reflect the programmatic wrap of the interior

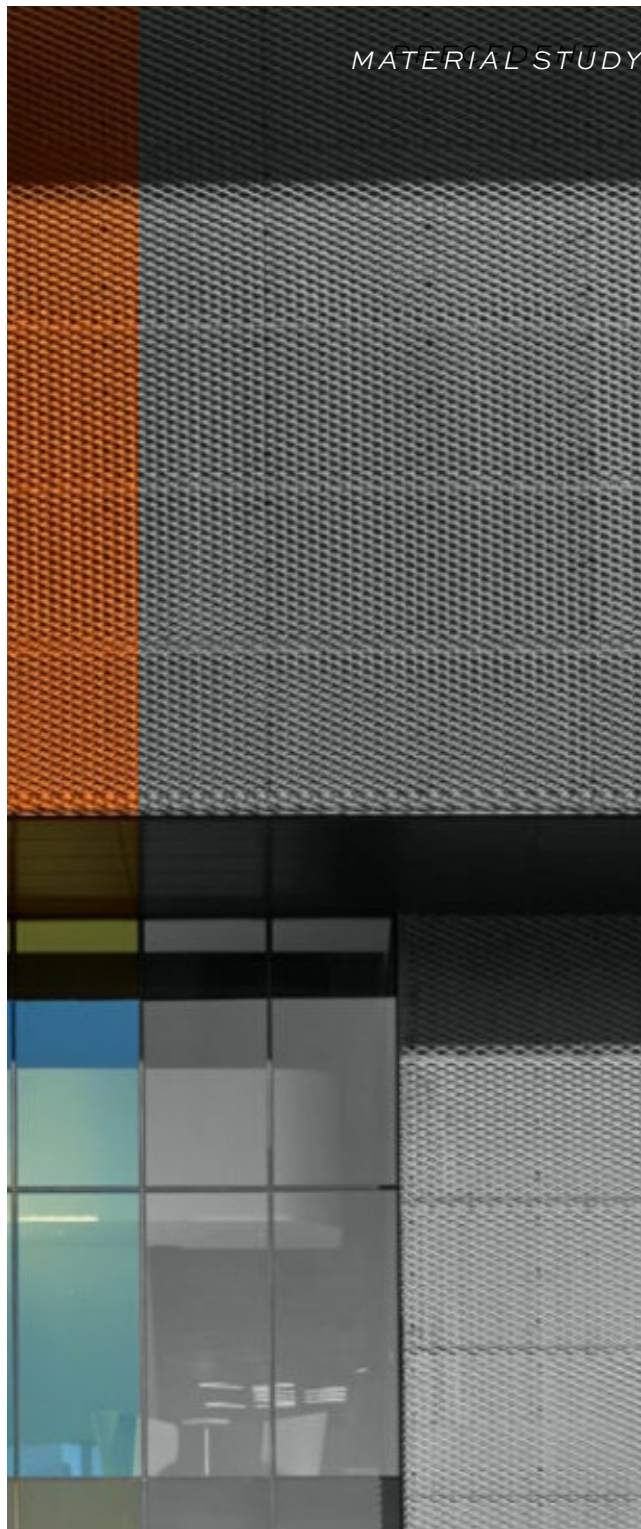
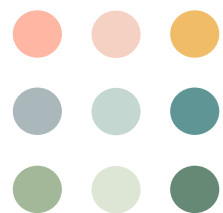


08. material
Lifting corners and framing viewpoints through an interplay of material and transparencies



09. landscape
Enhancing plaza spaces and outdoor public programming

schematic design



MATERIAL STUDY

02
03
04

MATERIALITY

SITE PLAN

FLOOR PLANS

05
06
07
08
09
10
EXTERIOR ELEVATIONS

BUILDING SECTION

ENVELOPE SUMMARY

The project presents a comprehensive and cohesive design that responds sensitively to the surrounding context as desired by Airdrie's Downtown Plan. The west face of the building creates an active street front along main street. At street level more expansive views are given into community resource and retail space, and more mediated views are presented into library back of house functions. The diversity of views and glazing at street level create an exciting and variable street level experience. At the second level expansive views into active classroom and gathering spaces contribute to the excitement along main street.

The southeast corner of the building signifies the entrance into downtown with a brightly illuminated and materially interesting corner that acts as a location for signage as well as a beacon for both the building and the larger downtown area. The building has been designed as a two-storey volume, respecting and responding to the existing heights and densities of the downtown development. The second storey volume slightly overhangs the first along main street to create an exciting and human scaled experience while offering a protected main street entrance to the building.

One of the two primary access points to the building (the other being on the eastern side facing Nose Creek) faces Main Street. Landscape features along Main Street are designed for pedestrian traffic, offering areas to sit and rest, boulevard trees, street lighting, and landscape planters, promoting activity, safety, and excitement along the Main Street corridor. A proposed vehicular layby along Main Street will serve as convenient drop-off for both the library and multiuse program, as well as a public transit stop. All of these elements, combined with the broader vision of downtown and Main Street contribute to the notion of a Complete Street, accommodating not only vehicular traffic, but pedestrian, cyclists, transit, landscape, and retail space in the design of the building and site.

The proposed warm, earth-toned materials for the building façade is reflective of Airdrie's history and creates an inviting and contemporary aesthetic as a cornerstone for the downtown. Proposed warm, earth-toned metals integrated with wood highlights, speak to both the natural (Nose Creek) and metropolitan (Main Street) aspects of the site. In both form and material, the building responds to these elements as well as the topographic change that couples them from east to west. Creating active, multimodal spaces, using a warm, elegant material palette, and offering a contextually sensitive form, the project enhances the character of the Downtown and signifies an exciting, contemporary, and thoughtful place in the City.

MATERIALITY

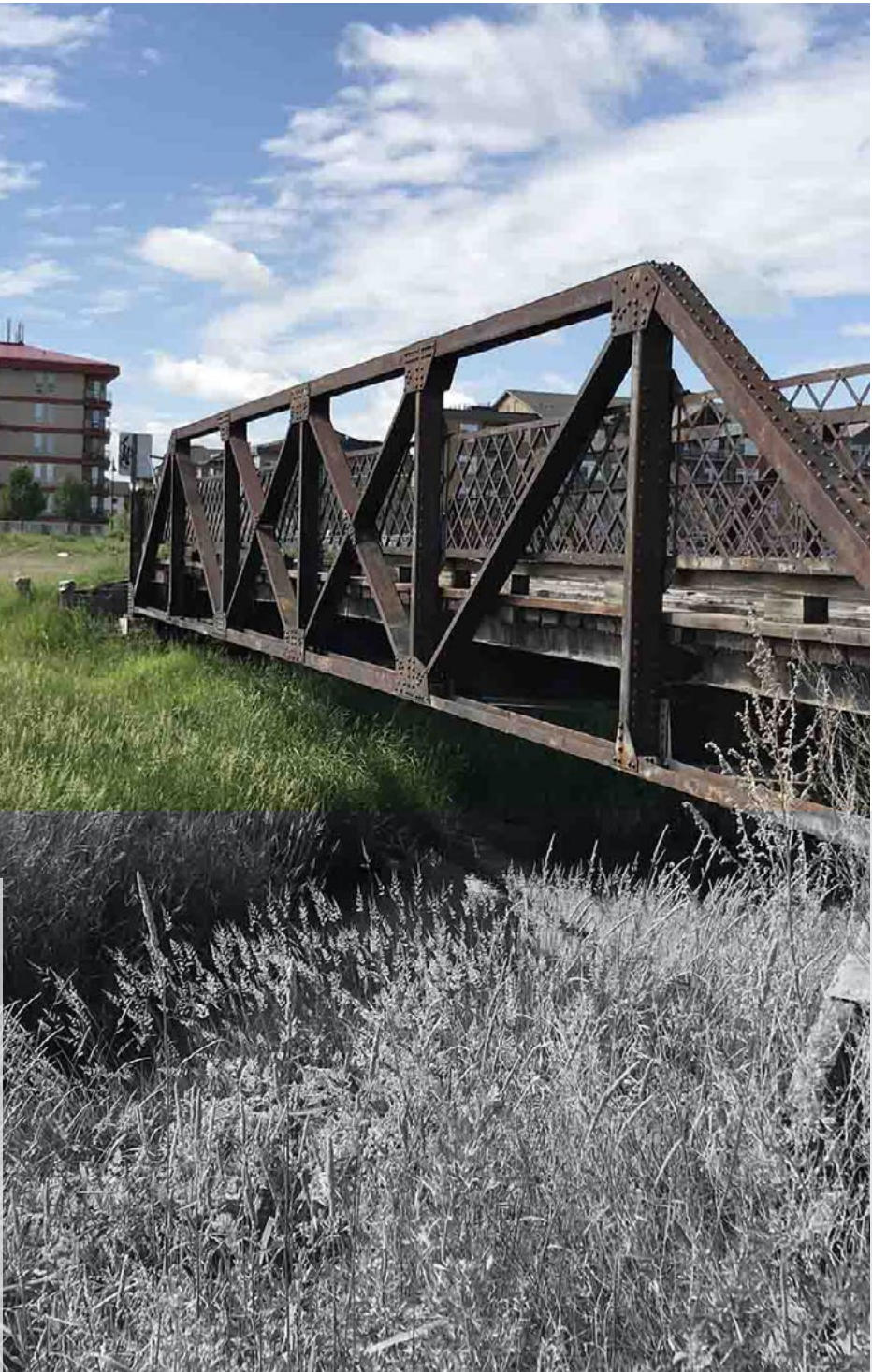
Through the visioning sessions held with Airdrie Council, a theme of marrying the history of Airdrie with the future aspirations of the city emerged.

Using this concept as a springboard, the design team was inspired by the railway and agricultural roots of the city, as well as the importance of the nosecreek passageway to the land.

The Schematic Design proposes utilizing a warm, earth-toned material palette to pay homage to Airdrie’s history, but doing so with high-performance, state of the art, contemporary materials. Many options for materiality are being investigated, and will be

finalized in the Design Development phase. These include zinc metal cladding, pre-weathered steel, natural wood cladding, fibre-reinforced concrete panels, wood-look metal cladding and high-performance glazing systems. Detailing and texture will elevate these materials in a contemporary manner.

The adjacent images are real-world examples of some of the aforementioned materials. These examples are seen in many high-calibre projects around the world with similar climates. Ease of maintenance, high-performance value and aesthetic qualities are all being considered.







Different material systems can achieve the spatial qualities of facade screening. Expanded metal mesh, whether exterior or integrated within the glazing unit, frit glazing, or extruded fins can all contribute to the design intent.



EXTERIOR SCREEN

Part of the material strategy is also the introduction of a screen element to the facade. Currently proposed in this design report is the implementation of a metal mesh screen, however the final system will be decided in Design Development.

Reflecting the experience of walking along Nose Creek, the screen is meant to provide soft, dappled light into the interior spaces, much like it would feel to sit within a bosque of trees. The proposed location of the screening also reflects the location of quieter, more introspective programming on the interior; for instance, screening is proposed outside the Library's quiet study room, or in other areas where more private, gathering functions occur. Views out are not impeded - vistas can still be enjoyed - but the quality of light within these spaces takes on a softer character.

The screening does also provide a an element of sun-shading; the screening is predominantly proposed on the west and south elevations, where the most sun-control is required.

The proposed expanded metal mesh can contribute to these properties, but there are other material systems that can achieve the intentions of the design. These can be further investigated in Design Development, as final costs, maintenance details and aesthetics are decided.



SITE PLAN
1:350

SITE STATISTICS

SITE AREA: 134002 (3.31 acres)
SITE FOOTPRINT: 4540 M2 (48,900 ft2)
GFA: 7950 M2 (85,600 ft2)
SURFACE PARKING: +/- 94 stalls
UNDERGROUND PARKING: +/- 123 stalls
EAST ENTRANCE GEODETIC: 1084.75 m
WEST ENTRANCE GEODETIC: 1082.75

EXTERIOR

1. bus and car dropoff
2. access forecourt
3. potential flag pole
4. parkade ramp
5. sloped sidewalk
6. garbage/recycling
7. roof deck
8. green roof
9. program area
10. paved pedestrian approach
11. temporary loading
12. learning garden
13. interpretive area
14. outdoor ampitheatre
15. green space
16. future site utilities
17. regional pathway
18. proposed realignment of underground services

★ public art opportunity



FLOOR PLAN

PARKING 1:350

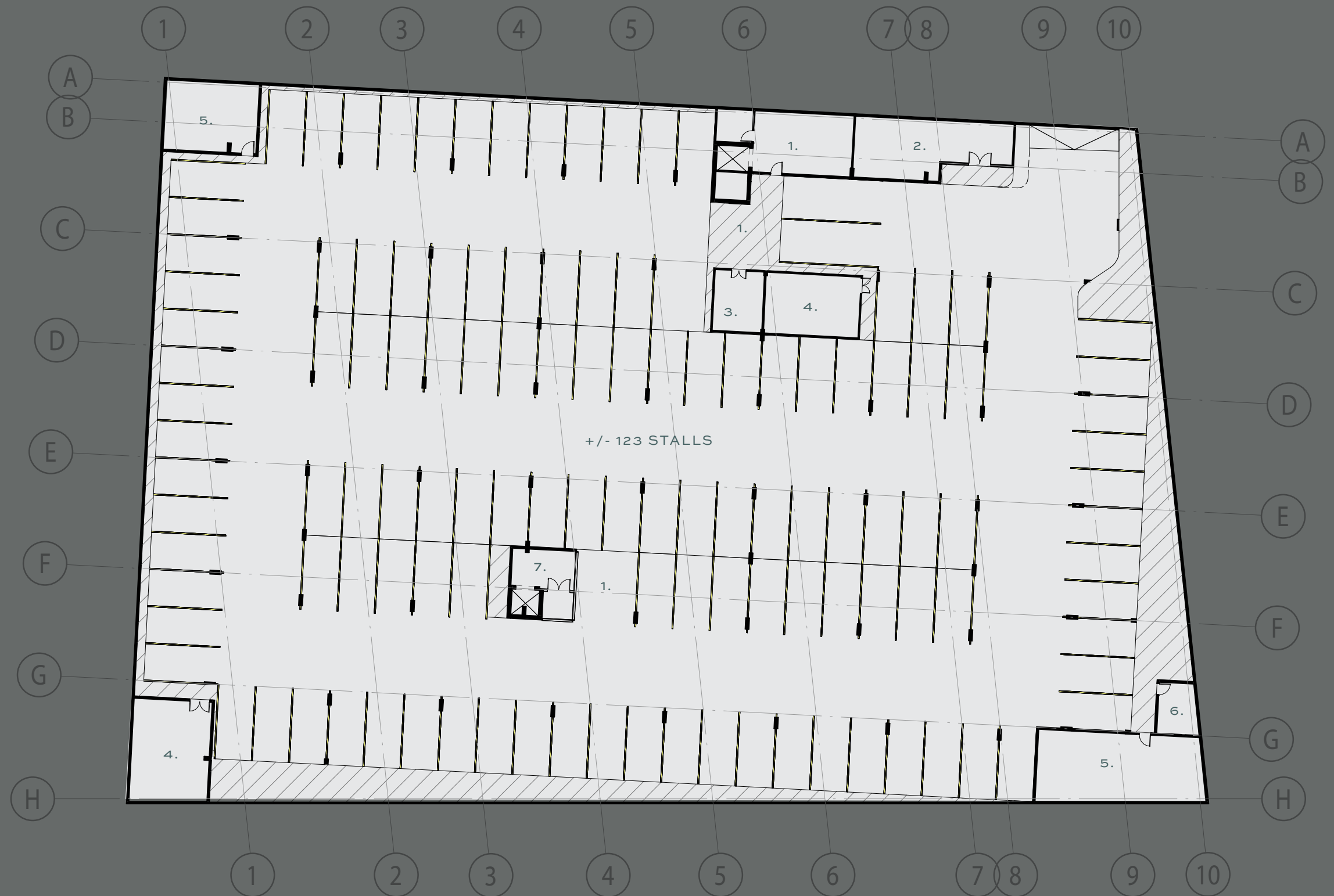
Library and Multi-Use loading and servicing is under development.

Conceptually, Library loading occurs predominantly in the loading bay in the north half of the plan, with Multi-Use loading occurring in the Multi-Use core and adjacent loading stall. Site loading exists at grade to support specialty events.

As Multi-Use programming and events are finalized in Design Development, the design team will have a better understanding of specific loading and servicing requirements which can be addressed at that time.

PARKADE

1. loading
2. bike storage
3. garbage/recycling room
4. storage room
5. mechanical room
6. water meter room
7. multi-use core



LEVEL 1 / 1.5 1:350

LIBRARY ENTRANCE and COMMUNITY LIVING ROOM

- 1 security/entry
- 2 service desk
- 3 fireside lounge
- 4 office manager/workstations
- 5 public services workroom
- 6 large program room
- 7 programming work area

PRE-SCHOOL CHILDREN'S AREA

- 8 gateway/orientation/arrival
- 9 literacy play area
- 10 collections
- 11 program nook
- 12 open program area
- 13 group table
- 14 casual seating
- 15 parent child reading alcoves

SCHOOL AGE CHILDREN'S AREA

- 16 gateway/orientation/arrival
- 17 collections
- 18 casual seating
- 19 group table
- 20 computer station
- 21 tutoring pods
- 22 makerspace

BACK OF HOUSE/STAFF

- 23 materials handling
- 24 workstations
- 25 IT workstations
- 26 server room

- washrooms
- custodial

- ★ public art opportunity

ENHANCED ATRIUM

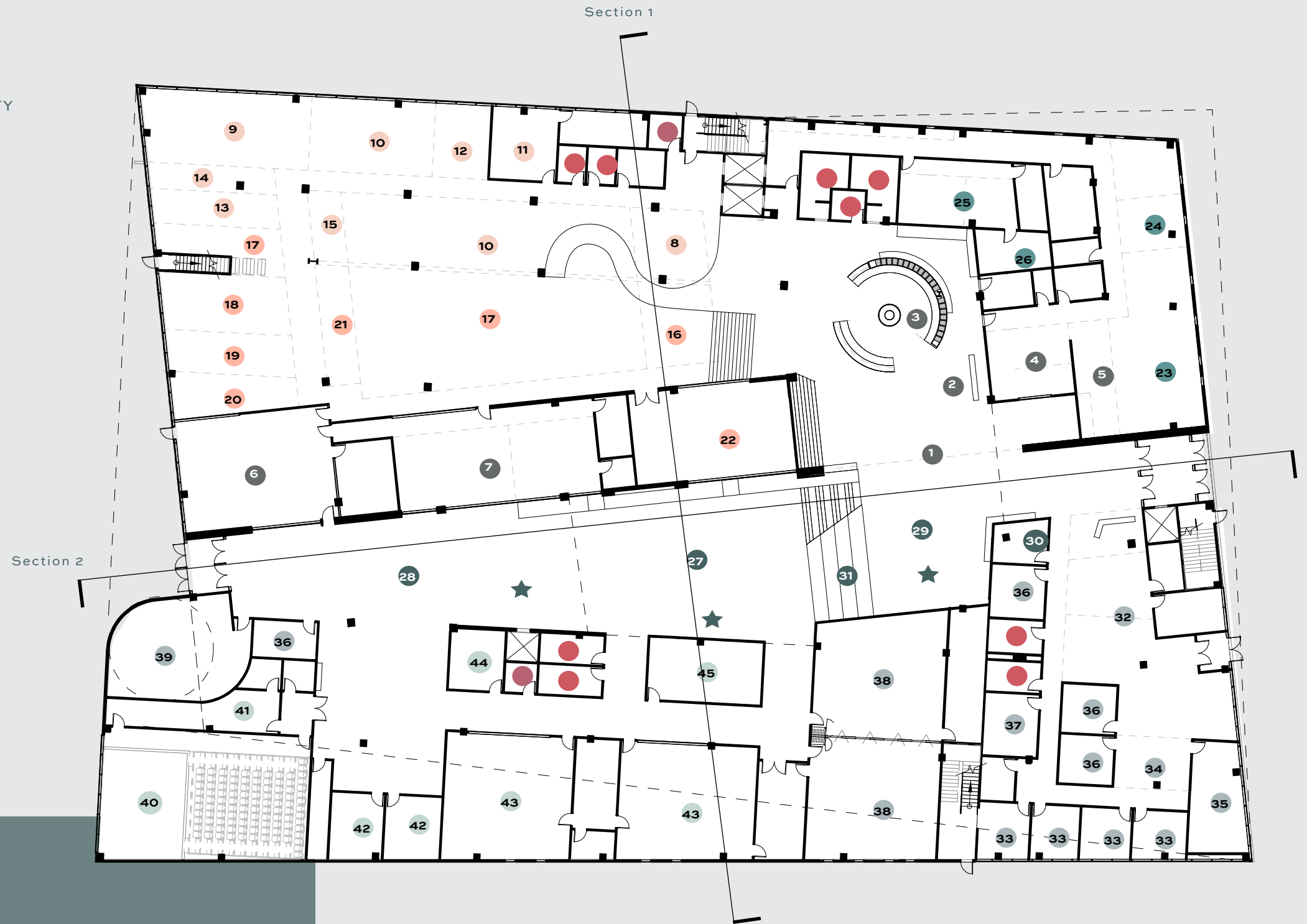
- 27 atrium
- 28 open exhibition space
- 29 retail pop-up
- 30 cafe / bistro
- 31 social stair

SHARED COMMUNITY RESOURCES

- 32 chamber of commerce
- 33 volunteer airdrie
- 34 open shared workspace
- 35 conference room
- 36 small meeting room
- 37 kitchenette/staff lounge
- 38 large multipurpose room
- 39 medium multipurpose room

ARTS DEVELOPMENT

- 40 performance space
- 41 green room
- 42 video/audio production
- 43 art studio
- 44 servery kitchen
- 45 city offices





FLOOR PLAN
LEVEL 2 / 2.5
1:350

ADULT COLLECTIONS

- 1 arrival/orientation
- 2 computer commons
- 3 collections
- 4 program room
- 5 reader's lounge
- 6 small group room
- 7 meeting room
- 8 single table seating
- 9 lounge chairs

YOUNG ADULT COLLECTIONS

- 10 arrival/orientation
- 11 computer station
- 12 collections
- 13 group tables
- 14 open program area
- 15 informal seating
- 16 console gaming
- 17 computer gaming

STAFF / BACK OF HOUSE

- 18 workstations
- 19 work area
- 20 office
- 21 staff lunch room
- 22 lockers
- 23 mechanical room

MAKER SPACE/QUIET STUDY

- 24 arrival/orientation
- 25 makerspace
- 26 video recording room
- 27 quiet study room

- washrooms
- custodial

★ public art opportunity



RENDERING. Nosecreek Plaza



RENDERING. Main Street view in winter. Height of SE corner in conjunction with lit, contemporary signage highlights gateway into downtown

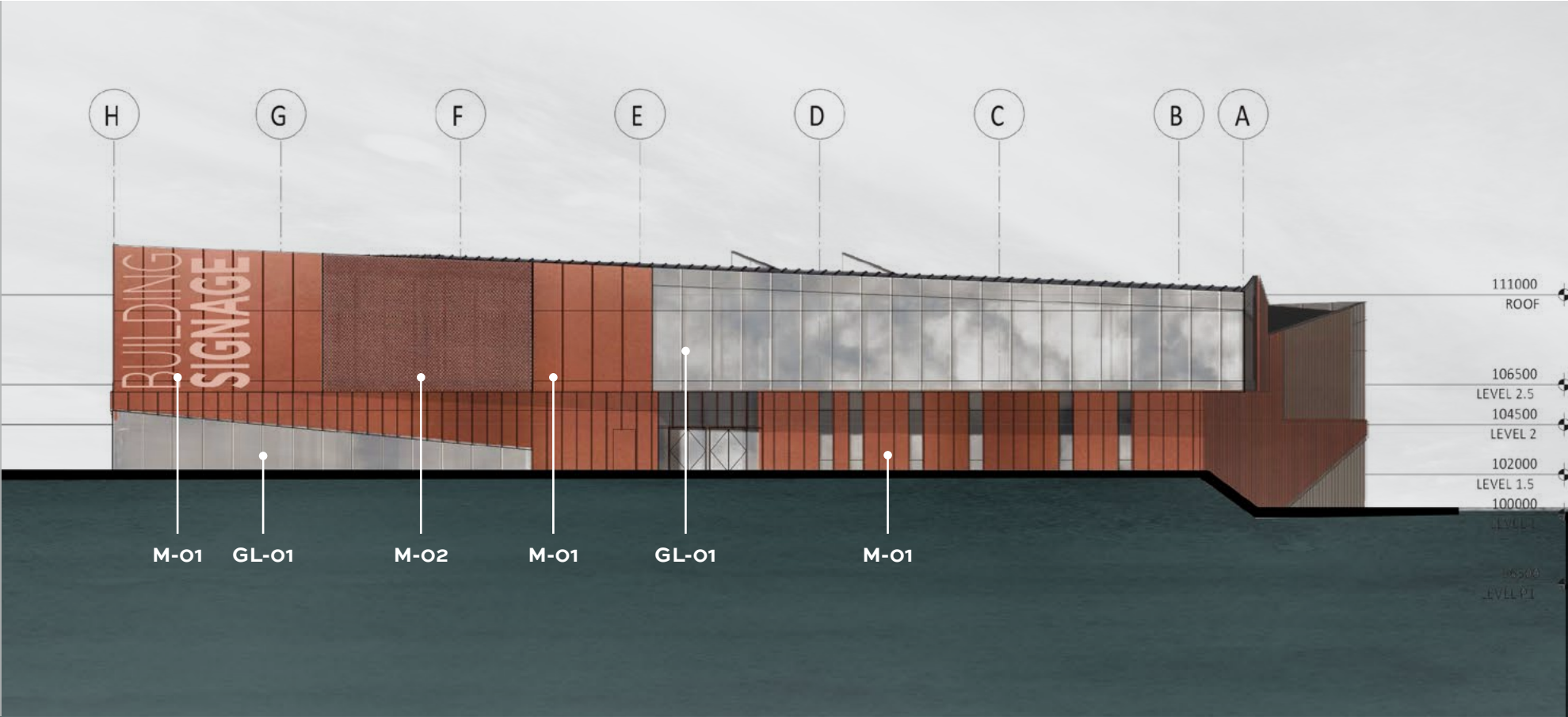


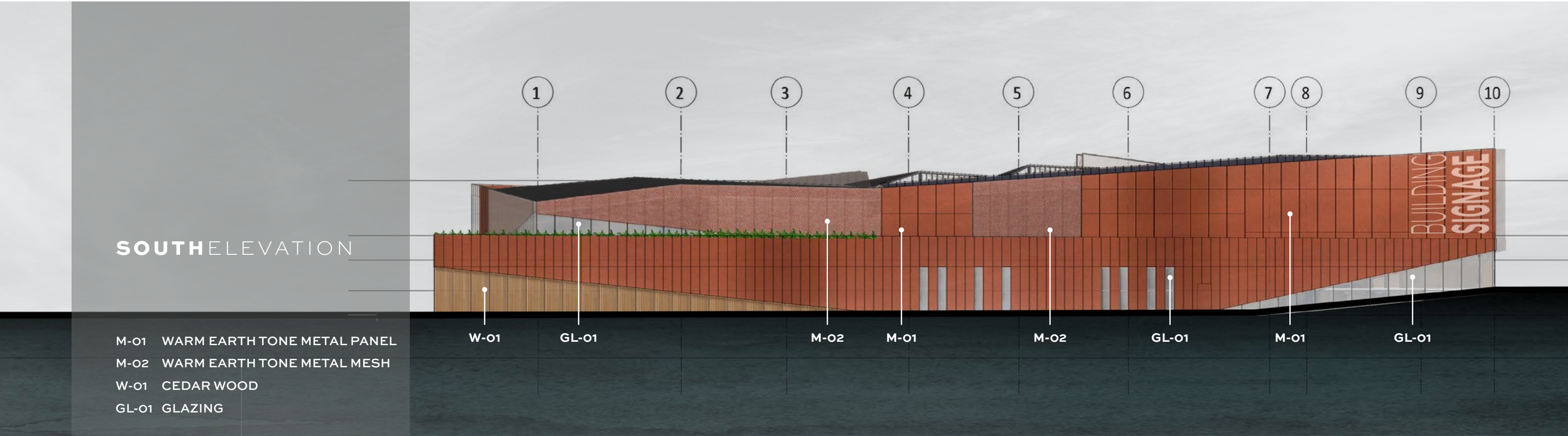


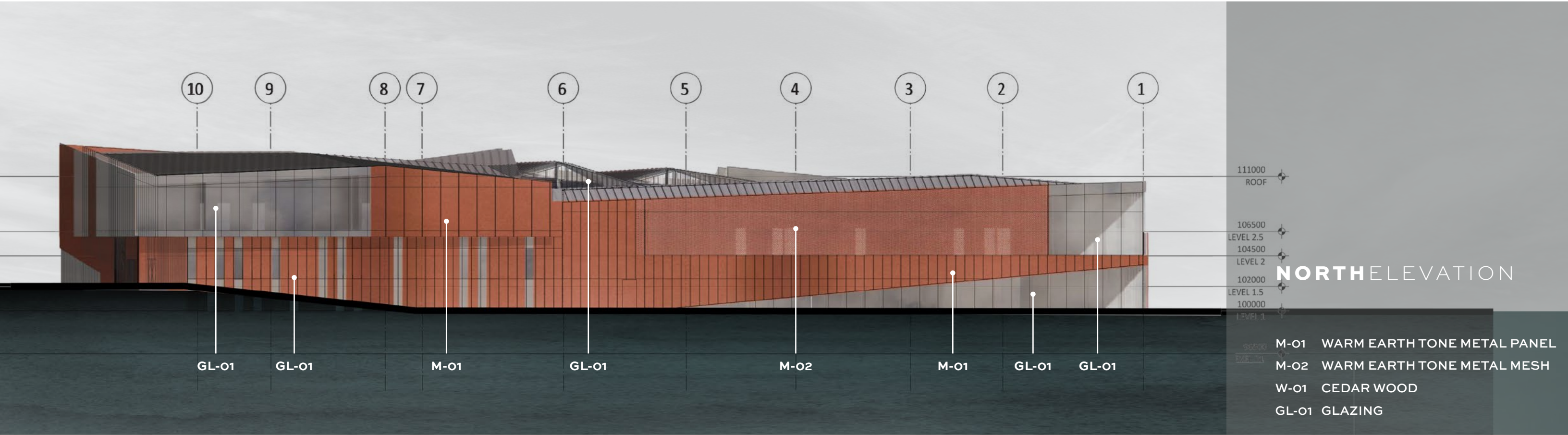
RENDERING. Main Street elevation at night; proposed illuminated corner highlights signage and gateway into downtown

EAST ELEVATION

- M-01 WARM EARTH TONE METAL PANEL
- M-02 WARM EARTH TONE METAL MESH
- W-01 CEDAR WOOD
- GL-01 GLAZING



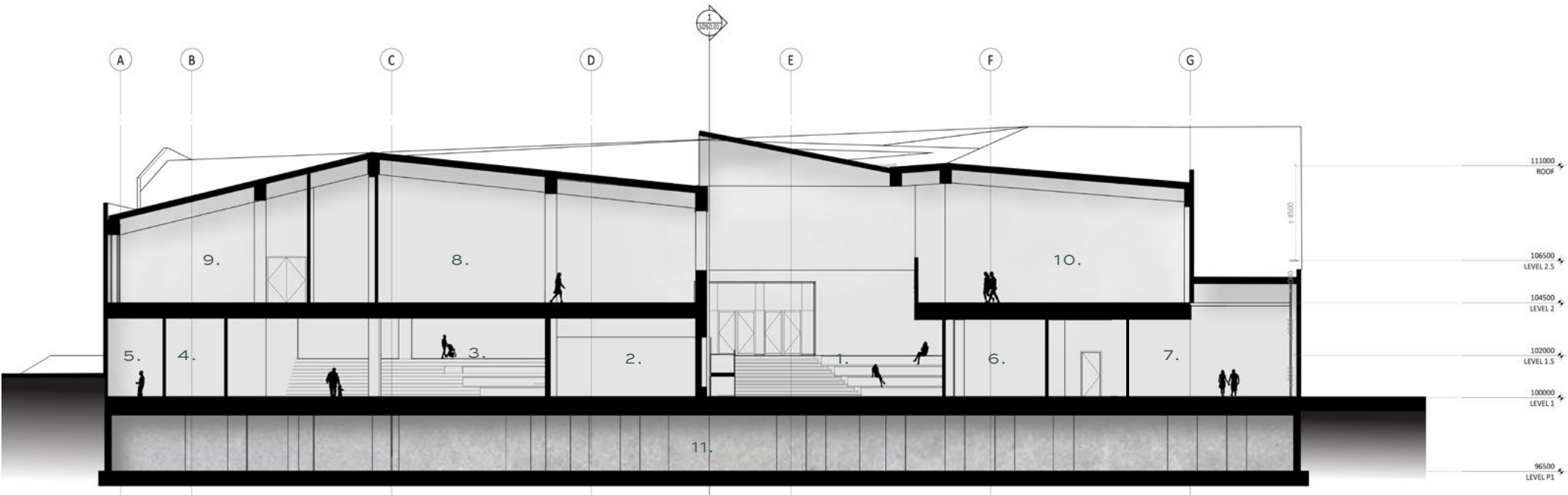




WEST ELEVATION

- M-01 WARM EARTHTONE METAL PANEL
- M-02 WARM EARTHTONE METAL MESH
- W-01 CEDAR WOOD
- GL-01 GLAZING



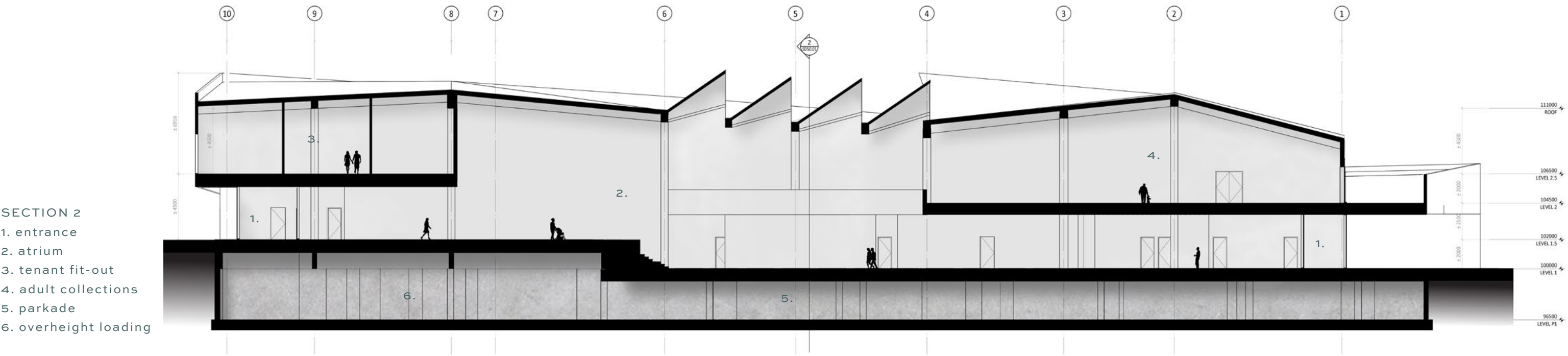


SECTION 1

- 1. atrium
- 2. makerspace
- 3. school age collections

- 4. quiet room
- 5. storage
- 6. city of airdrie offices
- 7. studio

- 8. adult collections
- 9. work area
- 10. young adult collections
- 11. parkade



SECTION 2

- 1. entrance
- 2. atrium
- 3. tenant fit-out
- 4. adult collections
- 5. parkade
- 6. overheight loading

BUILDING ENVELOPE

The exterior enclosure of the building will consist of high performance construction systems. Exterior wall construction will be based on rain-screen principals, and typically supported by structural studs. All opaque walls will include an air/vapour barrier membrane and insulation. Cladding will be a selection of weathered, pre-finished metal panels, cedar wood panels, and glazing systems. Exterior solar shading will be provided in select locations through a metal mesh screen. High-performance sealed unit glazing with low-e coatings will be selected.

Roofing systems will consist of conventional standing seam metal deck assembly, with additional insulation to be considered based on future sustainability targets. Accessible roof deck and green roofs are also included.

The following wall and roof systems are being considered as the basis for schematic design:

WALL ASSEMBLIES

W1 EFFECTIVE R VALUE = 18.6
WEATHERING STEEL CLADDING
25MM AIR SPACE
75MM BOARD INSULATION (R-4.2/INCH)
100MM METAL Z-GIRTS@ 600MM O.C. (VERTICAL)
75MM BOARD INSULATION (R-4.2/INCH)
75MM METAL Z-GIRTS@ 600MM O.C.
(HORIZONTAL)
AIR/VAPOUR BARRIER
15.9MM EXTERIOR GYPSUM SHEATHING
203MM STEEL STUDS @ 400MM O.C.

W2 EFFECTIVE R VALUE = 18.6
WOOD CLADDING
25MM AIR SPACE
75MM BOARD INSULATION (R-4.2/INCH)
100MM METAL Z-GIRTS@ 600MM O.C.
(HORIZONTAL)
75MM BOARD INSULATION (R-4.2/INCH)
75MM METAL Z-GIRTS@ 600MM O.C. (VERTICAL)
AIR/VAPOUR BARRIER
15.9MM EXTERIOR GYPSUM SHEATHING
203MM STEEL STUDS @ 400MM O.C.

CW CURTAIN WALL

ROOF ASSEMBLIES

R1 EFFECTIVE R VALUE = 45
PVC ROOFING MEMBRANE C/W DECORATIVE
STANDING SEAM
15.9MM EXTERIOR GYPSUM SHEATHING
200MM Z-GIRTS @ 400MM O.C.
2 LAYERS OF 100MM RIGID INSULATION
AIR/VAPOUR BARRIER
15.9MM EXTERIOR GYPSUM SHEATHING
STEEL ROOF DECK

R2 EFFECTIVE R VALUE = 40
WOOD DECKING ON ADJUSTABLE PEDESTALS
200MM RIGID INSULATION
DRAINAGE MAT
SBS ROOFING MEMBRANE
15.9MM EXTERIOR GYPSUM SHEATHING
STEEL ROOF DECK

R3 EFFECTIVE R VALUE = 40
PRE-VEGETATIVE MODULAR GREEN ROOF TRAYS
DRAINAGE MAT
200MM RIGID INSULATION
DRAINAGE MAT
SBS ROOFING MEMBRANE
15.9MM EXTERIOR GYPSUM SHEATHING
STEEL ROOF DECK





RENDERING. Aerial view of Nosecreek Plaza during cultural festival

03
04
05
06
07
08
09

MATERIAL PALETTE
INTERIOR CONCEPT
FLOOR FINISH PLANS
REFLECTED CEILING PLANS
FURNITURE ZONES

05 interior design





The interior finishes and materials are designed using neutral tones and warm metals to create a backdrop for soft colours and textures; which are brought out in the furniture palette. The colours support and enhance the Airdrie Public Library rebranding by reducing the hue saturation, adding grey colour tones, and emphasizing the gradient of colours.

Utilizing neutral tones as a base palette provides flexibility for any future modification to branding colors, or the incorporation of additional hues. Maintaining flexibility will allow the interior design to stay fresh and contemporary.





MAIN FLOOR



SECOND FLOOR

INTERIOR
CONCEPT

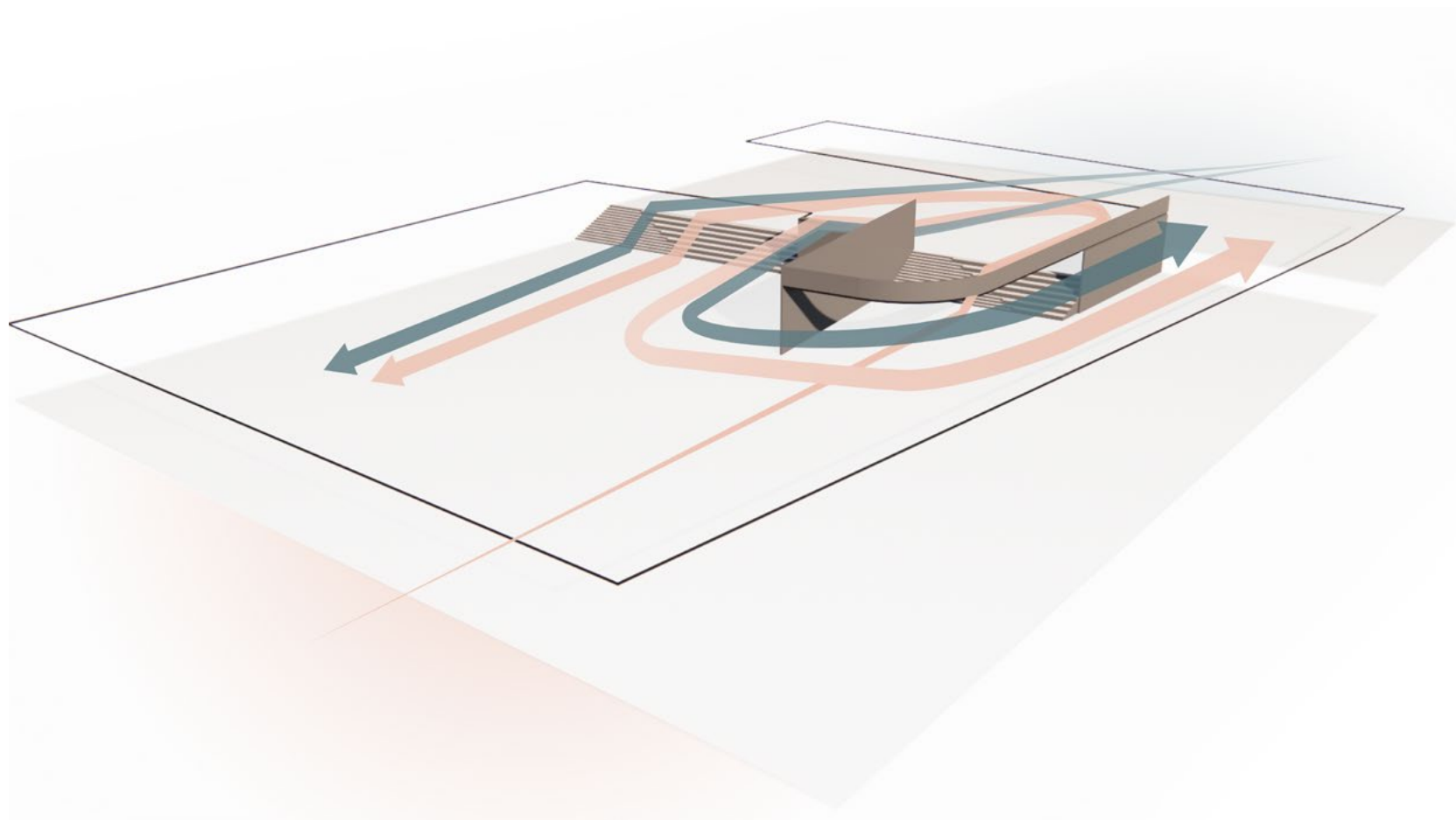
The dualism of perspective brings together the juxtaposing concepts of the natural environment and the built environment. Two major points of entry display this dualism with the East entry from the street side and the West entry from the creek side. Contrasting materials that express the natural and the built environments are implemented to create the experience from each point of entry to be viewed individually. Movement through the space reveals the duality of the contrasting expressions.

DUALISM OF PERSPECTIVE
juxtaposing concepts can exist together

/ du · al · ism

noun

1. the division of something conceptually into two opposed or contrasted aspects, or the state of being so divided.
2. the quality or condition of being dual; duality.



CIRCULATION

/ per · spec · tive
noun

1. the art of drawing solid objects on a two-dimensional surface so as to give the right impression of their height, width, depth, and position in relation to each other when viewed from a particular point.
2. a particular attitude toward or way of regarding something; a point of view.
3. an apparent spatial distribution in perceived sound.



While the functional purpose of slats and baffles are to provide acoustical dampening, the visual treatment of these components can be contrasting on each side thus creating a different experience when approached from each entry. This design detail can be used to shift the users perspective with their movement through the space.

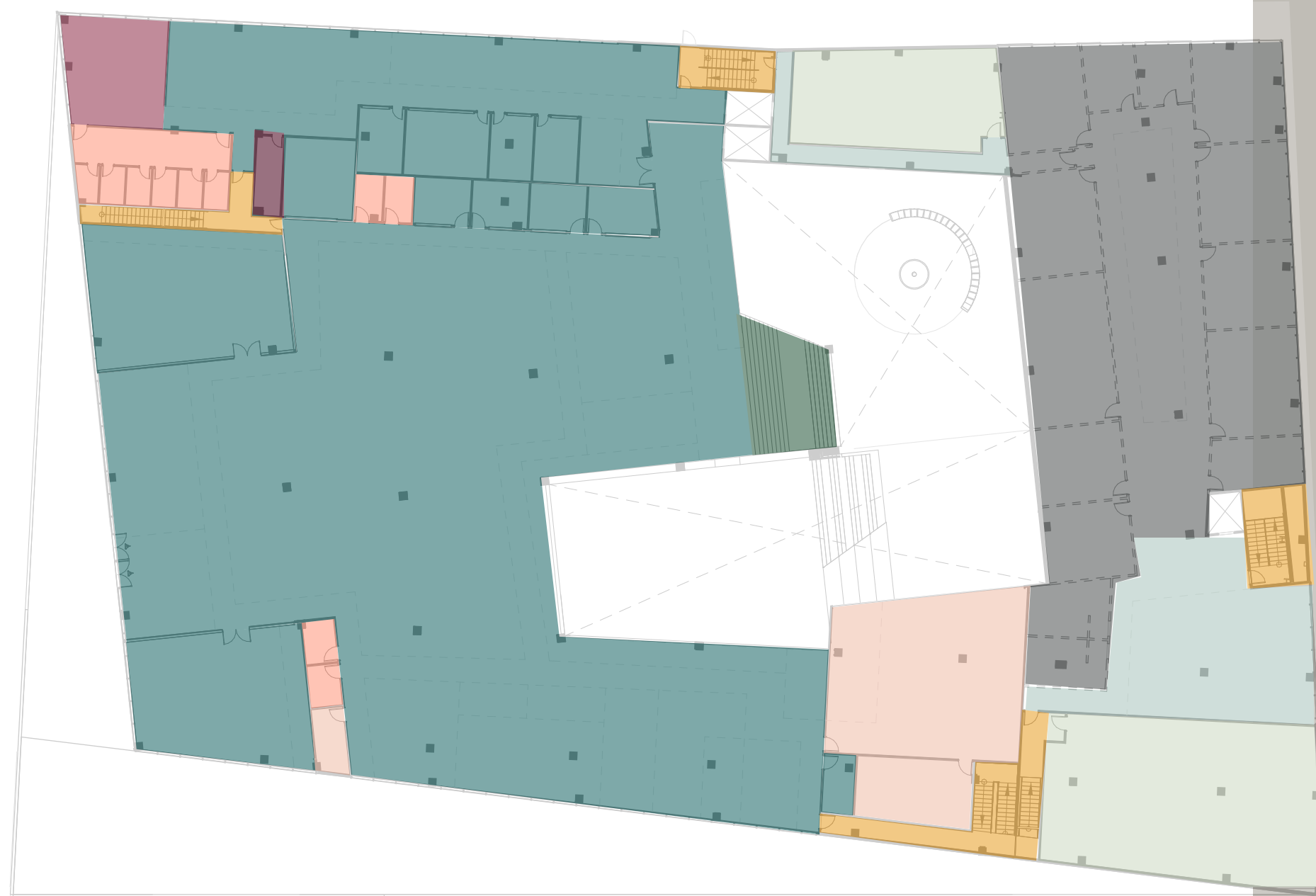
SLATS AND BAFFLES

FLOOR FINISH PLAN

LEVEL 1 / 1.5
1:350

- FLOOR FINISHES
- porcelain floor tile
 - resilient flooring / rubber tile - upgraded
 - resilient flooring / rubber tile - standard
 - rubber stair integrated tread
 - walk off carpet
 - wood sprung floor
 - carpet tile
 - polished concrete
 - sealed concrete
 - wood and metal feature stairs
 - fluid applied flooring

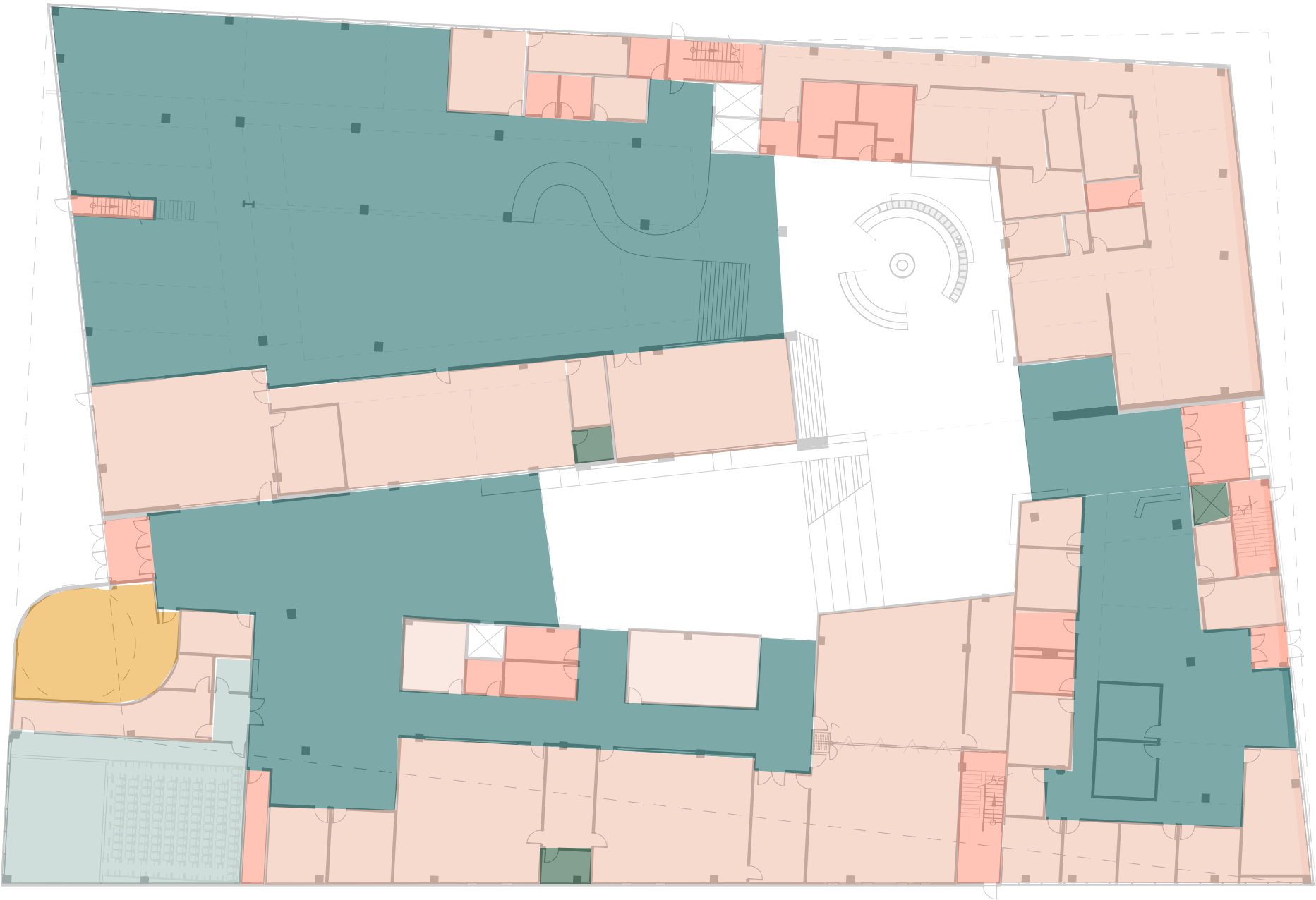




- FLOOR FINISHES
- porcelain floor tile
 - resilient flooring / rubber tile - upgraded
 - resilient flooring / rubber tile - standard
 - rubber stair integrated tread
 - walk off carpet
 - carpet tile
 - polished concrete
 - sealed concrete
 - wood and metal feature stairs
 - fluid applied flooring
 - open to volume below
 - tenant fit out

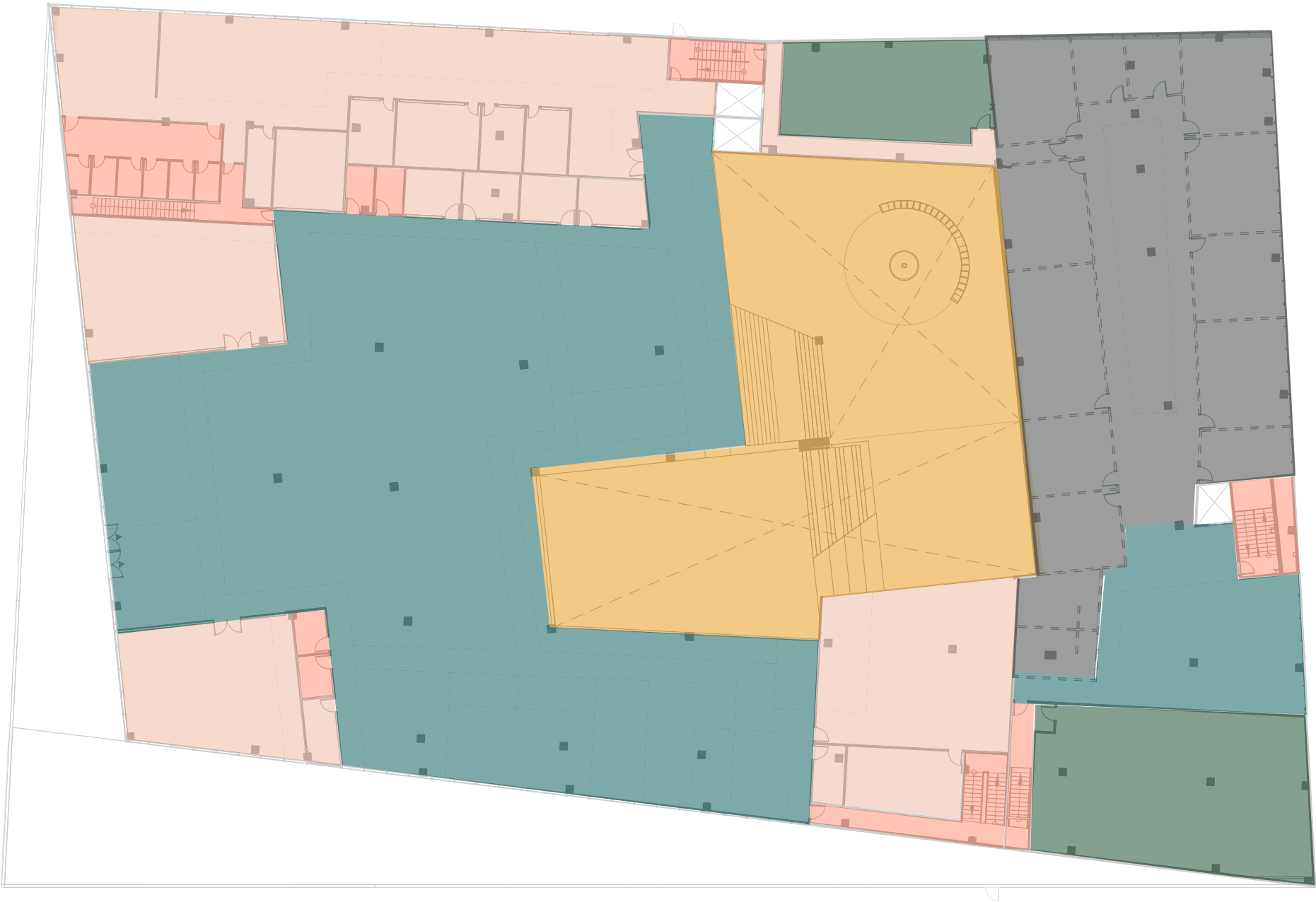
FLOOR FINISH PLAN
LEVEL 2 / 2.5
1:350

- REFLECTED CEILING PLAN
- gypsum wallboard
 - acoustic ceiling tile
 - exposed steel structure and metal deck with acoustic baffles/clouds
 - exposed steel structure and metal deck with feature wood
 - exposed steel structure and acoustic metal
 - deck
 - exposed steel structure and metal deck open to volume above



REFLECTED CEILING PLAN

LEVEL 1 / 1.5
1:350



- REFLECTED CEILING PLAN
- gypsum wallboard
 - acoustic ceiling tile
 - exposed steel structure and metal deck with feature wood
 - exposed steel structure and metal deck with acoustic baffles/clouds
 - exposed steel structure and metal deck
 - tenant fit out
 - open to volume below

REFLECTED CEILING PLAN

LEVEL 2 / 2.5

1:350

FURNITURE ZONE PLAN
LEVEL 1 / 1.5
1:350



- SERVICE

 - 1 printer/copier
 - 2 service desk
 - 3 opac station
 - 4 self-check-out
 - 5 material drop
- SEATING

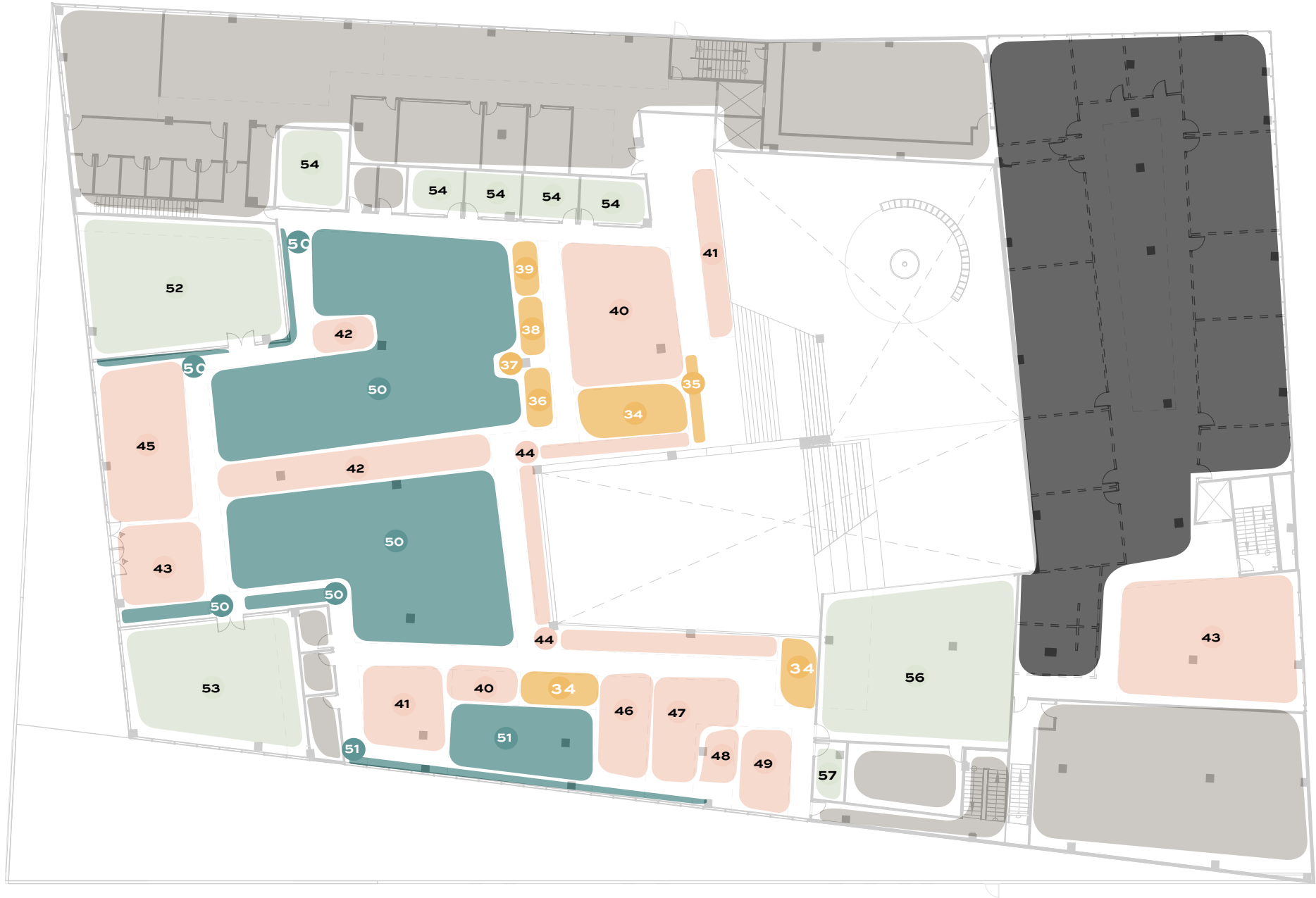
 - 6 public seating
 - 7 bistro tables and chairs
 - 8 fireside lounge
 - 9 parent and child reading chair/alcove
 - 10 casual seating
 - 11 computer station
 - 12 lounge seating
 - 13 group tables
 - 14 tutoring pods
- STAFF / BACK OF HOUSE

 - 15 washrooms
 - 16 janitorial closet
 - 17 storage room
 - 18 workstations
 - 19 programming work area
 - 20 office, manager, programming
 - public services workroom
 - first aid room
 - book truck corral
 - multi-use facility
- COLLECTIONS

 - 21 pre-school collection
 - 22 school-age collection
 - 23 holds collection
- ENCLOSED SPACES

 - 24 quiet room
 - 25 program nook
 - 26 makerspace
 - 27 large meeting room
 - 28 program room
- OPEN SPACES

 - 29 gateway feature
 - 30 literacy play area
 - 31 mustering area
 - 32 arrival and orientation
 - 33 stroller parking



FURNITURE ZONE PLAN
LEVEL 2 / 2.5
1:350

- | | | | | |
|------------------------------|-------------------------|------------------------------|-----------------------------|------------------------|
| SERVICE | SEATING | STAFF / BACK OF HOUSE | COLLECTIONS | ENCLOSED SPACES |
| 34 arrival and orientation | 40 computer stations | ● book truck corral | 50 adult collections | 52 quiet study room |
| 35 collection layout signage | 41 open program area | ● office / workstation | 51 young adults collections | 53 program room |
| 36 service desk | 42 browsing chair | ● meeting room | | 54 meeting room |
| 37 OPAC station | 43 lounge chair | ● staff amenity | | 56 makerspace |
| 38 self check station | 44 single table seating | ● it | | 57 video recording |
| 39 print centre | 45 readers lounge | ● mechanical | | |
| | 46 informal seating | ● shipping / receiving | | |
| | 47 group tables | ● storage | | |
| | 48 computer gaming | ● washrooms | | |
| | 49 console gaming | ● lockers / showers | | |
| | | ● tenant fit out | | |



RENDERING. Atrium.



RENDERING. Atrium at the west entry off Main Street.





RENDERING. APL Children's area.

END OF INTERIORS

indigenous inclusivity

During the Concept Design phase of the Airdrie Multi-Use Facility & Library project design, the design team expressed an interest in engaging with Indigenous Communities as part of the design process. GGA-Architecture, in collaboration with a community engagement consultant Eleven Eleven, designed an indigenous engagement process tailored around the program requirements of this facility, as well as the resources and interested indigenous communities available in and around Airdrie.

As part of the design process, the goal of indigenous engagement for this project is:

To assist the design team in creating a building that is welcoming to all. Through the integration of design elements like colour, material, art, and shape; these engagement sessions will provide the team with a direction forward that is both inclusive and meaningful.

This indigenous engagement process is not intended to supercede any pre-established functional programming for the Airdrie Library or Multi-Use spaces, however is meant to inform the design and shaping of established spaces.

The first indigenous engagement session took place at the Airdrie Nose Creek Valley Museum on June 15, 2022. Attendees included members of the project team from GGA-Architecture, Eleven Eleven, City of Airdrie, Airdrie Public Library and representatives from the different First Nations groups who are directly connected to the City of Airdrie.

The design team has distilled the comments from the session into the following key takeaways as it pertains to building and landscape design, their alignment with the project objectives and proposed next steps. Other commentary that relates to programming of spaces and more specific ornamentation will be tabled until the Design Development phase.



The design team understands the importance of creating a welcoming and inclusive community facility for the City of Airdrie. It was made clear during the session that the indigenous communities of Airdrie and surrounding area would feel more welcome with the implementation of the above-mentioned strategies; the design team also believes the integration of intentional indigenous spaces will serve to add richness to the project as a whole. From a functional perspective, providing a round multi-purpose room offers a unique variety of spaces and new programming opportunities, and will support the functions of the other, rectilinear-shaped, multi-purpose rooms that can be used by all. The integration of indigenous culture shares knowledge and enhances learning opportunities and relationships across multiple cultures, one of the primary objectives of this public facility.

1. REQUEST FOR INTENTIONAL SPACE

Desire for a welcoming space that is round, represents indigenous culture through art and/or material, and can support smudging. This space is to be occupied by any user or cultural group.

Potential Opportunities

Shared community multi-use space is still undefined in terms of design. An opportunity exists to define one of the medium, 50sm multi-purpose rooms as an intentional, round room. Implementing a round space into the project would be a key contributor to making indigenous groups feel welcome within the space. The unique qualities of a round multi-purpose room could also provide additional opportunities for programming for the overall facility.

Potential Risks

Designing a round space that represents indigenous culture may be perceived as overrepresenting one cultural group at the detriment of the other.

Alignment with Project Objectives:

A Facility that is a Catalyst for Downtown

- Creating a space that is inviting for a broader group of users will contribute to diversifying the Downtown.

A Facility that has Multiple Uses and Activities

- Designing one of the proposed multi-purpose spaces into a round space offers a different type of room that can support alternative programming and events. Other multi-purpose spaces would be designed as standard, rectilinear spaces.

A Facility that is a Hub for Community Development

- Inviting and welcoming a broader community, whether indigenous or otherwise, contributes to fulfilling this project objective.

2. INTENTIONAL LANDSCAPE DESIGN

Incorporating intentional indigenous elements into the landscape design was desired. Respecting the history of the adjacent Nosecreek River passage, providing gathering spaces for ceremony and teaching, as well as offering an area for an educational medicine garden made up on native plantings, were all suggestions made during the session.

Potential Opportunities

As landscape design progresses, hard-scaped areas for gathering and soft-scaped gardens will evolve. Options that include intentional indigenous elements can be developed as part of the overall design, and will serve all visitors to the facility.

Potential Risks

Understanding the scale of gathering space for ceremony still needs to be determined in order to see if the current square footage of the site can accommodate the request.

Alignment with Project Objectives:

A Facility that is a Catalyst for Downtown

- Enhancing green space for public use will invite a broad group of users and ultimately contribute to diversifying the downtown.

A Facility that has Multiple Uses and Activities

- Providing venues and outdoor space that can support additional cultural activities will facilitate multiple uses and activities.

A Facility that is a Hub for Community Development

- Inviting and welcoming a broader community, whether indigenous or otherwise, contributes to fulfilling this project objective.

3. ELDER'S ROOMS

A request for designating one or two rooms as Elder's rooms was proposed. These rooms would equate to the size of a small office and allow Elders to conduct one-on-one teaching sessions.

Potential Opportunities

As shared community multi-use space is still undefined from a design perspective, there is a potential to reallocate one or two 10-15sm offices as an Elder's room. Depending on usage, these offices could still be potentially shared with the non-indigenous community. There is additional opportunity for this request to be captured within the Airdrie Public Library space, with the understanding that use of these rooms would need to be shared with the broader community.

Potential Risks

A better understanding of demand and usage is required in order to determine the allocation of space and alignment with the project objectives.

Alignment with Project Objectives:

A Facility that is a Catalyst for Downtown

- Creating a space that is inviting for a broader group of users will contribute to diversifying the Downtown.

A Facility that has Multiple Uses and Activities

- Understanding desired usage, ie. dedicated to an indigenous community or available as a shared community resource, will help determine the alignment with this project objective.

A Facility that is a Hub for Community Development

- Inviting and welcoming a broader community, whether indigenous or otherwise, contributes to fulfilling this project objective.

key TAKEAWAYS

The design team has distilled the comments from the session into the following key takeaways as it pertains to building and landscape design, their alignment with the project objectives and proposed next steps. Other commentary that relates to programming of spaces and more specific ornamentation will be tabled until the Design Development phase.



During the Concept Design phase, the design team heard Council’s desire for this facility to be responsibly-designed, make use of feasibly sustainable approaches where possible and that a targeted certification was not required. The design team has translated this desire to an approach that promotes a balanced blend of aesthetics and innovation with utility, simplicity, and authenticity through the Schematic Design phase. The project is guided by three principles of sustainability; social, economic and environmental.

Social – This project will be successful if it fulfills the social obligations of the program for the Library, the City of Airdrie, and any tenant spaces within the Multi-Use Facility. Spaces need to be well used, durable and well-maintained to extend the life of the project beyond a projected 30 years.

Economic - Understanding the many levels of economic impact—from the initial capital cost to the ongoing maintenance costs, will continue to be considered as part of this design. This life-cycle approach to the selection of building materials, systems, and products includes the sourcing, transportation, installation, as well as the embodied energy of the products.

Environmental – This project aims to reduce its carbon footprint and increase energy efficiency as much as possible. Several strategies and architectural, mechanical and electrical elements have been proposed. These items have been broken out individually to be a consideration within the overall capital cost; however more study is required to understand the long-term savings and benefits to the

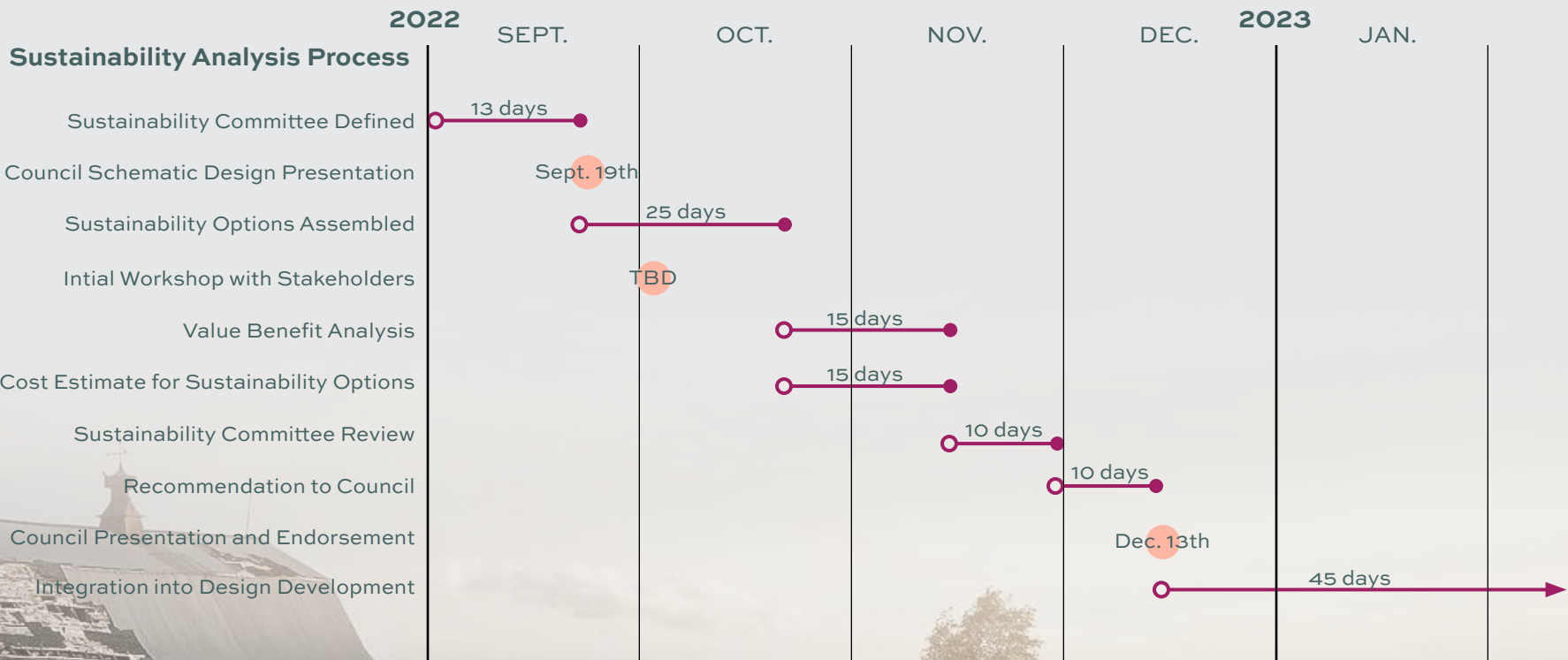
project and to overall council goals regarding sustainable initiatives.

The Schematic Design proceeded with an understanding that Council’s input and consideration of specific sustainable systems is required during Design Development, when it is typical to outline details of building systems. As such, the building design as proposed in this report is flexible, and can accommodate any of the following sustainable features on the adjacent page, should council decide to pursue any of the items.

The project has not been designed to accommodate a Net Zero certification, as designing to this standard has a great influence on building shape and massing. This was understood to be Council’s desire during the Concept Design phase.

The design team has put forward a proposal for Sustainability Engagement with City Council during Design Development, which will include a small number of focus groups and workshops in order to translate the City’s sustainability vision into feasible approaches for the project. Understanding what metrics or measurements of success are desired is also key in making these selections. The sustainability workshops will also include a cost-benefit analysis for any of the proposed strategies. Once these elements are finalized, the design team can incorporate into the site and building design.

7 sustainability summary



ARCHITECTURAL

- Enhanced wall insulation with thermal isolation clips
- Enhanced roof insulation with a target of R40
- Exterior sun shading via metal mesh screen
- Thermally isolated curtain wall glazing
- Triple glazing where possible
- Use of locally sourced materials where possible
- Green roof

LANDSCAPE

- Rainwater harvesting
- Xeriscaping

STRUCTURAL

- High fly ash content or carbon cured concrete

ELECTRICAL

- Light pollution reduction
- Fundamental building systems commissioning
- Optimized lighting systems c/w occupancy sensors and local control
- Enhanced measurement and verification
- Daylighting and daylighting controls
- Solar photovoltaic – panels on roof, façade where appropriate, PV carport
- Parking lot receptacle control

MECHANICAL

- CFC and HCFC free refrigerants
- Low-water consumption plumbing fixtures
- Heat-recovery system
- Efficient perimeter combined heating and cooling
- Zoning differentiation
- High-efficiency condensing boiler
- Energy efficient pumps and air-handling systems
- Regulated ventilation via CO2 sensors where appropriate
- Enhanced energy management control system



green roof



solar photovoltaic opportunities



strategic daylighting



accessibility
summary

Including every citizen in society isn’t a ‘nice to have’ — it’s the hallmark of a great society. Great societies become greater when everyone has equal access, is fully engaged, and can realize their potential. – Rick Hansen, Founder Rick Hansen Foundation

An accessible Multi-Use Facility and Library will mean that regardless of ability, people of all ages and abilities can engage in their community and the facility can properly serve the community’s needs. We all know someone that could benefit from greater accessibility: a parent pushing a stroller up a curb, a friend with vision loss navigating their surroundings or a grandparent with hearing loss trying to use a service at the library. There is more to accessibility than the addition of a few ramps and door openers—barriers come in all different forms. Barriers can be visible and physical, but they might also be less obvious. The design of the Airdrie Multi-Use Facility and Library seeks to create a physical environment that is simple and intuitive to use, requires low physical effort and is designed to accommodate a wide range of users. We all benefit when our communities enable everyone to play a part.

Notable highlights on some ways the Airdrie Multi-Use Facility and Library is building a more accessible built environment include:

- Fundamental Universal Design Principles – By incorporating a universal design approach at the front end of the project, integrity and marketability of the project will be maintained and future modifications will be kept to a minimum. Canadian Standards Association (CSA Group) B651 standards will be incorporated which considers the holistic user experience of people of all abilities, including those with mobility, vision and hearing disabilities as well as the Rick Hansen Foundation Accessibility Certification (RHFAC) standards.

- Parking/ Vehicular Access – Adequate parking and passenger zones have been considered in order to make the campus usable, safe and attractive for people of all abilities. Priority is given to designated spaces for people with disabilities. Pathways are designed with safety for all users, free of obstacles, well illuminated, easy to find, and well-integrated with stairs and ramps along

the route. A curbside pickup area is provided for those individuals who are unable to leave their cars to enter the building. Pick up / drop off zones are located as close as possible to the nearest accessible entrance. Proximity of public transportation was also considered in the

location of the site for those unable to drive and who rely on public transit.

- Entry / Reception/ Information Desks - Accessible service counters are provided at circulation, information or self-service checkout areas for both public and staff use.
- Navigation – The design of corridors, paths of travel, building entrances and connection with the site were all taken into consideration while developing the overall layout. Generous clear widths have been provided to ensure that people using wheeled mobility devices can easily pass through doorways and navigate along pathways comfortably. The design of overall paths of travel ensures that surfaces are stable, firm and have the appropriate type of surface material for designated use and location and won't disrupt mobility issues. Power door operators for doors into highly used functional spaces are provided for ease of entry. Textural and architectural treatments will be incorporated to provide wayfinding cues and guidance for all users.
- Lighting - Illumination is an important measure of accessibility for a range of interior and exterior facilities — from parking, exterior pathways and ramps, to site entrances, hallways, elevators and interior stairs. The use of natural light is considered and evenly distributed throughout rooms and circulation paths.
- Special Facilities and Areas –
 - o Theater - Accessible seating will be integrated and distributed throughout seating areas of assembly rooms to offer individuals with varying disabilities different vantage points and freedom of choice. Adaptable seating with armrests that flip up and down at the end of aisle seats will be provided to assist individuals transferring from mobility aids.
 - o Meeting Rooms – These spaces are intended to be flexible to accommodate a wide range of users and needs. Movable seating and tables for different types of meetings and multipurpose areas ensures maximum flexibility and accessible options available to all user types. Providing adequate space for the use of assistive devices or personal assistance will be looked into with further accessibility reviews in the design development stage.

- o Maker space/ Studios –These spaces are designed with low physical effort in mind which can mean allowing users to maintain a neutral position while they work by incorporating different work environments. Appropriate size and space are provided for approach, reach, and manipulation regardless of user's body size, posture or mobility. Designated areas/ workspaces with specialized equipment will be included for users with vision loss. Functional areas are also considered for those with development disabilities where noise and movement can be distracting based on levels of introverted and extroverted needs. An in-depth review of all work areas/ millwork will be assessed during the design development stage.

- Sanitary Facilities – Facilities are located on accessible routes and in close proximity to prominent areas. Universal washrooms allow the greatest flexibility, including larger floor space for people who require assistance and may be accompanied by a caregiver or companion, as well as to accommodate larger mobility aids such as power wheelchairs and scooters. The design ensures that we go well beyond ensuring barrier free features but also considers the protection of an individual's privacy, dignity, and security.

- Signage – Best practices will be taken into consideration to ensure the building is easily navigable by providing intuitive wayfinding and efficient signage design principles in addition to the layout

- being logical, clear and direct during design development.

GGA Architecture strives to support the City of Airdrie in their continued undertaking in providing equal experiences for all. An additional analysis will be completed at the design development stage to ensure that the City of Airdrie's accessibility strategies have been implemented.

Universal design will become more urgent with time. More than one in five Canadians identifies as having a disability. By encouraging the connectivity to people and programs that nurture mental well-being and build a healthy and vibrant community, the proposed design strives to support Airdrie Multi-Use Facility and Library in their continued undertaking in removing barriers and providing equal experiences for all members of the community.

09 consultant
LANDSCAPE SUMMARY

OVERVIEW

The landscape strategy for the Airdrie Multi-Use Facility and Library is 2-fold: to provide a legible, structured, and safe approach to the building from the street and adjacent parking, while offering flexible public and private outdoor spaces that complement interior programming objectives.

The overall landscape approach will acknowledge the adjacent Nose Creek ecology, highlighting native, simple, site appropriate plantings and design that celebrates local ecology, traditional materials, flood resiliency, and opportunities for enhancing outdoor comfort by harnessing the strengths of Airdrie's winter climate, while providing places of refuge, rest, and community all year long.

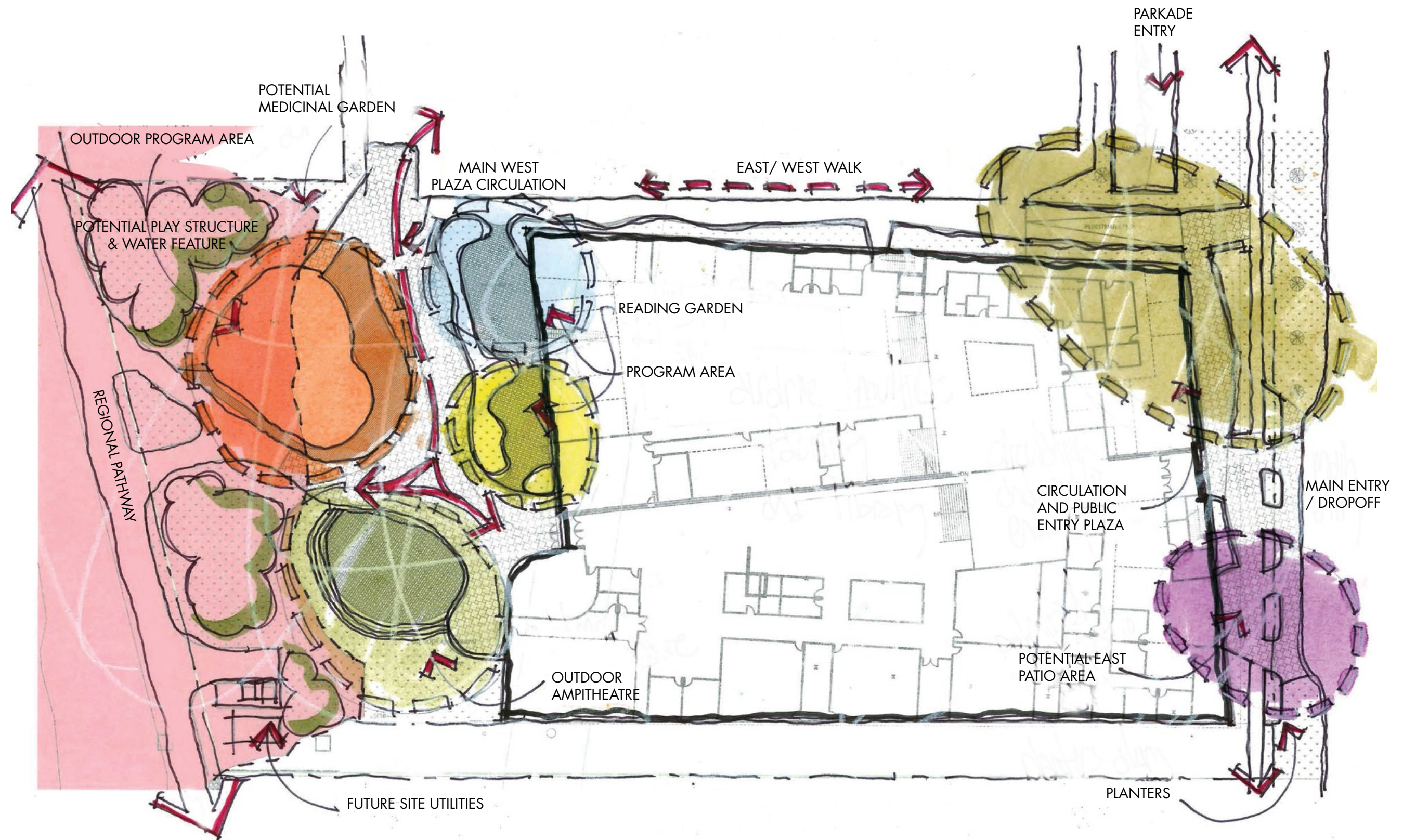
The landscape design seeks to achieve the following objectives:

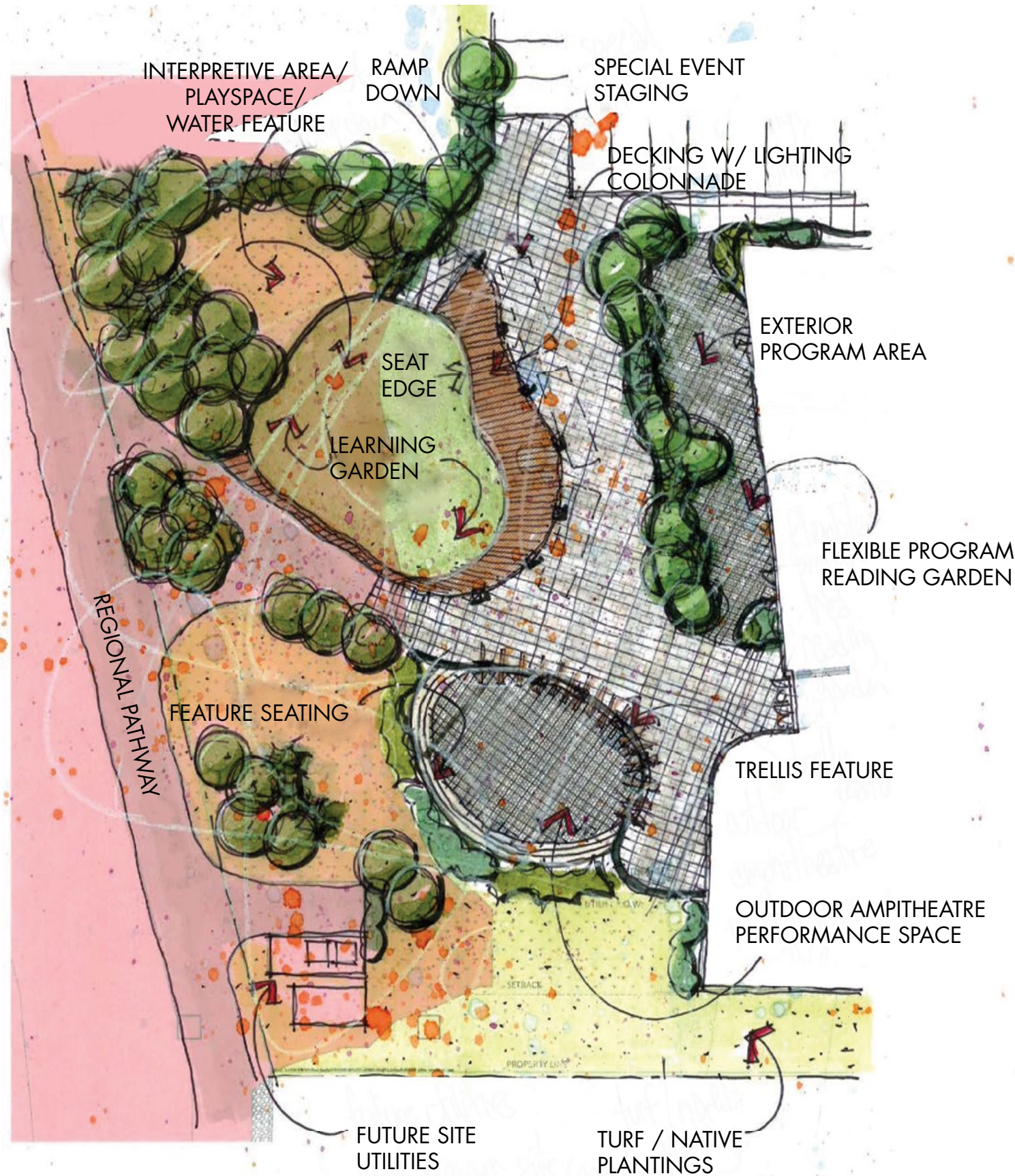
- 1) Complementary landscape to define architectural features
- 2) Indigenous ceremonial space and places of gathering
- 3) Defined outdoor areas to offer expanded indoor programming space / spill-out options
- 4) Outdoor educational opportunities and self-guided learning spaces
- 5) Sympathetic interface to naturalized Nose Creek boundary
- 6) Naturalized screening of adjacent infrastructure
- 7) Flood resilient materials
- 8) Accessible seating and circulation

YEAR-ROUND ACTIVATION

The landscape is designed to be activated year-round, taking advantage of Airdrie's full annual climate to create comfortable, functional, and exciting outdoor spaces. Existing and proposed native vegetation are leveraged to create shade in the summer and protection from wind and snow in the winter. Strategically placed mature trees allow for southern sunlight exposure during colder months, and areas of shade in the summer months. A diverse hard- and soft-scape material palette allows for a broad range of activities throughout the year. Summer picnics, library children's programming, educational gardens, summer festival, winter carnivals, food trucks, outdoor performance, and seasonal casual recreation activities can all be accommodated throughout the year. The adjacency of the landscape to the Nose Creek multi-modal pathway allows for easy access by bike or foot to an exciting, community-focused outdoor experience on the site.



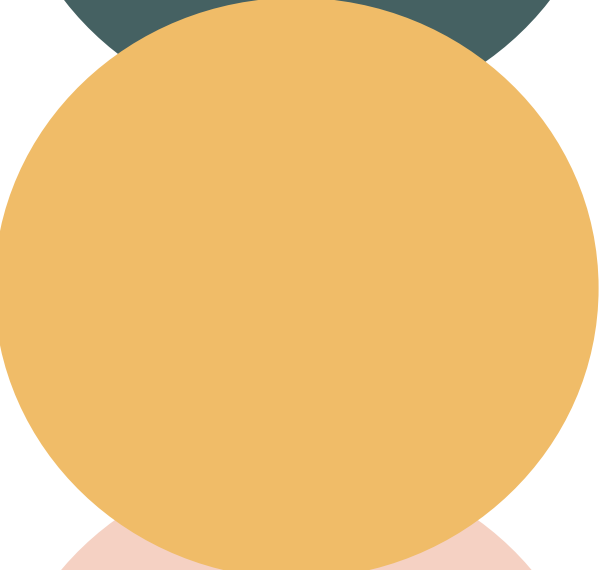




Back Programming Spaces



Front Entry



GET IN TOUCH

403.233.2000

350, 140 10th Avenue SE
Calgary, AB T2G 0R1

info@gga-arch.com
www.gga-arch.com

