

NEW CENTRAL LIBRARY
**FUNCTIONAL
PROGRAM**



**SASKATOON
PUBLIC LIBRARY**

SUMMARY
REPORT

INTRODUCTION

The functional program is a statement of needs that a building owner uses to inform the design consultant. It articulates the vision for the building and describes the types and sizes of spaces needed, how those spaces will be used, and the relationships between spaces.

Community input, library best practices, benchmarking, building codes, accessibility standards, the City of Saskatoon's Plan for Growth, and our Strategic Plan contributed to the new central library functional program.

The community guiding principles for the new central library are:

- Is a welcoming and accessible community hub.
- Has space for a large and diverse collection of materials.
- Is a place for learning and innovation.
- Has a variety of spaces to meet the needs of the community.

The complete functional program is available at saskatooncentrallibrary.ca/functional-program.

STRATEGIC VISION

A new central library is fundamental to delivering on SPL's vision to change lives through community connections, engagement and inclusivity, and is a critical piece of SPL's long-term plan to address population growth and increasing service demands. The functional program describes SPL's vision for a new central library that is infused with the spirit of the community and is a source of inspiration and pride for those who call Saskatoon home.

Enhanced Library Services

The new Saskatoon central library blends traditional library service with new and innovative spaces, programs and services. It will enable SPL to adapt library services to meet the changing needs of patrons in the future.

A new central library will include space for:

- Indoor and outdoor greenery.
- A mix of quiet and animated areas.
- Learning and innovation.
- Expanded programming opportunities.
- Groups and individuals.
- A significantly larger collection.

SPL envisions a facility that helps reduce inequality and social isolation in Saskatoon. By supporting citizens in various educational and social pursuits, a new central library will help build community and enhance the overall quality of life for residents.

Reconciliation

The new central library is a flagship of Canadian public library reconciliation in action.

Woven into the fabric of this place, Saskatoon Public Library has been enriching the community by inspiring discovery, curiosity and creativity through the sharing of spaces, experiences and ideas for over 100 years. This place also carries deep history and traditions of First Nation storytelling to facilitate information exchange since time immemorial, and the rich culture of the Métis adds vibrancy to the fabric. Located on Treaty 6 territory and the homeland of the Métis, Saskatoon Public Library pays respect to the Indigenous ancestors of this place known as Saskatoon.

This place also holds a dark past. When European explorers arrived, they made Treaties with the First Nations people. The Treaties were agreements describing how working together would ensure mutual success and opportunity for all people. The settlers did not keep their Treaty promises. Instead, the Canadian government implemented policies to assert control over Indigenous people that involved cultural assimilation and genocide. Settlers benefited from these policies and structures to gain land, wealth and power. These benefits continue to be realized by non-Indigenous people today. The destructive impacts of the past manifest in systemic racism, resulting in the exclusion of First Nation and Métis people from the economy, disproportionate over-representation in the justice system, and lower health outcomes, among many other negative impacts.

This oppressive and colonial past does not have to define the future. As an organization that played an essential role in the settlement of the city, and as a critical memory institution, Saskatoon Public Library affirms our commitment to reconciliation and acknowledges our responsibility to respond to calls for action, justice and equality. As Treaty people, and as an organization rooted in colonialism, reconciliation means doing our part to create an interdependent and fair society. A society where First Nation & Métis culture, stories, language, and culture thrive and contribute to the fabric of life in Saskatoon, where safe spaces exist for mutual learning, communication across cultures, trust-building, partnerships, and shared social experiences. In this re-imagined society, everyone can enjoy a high quality of life.

Saskatoon Public Library commits to being a leader in the realization of reconciliation. We will elevate First Nation and Métis voices, language, culture and history. We commit to connecting with First Nation and Métis communities in meaningful, respectful and

inclusive ways, to immerse the organization in cultural understanding, and to integrate First Nation and Métis perspectives in library operations.

Public libraries serve as a critical component in enhancing the quality of life for all and helping to address the global goal of a better and more sustainable future at a community level. The new central library presents a significant opportunity to reduce inequity and introduce progressive and effective social change.

Our vision is to strengthen and contribute to the healing of intergenerational trauma in the community through a culturally appropriate central library project. The new Saskatoon central library will bring Indigenous and non-Indigenous communities together in a safe and welcoming place.

The physical form of the building itself, as well as the interior and exterior spaces and art, will visually embody local First Nation and Métis identities (traditions and cultures) and express the aspirations of the Saskatoon community as a whole. Reconciliation will be evident in the integration of local First Nation and Métis perspectives into the programs, services, and collections available within the library walls.

To achieve this vision of reconciliation, both Indigenous and non-Indigenous leadership, values, history, and ways of knowing will be incorporated into the library, leaving a legacy of reconciliation behind.

Sustainability

The new central library is a model of sustainability in Saskatoon. The facility will be LEED® Gold certified.

Universal Accessibility

The new central library is a model of accessibility in Saskatoon. The facility will meet or exceed the City of Saskatoon Facility Accessibility Design Standards (FADS), which address physical accessibility. Beyond this, the new central library's design will consider a wide range of accessibility issues that patrons face, including visual and audio impairments, intellectual disabilities and mental health.

FUNCTIONAL PROGRAM

The Functional Program is organized into:

Part A: General Planning Criteria section, which includes information relating to the overall building, and

Part B: Component Planning Criteria section, which includes information relating to specific areas of the building only.

Part A: General Planning Criteria

ASSUMPTIONS

The following assumptions are not exhaustive; they are included to establish a working snapshot of the key functional and spatial parameters that guide the project:

Scale

- Total square feet: 115,551.
- Building gross area: approximately 136,000 square feet.
- Construction budget: \$70 million (includes escalation to 2026).

Systems

- Bike parking will be available.
- Directly adjacent sidewalks and multi-purpose exterior spaces.
- One public entrance.
- The main floor will be at the elevation of the adjacent sidewalks.
- Three to four above-ground floor levels and possibly an additional partial lower level.
- Entrance to the café will be from the street with interior window service into the library patron service area.
- Centrally located public elevators and open feature stair system.
- Centrally located water fountains, bottle filling and hand-wash stations.
- The building will achieve LEED® Gold.

Design Objectives

- Capture the regional identity of Saskatoon.
- Create a unifying, multi-faceted design tapestry that is inclusive and uplifting for the entire Saskatoon community and promotes community cohesion.
- Reflect First Nation and Métis traditions, cultures, values, aspirations and reverence for the relationship with the natural world, and promote cultural awareness.
- Evoke the natural topography of the Saskatchewan prairie and the South Saskatchewan River.
- Blend traditional First Nation and Métis building forms with contemporary design.
- The design process embodies community empowerment and authentic engagement.

Operations

- Practical operation for a minimum of 50 years.
- Allow for partial operation of the facility outside normal operating hours.
- Daily attendance can accommodate 2,500 as Saskatoon's population grows.
- The collection size is approximately 346,000 items, with 209,000 items accommodated on shelving.
- Employee workspaces grouped to support flexibility and efficient operations.
- Ancillary services will include a café and Friends of the Library Shop.

DEFINING FEATURES

The following defining features are not exhaustive; they are included to establish a working snapshot of those key functional and spatial parameters that guide the project:

Core Experience

- Universal accessibility.
- Health and well-being.
- Safety and security.
- Empowerment through ease of use and self-serve concepts.
- Multi-generational and multi-cultural animation.
- Acknowledgment of the history, spirit and natural environment of Saskatoon.
- Privacy, refuge and seclusion.
- Exploration and creation.
- Enjoyment and recreation.

Community Presence

- A prominent, identifiable destination with a simple and timeless architectural character.
- A community gathering space that balances traditional library experiences and innovative services.
- An upper-level symbolic destination that celebrates reconciliation, history, culture and art.
- Acknowledgement of the spirit of the place conveyed through use of wood and stone, vegetation and access to natural light and climatic conditions.

User Friendliness

- Visible, accessible and welcoming employee-led and patron self-directed services.
- Employee, community and partner-led programs, and patron self-directed experiences.
- A comprehensive collection of print, digital, and other media, arranged for optimal visibility, access and discovery.
- Collection resources and building features arranged for optimal patron self-direction and orientation.
- A wide range of patron-provided and library-provided technologies.
- Innovative and strategic signage systems designed for optimal patron self-direction and orientation.
- Cultural enrichment is provided through local Indigenous public art.

Interior Character

- Key features that delight and provide access to greenery and nature throughout the year.
- Navigation and orientation features are consistently located throughout the building.
- Views of people and activities from above, below and across spaces.
- Open interactive spaces and smaller-scaled personal refuges.
- A general emphasis on spatial openness and visual transparency, with fully enclosed spaces being the exception.

KEY SITE DEVELOPMENT GOALS

Visibility

- The exterior of the library facility should be prominently visible from adjacent streets, sidewalks and buildings.
- Signage identifying the library should be prominently visible from the major adjacent streets.
- The interior of the library should be prominently visible from adjacent streets, sidewalks and buildings.

Views

- Significant views of adjacent and nearby sidewalks, streets, outdoor green space and prominent local features from the interior of the library facility.
- Significant views of adjacent and nearby natural features, including the sky, from the library interior.

Pedestrian & Vehicular Access

- Convenient pedestrian access from adjacent urban destinations and pedestrian systems to the library.
- A convenient and safe pedestrian drop-off close to the entrance.
- Public parking on streets adjacent to the library, as well as drop-off stalls for school and accessibility buses.
- Access for service, delivery and private vehicles, along with limited surface parking for employee vehicles, should be provided on the actual site.

Project Image

- Site development must include building setbacks that create a partially covered entrance plaza and exterior arrival and gathering place, and an area for multi-functional activities.
- The building image, and exterior materials should reference and complement those of the region.
- The building image should make visible and imaginative use of Indigenous natural forms and materials.

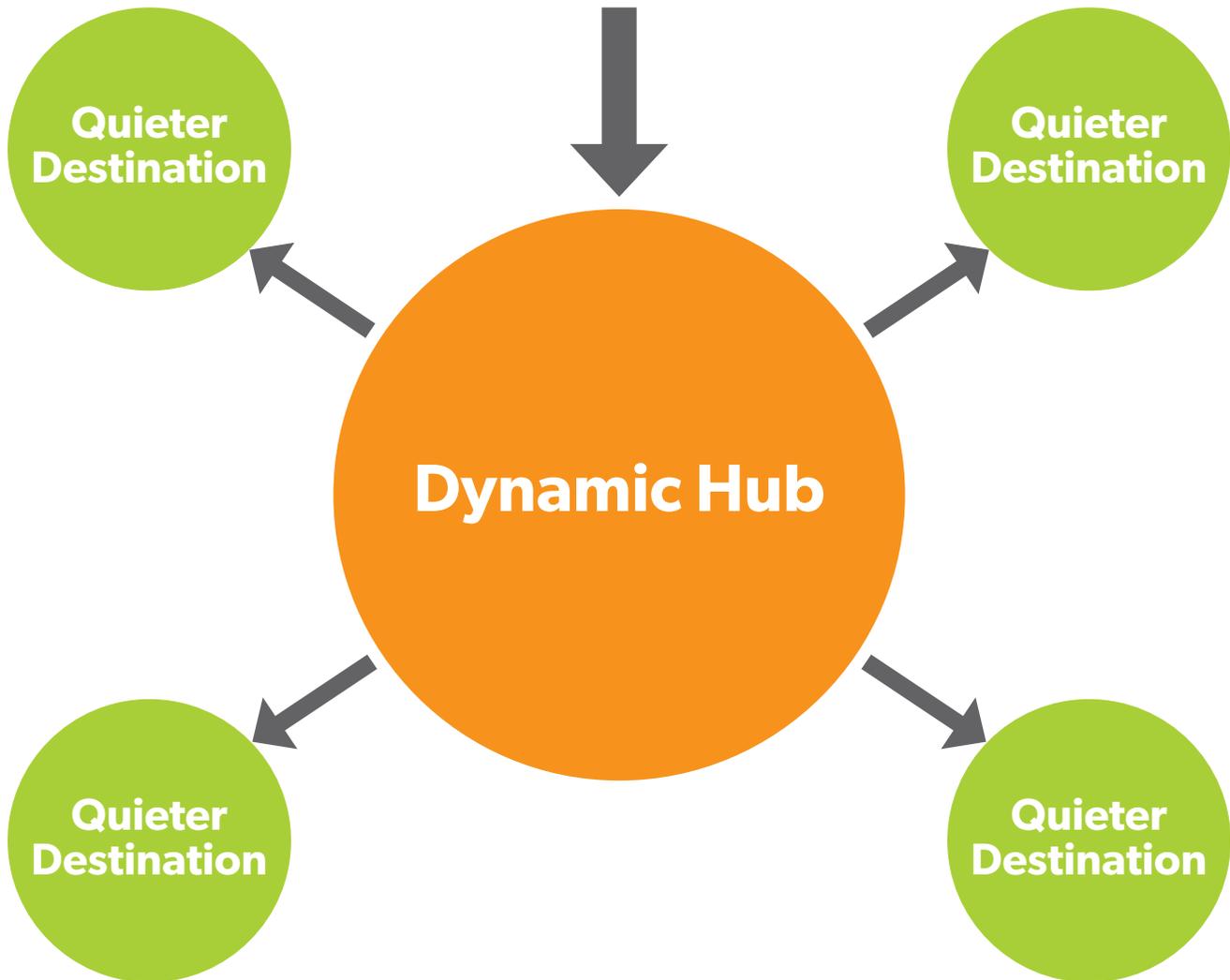
INTERIOR SYSTEMS

Key Features

- This will be a very highly used public building. Use will be daily, year-round and over several decades. Its diversity of users and its level of use will make ongoing demands on all fixtures, systems and infrastructure.
- The level of wear and tear will be very high. The building and all its sub-systems should be designed to be simply elegant, practical, durable and easily maintained.
- The space should be characterized by simplicity, clarity, unpretentious forms and materials that form a neutral backdrop to the animation of library patrons and activities.
- A prominent central spatial and architectural feature with references to local and regional social, historical and environmental contexts.
- A multi-level interior, that includes an atrium space with balcony overlooks, will be the major spatial and unifying feature in the building.
 - It will provide a central vertical space that connects and focuses spaces and functions on all floor levels.
 - It will also accommodate a multi-purpose ground floor program delivery destination that acts as a gathering point for community presentations and events.
- Intuitive wayfinding, visual cues and connections will ensure users:
 - Have a clear understanding of the overall layout of the building, including the sequence of arrival spaces, and locations of key services and features.
 - Have a clear understanding of where stair and elevator systems are located.
- Numerous opportunities for viewing and people watching, as well as quiet individual refuge.
- Spatial simplicity and future reconfigurability achieved through access to natural light, practically located services and a minimal amount of structural and fixed elements.
- Furnishings and interior design concepts should create an ambiance for human comfort and enjoyment.

Key Features

Lateral spatial zoning that generally transitions from active common spaces at the centre to quieter collection display and workspaces at the perimeter.



Key Features

Vertical, spatial zoning that generally transitions from active common spaces on lower floors and quieter reading, study areas and workspaces on upper floors.



- Generally, open and contiguous spaces with enclosed spaces the exception; all enclosed space must be acoustically damped.
- Ample natural light throughout.
- Exterior walls that feature large expanses of glazing, providing views into and out of the building, to and from adjacent buildings, natural features and public spaces.

Health & Safety Features

- On each level, adjacent to washrooms, bottle fillers and hand-wash stations will be provided.
- The design, materials, finishing details, fixture installation features will be easy to clean and minimize the likelihood of injury due to accidents, falls, etc.
- Safety and security features will be integrated unobtrusively using discreet, intuitive layout and design features (including interior glazing), rather than through obvious surveillance and /or physical barriers.
- Public areas will be visible from service points.
- The library interior is an interior urban space. The design of the space must reflect the principles of Crime Prevention Through (Interior) Environmental Design (CPTED).
- Spatial dimensions and proportions, furnishing and fixture design, should respond to the ergonomic and human-factor realities of human physiology, including those of people with special needs. This is particularly relevant for the requirements to comfortably access, move, lift, adjust and rearrange collection resources, equipment, furniture, doors, operable partitions, lighting, play equipment, presentation equipment and storage units.
- All materials used must be non-toxic and non-allergenic.
- All materials used must be considered for frequent cleanability and high use.

General Features

- Minimum 14' 10" ceilings in main public spaces, with feature multi-storey spaces with balcony overlooks.
- An open-feature staircase system, strategically placed so it does not obstruct sightlines and the functioning of general floor areas.
- In areas featuring grouped workstations, minimal internal corridors that incorporate intermittent views and natural light along their length.
- Orientation features and /or exterior views at the ends of corridors and aisles.
- Bookable rooms with modular construction and partial glazing.
- Program rooms with modular construction and partial glazing, including blinds.
- Mitigation of glare in patron and employee areas.
- Ceiling features that are suspended from an exposed structure and that define specific areas and functions below.
- Collection resources that are laid out to be optimally visible, self-explanatory and visually interesting, including shelving not more than 65" with many opportunities for face-out displays.

Functional Organization

- Individual workspaces are typically located adjacent to perimeter windows, with interactive spaces at the centre, although all spaces should have ample daylight.
- A variety of spatial scales, including group and individually scaled spaces.
- Spaces are designed to allow reconfiguration and expansion in the future with minimal disruption of services and operations.

Signage & Display

- The building will include feature signage and information displays, wall /ceiling-mounted projection equipment and integrated whiteboards or screens.
- Presentation equipment should be securely fastened to walls or ceilings.
- Display features may be freestanding, suspended and /or mounted on wall systems.
- Signage should be commercially available for ease of updating.
- Provide consistent signage display locations on each level.

Lighting

- An emphasis on natural light.
- Glazing that provides shade and glare control. Glass should have integral shading capacity and UV protection.
- There will be a wide variety of lighting conditions as well as the need to control lighting conditions in specific reading, study, and programming, meeting and bookable rooms.
- Light quality, lighting fixtures, and lighting controls must be developed as a significant design feature throughout.
- Full-spectrum lighting should be provided to support use in winter conditions.
- Generally, lighting will be LED, indirect and glare-free.
- Local task lighting will be required to illuminate work surfaces, displays and special features.

Acoustic Quality

- Generally, acoustic dampening of noise from human activity and from any mechanical system is required throughout the building.
- Acoustic treatment in all multi-purpose program and study spaces, offices and meeting rooms.

Furnishings & Surfaces

- Simplicity of design and coordination of forms and colours.
- As much as possible, furnishings should be fully adjustable, moveable and reconfigurable.
- Furnishings and surfaces should be commercially available with custom fabrication kept to a minimum. It should be selected for ease of maintenance, high durability, cleanability and conformance to infection control and general maintenance policies and procedures.
- Power and cabling access should be integrated with furnishing design and layout.

Fixtures & Equipment

- All collection areas should be compliant with FADS (Facility Accessibility Design Standards).
- Collections will be stored on shelving units that are typically three feet wide and no more than 66" high.
- Shelving units may be moveable (if under 52" high) or fixed to the floor structure (if higher than 52").

OPERATIONAL SYSTEMS

Partial Operations

- A direct means of access from the atrium, concourse and programming rooms to the entrance must be provided to facilitate after-hours use.
- To allow extended hours of operation for the atrium, concourse and programming rooms component, retractable aluminum screens may be used to preclude access to the staircase system and upper levels.
- Retractable aluminum screens may be used to allow variable hours of opening.

Room Booking

- Programming rooms will be used/booked by library employees and/or the public for meetings, programs and other events.

Service Points

- There will be at least one public service point on each floor level with additional service points for local history and creation spaces, plus a registration / public administration desk near the library entrance on the main level.
- Service points should be highly flexible (not built in) with the opportunity to change the numbers and placement of service points as required.
- Service points should be sufficiently adaptable to allow the easy installation of protective barriers such as sneeze guards.

Movement Systems

- Movement paths must be carefully coordinated to lead to and coincide with key functional destinations, such as feature collection areas, service points and collection displays.
- Pathways to destinations should optimize direct movement by the shortest route.
- Planning should develop circulation paths with simple geometries and clear sightlines; for security purposes, there should be no dead ends or hidden corners.

People Moving Systems

- Many patrons will use mobility devices, such as walkers, automated wheelchairs and strollers. People-moving systems must accommodate this with all systems optimized for ease of movement, orientation and safety.
- An open staircase that connects all levels of the library. Its design should invite frequent use.
- Public elevators (minimum two) will provide the second key means of vertical public movement. Glazed elevator cars must be avoided.

Materials Handling Systems

- Library patrons are the primary carriers of collection resources into and out of the building. Patrons typically carry collection resources and technical devices, as well as other personal effects. As such, all spaces and fixtures must be scaled to allow movement of patrons carrying these materials and should support the need to set them down occasionally on horizontal surfaces.
- Exterior material drops near the entrance, with consideration also given to drop-off for vehicles, must connect as directly as possible to the materials sorting area.
- There will be an automated materials handling system; it should involve minimal use of mechanical conveyors. Any necessary conveyor elements should be located inside the building, with minimal lateral distances, no level changes and no abrupt changes in direction.
- Collections resources will be moved by employees from the sorting room via book trucks.
- Other supplies and equipment may occasionally be moved via small pallet trolleys.
- A service elevator will be the primary means of the vertical movement of materials and supplies handling. This elevator will supplement and serve as a back-up to the public elevators.

Security Systems

- To allow extended hours of operation for the atrium, concourse and programming rooms component, retractable aluminum screens may be used to preclude access to the staircase system and upper levels.
- Doorbells or intercoms should be provided from employee entrance(s) to security and materials handling room (or other convenient employee workspace).
- Sidelight or viewing panels should be provided in exterior doors.
- All collection materials will have radio-frequency identification (RFID) tags.
- Passive surveillance will be provided through the general strategic positioning of occupants and employees, who will be located with direct sightlines to activity areas.
- There will be security guards on duty at all hours of opening. A service point for the security guard will be provided in the entrance area.
- Card-activated locks (swipe or proximity) will be provided for secured areas.
- Card-operated entry systems will be provided to employee-only workspaces.
- There will be a multi-camera security system distributed throughout the building and the exterior of the building monitored through the security service base at the entrance.

Waste, Recycling & Compost Management

- Waste, compost and recycling collection points in public area near arrival and orientation spaces in all component and employee areas.
- Sufficient space in non-public areas to store accumulated waste, recycling and compostable materials.

Communication Systems

- Fibre access and the provision of a server room and communication closets within the library.
- Wireless connection from patron stations to printing stations and from employee stations to printing stations.
- Flexible public and employee networks that are easily accessed, managed and reconfigured.
- Public telephones.
- Access to internet protocol (IP)-based television service in common gathering areas, program rooms, any meeting rooms and the boardroom.
- Internet access throughout common areas, program and study areas, and outdoor programming areas through a robust and high-capacity wireless fidelity (WiFi) system.
- Display monitors with permanent and/or ephemeral signage provided at critical points (as identified in the component programs) and in arrival and orientation spaces.
- Electrical outlets with casual seats to support the use of personal devices.
- Worktables with data and power that are not hardwired to support the reconfiguration of tables via ubiquitous power connections.
- Communications systems networks, monitoring and controls must be integrated with any intelligent building systems.
- Janitorial systems.
- Durable, easily maintained and easily operable interior systems, features and finishes.
- A housekeeping base on the lowest level, with housekeeping closets located on each upper level.

BUILDING SYSTEMS

Overall Building System

- At ground level, the exterior of the building, including fenestration and cladding, must be designed to preclude vandalism through impact and/or graffiti.
- The public on adjacent sidewalks should not be able to disrupt activities occurring inside.
- Exterior and landscape design that invites use and enjoyment.
- Consideration should be given to providing a convenient smoking area away from public and employee entrances.

The building interior will include:

- an efficient and regular structural system that optimizes unencumbered open floor space;
- an exposed ceiling structure with exposed services and featured suspended panels to define spaces below;
- distributed floor-loading capacity that allows for the occasional repositioning of collection shelving;
- a high-performance, sustainable-building envelope;
- a network of universally distributed, easily accessed building services, including a raised floor system;
- ideally, free-standing modular construction of programming rooms, including plug-in services and a lower height ceiling system;
- reconfigurable, non-structural, secondary partitions systems;
- a family of reconfigurable interior design elements and/or furnishings; and
- building systems designed to avoid extensive and unnecessary cosmetic features and finishes and that allow optimal flexibility and modifications to the interior.

Digital Integration & Digital Interfaces

- Digital infrastructure will be included as a critical link between many of the conventional building systems.
- Automated processes can automatically control building operations and the performance of heating, ventilation, air conditioning (HVAC), lighting, security and other systems.
- Sensors, actuators and microchips can collect data and manage it to comply with performance expectations, seasonal standards and the requirements of specific functions and services.

- This infrastructure overlaid on conventional technologies can control energy use, optimize space utilizations and customize spatial environments.
- It is essential to recognize that new building systems and infrastructure are emerging, specifically those allowing access to digital information through traditional building systems components. Key applications include integrated smart screen/wall surfaces and digital signage projections. These applications are streamlining many previously cumbersome functions.

Partition Systems

- Collection storage and display units serve as important partial partitions that define movement spaces in most public spaces. Shelving units should be reconfigurable, with some movable shelving units provided adjacent to open and people movement areas. They may not be used for seismic bracing.
- Structural column and bay spacings are compliant with FADS (Facility Accessibility Design Standards) that accommodate the installation of non-load-bearing partitions, with all partitions non-loadbearing, except for those at the exterior and those surrounding elevator and service chases, etc.
- Non-structural wall and partition systems that are impact-resistant, acoustically shielded and easily de-mountable to allow for possible future reconfiguration of space.
- Moveable partitions that are designed to be anchored to adjacent ceiling structures, walls and/or adjacent partition systems to preclude the risk of injury.
- Partition systems that accept changing displays of decorative items, and/or the mounting of flat-screen monitors, etc.
- Wall surfaces that have low reflectivity and that can be cleaned and maintained easily.

Acoustic Systems

- Wall, moveable partition, floor and/or ceiling-mounted acoustic treatment in areas that involve higher noise levels or require lower noise levels, with mitigating insulation features placed as close as possible to the sound source.
- Acoustic assemblies, such as sound reflectors, acoustic panelling on walls and/or ceilings that are fully secured.

Fenestration & Glazing

- UV and glare-reducing exterior glazing, including either tinted glass or operable blind systems, with preference given to electrically-assisted systems.
- Internal glazing used for clear orientation, light transmission, spatial continuity and informal visual surveillance.
- Glazing and windows that are impact resistant.
- Glazing with high-performance thermal properties.
- Bird-friendly window design, materials and treatments to reduce or eliminate bird strikes.
- Light from above will be critically important. However, the maintenance challenges of skylight systems providing light from above must be addressed: clerestory windows and or saw-tooth roof systems with integral glazing should be considered as lower-maintenance options.

Lighting & Electrical Systems

- Introduction of innovative, energy-efficient and sustainable lighting systems, with LED lighting, to create a distinctive image and to address the functional complexity of many activities occurring in the program spaces.
- Lighting systems that contribute to an overall atmosphere of space and clarity and that do not compete visually with collection displays or activities taking place.
- A minimal number of lighting systems with system maintenance, anticipated longevity of use and availability, and ease of parts replacement considered in the selection of all systems.
- Localized controls for lighting in open areas — with dimmers, as appropriate — and in each enclosed programming, bookable and meeting room space.
- Programmable lighting in most public areas, including manual override systems.
- Task lighting provided at individual workstations with task lighting that is centrally controlled for public areas.
- Use of controls, access panels, wiring, conduit and fixtures that are not publicly accessible, de-mountable or breakable.
- Consideration given to accessing lighting fixtures for maintenance.
- Exterior lighting systems that support dark sky initiatives.

HVAC Systems

- Provision of flexible systems that facilitate future modifications through looped distribution lines, ample branch-isolation valves, and adequate space for new services and maintenance access.
- Specialized ventilation systems are required for the ceremonial reconciliation space, the demonstration kitchen and the wet multi-purpose room.
- Thermostats are placed away from direct sunlight.
- Use of tested technology.
- Consideration is given to a Thermenex type system that makes use of heating and cooling sources within the facility and distributes these as necessary.

Flooring

- A raised floor system throughout to allow for universal access to subfloor conduits and HVAC plenums.
- Floors that feature a combination of non-skid surfaces, such as rubber, resilient or carpet tile, or sustainable materials.
- Floor systems that include seamless or flush joints with no raised thresholds at doorways.
- Floor materials and finishes that are selected for ease of movement, sustainability and acoustical performance.

Materials & Finishes

- Materials and finishes that contribute to an overall atmosphere of space, clarity and light, and that do not compete visually with the activities taking place.
- Materials that are aesthetically pleasing, including consideration of wood and glazing for doors and partitions.
- Impact-resistant wall finishes and wall bumper systems are required in public spaces and high-volume employee spaces, particularly where book trucks and other materials are moved.
- Materials that are selected for hygiene, durability and low maintenance.

Plumbing Requirements

- Access panels to plumbing systems located in general circulation /corridor spaces.
- Environmentally responsible approaches to water conservation, such as low-flow plumbing fixtures and collection of grey water.
- Touchless fixtures, paper towel dispensers, soap dispensers and toilets.

SUSTAINABILITY FEATURES

Symbolic Recognition of the Local Environment

- A goal will be to acknowledge the local environment throughout the building using natural light, materials such as wood and stone, and key features that provide a low maintenance (addresses issues of humidity, pests) garden-like experience that can be appreciated throughout the facility.

Standards

- Under the principles of Environmental Equity, there must be a consistent standard and quality of interior finishes, light quality and ergonomic comfort in both public and employee areas.
- Consideration of approaches to environmentally responsible materials selection, and energy use that meets or exceeds approved sustainability standards.

Energy Consumption Strategies & Targets

- Maximized thermal performance with a target of 60% of the kilowatt-hours of energy per square metre per year (Energy Use Intensity).
- Optimal passive solar orientation as well as strategic envelope apertures and enclosures for passive and active solar gain.
- Use of photovoltaic arrays or provision for future use of photovoltaic arrays.
- Opportunities for natural ventilation and cooling; allow warm and cold air to pass over concrete slab floors; use of solar chimney features to extract air.

Water Consumption & Management

- Innovative approaches for the management of groundwater related to building construction and maintenance.
- Recycling and reuse of wastewater produced onsite.
- Reuse of treated water in an available greywater system and for local irrigation.
- Consider the use of solar panels to generate hot water augmented by point-of-use heating.

Materiality

- Use of sustainable materials in all phases of the construction process.
- Use of sustainable materials in all construction systems.
- Consideration of non-slip polished concrete floors, heated and cooled with in-floor radiant systems (with sound attenuation).
- Sourcing local materials.
- Sourcing materials with low embodied energy.
- Sourcing reused, recycled and /or recyclable materials.
- Sourcing renewable and sustainably harvested materials.
- Sourcing materials that are non-toxic /non-polluting in manufacture, use and disposal.
- Use of materials that are chlorofluorocarbon (CFC) and hydro chlorofluorocarbons-free (HCFC).

Part B: Component Planning Criteria

The Component Planning Criteria section includes specific information and design criteria related to functional components that comprise the project. The following briefly summarizes each of the functional components:

Exterior Spaces

Location: Main floor

This component accommodates exterior spaces for the facility. Exterior spaces provide the outdoor links between the surrounding urban fabric, the green space on the site and the entrance leading to the building interior.

- Public bike parking (minimum 25).
- Outdoor seating.
- Green space and landscaping.
- Public art.
- Connecting pathways between sidewalks.
- Drop-off zone for private bus and cars.

Entrance

Total area: 5,113 square feet

Location: Main floor

This component accommodates the primary public weather-protected lobby accessing the building. The lobby functions as a multi-purpose gathering, waiting and dispersal space. It serves as a community front porch and leads to the library entrance, providing a view of the exterior approaches and views into the library interior. It forms a multi-functional area that contains spaces required to provide a diversity of services and to orient, collect and distribute (in and out) large numbers of library patrons.

- Outer lobby (includes bench seating for 15).
- Café with access from the street and window service into the library (55 seats).
- Materials return slot.
- Public service point.
- Retail kiosk for library merchandise.

Atrium, Concourse & Programming Rooms

Total area: 10,925 square feet

Location: Main floor

This component is the building's major spatial and organizing feature; it provides a central vertical space that connects spaces on all floor levels. The vitality of community interactions taking place in programming spaces will require flexibility and accessibility. The concourse space should provide views to the upper levels of the library, including a prominent open atrium with adjacent elevators and an open staircase system.

- Large programming room (capacity 100 people).
- Small programming room (capacity 30 people).
- Demonstration kitchen (opens into the small programming room).
- Fixed seat theatre (capacity 200 people).
- Public staircase and elevators.
- Living green wall feature.

Atrium, Concourse & Programming Rooms

Total area: 4,252 square feet

Location: Main floor

This component features new and in-demand materials, quick access computer stations and casual seating. Designed for high-volume collection turnovers and patrons making a quick visit to the library, the new and high demand area provides basic library patron services and a retail collection display environment.

- New and popular collection.
- Holds pick-up shelving.
- Friends of the Library shop.
- Casual chairs (20 seats).
- Laptop bar (4 seats).
- Public computers (15 stations).
- Print, scan and fax station.
- Self-service checkout station.

Children’s Library

Total area: 11,356 square feet
Location: Level 2

This component is a library within the library. It accommodates the collections, program spaces and collection support spaces for the children’s library, as well as programming spaces.

- Children’s collection.
- Children’s theatre (100 seats).
- Play zone: toys and climbing structure.
- Public computers (8 stations).
- Reading alcoves (24 seats).
- Group tables (15 seats).
- Casual chairs (24 seats).
- Family washroom (2).
- Stroller parking.
- Self-service checkout station (2).

Community Services

Total area: 6,243 square feet
Location: Level 2

This component includes the resources and support for patrons, including those with differing abilities, newcomers to Canada, and people facing poverty and homelessness.

- Specialized collections (e.g. materials in languages other than English, law and legal resources, large print).
- Technology (computer) training room (capacity 25 people).
- Small programming room (capacity 30 people).
- Outreach Worker consultation room.
- Elder in Residence office.
- Assistive technology (8 stations).
- Public service point.
- Public computers (12 stations).
- Print, scan, fax station.
- Individual tables (6 seats).
- Group tables (6 seats).
- Laptop bar (4 seats).

Teens

Total area: 5,759 square feet
Location: Level 3

This component accommodates an open teen collection area and a more spatially contained teen area. Teens have a range of requirements, including both independent study and group socializing, and both quiet and more animated activities.

- Teen collection.
- Casual seating (25 seats).
- Individual study carrels (20 carrels).
- Group tables (16 seats).
- Laptop bar (4 seats).
- Booth seating (16 seats).
- Public computers (10 stations).

Creation Spaces

Total area: 8,288 square feet
Location: Level 3

This is a technology-focused environment where patrons explore and create conventional and digitally-derived products and games, and access audiovisual materials.

- Visual recording studio (capacity 3 people).
- Audio recording studio (capacity 5 people).
- Recording Booths (capacity 2 seats).
- Post-production studio (capacity 6 seats).
- Whisper booths for the new oral stories collection (2 stations).
- Digital tools workstations (e.g. convert VHS to digital) (8 stations).
- Multi-purpose creation space (capacity 30 people).
- Gaming stations (16 seats).
- Creator in Residence office.
- Public service point.
- Public computers (20 stations).
- Laptop bar (4 seats).
- CD, DVD, audiobook and video game collection.
- Self-service checkout station.

Adult Collections

Total area: 28,148 square feet

Location – Non-fiction: Level 3

Location – Fiction: Level 4

Non-Fiction/Newspapers & Magazines:

- Non-fiction collection.
- Newspaper and magazine collection.
- Quiet reference room (50 seats).
- Bookable rooms (10 rooms for 2–3 people).
- Public computers (30 stations).
- Laptop bar (8 seats).
- Individual study carrels (14 carrels).
- Casual chairs (15 seats).
- Public service point.
- Print, scan and fax station.
- Self-service checkout station.

Fiction:

- Fiction collection.
- Reading lounge (25 seats).
- Writer in Residence office.
- Public service point.
- Public computers (15 seats).
- Laptop bar (6 seats).
- Casual chairs (20 seats).
- Individual study carrels (10 stations).
- Print, scan and fax station.
- Self-service checkout station.

Administration

Total area: 3,983 square feet

Location: Level 4

This component accommodates administration employee offices, as well as the boardroom.

- Employee offices and workstations.
- Washroom.
- Kitchenette.
- Boardroom.

Culture & History

Total area: 7,050 square feet

Location: Level 4

This component accommodates a reconciliation and Indigenous Learning Circle Space, specialized local history collections and support space, and an art gallery.

- Indigenous Learning Circle, ventilated for ceremony (capacity 30 people).
- Art gallery for new and emerging artists.
- Local History Collection.
- Microfiche readers (2 stations).
- Public computers (5 stations).
- Group tables (20 seats).
- Public service point.
- Print, scan and fax station.
- Self-service checkout station.

Employee Workspaces

Total area: 9,580 square feet

Location: Distributed across multiple levels

This component accommodates the workspace of employees in public service areas at the Central Library as well as the library system's support services in an environment that supports the integrated planning and delivery of services.

- Employee offices and workstations.
- Meeting room.
- Programming workroom.
- Print and copy stations.
- Breakroom and lockers.
- Washrooms.

Building Services & Back-of-House

Total area: 14,854 square feet

This component that accommodates building services spaces that are distributed throughout the building. The spaces ensure efficient movement of supplies, materials, furniture, and equipment in, out, and around the building.

Back-of-House

Location: Total area: 7,050 square feet
Location: Main level & lower level

- Automated materials handling system.
- Storage.
- Employee stairwell and elevator.
- Loading dock, shipping and receiving.
- Janitorial, mailroom and maintenance workspaces.
- Employee bike storage.
- Mechanical and building systems.

Building Services

Location: Distributed throughout the building

- Public washrooms.
- Hand washing stations.
- Water fountains and bottle filling stations.

SPACE ALLOCATIONS

- Entrance **4.4%**
- Atrium, Concourse and Programming Rooms **9.5%**
- New and High Demand Collection **3.7%**
- Children's Library **9.8%**
- Community Services **5.4%**
- Teens **5.0%**
- Creation Spaces **7.2%**
- Adult Collections **24.4%**
- Culture and History **6.1%**
- Employee Workspaces **8.3%**
- Administration **3.3%**
- Building Services and Back-of-House **12.9%**

