




# Port Moody Public Library |

## Functional Program Update – Central Library

2025-07-29

Resource Planning Group Inc.



# TABLE OF CONTENTS

**TABLE OF CONTENTS.....2**

**0.0 INTRODUCTION.....3**

**INTRODUCTION.....4**

*PURPOSE OF A FUNCTIONAL PROGRAM.....4*

*PROJECT OVERVIEW.....5*

*DESCRIPTION OF THE WORK PERFORMED.....5*

*ORGANIZATION OF THIS DOCUMENT.....6*

**1.0 SUMMARIES.....7**

**SUMMARIES.....8**

*INTRODUCTION.....8*

*FUNCTIONAL COMPONENT SUMMARY.....8*

*SUMMARY OF CUSTOMER ACCOMMODATION.....10*

*STAFFING & OCCUPANCY SUMMARY.....10*

*COLLECTION RESOURCES.....11*

*SPACE SUMMARY.....12*

**2.0 GENERAL PLANNING CRITERIA.....14**

**INTRODUCTION.....15**

**PROJECT ASSUMPTIONS.....16**

**SITE DEVELOPMENT AND URBAN PLANNING CONCEPTS.....16**

**ARCHITECTURAL CONCEPTS.....19**

**INTERIOR DESIGN, SIGNAGE, AND DISPLAY CONCEPTS.....21**

**OPERATIONAL CONCEPTS.....24**

**BUILDING SYSTEMS CONCEPTS.....26**

**SUSTAINABILITY FEATURES.....28**

**3.0 COMPONENT PLANNING CRITERIA.....29**

**INTRODUCTION.....30**

1. ENTRANCE, WELCOME AREA AND PROGRAM ROOM.....32

2. COLLABORATION ZONE.....41

3. CHILDREN'S LIBRARY.....47

4. ADULT AND TEEN COLLECTIONS AND STUDY SPACES.....57

5. TECH CENTRE.....69

6. STAFF WORKSPACE.....74

7. BACK-OF-HOUSE FUNCTIONS.....80

8. EXTERIOR SPACES.....89

**APPENDIX A: ABBREVIATIONS.....95**

**APPENDIX A: ABBREVIATIONS.....96**

# 0.0 INTRODUCTION

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# INTRODUCTION

The Functional Program document includes the following sections:

- This Introduction, which includes:
  - a discussion on the Purpose of a Functional Program and how it should be used,
  - a Project Overview, that relates the development of the Functional Programs to the previously developed Master Plan,
  - a description of the process to develop the Functional Programs, and
  - an overview of the Organization of the Functional Programs themselves;
- Functional Program Update for the Central Library, including Summaries, General Planning Criteria, and Component Planning Criteria;
- Functional Program for the Community Branch Library, including Summaries, General Planning Criteria and Component Planning Criteria; and
- Appendices.

## PURPOSE OF A FUNCTIONAL PROGRAM

The Central and Community Branch Library Functional Programs are to be read in conjunction with the Port Moody Public Library Master Plan (2024), which provides high level demographic, site, and strategic planning context for the new Library projects and, in short, a rationale for the size and location of proposed branch development. In contrast, the Functional Programs provide detail relating to proposed design criteria, including site and architectural criteria, and proposed space requirements for each facility.

The information in the Functional Programs is a constructive base of information to be used to assess any of the development opportunities and options that may arise.

The Functional Programs provide the information needed to develop a Class D cost estimate for the facility, as well as serving as a guide for the design team during the subsequent design phase. Once a specific site is selected and a development option has been confirmed, it may be prudent to revisit the Functional Programs to determine what, if any, of the assumptions around service delivery, staffing, collections, and public spaces may have changed and to refresh the Functional Programs in that light.

Depending on the type of development process selected, the Functional Programs may need to be reframed and developed as part of the Output Specifications which become part of the contractual documents with the developer. Alternately, as part of a standard design build process, they simply may need to be revisited, with opportunities for Library staff to be involved in design decisions.

Additionally, these Functional Programs provide:

- Council with a statement of what Port Moody is receiving for the capital investment;
- The Library and the City with criteria and specifications to evaluate emerging designs and design options; and
- The Library and the City with a guide for subsequent operations.

## A WORD ABOUT STAFFING

Because of the detailed nature of a Functional Program document, assumptions have been made about the number of staff that will be accommodated in each Library. These numbers are provided for planning purposes only and not an indication of projected future staffing for operational purposes, or as a prescribed staffing model. However, the staffing provided falls in line with the general provision of staff from other systems, which typically vary from 0.6 to 0.7 full-time equivalent (FTE) staff per 1,000 residents.

As each Library project moves forward into development, staffing requirements should be reassessed and updated to reflect service priorities, the desired organizational model, and budgetary constraints.

## PROJECT OVERVIEW

A Functional Program was developed in 2017 for a new Central Library for Port Moody; at that time, the population in 2042 was projected to be 50,000 people. This 2025 update of the Functional Program extends the planning horizon to the year 2050 and assumes a population of 70,000 people. This differential has been used in the Master Plan to calculate the space needs for the library system, which includes a new Central Library and a Branch Library.

Libraries continue to evolve, and many of these changes are reflected in the Functional Program, particularly as they relate to the Port Moody context.

Whereas the focus of the previous generation of libraries was the warehousing of books and audiovisual material, current library design focuses on spaces for customers. Libraries are community gathering places. People of all ages come to the library to use it as a place for creation, inspiration, information gathering, collaboration, discussion, meeting, learning, discovery, work and refuge – as well as to borrow materials. They are staying longer. Library design is responding by incorporating a wide range of flexible spaces to support these increasingly diverse community needs.

The proposed **Central Library** is envisioned to be two or more stories high, with a parking facility below. In the Master Plan, the total Central Library area was anticipated to be 3,950 building gross square metres (42,500 building gross square feet). The result of programming is a Central Library that is 4,524 building gross square metres, (or 48,696 building gross square feet); this is 15% larger than the estimated area identified in the Master Plan for the Central Library. This result is within an acceptable tolerance of the Master Plan’s order of magnitude estimated area. Additionally, subsequent to finalizing the Master Plan, the City’s population projections have been updated and are larger than the figures used for the Master Plan.

The proposed **Community Branch Library** is envisioned to be a single storey high building for efficiency of operations and staffing. The Community Branch Library area will be approximately 1,860 building gross square metres, (or 20,000 square feet). Together with a redeveloped Central Library of approximately 4,524 building gross square metres, the two Library developments are required to support residents’ high utilization levels, and Port Moody’s projected population of 70,000 by the year 2050. Again, it is important to note that the City’s population projections have recently been updated and are larger than the figures used for the Master Plan.

Common to many newly constructed libraries, the future Libraries must incorporate:

- Visibility, image and form that celebrates the Libraries as welcoming to all, their openness to dialogue and ideas, their role as supplier of information and space where information is used in creative practices, and as a community gathering space;
- Self-service concepts and technology, such as clear wayfinding through visual connections, digital information displays, and self-check materials handling;
- Services showcased by way of visual transparency from the exterior, particularly focused on areas of high interest and community activity;
- A wide range of spaces for customers that support the full range of activities that customers want to participate in at the Library, such as meeting informally with other people, collaborating with other people, people watching, creating digital and physical projects, reading quietly in a group environment and alone, and studying in a silent environment;
- Easily accessed collections showcased in multiple formats, including print, multimedia and digital, including focus areas with highlighted collections, technology and customer seating;
- A range of adaptable and flexible spaces for delivery of programs led by the Library and/or by partners from other agencies; and
- Robust, flexible and easily reconfigured power and data infrastructures that support the use of digital devices and virtual information.

## DESCRIPTION OF THE WORK PERFORMED

The process to complete the development of the Functional Program documents is provided below:

- April 3, 2025: RPG conducted the first of three work session/meetings with personnel from the Library, focused on the Circulation and Information Desk functions.
- April 10: RPG conducted the second of three work session/meetings with personnel from the Library, focused on Technical Services and Collections.

- April 17: RPG conducted the last of three work session/meetings with personnel from the Library, focused on Program spaces.
- May 13: RPG submitted the draft Functional Programs for review by Library staff and the Library Board.
- June 13: RPG provided the final drafts of the Functional Programs to BTY for costing.
- June 20: RPG submitted the final drafts of the Functional Programs, based on detailed comments from the Library.
- June 30: RPG received final comments from the Library and submitted the final Functional Program to BTY for costing.

## ORGANIZATION OF THIS DOCUMENT

The Functional Program reports which follow each include the following subsections:

1. Summaries of the building's functional components, customer accommodation, staffing and occupancy, collections, and space requirements;
2. General Planning Criteria, which includes criteria related to the site and facility in general, including design objectives, criteria for the Library experience, the exterior public realm, interior public realm, operational systems and building systems; and
3. Component Planning Criteria, which includes criteria related to each of the functional components comprising each type of branch.

# 1.0 SUMMARIES

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# SUMMARIES

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## INTRODUCTION

This section summarizes information provided in the Functional Program, including functional components, workloads, staffing, occupancy, and space requirements.

**STAFFING** summarizes estimated staffing in terms of full-time equivalents (FTEs) where relevant, as well as total headcount and maximum occupancy.

**SPACE REQUIREMENTS** are tabulated to indicate the number of rooms or spaces (units), the net square metres per unit (nsm/unit), the total net square feet for each room or space (nsf), explanatory or supplementary remarks (Remarks). Each space is given a reference number (Ref) which is used for cross referencing within this document and which will be available for use in any future supplementary document (e.g., Space Data Sheets and Schematic Design).

Indented line items indicate a close adjacency with or accessed internally from the preceding line item.

## FUNCTIONAL COMPONENT SUMMARY

The proposed Central Library includes the following functional components:

1. Entrance, Welcome Area and Program Room, which includes:
  - A welcoming and inspiring Lobby space (the size of which may need to vary depending on overall siting of the Library), which collects customers from various pedestrian and vehicle approaches, including from underground parking, if provided, from adjacent streets and surface parking, and from the connection through the riparian lands to the existing civic precinct,
  - Informal seating for those waiting for others and preparing to enter the Library or go to their destination,
  - A single entrance to the Library itself, with an Information Desk and Accounts/Circulation Desk, check-out stations, Holds storage, and wayfinding tools,
  - Two Fireside Lounges for 15 people each, with views to the exterior,
  - A Coffee Kiosk, which will support activities within the Library (and with consideration given to serving customers outside of the Library for increased viability through a second service counter),
  - The New and Notable collection of high demand items,
  - Public washrooms on all floors accessed by the public,
  - A versatile Program Room that accommodates 150 but which can also be subdivided; it will include a small catering support area and storage space and will be accessible through the Library, but will have independent egress to the Lobby to allow events to extend beyond regular Library operating hours as required. Washrooms will also be accommodated here for associated use after-hours;

2. Collaboration Zone, located on the Ground Floor, which includes:
  - A dynamic and flexible area for groups to work collaboratively on projects, learn together, share information, meet and socialize in an environment that they can arrange themselves to best meet their needs. It accommodates up to 60 customers, and
  - An Idea Lab/Makerspace for up to 25 people that supports a range of creative activities;
3. Children’s Library, on the Ground Floor, that includes:
  - Children’s collections, and the spaces organized along age and abilities,
  - A flexible Program Nook for 60,
  - A Family Literacy Area that encourages gross motor skill activities,
  - Family room for nursing mothers and tending to infants and toddlers,
  - Spaces for caregivers and children to read and explore information together, as well as spaces for children to read on their own,
  - Spaces for caregiver adults to touchdown and monitor their children who may, because of their different ages, be in different parts of the Children’s area, and
  - Adjacent Youth Services staff office area and Workroom;
4. Adult and Teen Collections and Study Spaces, which is organized over at least two floors in a logical transition to encourage cross-use and that includes:
 

*Ground Floor*

  - Teen Collection and associated lounge seating,
  - Large Print Collection and seating for browsing,
  - World Languages Collections,
  - Flexible space for future collections not currently envisioned, and

*Upper Floor(s)*

  - Non-Fiction Collections on fixed and movable shelving, including six feature collection areas that include associated customer seating such as computer stations, casual seating or seating at tables that can easily be changed,
  - Fiction Collections on fixed and movable shelving, including two feature collection areas, as described above,
  - An acoustically separated silent study room for 50 customers,
  - A feature quiet reading area for 15 with views to the exterior,
  - Group table and individual table seating,
  - A meeting room for 20 to 30, that will be used for programs, as well as by staff and the Library Board,
  - Public washrooms;
5. Tech Centre, which is on the Second Floor, that includes:
  - The Second Floor service desk that provides both support for technology and for information queries and that will serve customers using the Second Floor Adult Collections and Study Spaces,
  - Ten computer stations,
  - Two special purpose stations, for scanning or other more space intensive activities,
  - An instructional space for 10 people that is open to general customer use when not scheduled for training,
  - Two modular creation rooms for activities that may require acoustic separation, such as audio recordings, and
  - Open demonstration space;
6. Staff Workspace, which is on the Second Floor, that includes:
  - Office and open workstations for staff not located in workspace on the Ground Floor (i.e., Administration, Digital and Information Services, Program Services),
  - Support spaces for staff copying and printing, sorting mail, training and collaboration/planning activities,
  - Staff amenities, such as washrooms, lockers, and lunchroom/lounge;

7. Back-of-House Functions, which will primarily be on the Ground Floor, that includes:
  - A Loading Bay and Storage Area,
  - Collections and Technical Services staff work areas,
  - Circulation Services Workstations, Workroom and automated materials handling machine, with easy access to the Accounts/ Circulation Desk,
  - Staff entrance and end of trip facilities,
  - Long-term storage (which may be below grade); and
8. Exterior Spaces, which includes:
  - Vehicular, pedestrian and service approaches and access,
  - Landscape elements, and
  - Spaces that may be used for Library and City programming, including a larger plaza adjacent to the entrance(s) to the facility.

### SUMMARY OF CUSTOMER ACCOMMODATION

The following table identifies total numbers of seats and stations within the Library by component.

Component	Customer Seats/Stations
1. Entrance, Welcome Area and Program Room	195
2. Collaboration Zone	85
3. Children’s Library	152
4. Adult and Teen Collections and Study Spaces	270
5. Tech Centre	73
6. Staff Workspace	-
7. Back-of-House Functions	-
8. Exterior Space	-
<b>Total</b>	<b>775</b>

### STAFFING & OCCUPANCY SUMMARY

The following table identifies overall staffing for the facility, including existing staffing, and future anticipated staffing.

Component	Existing FTE	Future FTE	Total Headcount	Maximum Occupancy
1. Entrance, Welcome Area and Program Room	-	-	-	9-10
2. Collaboration Zone	-	-	-	-
3. Children’s Library	2.0	3.0	3	3
4. Adult and Teen Collections and Study Spaces	-	-	-	5-6
5. Tech Centre	-	-	-	4
6. Staff Workspace	6.0	14.0	20	18
7. Back-of-House Functions	9.5	15.0	25	17
8. Exterior Space	-	-	-	-
<b>Total</b>	<b>17.5</b>	<b>32.0</b>	<b>48</b>	<b>56-58</b>

## COLLECTION RESOURCES

Type	Total Collection <sup>1</sup>
<b>Children's</b>	
Board Books	3,298
Picture Books	12,487
Easy Readers	6,048
Comics	8,127
Fiction/First Fiction	19,238
Non-Fiction	14,036
French	2,266
Magazines - Titles	69
Holiday	2,708
<i>Audio Visual (AV)</i>	
Other	700
<b>Subtotal, Children's</b>	<b>68,977</b>
<b>Teen</b>	
Fiction	5,679
<i>AV</i>	
Other	700
<b>Subtotal, Teen</b>	<b>6,379</b>
<b>Adult</b>	
Fiction	34,459
Non-Fiction	28,208
Large Print	2,118
World Languages	3,377
English as a Second Language (ESL)	1,232
Graphic Novels	5,036
Book Club bundles	839
White Pines	353
Magazines	100
Other	700
<i>AV</i>	
DAISY Books	75
DVD's	702
Video Games	1,247
Library of Things	1,200
<b>Subtotal, Adult</b>	<b>79,646</b>
<b>Total</b>	<b>155,002<sup>2</sup></b>

*Notes:*

1. Number is total collection items, including both items that are shelved and items in circulation.
2. The collection figures provided above provide one snapshot of what the collection could be. The size of each collection may vary as community needs change.

## SPACE SUMMARY

Component	Net Area (NSM)	Net Area (NSF)	Grossing Factor	Component Gross Area (CGSM)	Component Gross Area (CGSF)	Grossing Factor	Building Gross Area (BGSM)	Building Gross Area (BGSF)
1. Entrance, Welcome Area and Program Room	448.9	4,832	1.25	560	6,028	1.20	670	7,212
2. Collaboration Zone	227.5	2,449	1.10	250	2,691	1.20	300	3,229
3. Children’s Library	567.8	6,112	1.20	680	7,319	1.20	815	8,773
4. Adult and Teen Collections and Study Spaces	1,186.5	12,771	1.20	1,425	15,339	1.20	1,710	18,406
5. Tech Centre	153.8	1,655	1.20	185	1,991	1.20	220	2,368
6. Staff Workspace	214.0	2,303	1.35	290	3,122	1.20	350	3,767
7. Back-of-House Functions	347.5	3,740	1.25	435	4,682	1.20	520	5,597
<b>Total</b>	<b>3,146.0</b>	<b>33,863</b>	<b>1.22</b>	<b>3,825</b>	<b>41,172</b>	<b>1.20</b>	<b>4,585</b>	<b>49,353</b>
<i>Net-to-Building Grossing Factor</i>								<i>1.46</i>
8. Exterior Space	-	-	-	-	-	-	-	-
Identified Building Area of Master Plan							3,950	42,500

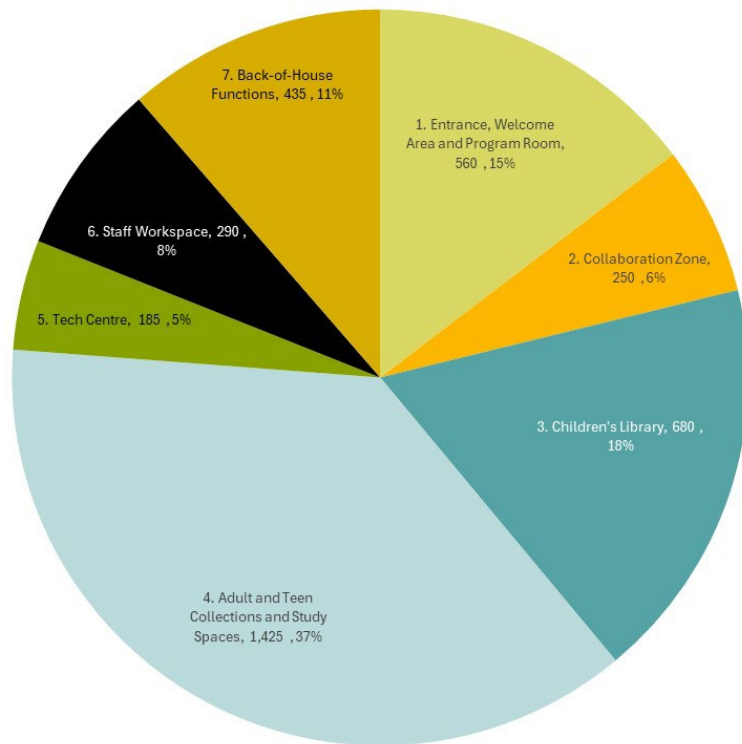
Note:

- The Total Building Gross Area is 49,353 BGSM, which represents a 16% increase over the area identified in the Master Plan. However, depending on the type of development, the Building Grossing Factor of 1.20 may be reduced depending on building elements that may be shared, such as egress stairs, mechanical rooms, etc.

The area allocation for the Children’s Library, at 18% of the total library area, is higher than other libraries, where the typical allocation is 10% to 12%. The increased allocation for the Central Library is driven, in part, by the higher circulation of PMPL’s children’s collections.

The following chart indicates the relative size of each component in terms of Component Gross Area (CGSM):

Area Summary (CGSM)



## 2.0 GENERAL PLANNING CRITERIA

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# INTRODUCTION

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This section of the document describes General Planning Criteria that should ensure user enjoyment, practical functioning, and efficient building operation.

General Planning Criteria should set the stage for the eventual development of design responses and technical specifications. They assume that any existing municipal, provincial, and/or national building codes and standards will take precedence over concepts suggested below.

More detailed component-specific design criteria are included in each Functional Component description.

General Planning Criteria are described in seven sections as follows:

- Project Assumptions;
- Site Development and Urban Planning Concepts;
- Architectural Concepts;
- Interior Design, Signage, and Display Concepts;
- Operational Concepts;
- Building Systems Concepts; and
- Sustainability Features.

## PROJECT ASSUMPTIONS

The following general assumptions guided the project:

1. Planning horizon for the Functional Program: 2050;
2. Projected population of the City of Port Moody in 2050: 70,000;
3. Component Gross Area: 3,825 square metres, or 41,172 square feet and a Building Gross Area of 4,585 square metres, or 49,353 square feet;
4. Future total collection size: 155,000 items;
5. Average collection circulation factor, i.e., that portion of the collection that is borrowed and that does not need to be accommodated in the Library: 24%;
6. Estimated future annual visits: 900,000, based on experience of other systems that sees a doubling of visits when a new library is built;
7. Site location: adjacent to or near the northwest corner of loco Road and Murray Street, as noted in the Master Plan;
8. No expansion of the Library facility will be possible at the proposed site;
9. Estimated parking spaces required assuming a Central Library of 49,406 ft<sup>2</sup> (approximately 4,590 m<sup>2</sup>): 124 parking spaces, plus an additional three accessible spaces (see City of Port Moody Zoning Bylaw, 2018, No. 2937); and
10. Future staff: ~34 FTE, based on the City of Port Moody's estimated population increase and on a review of peer library systems delivering equivalent services and similar workloads.

## SITE DEVELOPMENT AND URBAN PLANNING CONCEPTS

As noted in the Master Plan, it is assumed that the Library may be part of a comprehensive development on the former firehall site at the northwest corner of loco Road and Murray Street. As such the following goals have been identified for site development:

### Site Utilization

- To maximize the site efficiency for both the Library and potential development, consider locating parking for the Library in structured parking under the Library and associated plaza/landscaping and consider locating the urban plaza or a portion of it on top of the Library;

### Visibility

- The Library should introduce a new and exciting public space to the community;
- The Library should be visually distinct, yet complement the important civic spaces and facilities present or partnered with the site and introduce aesthetically pleasing and functional links to them;
- Signage for the Library should be prominently visible from loco Road and Murray Street;
- The Library's exterior and interior should be prominently visible from adjacent streets, sidewalks, and buildings, including those yet to be developed;
- The Library should be adjacent to a significant urban plaza. This space should be both visible and sheltered from the noise and bustle of the street;

### Views

- Provide significant views of nearby sidewalks, streets and urban features from the interior and possibly the rooftop of the Library;

- Provide significant views of adjacent and nearby natural features, including the adjacent riparian lands from the Library’s interior with opportunities to interpret exterior ecological values from within the Library;

### Pedestrian and Vehicular Access

- The Library should be an easily approachable and welcoming destination;
- Provide pedestrian access that links the Library to and from the centre of the site and to other planned buildings on the site;
- Provide pedestrian access linking the Library to and from the Civic Centre Complex and the Recreation Centre through the riparian lands, by way of an informal walkway;
- Provide convenient pedestrian access from adjacent sidewalks and streets to the Library;
- Provide vehicular access and surface and/or underground parking on or adjacent to the Library site. Underground parking should be well-lit and feel safe to Library customers and staff;
- Provide barrier-free access for each of the following:
  - pedestrians,
  - customers and staff being picked up or dropped off by car or bus,
  - customer and staff vehicles entering on-site parking areas (including bicycles) or accessing the drive-through book drop, and
  - service vehicles delivering and picking up materials to and from the Library.

*Pedestrians:* The Library must relate strongly to the adjacent streetscape. Pedestrian traffic must flow easily into the building via wide sidewalks.

*Customer/Staff Drop-off Points:* The Library will be a focus of activity. Site development may include bus stops, and a drop-off lane for customers (including persons with disabilities) arriving or departing by private car or mini-bus.

*Book Drop Access:* For the convenience of customers, a book drop should be easily accessible by pedestrians and, if possible, by vehicle.

*Parking Access:* Surface or structured parking must be provided for customers. Access and egress to parking areas must be fully integrated into the traffic patterns of adjacent streets. Lockable bicycle storage should be located at street level and highly visible to prevent theft.

*Collection Service Delivery:* Provide for the delivery of materials being transferred between the branches. Provide a dedicated staff/service access connecting directly into the staff work area. Provide a doorbell or other signalling device on the outside of the staff/service entrance for tradespeople, visitors, etc. to alert staff that their attention is required.

### Integration with Surroundings

While the Library must have a single controlled entry point, every effort must be made to develop a facility that is identifiable, approachable and accessible from multiple directions. Similarly, the Library should connect—visually and physically—to the streetscape to avoid inactive perimeter spaces.

### Building Visibility

The Library should be a visual focal point in the community. The visibility of the Library should be maximized from surrounding streets and from adjacent buildings. Facades and elevations present opportunities for a symbolic statement about the value of the Library to the community.

Not all customers will be familiar with the area or the Central Library. To facilitate access and wayfinding, the Library should be readily identifiable at some distance.

The Library may not be as high as surrounding buildings; therefore, consideration must be given to its appearance from above, particularly the screening of rooftop mechanical equipment and satellite dishes.

## Siting and Image

The external image of the Library is a directional and informational device for customers. It should make a symbolic statement about the social values that the Library embodies, and at the same time respect the architectural context in which it resides.

Urban design and architectural features present opportunities to define the customer's relationship with Port Moody Public Library's (PMPL) services. These might include the following:

- The siting of the building, the approach, the sense of safety;
- Views into the building during the day and at night;
- The visibility and configuration of the entrance;
- The presence and visibility of appropriate activity around the building;
- The scale and architectural vocabulary of the entrance, fenestration, and formal details;
- The actual writing/signage on the building; and
- The integration of urban design and landscaping elements with the building.

## Parking Facilities

General public and staff parking will be provided on-grade or in structured parking, depending on the siting context and opportunities. Due to such factors as the density of the neighbourhood, the size of the facility, and distance from public transit, the final number of stalls at the Library should be reviewed and confirmed in design.

## Exterior Signage

Exterior signage should include the following:

- Formal identification of "Port Moody Public Library", the PMPL logo, and the branch name fixed in an architecturally appropriate location, lit at night, as per PMPL's signage guidelines; and
- Floodlighting of the building, specifically of its architecturally outstanding elements.

## Urban Design Elements

Features such as innovatively designed bus shelters, street furniture, lighting systems, kiosks, ornamental paving, bike racks, landscaping, fountains, and artwork should be integrated as required to create a visually active, secure, and dynamic space.

## Landscape

Landscape is an integral part of adjacent urban design elements such as wide sidewalks and plazas. The development of public green space and the provision of trees and other vegetation can greatly enhance the civic image and attractiveness of the facility and provide the sense of a quiet refuge in the less active areas of the site. Care should be taken to provide direct routes through landscaping features from parking.

Consideration should be given to the provision of walking trails on the Library site that connect to walking routes in the neighbourhood.

## Site Services

All services to the building and other parts of the site should be located underground.

## Safety and Security

The safety and security of customers, staff and the building itself should be a major consideration in siting, design, landscaping, lighting, sightlines, and general visibility into and around the building. Crime Prevention Through Environmental Design (CPTED) principles should be integrated in design.

Ample exterior lighting should be provided at all entrances and for outdoor public space to identify secure public gathering places, promote access, and deter vandalism.

# ARCHITECTURAL CONCEPTS

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## Building Image

The Central Library's architecture should reflect the City of Port Moody and the beauty of its natural landscape. The building's design should be warm and inviting, using natural materials and be appropriately scaled to suit the site and surrounding buildings.

The architectural image should reflect contemporary library design that highlights the dynamic, interactive relationship between customers and the Library, between customers themselves, and between people and information.

Images and materials that emphasize monumentality, complex building systems, or elements of anonymous scale will seriously detract from the public spirit and accessibility of the Library service.

Where the Central Library is part of a larger development, it should be recognizable as a Library, with consideration given to separate articulation of the Library within the development. The Library should have its own prominent main entrance accessed at street level. This is also beneficial in the event of future pandemic events.

## Building Massing

The Central Library will have at least two levels. Given the size of a Central branch, spatial articulation may be successfully achieved using a range of vertical and horizontal volumes that correspond to levels of activity and the functions therein.

For easy customer access, including the use of strollers, the Children's Collection and any associated program space, should be located on the Ground Floor. While a quieter space, the newspaper/magazine and other quick reads area with soft seating should also be located on the Ground Floor to facilitate easy access for the Library's more senior demographic who may choose to spend time here as well as those using the Library as a third space.

## Permanence, Flexibility and Durability

The Library will be a long-term and significant member of the community it serves. Consequently, design should combine an appropriate formal vocabulary with appropriately durable material, and concepts that optimize flexibility, adaptability, and innovation. Design should strive to be timeless and not too tied to current trends that may appear dated in several years.

Architectural concepts and building systems should support building flexibility and adaptation.

## Building Entrance

The Library should be accessed by way of the following entry points:

- Street level access to the main entrance for the public; and
- Street level access to the staff/service entrance for materials and staff.

As customers may arrive at the Library before opening hours, the main entrance should be covered to shelter customers from the elements.

## Accessibility

The Library provides a free public service; therefore, the design of the building must reflect its universal accessibility, surpassing code requirements as appropriate.

Those outside the Library should be able to see into the building and have a sense of the range of activities taking place (both during the day and at night). Customers and staff inside the building must also have views of the community and its setting.

Interior space must be appropriately scaled for the movement of significant numbers of people. The layout of the building should be transparent and self-explanatory, encouraging customer security, confidence, comfort, and the full utilization of library resources.

Special access conditions are required by a variety of library customers:

- Customers with disabilities, including those using wheelchairs, scooters or crutches, and those who are sight impaired;

- Caregivers with young children in strollers; and
- Seniors unsure of their footing.

Within the Library there should be clearly identifiable traffic "corridors" and generous aisles in the bookshelf areas. An aisle width of 42" (106 cm) in all public collection areas is required. Cross aisles should also be a minimum of 60" (152 cm) wide.

### Hierarchy of Spaces

The building must include a logical hierarchy of spaces ranging from the larger volume of the entry area, generous circulation paths, central resource area, collection area, and finally, individual reading/study and work areas.

### Space Layout and Flexibility

Generally, the Library should be as open as possible, with walls kept to a minimum. Interior load bearing walls are impractical in all but a few areas. Permanent partitions are not desirable. However, all public areas must be clearly and securely separated from staff work areas and non-public space by partially glazed or solid partitions.

The Library must provide the ultimate in flexibility so that it can accommodate future program changes with no structural modifications. Building elements with the least likelihood of change should be grouped to ensure as much freedom of expansion and change of use in the remaining areas of the building.

Structural module or structural bay spacing will be based on consideration of the standard library shelving module of 3', with consideration given to shelving ranges that are a maximum of 15' or five bays. Columns, where provided, will be as few and as unobtrusive as possible within economic reason.

Strategies for ensuring future adaptability include providing energy saving building systems and features, multipurpose spaces, easily adaptable spaces, flexible and functional systems, such as a raised floor system, a regular structural grid, and use of easily reconfigured modular partitions and other building elements.

### Public Amenities

Public amenities should include drinking fountains, water bottle filling stations, public telephones, a family room, and accessible universal and gender-neutral washrooms (*gender-neutral washrooms to be confirmed*) with baby changing facilities. In the case that the Library may be located as part of a larger development, all of these public amenities must be located within the Library itself.

### Public Accommodation

Public accommodation will include the following:

- Informal seating comprised of lounge-type chairs and occasional tables;
- Multi-person tables;
- Double-sided and separate tables for individual study;
- Computer and tablet stations in an open library environment; and
- Fireplace features with informal seating.

### Service Desks

PMPL prides itself on providing welcoming and helpful customer service. Two service desks will be provided, one of which will be an Information Desk and the other, a Circulation Desk. They should be located within sight of arriving customers. These desks should be permeable, with high and low counters (for service to customers with disabilities and children). Service desks should be designed to minimize clutter from all angles of approach. The Information Desk will have a minimum of two staff stations and the Circulation Desk will have at least three staff stations. One station at each desk will be lower in height to serve those using mobility aids and children.

### Fenestration

Windows provide visibility into the public activity areas of the Library and will serve as an attraction to the passing public. They also provide visual relief to those inside the building. The amount of fenestration must be carefully gauged, balancing the advantages of visual continuity with the

need for environmental control and glare-free technical environments in some areas.

Selected windows in each area must be operable, not fixed, for ventilation in the event of mechanical failure. Operable windows must include screening or be situated sufficiently high to ensure collection security.

Window placement and size must take into consideration shelving heights, work counters and standard desk heights to avoid unsightly views from outside. Windows in the Children's area should be lower to allow smaller children to look outside. Wherever possible, windows should be located adjacent to public accommodation and staff work areas. All windows require ultra-violet (UV) filtering capabilities to reduce damage to books and other resources.

### Staff Work Area

The staff work area should be partially glazed or fully enclosed with demountable partitions. It will typically include built-in or modular workstations, layout and repair surfaces, a sink, shelving adjacent to desk space, and online access terminals/computer stations.

Provision of an automated sortation unit is dependent on annual circulation volume and material handling; however, for planning purposes, space has been allocated for one. The decision around use of an automated sortation unit should be made in conjunction with PMPL staff in the design stage of the project.

A technical support area should be provided adjacent to staff workstations. Adjacent storage should be provided for stationery supplies, materials, display items, etc.

### Staff Amenities

Staff amenities include washrooms, showers, lockers, and a lunchroom with kitchenette. The staff lunchroom should be acoustically treated to minimize noise transmission to and from public areas.

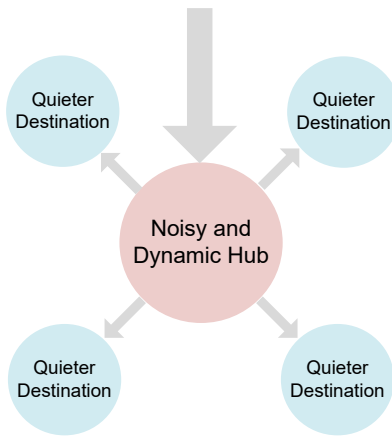
## INTERIOR DESIGN, SIGNAGE, AND DISPLAY CONCEPTS

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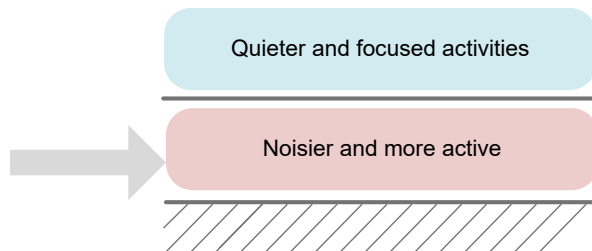
### General Features

General features of the interior of the Library facility should include:

- An interior environment that complements the Library's architectural image. It should be approachable in its aesthetic and convey familiarity, comfort, and a serene quality to customers using soft colours, textures, and natural materials;
- A general spatial concept that allows immediate visual contact with the majority of the building and for the layout of the spaces and functions to be easily understood;
- At minimum, a two level interior, with the Ground Floor somewhat larger than the upper floors, allowing for a multi-level atrium space with a balcony overlook;
- A focus on beauty through a concentration on building systems and furnishings forms, colours, and natural materials, all scaled for human comfort and enjoyment, with a focus on attention to small, immediate details throughout;
- Numerous opportunities for viewing and people watching, as well as secure and quiet refuge throughout;
- Highlighted collection feature areas and service destinations along a hub-and-spoke model, with a central arrival space with services, signage, and display features, etc., and specific related functions and spaces clustered around this central space;



- Zoning of public spaces that features higher activity toward the entrance, and quieter activity away from the entrance; higher activity on the Ground Floor, and quieter activity on the Second Floor;



- Generally open and contiguous spaces with enclosed spaces the exception; all enclosed space must be acoustically dampened;
- Program spaces should be located so that any noise generated does not disrupt quieter areas of the Library;
- Program spaces should be located as close to related collection resources as much as possible;
- Ample natural light throughout the interior;
- Exterior walls that feature large expanses of glazing; provide multiple views into and out of building, to and from adjacent buildings, natural features, and public spaces;

- Intuitive wayfinding, visual cues and connections that ensure that building 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, and
  - experience secure individual workspaces and private destinations.

### Specific Features

The following specific features should be provided:

- Minimum 4.5 metre ceilings in main public spaces, with some multi-level storey spaces with balcony overlooks;
- An open feature staircase strategically placed so as to not obstruct sightlines and functioning of general floor areas;
- Enclosed Meeting and Program Rooms and nooks with modular construction and significant glazing. These rooms should have provisions for audio visual (AV) including connection to the public address (PA) system, and whiteboards;
- Visible and welcoming Fireside Lounges featuring a prominent fireplace and a high, articulated ceiling;
- Ceiling systems and ceiling suspended features that are major design opportunities, with care taken to avoid visual monotony;
- Decorative ceiling features that are suspended from an exposed structure and used to define specific areas and functions below; skylights may admit welcome natural light; and
- Print collections that are laid out to be optimally visible, self-explanatory, and visually interesting, including shelving of variable heights, with many opportunities for face-out displays.

## Functional Organization

Design of the Library facility should include the following organizing principles:

- Individual workspaces that are typically located adjacent to surrounding windows; with active learning spaces at the centre, although all spaces should have ample daylight;
- A variety of spatial scales, including large, medium, and individually scaled spaces;
- A multi-storey space that houses staircase and glazed elevator systems, with light and views from above;
- Spaces which may be modified in the future that are designed to allow reconfiguration and expansion with minimal disruption of services and operations; and
- Ideally, librarian and staff workstations should be located close to their dedicated areas in the library.

## Lighting

Principles for lighting should include:

- Ample artificial lighting throughout the interior;
- General artificial lighting that is indirect and glare-free;
- Local task lighting that is used to illuminate work surfaces, displays, and special features; and
- Windows that have operable window coverings for shade and glare control.

## Acoustic Quality

Principles for acoustics should include:

- Acoustic shielding in all multipurpose learning and study spaces, offices and meeting rooms; and
- Generally, noise from any mechanical system will require acoustic dampening.

## Ergonomics and Human Factors

Principles for ergonomics and human factors should include:

- Spatial dimensions and proportions, furnishings and fixtures that respond to the ergonomic and human factors realities of the Library staff and customers, particularly their ability to access, move, lift, adjust, and rearrange collection resources, equipment, furniture, doors, lighting, play equipment, presentation equipment, and storage units; and
- User seating and workspaces that are selected due to their ergonomic design.

## Furnishings

Furnishings will be a key design element contributing to the artistic character of the building. Principles should include:

- Simplicity of design and coordination of forms and colours that embraces natural elements of the surrounding riparian ecosystem and that are sustainably sourced;
- As much as possible, furnishings that allow for flexible use over time (i.e., movable and reconfigurable);
- Selecting furnishings for ease of maintenance, high durability and conformance to infection control and general maintenance policies and procedures; and
- Power and cabling access that is integrated with furnishing design and layout.

## Fixtures and Equipment

Principles and criteria for fixtures and equipment should include:

- Feature signage and displays, wall/ceiling-mounted projection equipment and integrated whiteboards or screens;
- Presentation equipment that is either movable and/or securely fastened to walls or ceilings;

- Collections stored on shelving units typically three feet wide and of variable height throughout the Library to accommodate flexibility in changing collection sizes and to allow for sightlines with respect to lower height shelving;
- Shelving/display for non-book items should be thoughtfully considered based on item type and ease with which customers can browse these collections;
- Generally, the various collections will be grouped by height, with Non-Fiction having higher shelving than Fiction and Fiction also having more feature face-out shelving for display. Adult Collections could be spread across three to four different shelving heights. The Children's Collection could be spread across at least two different shelving heights;
- Shelving units that are movable (if under 132 cm high) or fixed to the floor structure, (if higher than 132 cm); and
- Display features that are freestanding, suspended, and/or mounted on wall systems.

## OPERATIONAL CONCEPTS

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Planning and design must consider the following operational concepts and systems:

### After-Hours Egress

- A direct means of egress from the Program Room to the Lobby must be provided to facilitate after-hours use;

### Room Booking

- Meeting and Program Rooms will be used/booked by Library staff and/or the public for meetings, programs, and other events;

### Service Points

- There will be one Information Desk on each floor level plus a Circulation Desk on the main level;

### Movement Systems

- Circulation 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; there should be no dead ends or hidden corners;

### People Moving Systems

- Many customers will use mobility devices, such as walkers, automated wheelchairs, and, especially, strollers accommodating small children. People moving systems must accommodate this with all systems optimizing ease of movement, orientation, and safety;
- Open staircases will connect the floor levels of the Library. Staircase design should invite frequent use, including the provision of interim landings with a bench seating area for rest and general prospect;
- A public elevator will provide the second key means of vertical public movement; access to it will be supplemented by access to and frequent availability of an adjacent service elevator;

### Materials Handling Systems

- Library customers are the primary carriers of Library collection resources into and out of the building. Customers 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 customers carrying these materials, and should support the need to set them down occasionally on horizontal surfaces;
- The exterior materials drop must connect directly to the materials sorting area;
- Consideration should be given to accommodating an automated materials handling system even though it may not be included at the outset; it should involve no or 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 staff from the sorting room (Circulation Services Workroom) via Book Trucks;
- Other supplies and equipment may 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 elevator;

### Security Systems

- All materials will have radio-frequency identification (RFID) tags that will be used for identification and security. Unobtrusive security gates at the entrance to the Library facility will be used to monitor the security of the collection utilizing the RFID system;
- Passive surveillance will be provided through the strategic positioning of general occupants and staff, who will be located with direct sightlines to all activity areas;
- There will be a security guard on duty at all times. A desk for the security guard will be provided in the entrance area;
- Keypad or card activated locks (swipe or proximity) will be provided for secured areas;
- Card operated entry systems will be provided for staff-only workspaces;
- Provisions for a multi-camera security system should be installed throughout, allowing for flexibility in deciding to install or not;

### Crime Prevention Through (Interior) Environmental Design (CPTED)

General safety and security is a critical objective. The principles of CPTED must be incorporated into all systems and design features, including:

- Public areas that are visible from staff service desks, service points, and staff work areas;
- Safety and security features that are integrated unobtrusively through the use of discreet, intuitive layout and design features, (including interior glazing), rather than through obvious surveillance and/or physical barriers;

- The design, materials, finishing details, fixture installation features, and maintenance activities of finishes that minimize the likelihood of injury due to accidents, falls, etc.;

### Communication Systems

Communications systems should include:

- Provision of a climate-controlled server closet within the Library;
- Provision of a flexible network that is easily accessed, managed, and reconfigured;
- Access to IP-based (internet protocol) television service in common gathering areas, program rooms and in meeting rooms;
- Internet access provided throughout common areas, and learning and study areas through a robust and high-capacity Wi-Fi system;
- Display monitors with permanent and/or ephemeral signage provided at critical points and in visitor gathering spaces;
- High speed charging stations;
- Electrical outlets provided in association with casual seats to support use of personal devices; and
- Work tables with data and power but that is not hard wired in order to support the reconfiguration of tables; and

### Waste and Recycling Management

Waste and recycling management systems should include:

- Waste and recycling collection points in public and staff areas;
- Building Service Worker Closets on each floor; and
- Sufficient space in non-public areas to store accumulated materials.

# BUILDING SYSTEMS CONCEPTS

## Overall Building Systems Concept

The overall building systems concept should be comprised of a kit of parts consisting of:

- An efficient and regular structural system;
- A high performance, sustainable building envelope;
- A network of universally distributed, easily accessed Building Services;
- Reconfigurable, non-structural, secondary partitions systems; and
- A family of reconfigurable interior design elements and/or furnishings that are sustainably sourced.

The building systems concept should make it possible to avoid unnecessary cosmetic features and finishes. It should allow optimal flexibility and modifications to the interior character.

## Partition Systems

In line with the overall building systems concept described above, the partition systems should include:

- Structural system column and bay spacing that accommodate the installation of non-load-bearing partitions, with all non-loadbearing walls, with the exception of 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 demountable to allow for possible future reconfiguration of space;
- Movable partitions that are designed to be anchored to adjacent ceilings, walls and/or adjacent partitions 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.; and

- Wall surfaces that have low reflectivity and that can be cleaned and maintained easily.

## Fenestration and Glazing

The criteria related to windows and glazing throughout the facility should include:

- UV and glare shielding exterior glazing including operable blind systems, with preference given to electrically assisted systems;
- Internal glazing as possible for clear orientation, light transmission, spatial continuity, and informal visual surveillance;
- Glazing and windows that are impact-resistant;
- Glazing with high performance thermal properties;
- 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
- Bird-friendly window design, materials and treatments to reduce or eliminate bird strikes.

## Floors

Criteria related to flooring should include:

- Flooring that is load bearing throughout to provide flexibility in moving and expanding the collections as needed;
- A raised floor system throughout to allow for universal access to sub-floor conduits and heating, ventilation and air-conditioning (HVAC) plenums;
- Floors that feature a combination of non-skid surfaces, such as rubber, resilient or carpet tile;
- Floor systems that include seamless or flush joints with no raised thresholds at doorways; and
- Floor materials and finishes that are selected for ease of movement, sustainability, and acoustical performance.

## Plumbing Requirements

Criteria related to plumbing should include:

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

## Materials and Finishes

Criteria related to materials and finishes should include:

- 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 in public spaces and high-volume staff spaces, particularly where Book Trucks and other materials are moved;
- Non-allergenic materials; and
- Materials that are selected for durability and low maintenance.

## Lighting and Electrical Systems

Criteria related to lighting and electrical systems should include:

- Introduction of innovative, energy efficient and sustainable lighting systems, with consideration given to light emitting diode (LED) lighting, to create a distinctive image and to address the functional complexity of many activities occurring in the program spaces;
- Decorative focus lighting suspended at an appropriate height in reading areas and in the Fireside Lounge;
- 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 meeting room space;
- Programmable lighting in most public areas including manual override systems;
- Reading areas should have general lighting that is bright and adjustable;
- Use of controls, access panels, wiring, conduit and fixtures that are not publicly accessible, demountable or breakable;
- Consideration given to accessing lighting fixtures for maintenance;
- Provisions should be provided for the installation of digital signage throughout, allowing for changing signage needs as required; and
- Infrastructure planning should be robust to support future technologies beyond current CAT5/power needs (i.e., additional conduits).

## General HVAC Systems

Criteria related to general HVAC systems should include:

- 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;
- Thermostats placed away from direct sunlight;
- Use of technology that has been tested;
- Consideration given to a Thermenex type system that makes use of heating and cooling sources within the facility and distributes these as necessary; and
- Individual environmental controls.

## Acoustic Systems

Criteria related to acoustic systems should include:

- Wall, movable partition, floor and/or ceiling-mounted acoustic shielding 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; and
- Acoustic assemblies, such as sound reflectors, acoustic panelling on walls and/or ceilings that are fully secured.

# SUSTAINABILITY FEATURES

It is expected that the Library facility will be in use for the next 50 or more years. As such, the strategy around environmental sustainability should take the long view, with strong consideration given to its continued operation in a post-carbon world. The following criteria relate to sustainability features.

## Standards

Criteria related to environmental standards should include:

- [BC Energy Step Code and Zero Carbon Step Code](#);
- [City of Port Moody Sustainability Report Card](#);
- Creation of a sustainability profile of the Library facility from typical and innovative sustainability practices and standards that also establish the building as a valuable demonstration project and teaching tool; and
- Consideration of approaches to environmentally responsible materials selection, and energy use that meet or exceed approved sustainability standards.

## Energy Consumption Strategies and Targets

Criteria related to energy consumption should include:

- Optimal passive solar orientation as well as strategic envelope apertures and enclosures for passive and active solar gain;

- Opportunities for natural ventilation and cooling; allowing warm and cool air to pass over concrete slab floors; use of solar chimney features to extract air; and
- Exposed mechanical and electrical services to demonstrate the technology used as part of the building's teaching capability.

## Water Consumption and Management

Criteria related to water use should include:

- Innovative approaches for the management of groundwater related to building construction and maintenance;
- Recycling and reuse of waste water produced on-site;
- Reuse of treated water in a general grey water system and for local irrigation; and
- Use of solar panels to generate hot water augmented by point of use heating.

## Materiality

Criteria related to materials and finishes should include:

- Use sustainable materials in all construction process or construction systems;
- Consideration of polished concrete floors, heated and cooled with in-floor radiant systems;
- 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; and
- Use of materials that are chlorofluorocarbon (CFC) and hydro chlorofluorocarbons-free (HCFC).

## 3.0 COMPONENT PLANNING CRITERIA

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# INTRODUCTION

The basic “building block” for physically organizing facilities projects is the FUNCTIONAL COMPONENT. A functional component can be defined as a grouping of activities and assigned spaces which are physically related by their common mission to satisfy a specific group of functions or operations. A functional component may or may not be synonymous with a department, since the term “department” refers to an administrative organizational structure and not a physical planning structure.

Information for each functional component is presented under the following headings:

**COMPONENT OVERVIEW** provides a high level overview of the component including a brief description, key metrics, key adjacencies, a statement of character, and indicative photos.

**KEY ADJACENCIES** indicates the priorities of the component for its location relative to other components.

“Direct access by internal or dedicated circulation” refers to components which are horizontally contiguous and linked internally. This form of access avoids movement through the general circulation system of the facility.

“Direct access by general circulation” refers to components linked by a minimal amount of horizontal and/or vertical general circulation.

“Convenient access by general circulation” refers to components linked by substantial horizontal and/or vertical general circulation.

**FUNCTIONAL DESCRIPTION** provides information on the feature, character, general services or activities of the component.

**OPERATIONAL DESCRIPTION** provides information on the primary operational concepts or systems which support the functional activity of the component.

**WORKLOAD – EXISTING AND PROJECTED ACTIVITY** summarizes existing and projected workload in appropriate units. This information is

used to estimate the space requirements of the component. Not all components have quantifiable workloads.

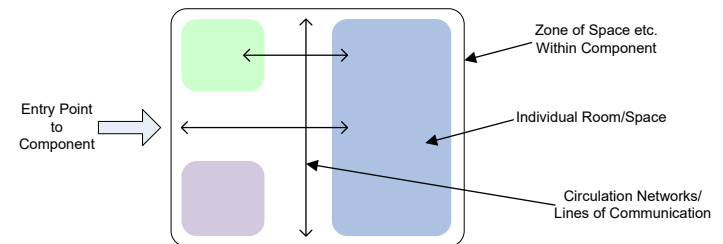
**STAFFING & OCCUPANCY ESTIMATES** summarizes future estimated staffing in terms of full-time equivalents (FTEs) where relevant, as well as total headcount and maximum occupancy staffing. Staffing estimates are provided to support planning only and should be revisited during the project development process.

**DESIGN CRITERIA** presents information as follows:

**Internal Relationships/Concepts** indicates basic criteria and concepts for the organization or environmental design of space. They are organized into Architectural Concepts which includes zoning and organization of space; Interior Design Concepts, which considers interior design concepts, signage, wayfinding and display concepts; Operational Concepts; and Building Systems Concepts, which indicate specialized structural, mechanical, power and information systems requirements. This section also includes a conceptual functional diagram showing organizational principles to be pursued in the design of the component.

The content of the diagrams is generally reflective of the headings used in the narrative and in the space requirements lists referring to “zones” of space, groups of rooms and, in some cases, individual rooms for which important internal relationship need to be emphasized. In general, thin lines terminating in arrows are used to indicate principal circulation networks or lines of communication between zones of space, groups of rooms, or individual rooms. Continuous/unbroken bold lines forming rectangles typically indicate zones or rooms.

Example:



**Space Requirements** are tabulated to indicate the number of rooms or spaces (units), the net square metre/feet per unit (nsm or nsf/unit), the total nsm/nsf for each room or space, explanatory or supplementary remarks (Remarks), and a reference number (Ref) used for cross referencing within this document and which will be available for use in any future supplementary document (e.g., Space Data Sheets and Schematic Design).

Indented line items indicate a close adjacency with the preceding line item.

Functional components are as follows:

1. Entrance, Welcome Area and Program Room;
2. Collaboration Zone;
3. Children's Library;
4. Adult and Teen Collections and Study Spaces;
5. Tech Centre;
6. Staff Workspace;
7. Back-of-House Functions; and
8. Exterior Spaces.

# 1. ENTRANCE, WELCOME AREA AND PROGRAM ROOM

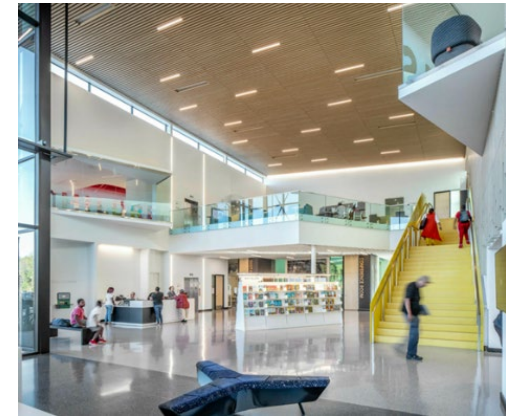
## FUNCTIONAL DESCRIPTION

### COMPONENT OVERVIEW

This component accommodates the main Entrances to the building, the building Lobby, a secure entrance to the Library space, the Program Room and other features, services, and functions encountered as one enters and leaves the Library.

### KEY ADJACENCIES

- 1 **1. Exterior Spaces** Provide direct access by general circulation to adjacent pedestrian and urban spaces for the movement of visitors and Library customers.
- 2 **Parking Facility** Provide direct access by general circulation to adjacent Parking Facility for the movement of visitors and Library customers.
- 3 **2. Collaboration Zone** Provide direct access by general circulation to the Collaboration Zone for the movement of individuals and groups working on self-directed projects.
- 4 **3. Children’s Library** Provide direct access by general circulation to Children’s Library for the movement of families and children.



Links from parking & exterior space, program room, library entrance features, services, and functions

## FUNCTIONAL DESCRIPTION

This component accommodates three zones: the Lobby, the Library Entrance/Welcome Area, and a Program Room.

The main Lobby for the building is approached through multiple entrances from the Exterior Spaces. Within the building, the Lobby provides access to the Parking Facility, and the secure threshold-Entrance to the Library space and a means of egress from the Program Room/Auditorium.

The Lobby is a transitional, connecting space that should provide multiple visual and physical connections to surrounding sidewalks and urban spaces, a comfortably-scaled indoor public space, and gateway to the secured Library space. The Lobby is also a multipurpose gathering and dispersal space. It is the community front porch and leads to the actual Library Entrance.

The Library Entrance includes unobtrusive security gates. It opens to the Welcome Area that contains spaces and services required to welcome, orient, and distribute large numbers of Library customers.

The Program Room/Auditorium is key to fulfilling the Library's mission, vision, and values in providing welcoming and inspiring space to promote lifelong learning (see the PMPL Master Plan for the full Mission, Vision, and Values, pg. 14). This versatile space accommodates up to 150 people for large group programs or it can be subdivided to run concurrent events and meetings. The room will serve as a community forum, meeting room, small conference space, and host for large active family programs, including those that require stroller parking for sizeable numbers, such as Babytime. The Program Room/Auditorium is normally accessed via the Library Entrance and Welcome Area. After-hours egress from the room is provided directly to the Lobby.

Features of the Lobby include:

- Weather-protected entrances;
- An appropriately scaled multi-level atrium-type space (or with skylights), accommodating movement and congregation space, seating and signage, and including visibility from adjacent external approaches;
- Dedicated stairs and elevator systems in the Lobby connecting to underground parking;

- Clear sightlines from the Lobby into Library space;
- Egress from the Program Room/Auditorium to the Lobby for programs and events that extend beyond Library operating hours; and
- Significant "green" features, including plantings and/or living walls, as well as optimal daylight, sunlight and views of the sky and changing weather conditions.

Features of the Library Entrance and Welcome Area include:

- Large scale retractable doors separating Lobby space from adjacent secure Ground Floor Library space;
- The Library Security Threshold itself, followed by a sequential arrangement of activities and spaces in the Welcome Area, generally as listed below:
  - exterior materials return with direct connection to the Circulation Services Workroom (see Component 7. Back-of-House Functions),
  - strong visual and spatial connections to the overall Library space and the layout of its features and resources, especially pathways, destinations, stair and elevator access,
  - Security Desk for a security guard,
  - Self-Service Check-Out stations,
  - Information Desk where customers will have access to staff who will provide help using Library resources and equipment, readers advisory recommendations, answers to information requests, and similar services,
  - Circulation Desk with direct connection to the Circulation Services Workroom (see Component 7. Back-of-House Functions) where customers are able to register for a Library card, enquire about their account, pay fines, and obtain general information about the Library,
  - Holds self-pick-up area by the Information and Circulation Desks,
  - Coffee Kiosk with bistro tables and seating,
  - Fireside Lounge,
  - primary access to the Program Room/Auditorium,

- displays for New and Notable Collections,
- Newspaper/Magazine and Quick Read Collections,
- direct views and paths to stair and elevator systems to access upper level services and collections,
- direct views and paths to upper level services and collections, and
- access to Public Washrooms.

Features of the Program Room/Auditorium include:

- Space for up to 150 people;
- A folding partition that allows for spatial subdivision into two or more rooms;
- Multiple room entrances allowing simultaneous uses;
- AV equipment; and
- Supporting furniture and equipment storage facilities as well as a small catering support area.

Activities taking place within the general component include:

- Movement of large numbers of building visitors and Library customers in and out of the Lobby;
- Movement of large groups of event and program attendees in and out of the Program Room/Auditorium and Lobby;
- Movement of large numbers of customers in and out of the Library space;
- Movement of collection materials carried in and out of the building by customers;
- Return of collection materials using materials drop(s);
- Scheduled Library and community-led events in the Program Room;
- Providing help using Library resources and answering information queries at the Information Desk on the Ground Floor;
- Answering enquiries about customer accounts and registering at the Circulation Desk on the Ground Floor;

- People watching and socializing;
- Purchasing beverages and snacks at the Coffee Kiosk and consuming them;
- Browsing and reading newspapers/magazines and other quick reads in the Fireside Lounge area;
- Prominent merchandizing of collection to facilitate browsing of new, high demand and featured titles/collection items in the Library Entrance and Welcome Area;
- Self-serve access of Holds collection materials;
- Self-check of materials;
- Displays of topical events; and
- General directional, event and ephemeral signage.

Activities specifically within the Program Room/Auditorium include:

- Library programs and events for all ages including:
  - early literacy programs for large groups of caregivers and children, including Babytimes and story times with stroller parking,
  - author readings, panels and book launches,
  - workshops and classes on a variety of topics including financial literacy, writing, health, digital literacy, job skills (resumé writing, interviews, etc.), and various educational topics,
  - community debates and open houses,
  - job fairs to connect employers and potential employees,
  - mini conferences,
  - book clubs,
  - celebration of international events, such as Science Literacy Week, Scratch Day, Table Top Day, and Free Comic Book Day,
  - sensory story times for families with children with sensory processing disorders,
  - conversation circles and classes for English language learners,
  - day camps and holiday programs,

- expert panel discussions to encourage community discourse on big issues,
- active after-school programs for children and teens,
- maker fairs, and
- family events, such as children’s musicians and entertainers;
- Programs conducted by and with other agencies and community partners;
- Provision of catering support;
- Wi-Fi access and use of personal technology; and
- Storage of equipment and supplies.

## OPERATIONAL DESCRIPTION

### Hours of Operation

Hours of operation for this component will be determined as the operational profile of the new building evolves.

The Lobby and Program Room/Auditorium may occasionally be open when the rest of the Library is closed.

### User Profile

The following types of users will access this component. Some users will be coming to this area as a destination (e.g., Fireside Lounge and Program Room/Auditorium) while others will be quickly passing through:

- People who may be simply passing through the building as they move through the surrounding parks and urban areas;
- Visitors to the building who come to experience its design and unique amenities;
- Community members accessing programs, events or meetings without using other Library services;
- Customers carrying personal effects, including books and other Library resources, clothing, personal devices, and sometimes food and drink;

- Customers who have never been in the Library before, or who are still somewhat unfamiliar with the building and its services, and who will require time and space to orient themselves to the building;
- Customers familiar with the building and its services and who know exactly where they are going, and who will move through the component quickly and into the Library;
- Customers who are waiting for others, people watching and/or standing still, browsing displays, reading signage and adjusting to the building environment;
- Customers in groups, who will typically move more slowly than individuals alone; and
- Many families with children, who will typically move more slowly and be encumbered with strollers and other equipment.

### Movement of Building Users and Library Customers

All customers using the Library will move through this component, so it will have the heaviest use of any of the building components. All movement spaces must be scaled accordingly.

There will typically be over 2,500 people a day moving in and out through this component.

Some building visitors will only access functions taking place in the Program Room and may not need to access the remainder of the Library.

The majority of building visitors will access the Library via the Security Threshold in this component in order to access Library components and services.

The main operational goal will be to allow the maximum number of visitors and customers to safely and comfortably move into the building, orienting themselves to their appropriate internal destination, and to move back out into the surrounding community when their visit is completed.

### Movement of Materials

Collection resources may be dropped off by customers at materials drops located both outside the building and/or within the Lobby area.

Materials drop-offs should be directly connected to the Circulation Services Workroom located in the Back-of-House Functions component.

All borrowed collection materials will enter and leave this component carried by customers, who pass through the RFID security gates at the Entrance.

Some food and drink may be purchased at the Coffee Kiosk located in the Library Entrance.

Library staff will enter the Library through a separate staff entrance located in Component 7. Back-of-House Functions on the Ground Floor.

Storage of furniture, supplies and materials will be located in Component 7. Back-of-House Functions.

### Staff Support

The Circulation Desk will provide general continual surveillance of the Library Entrance and Welcome Area, including the Fireside Lounge.

The Ground Floor Information Desk will also provide surveillance of this area, in addition to the rest of the floor. This desk will be staffed at all times; however staff will also provide roving service throughout the Ground Floor.

Library program coordination staff may be present in the Program Room/Auditorium and the Lobby.

### WORKLOADS

Anticipate movement in and out of over 2,500 customers a day.

### Customer Accommodation

Type	Number of Stations	Number of Seats	Customer Occupants
Lobby Public Seating (bench seats)	-	10	10
Fireside Lounge (lounges seats and side tables)	-	15	15
Coffee Kiosk (tables and chairs)	-	14	14
Welcome Area Public Seating (bench/lounge seats)	-	6	6
Program Room/Auditorium (seats)	-	150	150
<b>Total</b>	<b>-</b>	<b>195</b>	<b>195</b>

### Collection Resources

Type	Items
<i>New and Notable Collection</i>	200
Books	
Media	
<b>Subtotal, New and Notable Collection</b>	<b>200</b>
<i>Fireside Lounge</i>	
Magazine and Newspaper (titles)	68
<b>Subtotal, Fireside Lounge</b>	<b>68</b>
<i>Holds</i>	
General	1,000
<b>Subtotal, Holds</b>	<b>1,000</b>
<b>Total</b>	<b>1,268</b>

### STAFFING AND OCCUPANCY ESTIMATES

Estimated staffing and occupancies for this component are summarized below in full-time equivalents (FTE), headcounts, and maximum occupancy.

Position	Existing FTE	Future FTE	Total Headcount	Maximum Occupancy
Information Desk (Ground Floor)	-	-	-	2
Circulation Desk	-	-	-	3
Program Room/Auditorium	-	-	-	1-2
Circulation Staff <sup>1</sup>	-	-	-	-
Shelver <sup>1</sup>	-	-	-	-
Librarians/Library Assistants <sup>2</sup>	-	-	-	-
Coffee Kiosk	-	-	-	2
Security Staff	-	-	-	1
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9-10</b>

Notes:

1. Included in staffing tables in Component 7. Back-of-House Functions.
2. Included in staffing tables in Component 6. Staff Workspace.

## DESIGN CRITERIA

Design criteria relevant to this component address unique conditions and design features required in the space.

For planning criteria that apply to the exterior generally, see the General Planning Criteria section of the Functional Program.

### Internal Relationships

#### Architectural Concepts

- There are three zones involved: Lobby, Library Entrance and Welcome Area, and Program Room.
- This component is the first that building users encounter in the Library. As such, it is intended to be a spatially and aesthetically notable destination, ideally a multi-level atrium Lobby space, leading to an appropriately scaled and impressive multi-level Entrance and Welcome Area.
- The space should be simple and logically understood; the intuitive layout of space, features and sightlines should facilitate easy self-orientation. Key aspects include:
  - views of parkland/greenery, exposure to daylight, the sky and changing weather patterns;
  - views of activities taking place in adjacent streets;
  - views across the Ground Floor of the Library; and
  - visual connection to upper levels of the Library.
- With respect to after-hours use, the Lobby and Program Room should each have separate access to the exterior as well as access to washrooms.

#### Interior Design Concepts

- The Lobby and Entrance should make a striking and memorable impression on visitors, through use of spatial volume, vibrant colours, original building systems features, and multiple views into and out of the building, and options for public art (there are currently permanent collections, but to continue to allow for temporary displays as well). As these will be very active areas of the Library and the first spaces

customers travel through, they are logical locations for significant design features, including unusual materials and daylight, as well as innovative, attractive, comfortable social spaces and furnishings.

- Signage must be carefully arranged to optimize user self-direction and efficient movement. There may be daily event signage, Library building floor layout and collection organization signage, and donor recognition/commemoration signage. Signage and wayfinding should be easily read and understood from a distance and incorporate clear graphics and colour.
- There should be expansive sightlines from the Information and Circulation Desks to the Security Threshold and Library Entrance.
- The Fireside Lounge will require a feature fireplace, ideally a high ceiling, decorative ceiling treatment, special lighting, and comfortable lounge furnishings.
- The Fireside Lounge and adjoining areas should have pleasant views of Exterior Spaces as well as walls that are conducive to showcasing artworks.
- The Fireside Lounge must include:
  - a combination of hard and soft flooring materials;
  - data ports and power outlets; and
  - an acoustic control system.
- Being a very high traffic area, all materials and finishes should be durable, easily cleaned and maintained.

#### Operational Concepts

- This component includes public space with very high customer traffic.
- All spaces used by the public must be suitably scaled, optimally direct, safe, attractive and people-friendly. Good customer service is an important part of PMPL; the Library Entrance should be conducive to staff greeting and assisting customers upon arrival.
- Spaces must be scaled to accommodate the movement back and forth of large numbers of people, as well as the presence of stationary customers accessing services, and stationary services, and resources.

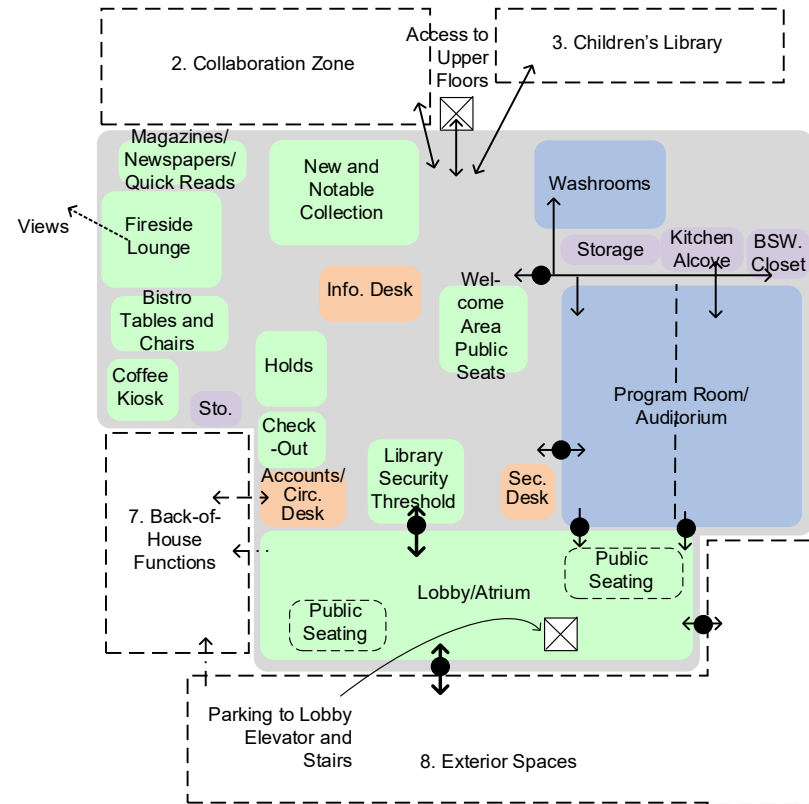
- Seating areas and informal gathering areas should not conflict with major movement paths to and from the Library threshold. Queues should not block circulation paths.
- The following services and spaces should be managed adjacent to the Information and Circulation Desks:
  - Inter-Library loans (see Component 7. Back-of-House Functions);
  - lost and found (see Component 7. Back-of-House Functions);
  - materials sorting (see Component 7. Back-of-House Functions);
  - staff workspace (see Component 7. Back-of-House Functions);
  - minor mends and processing (see Component 7. Back-of-House Functions); and
  - *(Others TBC).*
- Consideration should be given to offering an after-hours Holds pick-up.
- In the event of a pandemic, consideration should be given to offering a drive-through Holds pick-up.
- An unobtrusive Security Threshold will be incorporated into the design at the Library Entrance. The Ground Floor of the secure Library space should be spatially contiguous with the Lobby.
- Non-obtrusive and natural surveillance will be essential. No public area of this component should be hidden from view.

**Building Systems Criteria**

- A materials return drop located near the Library Security Threshold will connect to the Circulation Services Workroom in Component 7. Back-of-House Functions.
- A PA system should be installed throughout for announcements relating to closing hours, evacuation procedures, etc.
- There should be provisions for the future installation of advanced security technologies.

**Functional Relationship Diagram**

The spatial organization of this component will be generally as shown in the diagram below.



LEGEND	
<span style="display:inline-block; width:15px; height:10px; background-color:#90EE90;"></span>	PUBLIC OPEN AREA
<span style="display:inline-block; width:15px; height:10px; background-color:#ADD8E6;"></span>	PUBLIC ENCLOSED AREA
<span style="display:inline-block; width:15px; height:10px; background-color:#FFDAB9;"></span>	NON-PUBLIC OPEN AREA
<span style="display:inline-block; width:15px; height:10px; background-color:#9370DB;"></span>	NON-PUBLIC ENCLOSED AREA
<span style="display:inline-block; width:15px; height:10px; border:1px solid black;"></span>	SPATIAL ZONE

**NOTES:**

Component functional diagrams are conceptual only – actual layouts will be explored in schematic design and developed in the detailed design process.

## SPACE REQUIREMENTS

Refer to the table below for the details of the projected space allocation.

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
	<b>Lobby</b>				
	Exterior Materials Return	1		0	Connected to bin drop-in Circulation Service Workroom (see Component 7. Back-of-House Functions, Ref. 04)
	Interior Materials Return	1		0	Connected to bin drop-in Circulation Service Workroom (see Component 7. Back-of-House Functions, Ref. 04) adjacent to Ref. 10 Accounts/Circulation Desk
01	Entrance	2	7.4	14.8	
02	Lobby/Atrium	1		40.0	Incl. access to Public Washrooms; incl. access to Program/ Meeting Rooms (after normal operating hours)
03	Public Seating	1		12.0	Incl. bench seats for 10
04	Building Layout, Events and Services Display	1		1.0	Information on Library events, layout and features
	Donor Recognition Feature	1		0	
	<b>Subtotal, Lobby</b>			<b>67.8</b>	
	<b>Library Entrance and Welcome Area</b>				
	Library Security Threshold	1		0.0	Incl. in grossing factor
05	Security Desk	1		3.5	Locate adjacent to entry; accommodates 1 security guard
06	Self-Service Check-Out	6	2.0	12.0	
07	OPAC Station	2	1.0	2.0	
08	Welcome Area Public Seating	1		6.0	Incl. bench/lounge seats for 6
09	Information Desk	1		12.0	Staffed service point/kiosk with computer, access, information materials; accommodates min. of 2 staff; for accessibility, 1 workstation will be lower in height
10	Accounts/Circulation Desk	1		15.0	Modular operational and administrative service desk with computers; accommodates min. of 3 staff; for accessibility, 1 workstation will be lower in height; cash handling at one of the workstations
11	Collection Holds	1		7.2	Incl. 8 bays of shelving accommodating up to 1,000 items

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
12	Coffee Kiosk	1		12.0	Incl. display cabinet, cash register, cappuccino maker, supplies, water supply, data, and power; assumes up to 2 staff
13	Bistro Tables and Chairs	1		15.0	Bistro type table and chairs for 14
14	Storage	1		3.5	Storage for supplies and extra food
15	Fireside Lounge	1		35.0	Accommodates 15; comfortable soft seating
16	New and Notable Collection Display	1		8.0	200 items on display tables and 3-shelf high movable shelving units
17	Magazine/Newspaper and Quick Reads Collection	1		5.5	68 titles/items on 5 4-shelf bays; may be used for additional New and Notable Collections as physical Newspapers and Magazines drop in numbers
18	Public Washroom	2	20.0	40.0	Allowance, to be confirmed
19	Universal Washroom	1		5.6	Incl. baby change table
20	Storage	1		8.0	For storage of furniture, equipment, supplies, etc.
	Subtotal, Library Entrance and Welcome Area			190.3	
	<b>Program Room/Auditorium</b>				
21	Program Room/Auditorium	1		160.0	Accommodates 150; subdividable; egress to Lobby; also functions as Emergency Operations Centre (EOC) - incl. provisions to run 4 monitors, acoustic separation, and folding partitions
22	Storage	2	8.0	16.0	For storage of furniture, equipment, supplies etc.
23	Kitchen Alcove	1		7.4	Incl. counter and sink with cupboards above, small fridge, microwave, other counter/layout space and dishwasher
	Public Washroom	2		0	See Ref. 18; zoned for after-hours access
	Universal Washroom	1		0	See Ref. 19; zoned for after-hours access
24	Building Service Worker Closet	1		7.4	
	Subtotal, Program Room/Auditorium			190.8	
	<b>Total</b>			<b>448.9</b>	<b>NSM</b>
				1.25	Grossing Factor
				<b>560</b>	<b>CGSM</b>
				<b>6,028</b>	<b>CGSF</b>

## 2. COLLABORATION ZONE

### FUNCTIONAL DESCRIPTION

#### COMPONENT OVERVIEW

This component accommodates a dynamic and flexible Collaboration Zone designed for groups to work on projects, learn, conduct business activities and meetings, share information, study, and socialize in an environment that customers can arrange to best serve their needs. It also includes an Idea Lab/ Makerspace for up to 25 people that supports a variety of creative activities and projects.

#### KEY ADJACENCIES

- 1 **1. Entrance, Welcome Area and Program Room** Provide convenient access by general circulation from the Entrance, Welcome Area & Program Room for the movement of customers and other visitors.
- 2 **6. Staff Workspace** Provide convenient access by general circulation to Staff Workspace for the movement of staff, supplies, and equipment.
- 3 **7. Back-of-House Functions** Provide convenient access by general circulation to Back-of-House Functions for the movement of staff, supplies and equipment.

Flexible spaces for self-directed projects, individual and group activities, social and recreational activities



## FUNCTIONAL DESCRIPTION

This component accommodates multifunctional spaces, including the dynamic and flexible Collaboration Zone designed for groups to work on projects, learn, conduct business activities and meetings, share information, study, and socialize in an environment that they can arrange themselves to best suit their needs.

It also includes an Idea Lab/Makerspace for up to 25 people that supports a variety of messy creative activities and projects in a specially designed room which has robust and utilitarian surfaces.

The Collaboration Zone within this component is typically not programmed by the Library. The activity profile is determined by those using the space, rather than by the staff. The Idea Lab/Makerspace features Library and partner-led programs and activities.

Features within the component include:

- An open, flexible space accommodating a wide range of activities, involving groups of various sizes, which may involve various user-provided technologies and associated resources;
- A smaller scale enclosed Idea Lab/Makerspace for “messy” creative activities that promote content creation and experiential learning for all in the community, and that supports the Library’s role as a venue for creative expression and learning; and
- Associated support spaces.

Activities within the component include:

### *Collaboration Zone*

- Group study and projects;
- Presentations;
- Collaborative learning;
- Tutoring;
- Informal business use of space, such as client meetings;
- Socializing;
- Recreation, such as board games;

- Informal meetings;
- Access to Wi-Fi and use of personal technology;
- Printing, scanning and copying, with nearby access to Information Desk for payment;

### *Idea Lab/Makerspace*

- Formal and informal programs conducted by Library staff and community partners focussed on creative activities related to digital and physical projects. This encompasses activities ranging from crafting, sewing and gardening to robotics, coding and circuitry; and
- Storage of equipment and supplies.



## OPERATIONAL DESCRIPTION

### Hours of Operation

This area should be located within the Library’s security zone. As such, hours of operation will be the same as typical Library service hours.

### Movement of Customers

Both Library customers and the general public will attend activities and events in this component. Because activities taking place are independent and autonomous, proximity to the Entrance, Welcome Area and Program Room component, as well as some degree of separation from standard Library collections and activities, will be important.

However, Library users will also move to and from this component to access resources and collections in other areas of the Library.

Customers will access this component via the Entrance, Welcome Area and Program Room component. Access should be provided as directly as possible to avoid disruption to functions at the Library Entrance.

### Group Discovery, Exploration and Interaction

Generally, the Collaboration Zone is a large open space that will be used for multiple concurrent activities involving groups of various sizes. The range of community activities will be open-ended.

It will not have enclosed meeting or workspaces, but there may be areas that are screened off by movable partitions in order to create a sense of enclosure functions.

Spaces must be easily reconfigurable to accommodate frequent changes in the schedule, profile, and scope of activities.

The Idea Lab/Makerspace will be used for more structure activities that involve extensive use of diverse materials, supplies, and/or technologies.

### Movement of Materials

Some types of technology, such as presentation technology, may be supplied by the Library, but the majority of resources will be hand carried by users.

### Movement of Staff

Staff will not be stationed in this component. However, sightlines should be provided to this component from the Information and Circulation Desks. Staff may periodically walk through the component, providing assistance as required.

### Print and Business Services

Print/photocopy/scanning services will be available in this component.

## WORKLOADS

The primary workload associated with this component involves the number of spontaneous programs and activities and the seating capacity of the spaces.

### Customer Accommodation

The following table identifies the occupancy of each space within this component.

Type	Number of Spaces	Number of Seats	Total Occupants
Open Collaboration Zone	1	60	60
Idea Lab/Makerspace	1	25	25
<b>Total</b>	<b>2</b>	<b>85</b>	<b>85</b>

### Collection Resources

There are no collections present in this component.

## STAFFING AND OCCUPANCY ESTIMATES

No Library staff are directly associated with this component. Staff will provide general supervision only.

## DESIGN CRITERIA

Design criteria internal to this component are described below. They address unique conditions and design features required in the space.

For planning criteria that apply to the facility generally, see the General Planning Criteria section of the Functional Program.

## Internal Relationships

### Architectural Concepts

- The Collaboration Zone will be open and typically very active. It should be approachable from several directions.
- The Idea Lab/Makerspace will be enclosed and more subdued; however, there should be opportunities to showcase the activities taking place both from inside the Library and from the exterior.

### Interior Design Concepts

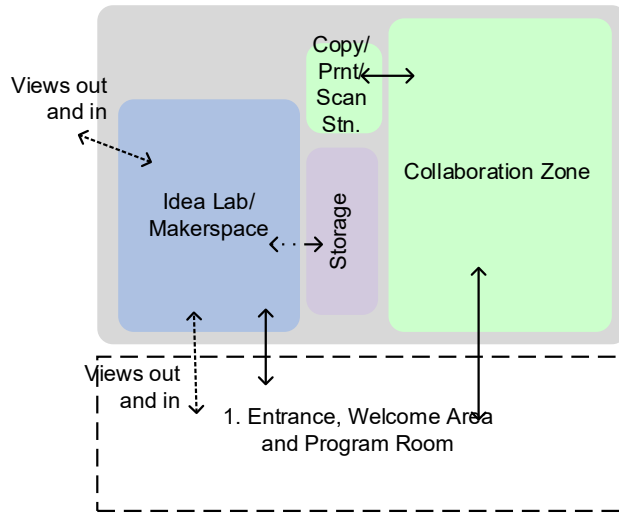
- Indirect daylight is required in the Collaboration Zone.
- The Collaboration Zone will require:
  - a flat floor with durable sound absorbing, easily cleaned surface;
  - acoustical shielding;
  - a variety of easily reconfigurable seating and tables; and
  - nearby furniture and equipment storage space.
- The Idea Lab/Makerspace will require:
  - robust and utilitarian surfaces;
  - a durable floor with durable sound absorbing and easily cleaned surface;
  - a sink, counter and cupboards;
  - acoustic shielding; and
  - nearby furniture and storage space (shared with the Collaboration Zone).

## Building Systems Criteria

- The Collaboration Zone must include:
  - technology for hearing impaired;
  - an AV system including large monitors to which customers can easily connect;
  - a lighting grid;
  - multiple data ports and power outlets; and
  - an acoustic control system.
- The Idea Lab/Makerspace must include:
  - multiple data ports and power outlets; and
  - an AV system including large monitors to which customers can easily connect.

### Functional Relationship Diagram

The following diagram provides a general spatial organization of the functions described above.



LEGEND	
<span style="display:inline-block; width:15px; height:10px; background-color:#90EE90; border:1px solid black;"></span>	PUBLIC OPEN AREA
<span style="display:inline-block; width:15px; height:10px; background-color:#6495ED; border:1px solid black;"></span>	PUBLIC ENCLOSED AREA
<span style="display:inline-block; width:15px; height:10px; background-color:#FFDAB9; border:1px solid black;"></span>	NON-PUBLIC OPEN AREA
<span style="display:inline-block; width:15px; height:10px; background-color:#9370DB; border:1px solid black;"></span>	NON-PUBLIC ENCLOSED AREA
<span style="display:inline-block; width:15px; height:10px; border:1px dashed black;"></span>	SPATIAL ZONE

**NOTES:**

Component functional diagrams are conceptual only – actual layouts will be explored in schematic design and developed in the detailed design process.

## SPACE REQUIREMENTS

Refer to the table below for the details of the projected space allocation.

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
01	Collaboration Zone	1		150.0	Incl. reconfigurable seats and tables for 60
02	Copy/Print/Scanner Station	1		5.0	
03	Idea Lab/Makerspace	1		64.5	Accommodates 25, incl. sink and counter, and cupboards
04	Storage	1		8.0	For storage of furniture, equipment, supplies, etc.
	<b>Total</b>			<b>227.5</b>	<b>NSM</b>
				1.10	Grossing Factor
				<b>250</b>	<b>CGSM</b>
				<b>2,691</b>	<b>CGSF</b>

# 3. CHILDREN'S LIBRARY

## FUNCTIONAL DESCRIPTION

### COMPONENT OVERVIEW

The Children's Library is a separate, playful environment that stimulates the imagination while also providing learning opportunities for a variety of literacies. It is, in some respects, a library within a library—acoustically separate, containing specialized collections, staff and programming for children from birth to age 12 and their caregivers.

### KEY ADJACENCIES

- 1 **1. Entrance, Welcome Area and Program Room** Provide direct access by general circulation to and from the Entrance, Welcome Area and Program Room for the movement of children, families and staff.
- 2 **2. Collaboration Zone** Provide convenient access by general circulation to and from the Idea Lab/ Makerspace in the Collaboration Zone for the movement of children, families and staff.
- 3 **4. Adult and Teen Collections and Study Spaces** Provide convenient access by general circulation to and from Adult and Teen Collections and Study Spaces for the movement of families and staff.
- 4 **6. Staff Workspace** Provide convenient access by general circulation to and from Staff Workspace for the movement of staff.
- 5 **7. Back-of-House Functions** Provide convenient access by general circulation to the Circulation Services Workroom in Back-of-House Functions for the movement of materials.



Inspiration, scale, imagination, exploration, learning

## FUNCTIONAL DESCRIPTION

This component accommodates the Children's Library, a clearly defined space that provides children and families with varying degrees of separateness from the larger Library space, to ensure their safety, security and comfort. This component provides for varying collection and activity needs at different stages of development.

The Children's Library will foster a child's growing independence while welcoming and encouraging caregiver oversight. It will be a space for children to discover their passion for reading, explore their interests to become lifelong learners, and engage in activities independently as well as in social and family groups of varying sizes and ages.

Through a variety of environments it will appeal to children with both quiet temperaments and more exuberant natures. Children of up to 12 years and their caregivers are the focus of this space.

Features of this component include:

- Gateway Feature;
- Topical and thematic display of materials;
- Self-Check-Out stations;
- Online Public Access Catalogues (OPAC);
- Family Literacy Centre, featuring interactive imagination area (e.g., train table and large fun furniture), early years digital literacy station, and early literacy activities;
- Quiet Reading Alcoves for reading with caregivers, and individual reading;
- Children's Collections;
- Variety of tables and informal seating areas;
- Program Nook for informal and non-registered programs of up to 60 children;
- Periodically staffed "Pop-Up" Service Kiosk;

- Family Room; and
- Staff Workroom.

Activities within the component include:

### *Public Area*

- Topical display of materials;
- Group mustering;
- Answering collection and information queries at a Pop-Up Service Kiosk and by roving staff;
- Self-check of materials;
- Family Literacy Centre that includes:
  - early literacy computers/technology,
  - imagination play activities with props that include textures, soundscapes, visual explorations, places in the community,
  - furniture and features that promote fine and gross motor skills development,
  - access to and reading of Board Book and Picture Book Collections, and
  - caregiver and child reading/exploration;
- Group and individual study and homework activities;
- Decompressing and reading in a quiet environment;
- Developmentally appropriate programming, including story and craft activities, reading and homework assistance, coding and digital literacy for large and small groups;
- Storage of personal items during programs;
- Tours or supervised group visits;
- Storage of program materials;
- Research and educational activities at computers including group work on computers;

- Storage, maintenance, display and access of the following collections:
  - Board Books,
  - Picture Books,
  - Easy Readers, beginning chapter books, Fiction and Fiction series,
  - Comics and graphic novels,
  - Non-Fiction Collection,
  - World Languages, and
  - Children's non-print materials: DVDs and kits;
- Reading/project work/computer use in informal areas such the Program Nook (when it is not used for programs), and Group Tables and Casual Seating areas that are associated with and appropriate to collection subjects and to the age of users;
- Supervised visits;
- Art displays;
- Shelf checks and reshelving of materials by staff;
- Accessing virtual collections;
- Storage of program supplies, special collections, and materials; and
- Preparation of program materials.

## OPERATIONAL DESCRIPTION

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### Hours of Operation

This component will be open when the Library is open.

### Customer Profile

More than other components, this component will be characterized by customers that arrive typically in groups of two or more. Most groups will have at least one adult and one child. Customers will include:

- Those who have come as part of a large group, from a school, kindergarten, or daycare;

- Caregivers who may have with them children of varying ages, including very young children with whom they will actively attend;
- Child and adult customers with special needs, including physical, sensory, cognitive, and mental challenges and who may be accompanied by a caregiver;
- Customers who arrive simultaneously to be part of a programmed activity;
- Caregivers and educators wanting children's resources or information;
- Children who range widely in behaviours, from those requiring more regular attention to those who can manage themselves more independently; and
- Teen volunteers for programs.

### Movement of Customers

People will arrive and depart from a single point of arrival. All areas of the component are expected to be highly active.

### Personal Exploration and Discovery

Generally, customers will interact with staff and may require more assistance by staff; staff will be located in this component when it is busy and may be roving. At other times, assistance will be provided by staff located at the Ground Floor Information Desk.

Collections will be accommodated in age-appropriate ways, giving children the opportunity to see, handle and look at materials easily.

Personal exploration may involve a caregiver and child.

### Group Discovery, Exploration and Interaction

Informal interaction and collaborative activities will take place in the enclosed and flexible open spaces within this component.

Scheduled program activities involving larger groups will occur in the enclosed Program Nook or in the Program Room in Component 1, as well as in the open areas. Some specialized programs may take place in the Idea Lab/Makerspace located in Component 2. Collaboration Zone.

### Types of Services

Types of services include:

- Scheduled program activities, including Storytime, book clubs, maker activities, crafts, reading, and homework and reading assistance;
- Personal and small group assistance as needed including discovery services, such as navigation assistance, readers advisory and assistance with technology; and
- General monitoring of the component to ensure the safety and security of all customers.

### WORKLOADS

#### Customer Accommodation

Type	Number of Stations	Number of Seats	Customer Occupants
Self-Check-Out Station	2	-	2
Computer Station – Early Literacy	3	2	6
Family Literacy Area	31	-	31
Casual Seating/Caregiver and Child	-	36	36
Group Table	-	16	16
Program Nook	-	60	60
OPAC	2	-	2
<b>Total</b>	<b>38</b>	<b>114</b>	<b>153</b>

### Collections

Assumptions for collection size are provided below. Collection size is anticipated to increase in the future, however, magazines, CDs and DVDs are not anticipated in the longer term future but will be provided in the shorter term.

Type	Total Items	Circulation Rate	Items on Shelves
Board Books	3,298	54%	1,523
Picture Books	12,487	45%	6,868
Easy Readers	6,048	46%	3,266
Comics	8,127	55%	3,657
Fiction/First Fiction	19,238	27%	14,043
Non-Fiction	14,036	30%	9,825
French	2,266	13%	1,972
Magazines - Titles	69	9%	62

Type	Total Items	Circulation Rate	Items on Shelves
Holiday	2,708	33%	1,814
Other (AV)	700	10%	634
<b>Total</b>	<b>68,977</b>		<b>43,664</b>

### STAFFING AND OCCUPANCY ESTIMATES

Estimated staffing and occupancies for this component are summarized below in full-time equivalents (FTE), headcounts, and maximum occupancy.

Position	Existing FTE	Future FTE	Total Headcount	Maximum Occupancy
Program and Youth Services Coordinator	1.0	1.0	1	1
Program and Youth Services Librarian	1.0	1.0	1	1
Library Assistant	-	1.0	1	1
<b>Total</b>	<b>2.0</b>	<b>3.0</b>	<b>3</b>	<b>3</b>

### DESIGN CRITERIA

Design criteria internal to this component are described below. They address unique conditions and design features required in the space.

For planning criteria that apply to the facility generally, see the General Planning Criteria section of the Functional Program.

#### Internal Relationships

#### Architectural Concepts

- The Children’s Library should be located on the Ground Floor of the Library to allow easy access to young customers and their caregivers who may be carrying coats, bags, and other personal items, as well as pushing strollers. Ground Floor access also facilitates more convenient evacuation in the event of a fire or other life safety event.
- This component primarily includes public space with a small staff office area and Workroom for program development, collection work and general service planning.
- The Children’s Library should be visible from Entrance, Welcome Area and Program Room component; a sense of anticipation should be created with invitations that begin outside of the component itself.

- The Entrance to this component should be marked by character and gateway images that reflect the content of the resources and activities.
- Views should be provided into the Children's Library from other components while maintaining the general enclosure of the component. This will create opportunities to market the services and resources of the Children's Library, decrease noise in other components, and will increase the level of visual security.
- Design should consider a higher ceiling, as possible, to support hanging displays that add character and life to the environment.
- Opportunity to create a Pop-Up Service Kiosk is required which, when in place, should be situated within view of and proximate to arriving customers. The Pop-Up Service Kiosk should have visual connections to the entire public area of the Children's Library so activities can be monitored.
- The overall layout of the Children's Library should reflect an organic and informal approach to the organization of space, as reflected in design elements, gateways, and enclosures, etc.
- This component should include natural light and views to landscaped exterior areas.
- The Family Literacy Area should be located away from Program Nook but should be visible from the Pop-Up Service Kiosk. This is an area that will be noisy with exuberant children.
- The Program Nook should be located somewhat near the Entrance and adjacent to the Service Kiosk. Visibility to the Program Room from the Pop-Up Service Kiosk is required, including glazing into the room. However, the room should be located so that general traffic flow is not impeded.
- Wall space for displays of children's artwork should be maximized, including a wall at the Entrance to the component to showcase local children's art, including children's digital art.
- A Family Room is included within this component; it includes both adult and child-sized fixtures, a change table, and chairs for both adults and children for nursing, waiting on family members, etc.

### Interior Design Concepts

- Imaginative features should be considered at the entrance to the Literacy Centre and to the Play Space.
- Above all, the environment should be safe. Partitions and furniture should have rounded corners to minimize injuries.
- The character of the Children's Library will differ from that of the rest of the Library. It may have themes in which children become part of the stories that they are reading. It should be an environment of exploration and engagement; this should be translated into the display of collection resources, installations, and program areas. Interior design themes should be rich in the use of colour, language and language elements.
- Notwithstanding the above, design features in the Children's Library should be sympathetic to those of the rest of the Library.
- The Family Literacy Area, in particular, should be a learning environment that stimulates as many senses as possible, including sight, hearing, touch, taste, smell and kinesthesia. It may include a variety of open-ended and interactive play spaces. It should feature letters and words in the design. The environment should stimulate doing, learning and feeling. This is an area where children will explore and learn with their caregivers.
- The space, furnishings, lighting and signage of Children's Library should be flexible to facilitate change, exploration and experimentation by both staff and children. Children should feel empowered to change the environment.
- The scale of space and furnishings are critical factors. Design must reflect "child-sized" environments, with children as a priority, to respond to the specific needs of infants, toddlers and school children (i.e., seating types), in their respective areas, while also providing furnishings appropriate for caregivers and other adults.
- A mix of seating types should be provided, including informal seating, benches and tables for groups of children. Some activity areas will require furniture that allows children to interact with accompanying adults. Furniture should be robust as adults will on occasion use child-sized seats.
- For safety, play areas must not be located near exits, elevators, and/or stairs.

- The various areas of the Children's Library should be organized by level of activity and amount of noise, and not strictly by age. Informal and formal customer program areas, however, should relate to adjacent collection areas, as possible.
- The collection area should feature more intimate environments for reading and associated activities. These may be provided through the use of a lower ceiling, canopy or by creating physically separate but connected area(s).
- There should be minimal use of wall shelving so that wall surfaces can be used for display.
- Furniture and stacks/shelving should be flexible to allow for changes in collections, formats and users.
- The height of stacks should vary according to the collection accommodated: collections for younger children on 2- and 3-shelf units and Non-Fiction on higher 4-shelf units.
- The Pop-Up Service Kiosk requires careful consideration. As it will not be present all of the time, it will need to be stored away or transformed into another function. At the same time, when it is in operation, it must be easily identified, ergonomically designed and should not intimidate young children. It should be configured so that children of all ages and sizes feel comfortable approaching when staffed. Design should consider a lower desk height and lower staff work area.
- Public activity spaces within the Children's Library should be visible to staff when they are at the Pop-Up Service Kiosk and yet should provide a cozy, secure and intimate environment for children.
- In the Family Literacy Area, attention should be paid to activities for crawling children, as well as children who have begun cruising, including mirrors at floor level and low window sills.
- Acoustic treatment and/or separation should be provided between the various activity areas to reduce acoustical interference.

- The Program Nook should be large enough to accommodate 60 children and caregivers. Various flooring options should be reviewed to balance ease of cleaning with use of the floor as a seating area. It should also have sliding glass doors to limit access when needed.
- Visual contact with exterior natural features and elements should be an important feature of the Children's Library.

#### Operational Concepts

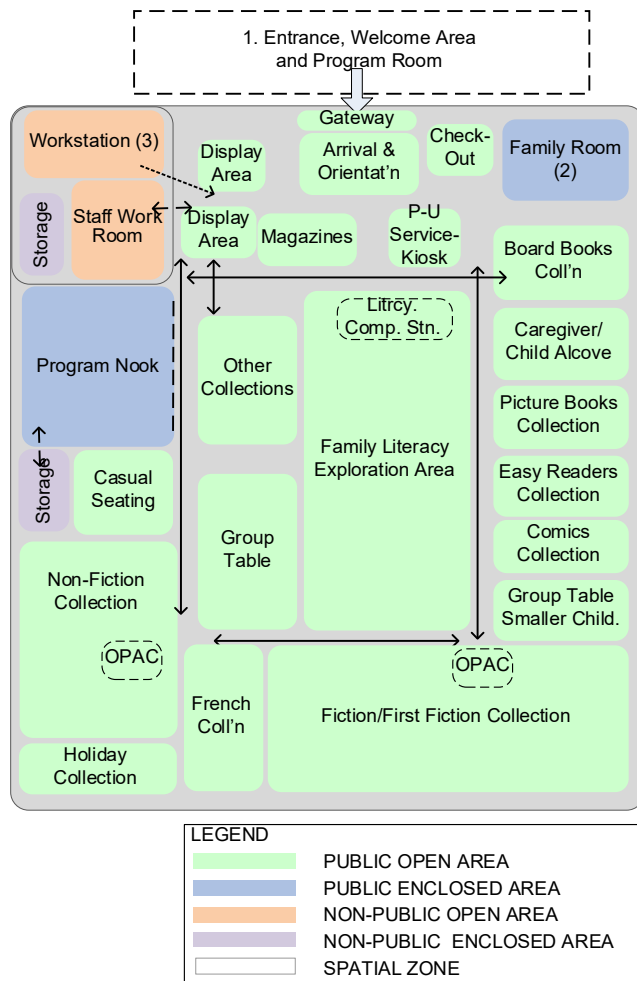
- Although they may base themselves in this component, some of the customers of the Children's Library will also access other collection and service areas in the Library.
- Materials used by customers for casual reading while in the component will be deposited in designated locations and re-shelved by staff.

#### Building Systems Criteria

- Sound attenuation provisions are required to insulate the remainder of the Library from the sometimes higher level of sound originating in this component.
- Lighting systems should be flexible and highlight the Pop-Up Service Kiosk when it is operating, display areas and component signage.
- The Program Nook should include sound systems and should support wireless assistive listening devices. Built-in projection screens/monitors and/or projectors should be provided.

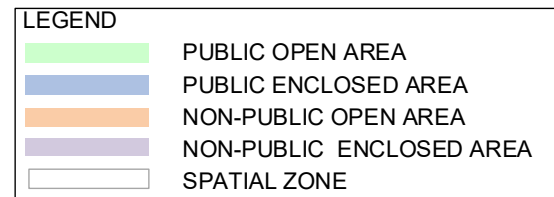
### Functional Relationship Diagram

The diagram below identifies a general spatial organization of the functions described above.



**NOTE:**

Component functional diagrams are conceptual only – actual layouts will be explored in schematic design and developed in the detailed design process.



**NOTE:**

Component functional diagrams are conceptual only – actual layouts will be explored in schematic design and developed in the detailed design process.

## SPACE REQUIREMENTS

Refer to the table below for the details of the projected space allocation.

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
	<b>Entrance</b>				
01	Gateway Feature	1		4.0	Feature that reflects program activities and content of the collection
02	Arrival and Orientation	1		10.0	Open area to view component
03	Family Room	2	6.4	12.8	Allowance only
04	Pop-Up Service Kiosk	1		7.0	Open area to accommodate 2 staff stations; may be a reconfigurable piece of furniture that is used by customers or may be moved from Workroom
05	Self-Check-Out	2	2.0	4.0	Adjacent to Service Kiosk
06	Thematic Display Area	2	1.0	2.0	Distributed through Library area
07	Literacy Computer Station or iPad	3	2.5	7.5	Each accommodates up to 2 children
08	Family Literacy Area	1		85.0	Accommodates 16 children and caregivers; incl. sensory wall, soft seating area, numerous imagination play environments incl. train table, and manipulate-able toys; also accommodates 15 at activity stations, such as Burgeon large scale interactives
	Subtotal, Entrance			132.3	
	<b>Children's Collections</b>				
09	Board Books Collection	1		13.0	Accommodates 1,523 items on 13 movable 3-shelf bays or equivalent
10	Picture Books Collection	1		39.6	Accommodates 6,868 items on 36 movable 3-shelf bays, with display on top
11	Easy Readers Collection	1		20.9	Accommodates 3,266 items on 19 movable 4-shelf bays, with display on top
12	Comics Collection	1		18.7	Accommodates 3,657 items on 17 movable 4-shelf bays, with display on top
13	Fiction/First Fiction Collection	1		90.0	Accommodates 14,043 items on 90 movable 4- and 5-shelf bays, with display on top
14	Non-Fiction Collection	1		40.0	Accommodates 9,825 items on 40 movable 5-shelf bays, with display on top
15	French Collection	1		7.0	Accommodates 1,972 items on 7 movable 5-shelf bays, with display on top

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
16	Magazines – Titles Collection	1		3.0	Accommodates 62 items on 3 movable 5-shelf bays, with display on top; may be used for other collections as collection is phased out
17	Holiday Collection	1		8.0	Accommodates 1,814 items on 8 movable 5-shelf bays, with display on top
18	Other Collection (AV)	1		3.0	Accommodates 634 items on 3 movable 4-shelf bays, with display on top
19	OPAC Station	2	1.0	2.0	Locate prominently at end of stacks
20	Caregiver and Child Reading Chair/Alcove	1		22.0	Incl. a mix of 8 larger chairs accommodating a caregiver and 1 or 2 children, and 4 individual chairs for caregivers
21	Group Table, Smaller Children	2	4.5	9.0	Each accommodates up to 4 children
22	Casual Seating	10	2.0	20.0	Distributed in collection areas
23	Group Table	4	5.0	20.0	Accommodates 2 each
24	Program Nook	1		72.0	Accommodates up to 60, storage cabinets and coat hook area; should have glazed doors to main Children's area and should be blackout capable; room will be open and available when not in use for programs
25	Storage	1		8.0	Adjacent to Program Nook; storage for a variety of equipment and furnishings
	Subtotal, Children's Collections			396.2	
	<b>Staff Area</b>				
26	Staff Workroom	1		15.0	Accommodates work table or work counter, 8 bays of shelving for storage of program materials and supplies, sink and counter with storage cupboards; integrated with staff areas
27	Workstation, Programs and Youth Services Coordinator	1		5.9	L-shaped desk and chair, filing cabinet, bookcase
28	Workstation, Programs and Youth Services Librarian	1		5.9	L-shaped desk and chair, filing cabinet, bookcase
29	Workstation, Library Assistant	1		4.5	L-shaped desk and chair, filing cabinet

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
30	Storage	1		8.0	For storage of furniture, equipment, supplies, etc.
	Subtotal, Staff Area			39.3	
	<b>Total</b>			<b>567.8</b>	<b>NSM</b>
				1.20	Grossing Factor
				<b>680</b>	<b>CGSM</b>
				<b>7,319</b>	<b>CGSF</b>

# 4. ADULT AND TEEN COLLECTIONS AND STUDY SPACES

## FUNCTIONAL DESCRIPTION

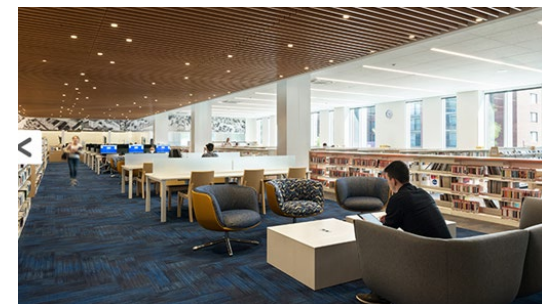
### COMPONENT OVERVIEW

This component houses the Adult Fiction and Non-Fiction, Teen, Large Print, World Languages and Multimedia Collections, the accommodations required for related self-directed activities, including quiet reading, studying, discovering, browsing, searching and discussing. It also includes a Meeting Room and Silent Study Room.

### KEY ADJACENCIES

- 1 **5. Tech Centre** Provide direct access by general circulation to Tech Centre for the movement of Library customers and staff to a shared service desk.
- 2 **1. Entrance, Welcome Area and Program Room** Provide direct access by general circulation to Entrance, Welcome Area and Program Room for visibility/ease of access to Collections on the Ground Floor.
- 3 **6. Staff Workspace** Provide direct access by general circulation to the Staff Workspace for access to the large Meeting Room for staff meetings and board functions.
- 4 **7. Back-of-House Functions** Provide direct access by dedicated circulation to sorting area in Back-of-House Functions for the movement of staff, equipment and collection resources.

Adult and teen collections, focus areas, silent study, quiet reading, general study, reflection, discovery and discussion



## FUNCTIONAL DESCRIPTION

This component houses the Adult Fiction and Non-Fiction, Teen, Large Print, World Languages and Multimedia Collections. It provides accommodations for the self-directed activities associated with these collections, including quiet reading, studying, discovering, browsing, searching and discussing. It also includes Meeting Rooms and Silent Study Room.

### Collections

All collection resources are circulating resources that will be used extensively by those interested in reading for enjoyment and for lifelong learning, research and study. Paperbacks are interfiled in each respective sub-section of the collection.

Each collection has a unique character and profile of use:

- Non-Fiction Collection
 

The Non-Fiction Collection must be flexible to accommodate changing community interests and changing collection organization and display systems, including general organization using Dewey or BISAC (Book Industry Subject and Category), and special focus areas addressing specific topics, where physical materials, virtual materials and associated study spaces are brought together.
- Fiction Collection
 

The Fiction Collection comprises well-reviewed, award-winning and popular fiction books. Some of the materials are grouped by genre. This collection will also have special focus areas to highlight featured themes or sub-collections.
- Graphic Novel Collection
 

Graphic novels for teens and adults are located together in a single collection. They should also be adjacent to Component 3. Children's Library.
- Teen Collection
 

The Teen Collection includes primarily fiction material of interest to teen customers, although it is available for general customer access and use.

- Large Print
 

This collection includes materials printed in large font, generally to support older or visually challenged customers.
- DVD Collection
 

This collection includes popular DVDs arranged by category.
- DAISY Book Collection (Digital Accessible Information System)
 

This collection area includes specialized material for customers who are sight impaired.
- World Languages Collection
 

This collection area includes books for customers who seek resources in languages other than English.
- English as a Second Language (ESL) Collection
 

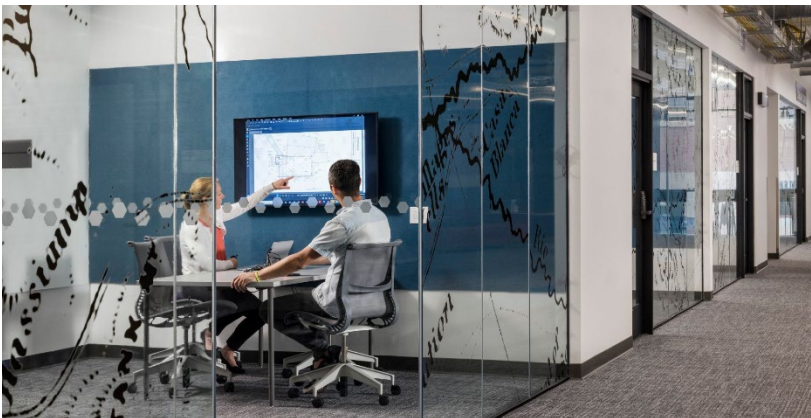
This collection includes materials appropriate for learners of English, typically for those for whom English is an additional language.

### Study and Reading Space



The provision of study and reading space is core to the Library’s mission, vision, and values in promoting intellectual freedom and lifelong learning. The study and reading space in this component tends to be more focussed on individual use and quieter group activities. Special features include:

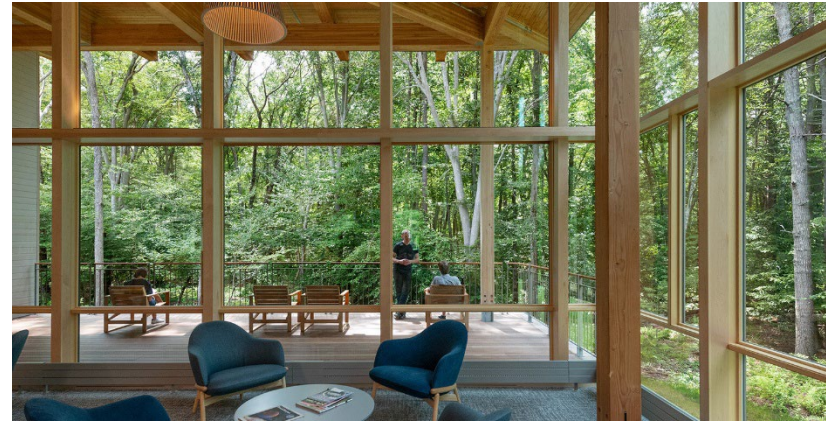
- A Silent Study room (enclosed and acoustically separated);
- Modular Study Rooms;
- Individual study tables/benches;
- A Quiet Reading Area/Fireside Lounge; and
- Meeting Rooms.



Features of the Adult and Teen Collections and Study Spaces component include:

- Arrangement of the collections and associated customer spaces on at least two levels, with specialty collections and the Teen Collection on the Ground Floor, and the majority of the Non-Fiction and Fiction Collections on the Library’s upper levels. Collections such as Large Print and Accessible Audiobooks are located on the Ground Floor for ease of access; the Teen Collection is located on the Ground Floor to encourage cross-use by children;
- A Ground Floor arrival area featuring customer resources, and signage introducing users to the scope and arrangement of resources;
- A Second Floor arrival area featuring a service desk that is shared with the Tech Centre, customer resources, and signage introducing users to the scope and arrangement of resources;
- Focus areas, identified by dedicated signage and display features, display of collection and seats and workstations that support access and use of the resources and encourage a love of reading, discovery and lifelong learning. One of the goals of these focus areas is to animate the collection by means of various Library-led and impromptu/informal programs and discussions that take place in the space;
- Visual features that define areas occupied by each sub-section of the collection;
- Informal seating areas for scheduled and/or ad hoc programming;
- An enclosed and acoustically separate Silent Reading Room with 50 individual seats;
- A variety of seating and study alternatives interspersed with collection areas;
  - soft seating in the Teen Collection focused on single seating,
  - the ESL Collection should be proximate to group tables for language learners to chat,
  - the Local Collection (part of the Non-Fiction Collection) should have group tables or be located near study carrels,

- the Large Print Collection should be proximate to a combination of single seats and group tables, and
- the Accessible Audiobook Collection could share a seating area with the Large Print Collection.
- Distributed online access (OPAC) stations throughout the collections and near the service desk;
- A Quiet Reading Area/Fireside Lounge with a view of exterior natural features;
- Meeting Rooms of various sizes that can also be rented by the community;
- An Artist-in-Residence Studio; and
- Access to Public Washrooms.



## OPERATIONAL DESCRIPTION

### Hours of Operation

Hours of operation for the component will be the same as opening hours of the Library facility.

### Customer Profile

The Non-Fiction Collection may attract those with a special interest in the entire spectrum of knowledge and information, including:

- Those interested in lifelong learning;
- Those with an interest in health and medicine, fitness, recreation, including outdoor recreation;
- Those who travel and explore;
- People planning a career change or career development;
- Those interested in cooking, food and nutrition;
- Gardeners and do-it-yourself enthusiasts;
- Artists and crafters;
- Students engaged in formal education programs;
- Those interested in science and the environment;
- Entrepreneurs and job seekers; and
- Those exploring the structure and history of human thought, human and social values, and the complexity of human behaviour.

The Fiction Collection may attract:

- Those with expectations of traditional reading environments;
- People who love reading and read for enjoyment;
- People who read and study intensively for extended periods of time, typically alone;
- People who have heard about a new book from the media;
- People for whom the process of reading and writing are very important;

- Those who like to talk about books and listen to others talking about books;
- Those who enjoy the process and products of active imaginations; and
- Authors, poets, and others who deliver oral presentations.

The Teen Collection will typically attract:

- Teens who enjoy reading teen fiction;
- Children who read both children's and teen books; and
- Adults and others who have an interest in teen fiction.

The Large Print and DAISY Books Collections will typically attract:

- Older adults with mobility, vision and hearing challenges; and
- Customers picking up materials for others.

The ESL Collection will typically attract:

- Those learning ESL;
- Those taking English languages tests, such as Teaching English as a Foreign Language (TOEFL);
- Newcomers to the community; and
- Those who may have challenges reading and comprehending general and collection resource signage.

The World Languages Collection will typically attract:

- Those who enjoy reading a non-English language;
- Newcomers to the community;
- Those who may be unfamiliar with the Library, and with Library services;
- Those who may have challenges reading and comprehending general and collection resource signage;
- Those seeking information in foreign languages; and
- Those learning ESL.

The study and reading space will typically attract:

- Those studying for formal education purposes;
- Those reading or studying quietly for informal and lifelong learning purposes;
- Those studying for various tests or exams;
- Those needing quiet individual spaces and lacking access to such space at home or elsewhere; and
- Those reading for pleasure or learning in a social setting rather than isolated at home.

### Exploration, Discovery, and Relaxation

People will arrive at and depart from the component arrival area on each level, moving in and out among the collection, with browsing, reading and study activity occurring in seating and other spaces distributed among resources and at the glazed perimeter of the component.

Some customers will be self-directed in both their browsing of the collection, and their subsequent reading/study of materials, occasionally assisted by services provided from staff at a nearby service desk and/or by roving staff. Other customers may require more assistance to navigate the collection.

Customers will often be looking for reading recommendations from staff and opportunities to have conversations with staff about their reading.

Customers will frequently browse and select from collection resources temporarily stored on Book Trucks, and waiting to be re-shelved.

Both scheduled and spontaneous program presentations and interaction may occur in flexible open program spaces located near the centre of this component and in the Meeting Room.

There will be frequent use of portable electronic devices and the Library's Wi-Fi service. Customers may also make use of data access provided in this component to engage in catalogue research, Internet research and general browsing, social media, and e-mail.

### Collection Resources Access and Maintenance

This component will include several focus areas, which highlight topical subject matter.

Fiction Collection resources for teens will be highlighted as a focus area. Non-Fiction material for teens will be interfiled with general Adult Non-Fiction Collection resources.

Collection Storage and display will occur on variable, medium-height, typically 4- to 5-shelf bays. Higher shelving may be used along walls. Collections should feature face-out displays.

OPAC computer stations will be dispersed throughout the collection along with conversation areas, and study areas that encourage contact with the resources and impromptu exploration of all information formats.

The vast majority of materials will leave this component carried by Library users. Materials will be returned to this component on Book Trucks from the Back-of-House Functions component after it has been sorted.

#### Staff Support

On the Ground Floor, staff support and service will be provided from the Information Desk in the Entrance, Welcome Area and Program Room component.

On the Second Floor, staff support and service will be provided from a service desk shared with Tech Centre;

Staff involved with collection maintenance activities may be temporarily located in the component.

## WORKLOADS

### Customer Accommodation

Type	Number of Stations	Number of Seats	Customer Occupants
Arrival Seats	-	8	8
Large Print Seats	-	2	2
Teen Seats	-	6	6
OPAC Stations	6	-	6
Single Table Seats	-	22	22
Silent Study Room Seats	-	50	50
Modular Study Room	-	3	3
Collection Focus Area	-	48	48
Quiet Reading Area/Fireside Lounge	-	15	15
Artist-in-Residence Studio	-	15	15
Meeting Room, Small	-	15	15
Meeting Room, Medium	-	30	30
Meeting Room, Large	-	50	50
<b>Total</b>	<b>6</b>	<b>264</b>	<b>270</b>

### Collection Resources

Type	Total Items	Circulation Rate	Items on Shelves
<b>Teens</b>			
Fiction	5,679	15%	4,827
Other	700	25%	525
<b>Subtotal, Teens</b>	<b>6,379</b>	<b>20%</b>	<b>5,352</b>
<b>Adults</b>			
Fiction	34,459	14%	29,635
Non-Fiction	28,208	12%	24,823
Large Print	2,118	14%	1,821
World Languages	3,377	18%	2,769
ESL	1,232	9%	1,121
Graphic Novels	5,036	32%	3,425
Book Club bundles	839	6%	788
White Pines	353	4%	339
Magazines	100	32%	68
Other	700	25%	525
<b>AV</b>			
DAISY Books	75	8%	69
DVD's	702	20%	562
Video Games	1,247	10%	1,123

Type	Total Items	Circulation Rate	Items on Shelves
Library of Things	1,200	59%	492
Subtotal, Adults	79,646	19%	67,560
<b>Total</b>	<b>86,025</b>		<b>72,912</b>

## STAFFING AND OCCUPANCY ESTIMATES

Estimated staffing and occupancies for this component are summarized below in full-time equivalents (FTE), headcounts, and maximum occupancy.

Position	Existing FTE	Future FTE	Total Headcount	Maximum Occupancy
Service Desk Staff <sup>1</sup>	-	-	-	4
Shelvers	-	-	-	1-2
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5-6</b>

Note:

- Two of the staff are shared with Component 5. Tech Centre.

## DESIGN CRITERIA

Design criteria internal to this component are described below. They address unique conditions and design features required in the space.

For planning criteria that apply to the facility generally, see the General Planning Criteria section of the Functional Program.

### Internal Relationships

#### Architectural Concepts

- This component is anticipated to be arranged on at least two floors. The component will have specialty collections on the Ground Floor and the majority of the collection on the Library's upper levels, grouped as follows:

##### Ground Floor

- Teen Collection;
- Large Print Collection;
- ESL Collection;
- DVD and Books-on-CD collections;
- World Languages Collection; and

- DAISY Book Collection.

Note that the Ground Floor also includes New and Notable Collections, and Newspapers and Magazines as identified in the Entrance, Welcome Area and Program Room component. All subsections of the collection located on the lower level should be grouped together.

*Upper Floors*

- General Non-Fiction Collection;
  - Non-Fiction Special Focus areas;
  - Graphic Novel Collection;
  - Fiction: including genres; and
  - Fiction Special Focus areas.
- The Second Floor should provide an arrival space, signage, and other resources that introduce the layout and distribution of collection resources and associated customer accommodation.
  - The Second Floor service desk is shared with the adjacent Tech Centre component.
  - A rational and sequential layout of collections resources should allow for optimal customer orientation and access.
  - Focus collections will be located strategically throughout the Non-Fiction and Fiction Collections to provide varied customer experiences, visual interest and distinctive smaller quiet reading areas.
  - An enclosed, partially glazed Silent Study Room will accommodate quiet individual reading and study. This will be a general resource shared by all customers.

**Interior Design Concepts**

- Design and location of the Second Floor service desk (in Component 5. Tech Centre) must provide visual access and clear sightlines to all areas of the component and must be multifunctional and informal.
- Clearly visible signage must be provided in all areas to enhance the self-service concept.

- Collection areas must be inviting, comfortable and visually interesting. Within the general collection area, focus areas should be created as interesting destinations, possibly with unique features.



- Shelving should be arranged to avoid creating an experience of visual and/or physical obstruction and should be oriented to maximize sightlines across the component and to the various service and focus destinations within the component.
- There should be opportunities for interesting ceiling-mounted features and focus area destination features.
- Opportunities for strategically placed face-out collection resources should be maximized, with a significantly higher proportion of face-out displays in focus area.
- As the sizes of the collections grow or shrink, more or less of the collection may be organized as face-out display. Ongoing changes in collection size can be expected in the future.
- Space and furniture for browsing, reading and studying will be fully integrated with a casual, user-friendly layout of collection resources.
- Open spontaneous program space may be created periodically by the rearrangement of lightweight furnishings, including some movable collection shelving, particularly associated with collection focus areas.
- Floor surfaces should make use of a durable, easily cleaned, acoustically absorbent material.

### Operational Concepts

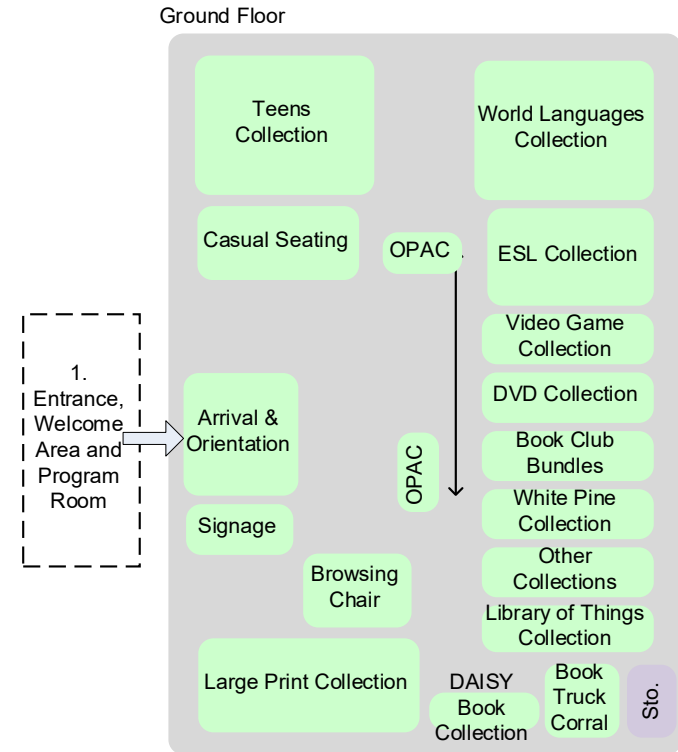
- Shelving in focus areas must be movable and reconfigurable.
- The Second Floor service desk (in Component 5. Tech Centre) does not require direct adjacency to Component 6. Staff Workspace.
- The Meeting Room should be on the Second Floor, and easily accessible from the Staff Workspace.
- Customers will frequently browse and select from collection resources temporarily stored on Book Trucks, and waiting to be re-shelved. Consideration should be given to providing a defined space for this that enables customers to see and examine these resources while reducing visual clutter.
- The Non-Fiction Collection may be arranged in a modified Dewey order with interspersed feature focus areas and displays.
- The Fiction Collection will be arranged alphabetically by author and by genre. With interspersed feature, focus areas and displays.
- Collection resources will typically be stored and displayed on three foot wide bays, each with four to five shelves. Allowances for shelving units include an allowance for the user circulation spaces between storage units.

### Building Systems Criteria

- Customer seating will be equipped with task lighting and individual power supply.

### Functional Relationship Diagram

The diagram below identifies a general spatial organization of the functions described above.



LEGEND	
<span style="display:inline-block; width:15px; height:10px; background-color:#90EE90;"></span>	PUBLIC OPEN AREA
<span style="display:inline-block; width:15px; height:10px; background-color:#ADD8E6;"></span>	PUBLIC ENCLOSED AREA
<span style="display:inline-block; width:15px; height:10px; background-color:#FFDAB9;"></span>	NON-PUBLIC OPEN AREA
<span style="display:inline-block; width:15px; height:10px; background-color:#D8BFD8;"></span>	NON-PUBLIC ENCLOSED AREA
<span style="display:inline-block; width:15px; height:10px; border:1px solid black;"></span>	SPATIAL ZONE

**NOTE:**

Component functional diagrams are conceptual only – actual layouts will be explored in schematic design and developed in the detailed design process.

## SPACE REQUIREMENTS

Refer to the table below for the details of the projected space allocation.

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
	<b>Ground Floor</b>				
01	Arrival and Orientation Point	1		10.0	Incl. gateway features, orientation, events notices, and directional signage, bench seating for 4
02	Collection Layout Signage	1		1.0	Incl. print and digital displays conveying content and layout of the collection, associated resources and related programs
03	OPAC Station	2	1.0	2.0	Distributed in collection area
04	Teen Collection (Fiction and AV)	1		42.0	5,352 items on 42 4- and 5-shelf bays
05	Casual Seating	1		15.0	Incl. 6 soft seats
06	Large Print Collection	1		28.0	1,821 items on 28 4-shelf bays
07	Browsing Chair	2	2.5	5.0	Higher upright chair for browsing Large Print Collection
08	World Languages Collection	1		23.0	2,769 books on 23 5-shelf bays
09	ESL Collection	1		7.0	1,121 items on 7 4-shelf bays
10	Book Club Bundles	1		4.0	788 items on 4 4-shelf bays
11	White Pine Collection	1		2.0	339 items on 2 -shelf bays
12	Other Collection	1		4.0	525 items on 4 5-shelf bays
13	DAISY Book Collection	1		1.0	69 items on 1 4-shelf bays
14	DVD Collection	1		2.0	562 items on 2 5-shelf bays
15	Video Game Collection	1		6.0	1,123 items on 6 5-shelf bays
16	Library of Things Collection	1		9.0	492 items on 9 5-shelf bays
17	Book Truck Corral	1		8.0	Convenient location for customers to browse materials prior to reshelving
18	Storage	1		8.0	For storage of furniture, equipment, supplies, etc.
	Subtotal, Ground Floor			177.0	

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
	<u>Upper Floor(s)</u>				Potentially divided into 2+ floors
19	Arrival and Orientation Point	1		10.0	Incl. gateway features, orientation, events notices, and directional signage, bench seating for 4
	Information Desk (Second Floor)	1		0	See Component 5. Tech Centre
20	Information Desk (Third Floor)	1		12.0	Modular desk for 2 staff
21	Collection Layout Signage	1		1.0	Incl. print and digital displays conveying content and layout of the Collection, associated resources and related programs
22	Public Washroom	2	20.0	40.0	Allowance, to be confirmed
23	Universal Washroom	1		5.6	Incl. baby change table
24	Non-Fiction Collection	1		166.0	24,823 books on 166 5-shelf bays
25	OPAC Station	2	1.0	2.0	Adjacent to collection
26	Silent Study Room	1		125.0	Accommodates 50 at individual tables and carrels; enclosed with silent sliding door; provide views to exterior
27	Modular Study Room	3	2.5	7.5	Such as the Framery office booths; accommodates 1 person
28	Single Table Seating	12	2.5	30.0	Dispersed at component perimeter by Non-Fiction Collection
29	Fiction Collection	1		264.0	29,635 items on 264 4- and 5-shelf bays
30	Graphic Novel Collection	1		16.0	3,425 items on 16 5-shelf bays
31	OPAC Station	2	1.0	2.0	Adjacent to Collection
32	Quiet Reading Area/ Fireside Lounge	1		45.0	Incl. 15 individual lounge seats and/or couches, placed with views to exterior
33	Single Table Seating	10	2.5	25.0	Dispersed at component perimeter
34	Artist-in-Residence Studio	1		37.5	Incl. counter with sink
35	Meeting Room, Small	1		37.5	Accommodates up to 15; can be rented by community
36	Meeting Room, Medium	1		60.0	Accommodates up to 30; can be rented by community; may be located on Ground Level
37	Meeting Room, Large	1		100.0	Accommodates up to 50, with counter and sink; can be rented by community
38	Building Service Worker Closet	1		7.4	
39	Book Truck Corral	1		8.0	Accommodates 8 Book Trucks
	Copy/Print/Scanner Station			0	See Component 5. Tech Centre

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
40	Storage	1		8.0	For storage of furniture, equipment, supplies, etc.
	Subtotal, Upper Floor(s)			1,009.5	
	<b>Total</b>			<b>1,186.5</b>	<b>NSM</b>
				1.20	Grossing Factor
				1,425	<b>CGSM</b>
				15,339	<b>CGSF</b>

# 5. TECH CENTRE

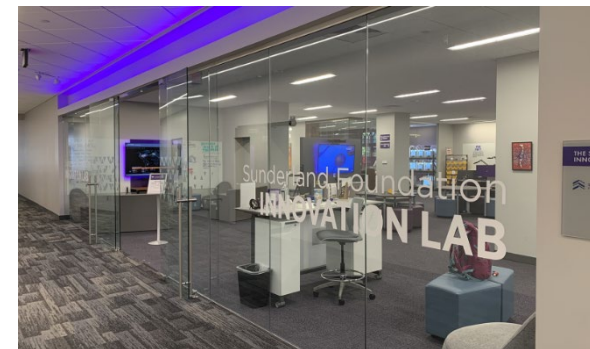
## FUNCTIONAL DESCRIPTION

### COMPONENT OVERVIEW

The Tech Centre supports the exploration of technology and the teaching and learning of digital skills. It provides highly mediated spaces and services, in which most of the interaction is between customers and technology. It accommodates specialized technologies, and includes staff-facilitated, individual and group instruction in the use of those technologies, and assistance with the creation of content.

### KEY ADJACENCIES

- 1 **4. Adult and Teen Collections and Study Spaces** Provide direct access by general circulation to Adult and Teen Collections and Study Spaces for the movement of customers and staff.
- 2 **2. Collaboration Zone** Provide direct access by general circulation to the Collaboration Zone for the movement of customers and staff.
- 3 **6. Staff Workspace** Provide direct access by dedicated circulation to sorting area in Staff Workspace for the movement of staff and collection resources.



Specialized instruction, access to new and innovative technologies and tech help

## FUNCTIONAL DESCRIPTION

This component accommodates one-on-one instruction, group instruction, access to specialized technology and software, and showcasing and exploration of new technologies.

Features will include:

- An Arrival and Orientation Point introducing users to the scope of services offered;
- Staff service that focuses on technological equipment and virtual access;
- Customer access to computer stations in open and enclosed spaces; and
- A Makerspace.

Activities will include:

- Staff assistance and peer assistance for customers;
- Small group technology instruction;
- Access to general and specialized technology stations;
- Support for linking personal devices to Library resources;
- Testing new technologies; creating digital content; self-publishing;
- Video and audio projects taking place in modularized digital creation rooms;
- Access to public printing/copying equipment, with nearby access to Information Desk for payment; and
- Access to robust Wi-Fi service.

## OPERATIONAL DESCRIPTION

### Hours of Operation

This component will generally be open only when main Library components are open.

### Customer Profile

The component will attract:

- Those requiring access to special technology and the staff assistance required for that access;
- Customers wishing to print items of general or research interest, or the results of personal projects completed while in the Library;
- Those accessing digital information via computer stations located in this component; additionally, there will be frequent use of portable personal information technology;
- Those learning and/or exploring new technologies and technology applications; and
- Those seeking help with using their own devices. This includes one-on-one tech help appointments.

### Learning and Discovery

Customers will use Library computer workstations, and/or will frequently bring their own computers or other devices.

Scheduled and spontaneous teaching presentations and interaction may occur in flexible open Demonstration Space located near the centre of this component as well as in the group instruction room. These interactions may be for individuals and/or small groups.

This component will include a Demonstration Space, which highlights the technologies and services available.

### Staff Support

Specialized staff supporting activity via an Information Desk taking place in this component will also support the adjacent Second Floor functions of the Adult and Teen Collections and Study Spaces component.

Roving staff based in this component will be available to provide assistance to customers in this component and Component 4. Adult and Teen Collections and Study Spaces which will be adjacent.

Additional staff involved with equipment maintenance activities may be temporarily located in the component.

## WORKLOADS

### Customer Accommodation

Type	Number of Stations	Number of Seats	Customer Occupants
Open Demonstration Space	-	10	10
Individual/Group Workspace	2	10	10
Computer Station	10	10	10
Special Technology Station	2	2	2
Copy/Print/Scanner Station	1	-	1
Group Instruction Room	10	10	10
Digital Creation Space	2	4	4
<b>Total</b>	<b>27</b>	<b>46</b>	<b>47</b>

### Collection Resources

No collections materials will be displayed or stored in this component.

## STAFFING AND OCCUPANCY ESTIMATES

Estimated staffing and occupancies for this component are summarized below in full-time equivalents (FTE), headcounts, and maximum occupancy.

Position	Existing FTE	Future FTE	Total Headcount	Maximum Occupancy
Public Service Staff <sup>1</sup>	-	-	-	2
Information Desk <sup>2</sup>	-	-	-	2
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>

Notes:

- Staff are listed in the Component 6. Staff Workspace component staffing table.
- The two staff members are shared with Component 4. Adult and Teen Collections and Study Spaces.

## DESIGN CRITERIA

Design criteria internal to this component are described below. They address unique conditions and design features required in the space.

For planning criteria that apply to the facility generally, see the General Planning Criteria section of the Functional Program.

### Internal Relationships

#### Architectural Concepts

- The component should provide an Arrival space that allows an immediate understanding of the layout and distribution of services and technologies.
- An enclosed and partially glazed Group Instruction Nook (with easily re-arranged furnishings) will allow for groups activities and programs.
- Semi-private Computer Stations will support a range of activities in which customers may be engaged in research, language learning, interviews, and online courses, etc.

#### Interior Design Concepts

- Technology resources should be grouped by type. Some resources will attract more activity; some will require minimal distraction and increased focus.
- Open spontaneous demonstration and instructional space may be created periodically by the rearrangement of lightweight furnishings.
- All technology should be arranged to avoid creating an experience of visual and/or physical obstruction and should be oriented to maximize sightlines across the component.
- Floor surfaces should make use of a durable, easily cleaned and acoustically absorbent material.

#### Operational Concepts

- The Information Desk located in this component is shared with Component 4. Adult and Teen Collections and Study Spaces must have visual contact with all areas of that component.
- The component does not require direct adjacency to non-public staff workspace.

#### Building Systems Criteria

- Customer technology stations will be semi-private workstations equipped with larger work surfaces and power supply.



## SPACE REQUIREMENTS

Refer to the table below for the details of the projected space allocation.

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
01	Arrival and Orientation Point	1		10.0	Incl. gateway features, orientation, events notices, and directional signage
02	Open Demonstration Space	1		15.0	Incl. 10 movable lounge seats and side tables, green screen
03	Information Desk	1		12.0	Located in proximity to Component 4. Adult and Teen Collections and Study Spaces (supporting Second Floor) as it also supports that component; modular desk for 2 staff
04	Individual/Group Workspace	10	2.0	20.0	
05	Computer Station	10	3.0	30.0	Provide with stations that can accommodate 2 or more people as required
06	Digital Creation Station	2	4.5	9.0	Locate away from activity but close to staff Information Desk; includes Digitization Station
07	Copy/Print/Scanner Station	1		5.0	Incl. high speed printer and scanner with collating area
08	Group Instruction Nook	1		30.0	Accommodates 10 people at computer tables and assumes use of laptops; large opening glazed wall to integrate computers/space into other area
09	Storage	1		8.0	For laptop carts and other equipment
10	Modular Digital Creation Room	2	7.4	14.8	Accommodates 2 people each for activities such as audio recording and editing, video editing and recording, and other similar tasks that require an acoustically isolated environment
	<b>Total</b>			<b>153.8</b>	<b>NSM</b>
				1.20	Grossing Factor
				<b>185</b>	<b>CGSM</b>
				<b>1,991</b>	<b>CGSF</b>

# 6. STAFF WORKSPACE

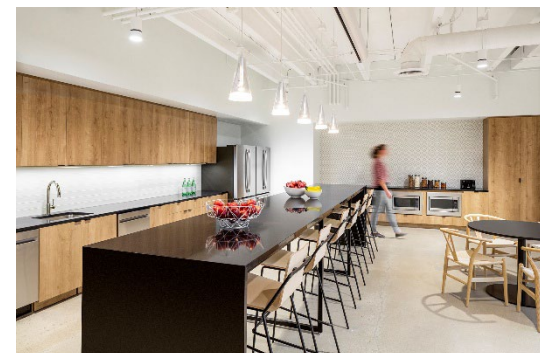
## FUNCTIONAL DESCRIPTION

### COMPONENT OVERVIEW

Staff Workspace accommodates the administrative and non-public workspace of Library staff including those who work in customer service areas at the Library. This component also includes the central staff amenities for all staff who work in the Library.

### KEY ADJACENCIES

- 1 **1. Entrance, Welcome Area and Program Room** Provide convenient access by general circulation to Entrance, Welcome Area and Program Room for the movement of staff providing service & working in Circ. Svcs.
- 2 **5. Tech Centre** Provide convenient access by general circulation to the Tech Centre for the movement of staff providing service.
- 3 **3. Children’s Library** Provide convenient access by general circulation to the Children’s Library for the movement of staff providing service.
- 4 **7. Back-of-House Functions** Provide convenient access by general circulation to Back-of-House Functions for the movement of staff receiving shipments of materials, equipment and supplies.



Open and closed office environments, staff break areas

## FUNCTIONAL DESCRIPTION

Staff Workspace accommodates the administrative and non-public workspace of administration staff and staff who work in various service areas at the Library. It also includes central staff amenities that support all Library staff. Other staff workspaces within the building include:

- Children’s Library: workspaces for some Programs and Youth Services staff; and
- Back-of-House Functions: workspaces for Circulation staff and Collections and Technical Services staff.

Features within the component include:

- Open office space for collaborative service delivery;
- Dedicated and shared workstations depending upon functional requirements;
- Workstations designed and organized for material and information flows; and
- Green principles in design of office configuration, with open offices at the window and enclosed offices inboard.

Activities within the component include:

### *Staff Office/Workroom*

- Administrative functions, including developing service directions, planning, writing reports and departmental budgets;
- A broad range of other desk-oriented activities specific to individual positions;
- Group meetings and other collaborative activity;
- Photocopying, printing, scanning and document production;
- Mail processing and sorting;

### *Staff Amenities*

- Storage and preparation of snacks and light meals;
- Informal socializing;
- Quiet and gregarious staff break activities;

- Charging of personal devices;
- Hosting informal staff recognition events and celebrations;
- Secure storage of staff personal effects; and
- Staff Washroom facilities.

## OPERATIONAL DESCRIPTION

### Hours of Operation

Hours of operation are as follows, assuming staff may be present one hour before and one hour after regular Library operating hours. Staff amenities will be available at any time that staff are in the facility, which may include any hour of the day and weekends.

	Opens	Closes
Monday to Friday	8:00 am	10:00 pm
Saturday	8:00 am	6:00 pm
Sunday	11:00 am	6:00 pm

### Security

Card access will be provided to the general staff zone, after which staff will be able to move to the various spaces without card access.

## WORKLOADS

Workloads are dependent on the number of staff required to support the provision of services.

## STAFFING AND OCCUPANCY ESTIMATES

Estimated staffing and occupancies for this component are summarized below in full-time equivalents (FTE), headcounts, and maximum occupancy.

Position	Existing FTE	Future FTE	Total Headcount	Maximum Occupancy
Administration				
Library Director	1.0	1.0	1	1
Deputy Director	1.0	1.0	1	1
Administrative Assistant	1.0	1.0	1	1
Future support position	-	-	2	2

Position	Existing FTE	Future FTE	Total Headcount	Maximum Occupancy
<b>Technology &amp; Infrastructure</b>				
Future new librarian position	-	1.0	1	1
Future facilities support position	-	-	2	2
<b>Public Services</b>				
Digital and Information Services Coordinator	1.0	1.0	1	1
Digital & Information Services Librarian	1.0	2.0	2	2
Future Information Services Assistant position	-	4.0	6	4
<b>Community Development &amp; Programs</b>				
Future new senior position	-	1.0	1	1
Programs and Services Advisor	1.0	1.0	1	1
Future Home Services librarian position	-	1.0	1	1
<b>Total</b>	<b>6.0</b>	<b>14.0</b>	<b>20</b>	<b>18</b>

## DESIGN CRITERIA

Design criteria internal to this component are described below. They address unique conditions and design features required in the space.

For planning criteria that apply to the facility generally, see the General Planning Criteria section of the Functional Program.

### Internal Relationships

#### Architectural Concepts

- Staff workspace identified in this component is one of three staff work areas in the building. Ideally it requires a semi-private location on the Second Floor.
- If possible, it should be directly above a corresponding operational staff work area on the Ground Floor.

- The component requires a vestibule entry from public areas. This will allow for a sound lock transitional space, and separate approaches to Administration offices, the open office area, and the Staff Lunchroom and Washroom.
- Offices for the Director and Deputy Director do not need to be visible to or accessible to the public.
- This component should be located near the Meeting Room located in Component 4. Adult and Teen Collections and Study Spaces, in order to facilitate use of that room by staff and the Library Board.
- Natural light and, preferably, views should be provided in all office and workspace areas.
- The Staff Lunchroom would benefit from an irregular or rectangular shape to create zones that support noisier and quieter activity.
- The Staff Lunchroom should have natural light and views with opening windows.
- The Staff Lunchroom should have access to an exterior lounge area, if possible.

#### Interior Design Concepts

- This component is a non-public space. There should be no views into this area from public spaces.
- Generally, the staff work area will be an open plan environment, with sound reducing partitions, as necessary.
- The staff work area will be organized into groupings (e.g., Administration, Public Services, Technology and Infrastructure, Community Development and Programs) to encourage collaboration and sharing among those doing similar work. Each grouping will consist of open workstations plus a small collaboration space for brainstorming, idea sharing and project work.
- A staff Breakout Room for six is provided that is shared by all areas of this component. It will be used for project work, group planning, private conversations, training, and meetings.
- All workstations, movement spaces and offices must have ample natural light and nearby views to the exterior.

- Consideration should be given to the use of sit/stand desks.
- The atmosphere of the Staff Lunchroom should be inviting and non-institutional, with warm natural materials, comfortable furnishings, and indirect lighting.
- The Staff Lunchroom should accommodate a variety of seating types, with group and individual seating areas providing opportunities for social interaction, but also with areas for quiet solitary activities.
- The Staff Lunchroom kitchen area should include a double sink, refrigerator, dishwasher, microwave, garbage bins, recycling centre, counters for food preparation and cupboards for the storage of dishes and supplies.

**Operational Concepts**

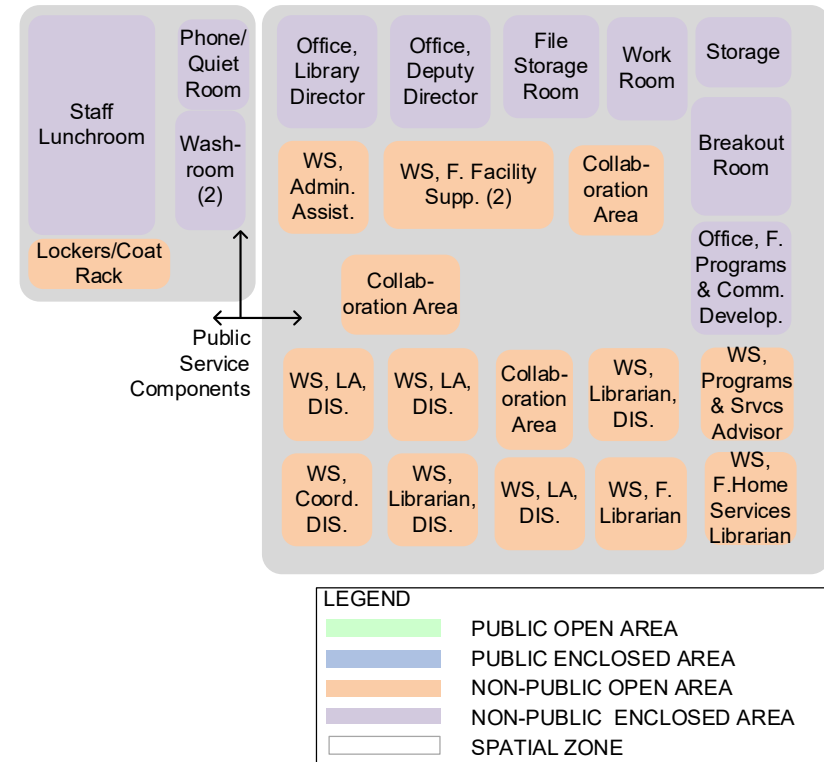
- The model provided may change as planning for the proposed Library matures and through the life of the new facility. It will be important to create as much flexibility as possible around staff space.
- Each staff member who does not have a dedicated workstation will be assigned a locker.
- The Staff Lunchroom must be enclosed, acoustically shielded, provided with opening windows with views to the exterior, and its kitchen area separately ventilated.

**Building Systems Criteria**

- Each staff workstation must have two data ports and two duplex electrical outlets.
- Staff desks should have task lighting.
- The Staff Lunchroom should have Wi-Fi capability and should include an area to recharge devices.
- Acoustical separation must be provided between the Lunchroom and any adjacent work and public areas.
- The Staff Lunchroom should be plumbed and wired to support vending machines.

**Functional Relationship Diagram**

The diagram below identifies a general spatial organization of the functions described above.



## SPACE REQUIREMENTS

Refer to the table below for the details of the projected space allocation.

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
	<b>Administration Area</b>				
01	Office, Library Director	1		13.0	L-shaped desk and chair, 2 bookcases, 2 filing cabinets, meeting table and 4 side chairs
02	Office, Deputy Director	1		9.2	L-shaped desk and chair, bookcase, filing cabinet, meeting table and 3 side chairs
03	Workstation, Administrative Assistant	1		5.6	L-shaped desk and chair, filing cabinet, bookcase
04	Workstation, Future Support Position	2	5.6	11.2	L-shaped desk and chair, filing cabinet, bookcase
05	File Storage Room	1		7.4	Accommodates 4 lateral filing cabinets and lockable storage cabinet; lockable
	Meeting Room	1		0.0	See Component 4. Adult and Teen Collections and Study Spaces
	<b>Public Services</b>				
	<b>Digital and Information Services</b>				
06	Workstation, Coordinator, Digital and Information Services	1		5.6	
07	Workstation, Digital and Information Services Librarian	2	5.6	11.2	L-shaped desk and chair, filing cabinet, bookcase
08	Workstation, Shared, Library Assistant	3	4.2	12.6	L-shaped desk and chair, storage pedestal; shared by 4 Assistants
10	Collaboration Area	1		5.6	Incl. table, central to above work pod
	<b>Programs and Community Development</b>				
11	Office, Manager, Programs and Community Development	1		9.2	L-shaped desk and chair, bookcase, meeting table and 3 side chairs
12	Workstation, Programs and Services Advisor	1		5.6	L-shaped desk and chair, filing cabinet, bookcase
13	Workstation, Future Home Services Librarian	1		5.6	L-shaped desk and chair, filing cabinet, bookcase; requires storage for collection and equipment

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
14	Collaboration Area	1		5.6	Incl. table, central to above work pod
	<b>Technology and Infrastructure</b>				
15	Workstation, Future New Librarian	1		5.6	L-shaped desk and chair, filing cabinet, bookcase
16	Workstation, Future Facilities Support Position	2	5.6	11.2	L-shaped desk and chair, filing cabinet, bookcase
17	Collaboration Area	1		5.6	Incl. table, central to above work pod
	<b>Office Support</b>				
18	Breakout Room	1		12.0	Shared by all areas; accommodates 4 to 6 people; used for private conversations, training and meetings
19	Workroom	1		14.0	Incl. work counter, high speed multifunctional device with finishing attachment, paper cutter and collating area, paper storage cabinet, stationery supplies storage, mail machine, mail slots and shredder
20	Storage	1		8.0	For storage of furniture, equipment, supplies, etc.
	Subtotal, Administration Area			163.8	
	<b>Staff Amenities</b>				
21	Lockers/Coat Rack	1		6.0	30 assigned full lockers 18" X 18" and coat rack
22	Staff Washroom	2	4.6	9.2	Wheelchair accessible
23	Staff Lunchroom	1		30.0	Accommodates 15; incl. communal spaces, tables and chairs, soft seating, as well as areas of refuge; incl. sink, counter, full sized fridge, microwave; opens to exterior staff-only space
24	Phone/Quiet Room	1		5.0	For confidential calls, small meetings, and wellness
	Subtotal, Staff Amenities			50.2	
	<b>Total</b>			<b>214.0</b>	<b>NSM</b>
				1.35	Grossing Factor
				<b>290</b>	<b>CGSM</b>
				<b>3,122</b>	<b>CGSF</b>

# 7. BACK-OF-HOUSE FUNCTIONS

## FUNCTIONAL DESCRIPTION

### COMPONENT OVERVIEW

This is a very active, non-public component that features receiving, sorting and movement of collection resources, equipment, materials, and supplies into and out of the Library. It includes workspace for Circulation Services staff and for Collections and Technical Services staff, in addition to space to support Building Services staff functions. It also includes general building storage and houses the staff entrance to the Library.

### KEY ADJACENCIES

- 1 **1. Entrance, Welcome Area and Program Room** Provide direct access by dedicated circulation to the Entrance, Welcome Area and Program Room for the movement of InterLINK and Inter-Library Loan (ILL) materials and supplies.
- 2 **6. Staff Workspace** Provide direct access by dedicated circulation to the Staff Workspace, for the movement of staff to the Staff Amenities space there.
- 3 **4. Adult and Teen Collections and Study Spaces** Provide convenient access by dedicated circulation to the Adult and Teen Collections and Study Spaces for the movement of materials.



Shipping and receiving, general building storage, other back of house functions

## FUNCTIONAL DESCRIPTION

This component accommodates the spaces required to ensure the practical operation of the building and to support the movement of materials, equipment and supplies into and out of the facility.

It also includes staff workspaces for Circulation Services and for Collections and Technical Services in addition to space to support Building Services staff functions. General building storage is also located in the component.

Features within the component include:

- Delivery Bay and Loading Bay and Staging Area;
- Central Stores Area;
- Staff Work Area for Circulation Services in proximity to the Accounts Desk in Component 1. Entrance, Welcome Area and Program Room;
- Workroom for Circulation Services associated with automated materials handling machine and other activities;
- Staff work areas for Collections and Technical Services staff that support collection acquisitions, cataloguing, processing and maintenance tasks including sorting of donations;
- Staff work areas for Collections and Technical Services staff that relate to Systems Support for various Library computer software and equipment (including the integrated library system);
- Storage for Library equipment and furnishings;
- Storage for Book Trucks not currently in use;
- Central housekeeping;
- Facilities and Maintenance Workshop; and
- Garbage and recycling marshalling area.

Activities within the component include:

### *Shipping and Receiving Area*

- Control and management of Loading Bay and Staging Area activities, which include:

- shipping and receiving of supplies and materials related to the operation and maintenance of the Library, and
- shipping and receiving of supplies for events in the Program and Meeting Rooms;
- General processing of deliveries, unpacking or boxes, assembly of refuse;
- Sorting of incoming shipments of items and initial distribution to departments in the Library;
- Temporary storage and staging of shipments;
- Storage of recyclables;
- Secure storage of staff bicycles;

### *Circulation Services Area*

- Receiving of materials the Exterior Materials Return connected directly Circulation Service Workroom (see Component 7. Back-of-House Functions, Ref. 04);
- Sorting of returned collection materials using an automated materials handling machine;
- Placing materials onto Book Trucks prior to moving them to Book Truck Corrals in collection areas;
- Storage and retrieval of collections that are not located in the public area, such as story time kits, library of things and technological devices such as tablets, laptops, etc. that are lent to customers while at the Library;
- Counting of cash received and secure storage of cash and valuables;
- Storage and retrieval of lost and found items;
- Shipping and receiving of returns and requests transported via the InterLINK delivery truck;
- Inspection and minor mends of collections as well as some processing of collections;
- Administrative activities associated with Circulation Services;

*Collections and Technical Services Area*

- Acquisition and receiving of Library collections, including unpacking of materials and entry into system;
- Cataloguing and processing of materials;
- Collection maintenance activities, including updating/revision of catalogue records, re-labelling materials, and withdrawing items from the collection;
- Temporary storage of in-process materials;
- Temporary storage, review and triaging of donated materials;
- Systems support and maintenance activities, including troubleshooting and maintaining various computer software and equipment (including the Integrated Library System [ILS]);
- Access and servicing of information technology (IT) network infrastructure;
- Administrative activities associated with Collections and Technical Services;
- Photocopying, printing and scanning and document production (shared with Circulation Services); and

*Storage Area*

- Storage of some of the general supplies used throughout the building;
- Storage of surplus furniture and miscellaneous equipment;
- Central storage of housekeeping supplies and coordination of services;
- Building repairs in the Facilities and Maintenance Workshop; and
- End of trip Showers and Lockers.

**OPERATIONAL DESCRIPTION**

**Hours of Operation**

Indicative hours of operation for Back-of-House Functions are as follows:

	<b>Opens</b>	<b>Closes</b>
Monday to Friday	8:00 am	9:00 pm
Saturday	8:30 am	6:00 pm
Sunday	12:00 pm	6:00 pm

**Movement of Materials**

*Deliveries to Facility*

Outside agencies will contact staff in this component to notify that deliveries are being made, whereupon staff will meet the deliveries at the Loading Bay. New materials will be moved by trolley or hand truck directly to the Collections and Technical Services area. Materials received through InterLINK and ILL materials will be taken directly to the Circulation Services Workroom for processing and distribution. After processing, materials will be placed on Book Trucks and moved to the Holds shelving in Component 1. Entrance, Welcome Area and Program Room.

City staff will have access to the Loading Bay and Staging Area entrance to deliver materials related to building operations or to conduct maintenance activities.

*Circulating Library Materials*

Returned Library materials will move from materials drops to the automated sorting machine with a minimum of conveyors and with no staff handling requirements.

Material will be automatically sorted into bins by the automated materials handling machine. Staff will fine sort the materials onto Book Trucks and move the Book Trucks to appropriate collection areas of the Library, including: the New and Notable Collection and Holds area in Component 1. Entrance, Welcome Area and Program Room, to Component 3. Children’s Library, and to Component 4. Adult and Teen Collections and Study Spaces. Staff will use the designated service elevator.

Consideration should be given to the use of a PMPL van to move materials between the Central and Branch Libraries, but also for outreach activities.

### General Shipping and Receiving

Materials and supplies will be received through the Loading Bay and transferred to appropriate locations through the building, including Building Service Worker Closet, the staff workrooms/work areas, and to general storage rooms.

### WORKLOADS

The workload of this component is generally a function of the numbers of staff needing accommodation, and the numbers of materials circulating in a library system, and the size of the facility itself.

While this is planned to support a two-branch Library, a single Loading Bay will be provided with support spaces dictated by the size of the facility.

Use of the Library can be expected to increase significantly over existing levels. Maintenance services will be affected.

### STAFFING AND OCCUPANCY ESTIMATES

Estimated staffing and occupancies for this component are summarized below in full-time equivalents (FTE), headcounts, and maximum occupancy.

Position	Existing FTE	Future FTE	Total Headcount	Maximum Occupancy
Shipping and Receiving Circulation Services	-	-	-	-
Supervisor, Circulation Services	1.0	1.0	1	1
Shift Supervisor	1.0	1.0	1	1
Circulation Assistant	2.4	4.0	8	4
Shelver	1.3	2.0	7	3
Collections and Technical Services				
Coordinator, Systems and Technical Services	1.0	1.0	1	1
Systems Support Technician	1.0	2.0	2	2
Cataloguing & Acquisitions Technician	0.8	2.0	2	2
Collection Support Assistant	1.0	1.0	2	2

Position	Existing FTE	Future FTE	Total Headcount	Maximum Occupancy
Stores Area				
Facilities Manager	-	1.0	1	1
<b>Total</b>	<b>9.5</b>	<b>15.0</b>	<b>25</b>	<b>17</b>

### DESIGN CRITERIA

Design criteria internal to this component are described below. They address unique conditions and design features required in the space.

For planning criteria that apply to the facility generally, see the General Planning Criteria section of the Functional Program.

### Internal Relationships

#### Architectural Concepts

- The Back-of-House staff workspace is one of three staff work areas in the building. It requires a Ground Floor location convenient for active materials vehicular access, receiving, and processing.
- If possible, it should be directly below staff workspaces described in Component 6. Staff Workspace. Ideally, a convenience stair(s) should be provided linking the two staff workspaces.
- Design should be driven by the staff environmental needs and the materials handling requirements of the component and the Library.
- There are four separate zones:
  - Shipping and Receiving Area;
  - Staff Work Area;
    - Circulation Workroom;
    - Collections and Technical Services;
  - Stores Area; and
  - Staff Amenities.

These zones must be separated by appropriately scaled movement aisles.
- This component must include a weather-protected staff entrance, with an entry vestibule adjacent to the Staff Amenities Zone.

- Connections into the interior public space must be sufficiently wide and located close to the service elevator.
- There must be views of the Loading Bay and Staging Area and vehicular approaches from one of the staff work areas.
- This component will require detailed consideration of corridor width and circulation space, equipment clearances, exit widths, door sizes, etc., to allow for the movement of equipment and materials.
- Barriers to the movement of materials should be minimized. The number of right-angle turns should be minimized in all materials movement pathways.

### Interior Design Concepts

- There are two main environments: one for active Shipping and Receiving, materials movement, and collection sorting functions; and another for careful technical or clerical work at staff workstations. These two environments should be very carefully delineated to ensure optimal staff working conditions.
- This component will be qualitatively different from others in the type of finishes, materials and flooring used. These must be selected to minimize cleaning and maintenance and to withstand heavy impacts and usage.
- Where staff are in locations in this component for extended periods of time, light and views should be introduced as possible.
- Book disposal should be carried out in an area away from public view.

### Operational Concepts

- The Loading Bay must accommodate 3-ton trucks, including any overhead canopies.
- The Loading Bay must be adjustable to match the various heights of delivery truck decks.
- Incoming materials include books and collection resources, supplies, furnishings and equipment will arrive by City or other delivery vehicle at the Loading Bay.

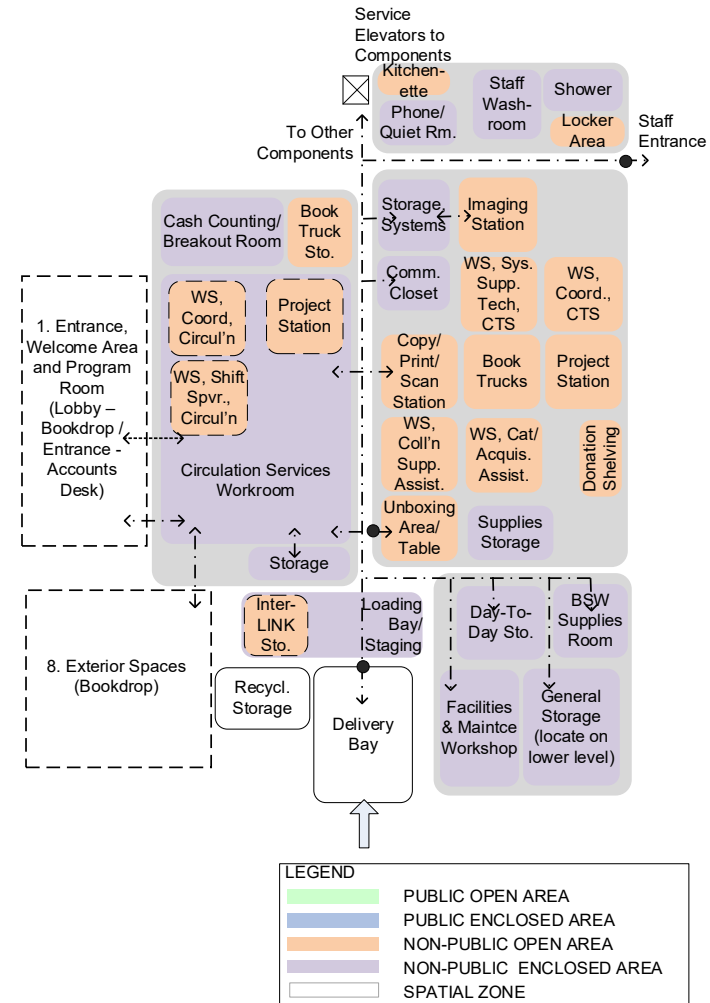
- Materials will be moved by pallet truck to an Unboxing Area before distribution to appropriate storage area or to other Library components. Materials will be distributed to four main areas:
  - ILL and InterLINK materials will be delivered to Circulation Services Workroom for sorting, processing and delivery to the appropriate Library component;
  - circulating collection resources returned via external and/or internal book drops will arrive, (via minimal horizontal conveyor systems), in the Circulation Services Workroom for sorting;
  - new and incoming materials will be delivered to Collections and Technical Services for processing; and
  - supplies, furnishings and equipment will be transported to central storage areas for long-term storage.
- Book Trucks that have been loaded in the Circulation Services Workroom will be moved to Book Truck Corrals in the public area and to appropriate destinations in the collections. Once emptied, Book Trucks will be returned to a Book Truck Storage area adjacent to the sorting room.
- A designated service elevator should connect this component to the upper levels of the building. A marshalling area of 8.0 square metres should be located adjacent to each elevator door.
- Controlled access is required for all areas of this component.
- Recycling includes pop and juice cans and bottles, plastics, glass and paper, and compostables. Materials are collected from boxes on each floor and brought to bins in this component for pick-up.
- Staff of this component will also use the central amenity staff room located on the upper level.

Building Systems Criteria

- Camera surveillance of the Loading Bay and Staging Area and all corridors should be provided. This is an area full of supplies, equipment, books and materials.
- An intercom and buzzer system is required to connect the Loading Bay and Staging Area with the Circulation Services Workroom.
- Card access should be provided to all non-public areas.
- Acoustic shielding must be provided for all mechanical equipment.

Functional Relationship Diagram

The diagram below identifies a general spatial organization of the functions described above.



## SPACE REQUIREMENTS

Refer to the table below for the details of the projected space allocation.

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
	<u>Shipping and Receiving Area</u>				
	Delivery Bay/Vehicle Parking	1		0	Exterior; assume 45 square metres required for Loading Bay; plus an additional 35 square metres for parking PMPL van
01	Loading Bay and Staging Area	1		16.0	Should have scissors lift to accommodate various heights of truck decks
02	InterLINK Delivery Storage	1		6.0	Adjacent to Loading Bay and Staging Area
	Staff Bike Storage	1		0	Covered and weather-protected, secure storage for up to 4 staff bikes
	Recycling Storage	1		0	Incl. in Enclosed Delivery Bay/Vehicle Parking
	Subtotal, Shipping and Receiving Area			22.0	
	<u>Staff Work Area</u>				
	<i>Circulation Workroom</i>				
03	Cash Counting/Breakout Room	1		7.4	Accommodates counting of cash, as well as small meetings and training activities
04	Circulation Service Workroom	1		75.0	Incl. automated materials handling machine with 9 trolleys, 4 shared sit-stand workstations, ILL station, Holds processing/minor mends station, 7 bays shelving, printer, safe, bins storage, lost and found storage cabinet, recycling bins, and wider utility shelving (5) for collection of things; provide views to Component 1 - Ref. 12 Circulation Desk
05	Workstation, Circulation Supervisor/Shift Supervisor	2	5.6	11.2	L-shaped desk and chair, filing cabinet, bookcase; locate in alcove at edge of Ref. 04 Circulation Services Workroom; provide visual and acoustic separation from the Circulation Services Workroom
06	Project Station	1		4.2	Desk and chair; locate in alcove with Ref. 05 Circulation Supervisor/Shift Supervisor Workstation
07	Book Truck Storage	1		16.8	Accommodates 21 Book Trucks
08	Storage Room, Circulation	1		7.4	

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
	<i>Collections and Technical Services</i>				
09	Workstation, Coordinator, Collections and Technical Services	1		5.6	Accommodates workstation with 2 to 3 large monitors
10	Workstation, Systems Support Technician	2	5.6	11.2	Accommodates workstation with 2 to 3 large monitors
11	Copy/Print/Scanner Station	1		5.0	Shared with Circulation Services
12	Imaging Station	1		5.6	For imaging up to 6 computers at a time, as well as repair of computers
13	Storage, Systems	1		7.2	3 – 4 cabinets and utility shelving
14	Workstation, Cataloguing/ Acquisitions Assistant	2	7.4	14.8	Larger workstation for up to 2 Book Trucks
15	Workstation, Collection Support Assistant	2	7.4	14.8	Larger workstation for up to 2 Book Trucks
16	Project Station	1		4.2	
17	Donation Shelving	1		3.6	Accommodates 4 shelving units
18	Unboxing Area/Table	1		8.0	
19	Book Trucks	14	0.8	11.2	
20	Supplies Storage	1		4.0	2 – 3 cabinets/utility shelving units
21	Communications Closet	1		2.0	Air conditioned; plywood walls; accommodates server or other telecommunications equipment
	<b>Subtotal, Staff Work Area</b>			<b>219.2</b>	
	<b>Stores Area</b>				
22	Day-to-Day Storage	1		17.5	For items that require ready access
23	Building Service Worker Supplies Room	1		9.2	As per existing area; lockable with card access; incl. charging station, industrial shelving and open floor area for supplies; incl. sink
24	Storage, General	1		25.0	
25	Facilities and Maintenance Workshop	1		35.0	Incl. 1 workbench; perimeter counter and cabinets; task lighting; table saw, drill press, mitre saw, band saw, flammable materials
	<b>Subtotal, Stores Area</b>			<b>86.7</b>	

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
	<u>Staff Amenities</u>				
26	Kitchenette	1		3.5	Incl. counter and sink, small fridge
27	Shower	1		3.0	
28	Locker Area	1		3.5	Accommodates 16 half lockers and coat rack
29	Staff Washroom	1		4.6	
30	Phone/Quiet Room	1		5.0	For confidential calls, small meetings, and wellness
	Subtotal, Staff Amenities			19.6	
	<b>Total</b>			<b>347.5</b>	<b>NSM</b>
				1.25	Grossing Factor
				<b>435</b>	<b>CGSM</b>
				<b>4,682</b>	<b>CGSF</b>

# 8. EXTERIOR SPACES

## FUNCTIONAL DESCRIPTION

### COMPONENT OVERVIEW

This component accommodates the Library Entry, Landscaped Areas, covered bike parking, Connecting Pathways, Parking Facility Access, and Loading Bay Access. This component is conceptual and is provided for consideration in site development.

### KEY ADJACENCIES

- 1. Entrance, Welcome Area and Program Room**

Provide multiple direct connections from site pedestrian pathways and Plaza to the Entrance, Welcome Area and Program Room for movement to & from the building.

  
- 2. Entrance, Welcome Area and Program Room**

Provide direct connections to other site facilities to the Entrance, Welcome Area and Program Room to facilitate movement to and from the building.

  
- 3. Street Edges and Pathways**

Provide direct visual connections between Street Edges and Pathways to provide daytime and nighttime views to and from the building.

  
- 4. Parking Facility**

Provide direct access from underground Parking Facility for the movement of arriving and departing building users.

  
- 5. 7. Back-of-House Functions**

Provide direct access by Ground Floor vehicular approach to Back-of-House Functions Loading Bay for the movement of equipment, materials and supplies.



Public arrival & departure, parking access, service urban plaza & green space, signage, & program space

## FUNCTIONAL DESCRIPTION

This description establishes basic functional concepts relating to the development of the building site and describes aesthetic, practical, and/or symbolic exterior requirements.

Exterior Spaces must provide the outdoor links between the surrounding urban fabric, the inner green space on the site, and the Entrance, Welcome Area and Program Room at the heart of the building interior.

The building will be an active destination, with over 2,500 people moving in and out daily, arriving by private vehicle, pedestrian and cycle paths, and public transportation. More people can be expected to be moving through the site as they access other facilities in the vicinity. Additionally, there will be materials deliveries to and from the building.

This component ensures that space immediately adjacent to the building supports the optimal functional operation of the Library and provides a setting for Library and City-related activities occurring outside.

Together with the Library itself, the Exterior Spaces must provide a symbolic and functionally practical, attractive, and multifunctional civic setting.

All exterior space must be open and welcoming; however, security of the public must be a major consideration in the design of all Exterior Spaces.

Open plaza space directly adjacent to busy traffic arterials and contiguous with moving traffic is not desirable, will not be attractive and useable, and will not be welcomed by the public.

### Site Assumptions

- Assume that the edge of the site will continue to be a very active, bounded by busy traffic arterials, with a quieter interior to the site, away from the traffic, and adjacent to the natural riparian wooded areas.
- Assume a combination of pathways allowing pedestrian access to the Library from both the exterior and interior sides of the site.
- Assume that the part of the Library that faces major streets though it may be very visible, will be less active than the parts of the Library that

face the interior of the site, from which most visitors, arriving by car, will approach the building.

- Any site development concept must include visual and edge conditions adjacent to the intersection that provide for the building and for any adjacent plaza space, a sense of secure enclosure and safe prospect rather than exposure to busy traffic activity.
- Assume that the Library faces onto a civic Plaza, which should be safely removed from busy traffic areas. No allowance has been made for the size of the Plaza at this time.
- The Back-of-House Functions component will be on-grade and will be accessed by a service vehicle route that is on-grade.
- Structured parking for Library customers is provided below the Library facility, although it is not included as part of the Functional Program.

Features and activities include:

#### *Presence and Visibility*

- From adjacent sidewalks and adjacent streets, easily read signage that identifies the Library location and vehicular and pedestrian routes to access the facility;
- An iconic landmark architectural form that gives identity to the site;
- From the site and surroundings – views of features, spaces, and activities in Library spaces;
- From within the building – daytime and nighttime views of adjacent streets, and of buildings adjacent to the site;
- From within the building – daytime and nighttime views of adjacent riparian areas;
- From Plaza and Landscaped Areas – views of people who are entering and leaving the Library;

#### *Public Access Features*

- Approaches to one or more entrances to the Library Lobby, with pedestrian paths, public art, banner/flags, and signage. Note: within the building itself, there will be only one main public Entrance to the Library itself (the second public entrance will be through one of the

Program Rooms, but it will only be open for those attending a scheduled program/event);

- Overhead weather protection systems and protected waiting areas at entrances;
- Exterior approaches should be contiguous with interior floor levels in Entrance and Lobby spaces, and involve no stairs and/or minimal ramps;
- A connecting environmentally sensitive pedestrian pathway to existing civic buildings through the riparian area;
- Exterior pedestrian access points to a public underground Parking Facility;
- Covered and secure bicycle parking near an entrance to the Lobby;

*Vehicular Access and Materials Handling Features*

- Drop-off return chutes in the exterior wall adjacent to the materials handling area for collection materials returned by Library customers;
- Drop-off zone for private vehicles, buses and for customers with mobility challenges;
- Two-lane access ramp to a public underground Parking Facility; and
- Two-lane service vehicle access to the Library’s dedicated delivery bay, including recycling and garbage marshalling areas, receiving of shipments and movement of supplies, and parking for service vehicles.

**OPERATIONAL DESCRIPTION**

**Hours of Operation**

This component will generally be accessible for extended hours with most areas accessible 24-hours per day.

**Customer Profile**

Customer profile for this component includes:

- Many children of all ages, in small, medium and large groups;
- Mobility impaired customers and visitors;

- Those accessing the building to use one of the services;
- Those looking to spend time alone or with others in an active public urban environment;
- Those enjoying a break from their activities inside the building;
- Those enjoying a break from activities taking place in the adjacent Program Rooms, and who may be part of a larger group; and
- Those giving planned and/or impromptu outdoor presentations and/or performances.

**Movement of the Public**

Users accessing the building should be self-directed through intuitive wayfinding, assisted by various types of signage.

Many users will access the building directly from the Parking Facility.

This will be a place to stop and appreciate the visual impact and aesthetics of the building, and the activities occurring around it.

Design should promote after-hours use of Exterior Spaces by creating an active and visible location that is perceived as safe.

**Movement of Staff**

Staff will enter and leave the building via a dedicated staff entrance associated with the Back-of-House Functions component.

Staff may use the Exterior Spaces throughout the day for organized program support and/or for personal recreational activities.

**Movement of Materials**

Many customers will be carrying Library materials to and from their vehicles, their bicycles or simply as pedestrians.

Many clients using these spaces will be encumbered by personal effects, by strollers, and their collection materials.

A collection materials drop should be accessible from the exterior in a location that is convenient to the drop-off, adjacent to an entrance, and that empties directly into the Circulation Services Workroom in the Back-of-House Functions

component. The materials drop should not require a vertical below grade connection to horizontal conveyors connecting to the collection sorting room in Building Services.

Frequent materials movement by service vehicles will be a major activity.

### WORKLOADS

A working assumption is that over 2,500 people will be arriving per day at the Library site and moving to and from the building.

A small proportion will move by foot across the site with a much larger proportion moving from the Parking Facility directly to the building.

### Customer Accommodation

Type	Number of Stations/Seats
Entry Bench Seats	20
Bike Parking, Short-Term	4 <sup>1</sup>
Bike Parking, Long-Term	6 <sup>1</sup>
Casual Landscape Benches	30
<b>Total</b>	<b>60</b>

Note:

1. See City of Port Moody Zoning Bylaw, 2018, No. 2937.

### OCCUPANCY ESTIMATES

Estimated occupancies for this component are summarized below in full-time equivalents (FTE), headcounts, and maximum occupancy.

Position	Existing FTE	Future FTE	Total Headcount	Maximum Occupancy
General Plaza and Landscaped Areas <sup>1</sup>	NA	NA	-	150
Staff Exterior Space	NA	NA	-	20
<b>Total</b>	-	-	-	<b>170</b>

Note:

1. These are unstaffed areas.

### DESIGN CRITERIA

Design criteria relevant to this component address unique conditions and design features required in the space.

For planning criteria that apply to the exterior generally, see the General Planning Criteria section of the Functional Program.

### Design Relationships

#### Urban Design

- Site zones include:
  - symbolic and commemorative features and artwork, along adjacent streets and sidewalks;
  - smaller less active, paved and landscaped areas connecting to other destinations, features and facilities on the site;
  - sheltered and acoustically separated open Plaza and program area adjacent to the Lobby Entrances (which should be determined by the City of Port Moody);
  - service access route; including shipping/receiving, emergency access, access to secured exterior Building Services spaces, storage for equipment used for exterior maintenance; and
  - Parking Facility access routes.
- By way of views into the building and through the consistent use of materials, public approaches should preview the experience to be found in the inner Lobby and Entrance.
- All features should integrate the principles of CPTED.
- Site design should carefully separate three types of movement:
  - pedestrians arriving via pedestrian pathways;
  - private vehicles arriving/departing via the Parking Facility access ramp; and
  - service delivery vehicles arriving/departing via the dedicated delivery bay access route.

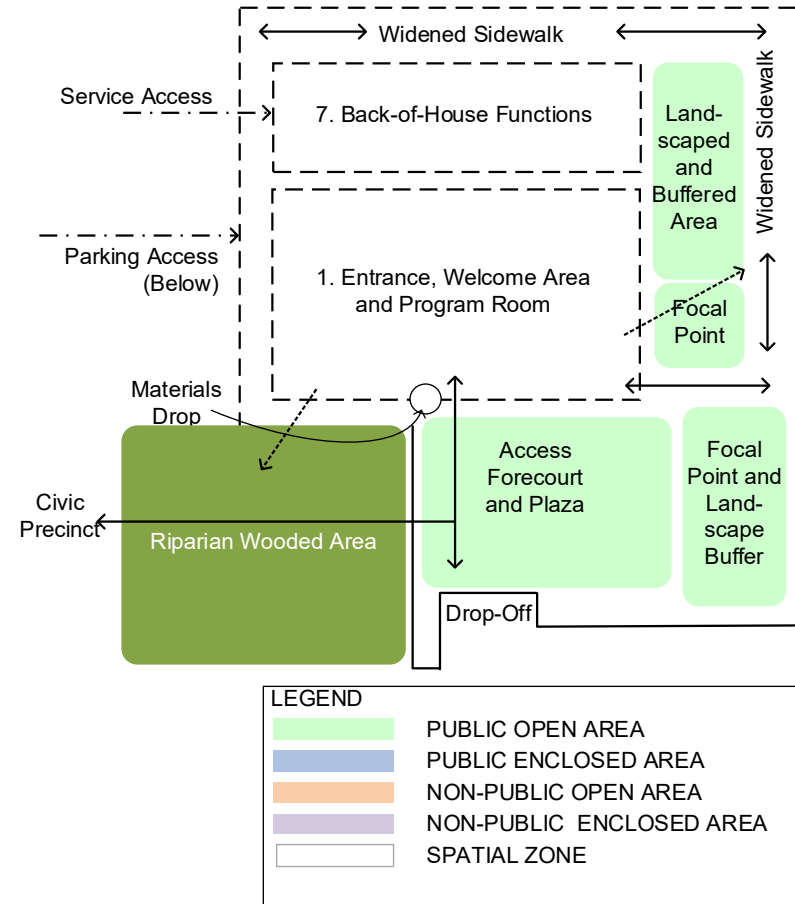
- Wide and safe pedestrian crossings must be provided where sidewalks/pedestrian routes intersect with vehicle ramp access points.

### Exterior Services and Systems

- All design features should seek to minimize adverse weather and/or environmental conditions such as wind tunnels, rain exposure, and/or snow accumulation.
- The service route providing access to the Loading Bay should not detract from the formality or dignity of the Library facility or from the surrounding urban fabric and pedestrian pathways.
- Security surveillance may be provided.
- Underground services are required for lighting of pedestrian routes, program areas, building features, landscaped areas, and signage and commemorative features.
- Pedestrian Plaza and access routes will require security bollards/barricades.
- Vehicular access routes will require closable security barriers at ramp entrances and gates at facility entrances.

### Functional Relationship Diagram

The spatial organization of this component will be generally as shown in the diagram below.



**NOTES:**

Component functional diagrams are conceptual only – actual layouts will be explored in schematic design and developed in the detailed design process.

## SPACE REQUIREMENTS

Refer to the table below for the details of the projected space allocation.

Ref.	Space	Quantity	Area/Space (nsm)	Total Area (nsm)	Comments
01	Bus and Car Drop-Off			Area not identified	Vehicular access in close proximity to main Entrance; incl. space for 1 bus or 2 cars
02	Focal Point			Area not identified	Strategic locations near street frontage for commemoration, iconic urban features; incl. flagpoles, event signage, artwork
03	Access Forecourt			Area not identified	Approaches to Entrance Lobby from two directions; incl. connections to all adjacent pedestrian paths, glazed main entries, materials drop-off, overhead weather protection, building signage, low and medium level lighting systems, underground services, minimum width 15 m; bike parking
04	Plaza			Area not identified; to be determined by the City of Port Moody	Urban Plaza gathering space for group activities, Library program space for 150 seated and accommodating more for key events, landscape features, lighting, bench seats, arbour features; acoustically isolated from high traffic arterial streets
05	Landscaped Area			Area not identified	Used to delineate active pathway approaches
06	Connecting Pathway			Area not identified	Incl. connections from Entrance to adjacent sidewalks along streets, to the link to the adjacent Civic Complex
07	Staff Exterior Space			Area not identified	Accommodates approximately 20; See Component 6. Staff Workspace
08	Loading Bay Access			Area not identified	Access for maintenance and materials handling
09	Secured Building Service Storage			Area not identified	Secured storage for equipment required for exterior maintenance
10	Parking Facility Access			Area not identified	Access for public parking
	<b>Total</b>			-	<b>Square Metres</b>

# APPENDIX A: ABBREVIATIONS

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## APPENDIX A: ABBREVIATIONS

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**AV** – Audio Visual

**BISAC** – Book Industry Subject and Category

**BSW** – Building Services Worker

**CFC** – Chlorofluorocarbon

**CPTD** – Crime Prevention Through Environmental Design

**DAISY** – Digital Accessible Information System

**EOC** – Emergency Operations Centre

**ESL** – English as a Second Language

**FTE** – Full-Time Equivalent

**HCFC** – Hydro Chlorofluorocarbons-free

**HVAC** – Heating, Ventilation and Air-Conditioning

**ILL** – Inter-Library Loan

**ILS** – Integrated Library System

**IP** – Internet Protocol

**IT** – Information Technology

**LED** – Light Emitting Diode

**NSF** – Net Square Feet

**NSM** – Net Square Metres

**OPAC** – Online Public Access Catalogue

**PA** – Public Address

**PMPL** – Port Moody Public Library

**RFID** – Radio-Frequency Identification

**TOEFL** – Teaching English as a Foreign Language

**UV** – Ultra-Violet

