



Lakefield Branch Feasibility Study on Expansion Final Report

Background

As outlined in the 2016 Library Services work plan, staff were directed to:

Undertake an architectural facility review of Memorial Hall/Lakefield Library to:

- Determine strengths, weaknesses, possibilities for existing facility to meet short-term & long-term needs

Group GSA Toronto, and Principal David Warne, were engaged to complete a study on the feasibility of the Lakefield Library Branch expansion into Memorial Hall should additional library space be required in the future.

Library growth estimates project the need to expand from the current 900 square feet up to 4,000 square feet in the future. The study established a set of benchmark categories to evaluate the appropriateness of this expansion: civic import, library trends accommodation, a building audit and cost estimate.

With public libraries in a constant state of evolution, smaller branches like Lakefield need to manage limited space in creative ways. Maintaining flexibility is a key factor in being prepared for the future. The Memorial Hall is a prime example of adaptability - first a community hall, then a Town Hall, then a community organization space - but is it appropriate for a future library?

The feasibility study uses needs and trends to evaluate the opportunities and constraints of the expansion; a building audit considers phasing and incremental costs ;and phased Architectural Design Options outline how it can be achieved.

Strategic Plan Reference

Extend the reach of Library programs and services - the final feasibility study provides the Board with an important baseline for future expansion possibilities at the existing Lakefield site.

Annual monitoring of population, library statistics and functionality of the existing space will impact the Board's decision making on when to proceed with library space expansion.

Feasibility Study& Concept Design for: Selwyn Public Library - Lakefield Branch

8 Queen Street, Lakefield, Ontario

Prepared by Studio Canoo/Group GSA Architects
September 2016



Selwyn Public Library

Feasibility Study & Concept Design

8 Queen Street

Aug 2016

Executive Summary

In May 2016, Studio Canoo/GroupGSA was engaged by the Selwyn Public Library to undertake a Design Study to evaluate whether the current location of the Lakefield branch is an appropriate location to consider for renovation and expansion to meet Lakefield's projected population growth over the next 5 to 10 years. The study looks at transforming the building into a contemporary library and includes a Space Analysis, Concept Design and Cost Estimate.

Process: The Consultant undertook a Building Analysis, Consultation Process, Design Collaboration and Cost Estimate in order to determine a cost-effective approach to solving current issues while transforming the Library into a modern facility. The recommended renovation/alteration not only rectifies the current issues but improves the overall usable space, security and circulation while creating the opportunity for an inspirational space at the heart of the library.

Concept: The study identified that the "transition space" between the current Library and Memorial Hall is the primary impediment to the Library expansion because this zone has a 2'-8" higher floor level, is enclosed by thick brick walls and includes washrooms, a basement stair and offices that impede circulation and a visual connection between spaces. Our Concept approach focused on clearing this zone so that the Library could open and flow into Memorial Hall.

Phasing: The Phasing of Construction was considered, which would allow the Library to remain open while construction progressed on the Memorial Hall side. This approach (described in more detail below) is an option for the Board but will have a premium cost and add time to the schedule.

Cost Estimate: Concept drawings were prepared to illustrate the approach to this transformation and outline the work and costs in order to achieve the transformation. Our estimate, which includes Construction Costs, Escalation for 5 years and Contingencies is \$1.1M + HST, or \$230/sf. Additional Optional items evaluated include Phasing, Second Floor renovations, Raised floor and Window Replacement.

Recommendation: The Study reaches the conclusion that a renovation can indeed meet the future space requirements of the Library as well as maintaining the library as a key community hub in the historic downtown core. The content of this study outlines the process and detailed design strategy to arrive at this conclusion.

Future Benefits and Savings: This study finds that the proposed renovation would have long-term benefits and cost savings to the library. Capital investments in the short term will generate operating savings in the long term. Insulating the existing walls will reduce heating and cooling costs and allow for smaller mechanical units. Also, by providing abundant natural light in an open and flexible floor plan now, future renovation needs can be accommodated without major renovation.

Green Building: LEED suggests that renovating an existing building is the most sustainable approach. Not only can we retrofit high insulation and reduce energy needs, but repurposing the use of an important Town asset reduces material use and energy in construction. Further, renovation is typically 2/3 cost of new construction.

Transformation: The proposed renovation will transform the Library to a contemporary building, a real community hub with a physical presence in the downtown core. Similar renovations are being undertaken by libraries across Ontario, and we believe that the proposed project is an appropriate and timely investment in the future of the Library and the downtown core. The study also provides a benchmark against which other possible options may be evaluated in the future, including the possibility of relocating to other school board properties that may become available within the next 5 to 10 years.



Satellite View of Lakefield Library and Memorial Hall

Study Process:

The study was a collaborative process between the Selwyn Library Board, Selwyn Library Staff and the Consultants and was undertaken to arrive at a proposal that would suit both the vision for the organization and the detailed program needs. The study followed these detailed steps:

- 1. Building Analysis** - site review and assessment of current operations and building issues
- 2. Consultation** - understanding current operations and the future needs and vision
- 3. Optional Schemes** - review of optional design schemes and identify best approach
- 4. Final Concept** - illustrate the main design concept to achieve the desired goals
- 5. Outline Spec** - to outline building systems and requirements
- 6. Cost Estimate** - to develop a preliminary costing and review the feasibility of the approach
- 7. Final Report** - to develop a brief cost/benefit analysis and identify key issues
- 8. Conclusions** - to provide expert recommendations and identify next steps



Lakefield Library - Fire Hall and Memorial Hall along Queen Street

1 BUILDING ANALYSIS

The building analysis was based on three site visits to the library, a visual inspection and input and reports from the Township.

The Lakefield Branch is one of three branches for the Selwyn Public Library. The building is composed of two buildings; the original Memorial Hall built in 1920 by the Village of Lakefield to house the Village Administration on the Ground Floor and a Dance Hall on the second floor, with a partial mechanical basement; a single-storey Fire Hall was added to the south of the building in 1960. During the 1980s, the Lakefield Library was operated on the second floor of Memorial Hall but then moved to the Fire Hall to be more accessible in 1995.

Historic adaptive reuse

Memorial Hall is occupied by Renewed Classics (used clothing retail) and the Centennial Room (a public meeting space). The upstairs is currently unoccupied. The building was the location of the Town Hall for decades, before the amalgamation into Selwyn Township. Adaptive Reuse is a cornerstone principle of sustainable design. Memorial Hall was built to be strong and durable; it is an excellent example of Green Building Design in its proven ability to adapt to many various functions over the years.

The building is located in a unique position in town: at the axial end of Queen Street where the Bridge Street bridge enters the downtown core. The architecture evokes civic pride with a heavy Italianate stone base, Ontario red brick, detailed wood cornice and trim, and restored Baroque-like cupola/lantern. The main double doors face the downtown but have been somewhat visually compromised by the need for accessibility ramp.

Libraries are part of the Knowledge Infrastructure of the township. Libraries are the hub of public learning space and part of the cultural network. Library use has increased in Canada since the advent of the internet because they provide reliable free access to information and information experts. Libraries remain an indispensable public node in the infrastructure of communities.

Memorial Hall is metaphorically and architecturally an ideal fit for the Lakefield Library Branch. Its central location reinforces the downtown core. Its strong historic design reinforces civic pride and positive branding for the library. Any renovation work needed to incorporate the Library expansion can be undertaken in a modern vocabulary to heighten the information-age look and feel, while differentiating and heightening the beauty of the historic envelope.



Memorial Hall Front Elevation facing Downtown

Memorial Hall & Fire Hall from Park

Building Audit

Overall the building structure was found to be in excellent condition and in need of only minor repair. The roof was replaced in 2012, along with a detailed historic reconstruction of the distinctive cupula/lantern which lends the building its landmark civic presence. Key repair recommendations include the following:

- ☐ repair exterior ramp guards to comply with building code at the front of Memorial Hall
- ☐ optional replacement of existing windows, in compliance with the historic designation and heritage committee requirements, to increase their energy efficiency and air tightness.
- ☐ optional improved energy efficiency: R20 exterior insulation including continuous air/vapour barrier

Building Code

Applicable building code and regulations were reviewed by consultants. The following items were found to be deficient and should be addressed in the proposed renovation:

- ☐ Washroom Requirement Current washrooms do not meet code.
Revised washroom count based on occupancy load and OBC Assembly Areas - Table 3.7.4.3.A:
2 WC for females, 2 WC for males, 1 BF WC (Unisex), 1 staff WC; Total 6 WC required.
- ☐ Based on the following occupant load calculations:

Occupancy	Area(sf)	Area/Person	Total Persons
Library	1512	9.30	15
Meeting	1080	0.95	106**
Reading	1080	4.60	22
Staff	540	9.30	5
Total	4725*		148

* Total Ground Floor area including stairs.
** Signage limiting to 75 persons will reduce WC requirement by 1 WC
- ☐ Various parts of the building do not meet the current 2012 Building Code accessibility requirements. A new lift should be provided to address the elevation difference of 2'-8" on the main level. Alternatively, a new raised floor can be introduced into the area occupied by the old fire hall addition. Code and AODA (Accessibility for Ontarians with Disabilities Act) recommends 4' book aisle widths, 3'-6" corridor widths and power doors operators on entry and washroom doors.
- ☐ The existing building area is within the allowable 1,000 m² building area (facing 2 streets) and therefore can be built of combustible construction. The building area is the existing lower level footprint of 4,750 sf or 441m² (as per O.B.C. Table 3.2.2.25, Maximum Building Area, Group A, Division 2, up to 2 Storeys).
- ☐ Fire escape can remain with some adjustments to improve safety as per Building Department.
- ☐ Ground floor ceiling/second floor assembly requires a 45 minute Fire Rating, typically using drywall.

Photos of Existing Library Space



Entry & Circulation Desk



Computer Table & Washroom



Front Reading Room & PAC



Stacks with aisles facing windows



Children's Area



Stacks for teen, Fiction & Non-fiction collections

2 CONSULTATION

The library working group identified the goals and visions of the library through a series of meetings.

Chief Librarian Joan MacDonald and Branch Librarian Jill Warren undertook a review of the current library space and identified these main deficiencies (summarized here but full outline is attached in **Appendix A**):

- to increase the amount of area dedicated to reading and Wi-Fi use (especially in the summer as use spikes)
- eliminate patron circulation through the staff workroom to access other program areas
- children's area is also deficient in collection size and accessibility of program room
- the collection space is tight but more reading and study space would be advantageous

The renovated Library should represent the purpose, vision and values of the library in a contemporary architectural expression:

1. complex, multi-service information providers
2. civic infrastructure providing cultural capital
3. community for partnerships and gathering
4. life-long learning
5. technology and innovation
6. sustainable efficient design
7. accessible and self-serve/directed
8. increased shelf space (based on 10 books per foot metric)

The consultants reviewed suggestions put forward by the working group to improve the interior layout.

Summary of program requirements and collection size is noted in the **Functional Area Space Allocation Table**.

- a. **Entry** –possibly relocate to more central location to improve entry sequence and access to various program areas. Program proximities to entry include:
 - i. reception/info/help desk with a volunteer greeter
 - ii. book returns
 - iii. marketing/mechanizing of collections
 - iv. sightlines to all main programs for easy orientation including physical collection
 - v. exterior book drop accessible 24/7
 - vi. new lift to Memorial Hall
- b. **Staff work area** - to be consolidated centrally beside reception desk so that staff can be easily accessible to volunteers and have direct oversight of all key program areas. (Note that in the future books may be equipped with RFID, which would decrease need to locate staff directly behind the Circulation Desk.)
- c. **Collections** - total 280 feet of shelves. 5 foot shelf height desired with lower shelves for display/merchandizing. Reference is generally declining as internet searches replace need for hard copies. AODA recommends 4' aisles and elimination of the lowest shelf for accessibility.
- d. **Children's area** - safety and containment are to be balanced with increased open and flexible space. The Program Room for 30-50 children needs to be directly adjacent.
- e. **Teen area** - the library does not currently attract a lot of teens, so the goal is to be more amenable. Teen area should be complementary to front desk to provide ongoing development. The teen collection should ideally expand although the area should remain flexible to deal with unknown demand. The library might serve as a homework spot for teens as the high school relocates outside of the community.
- f. **Program Room** - a space at least as large as the current Centennial Room with Sundry and access to Entry and Washrooms after hours. Stroller access and parking is desirable.
- g. **Partner Space** - separate entrance through existing entry doors at north end of building. Partner space would be relocated to second floor. Vintage clothing shop would be displaced in these scenarios in order to secure adequate square footage on ground floor for additional program requirements and therefore, need an alternate location in which to operate.

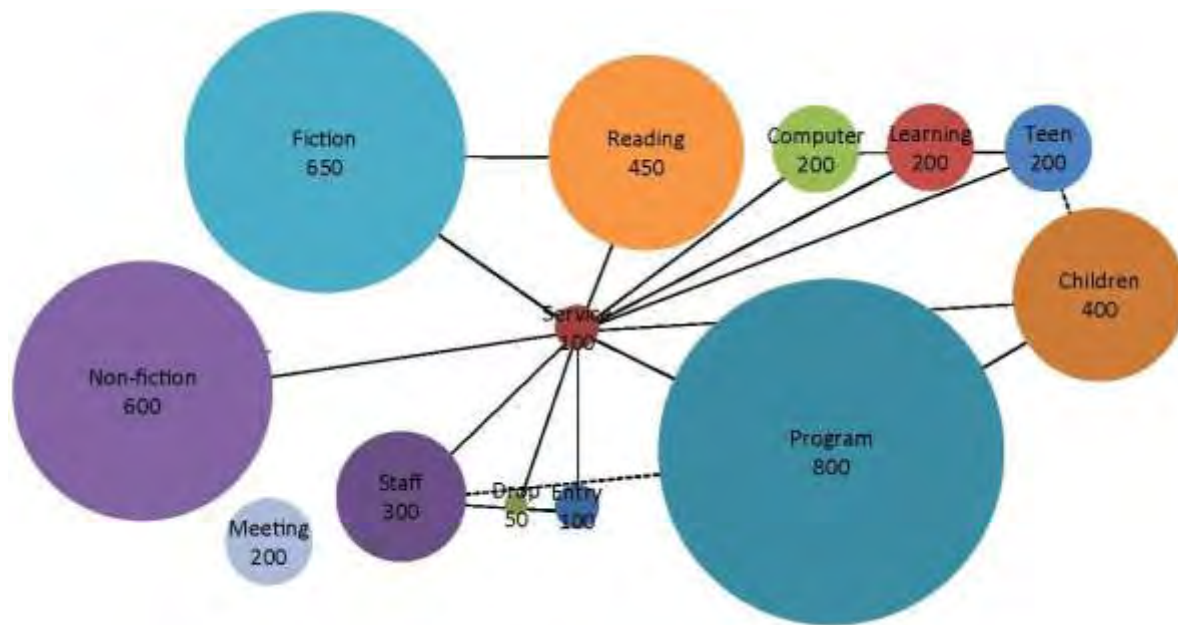


	Length	Shelves	Books/Shelf	Total
Childrens	28	3	12	1008
Junior	12	5	10	600
Fiction	108	5	10	5400
Non-fiction	84	5	10	4200
Reference/Large	12	5	10	600
Books on Tape	12	5	10	600
New	6	5	10	300
Vinyl	6	5	20	600
Magazine	12	5	15	900
	280			14208

Current Layout Analysis

The current layout of space is shown above. The goal of the study is to determine if the library can expand into the "Partner" space while resolving the main issues and impediments of the current layout, including:

- Staff space that divides Library from Centennial Room and needs to be cleared and/or rearranged
- Centennial Room is 2'-8" above the Library level and requires an accessible path of travel
- Washrooms are not consolidated in a way to service both the Library and Centennial Room



Layout Principles

The following ideal layout principles were discussed in the design charrette, based on the above diagram:

- Entry needs to be central and mid-way across the length of a rectangular footprint
- Circulation desk is centrally located in the plan, with sightlines to the remaining programs
- Children and Adult collections are on either end of plan
- Reading room with Computers and Teen space centrally located
- Program room needs immediate access to Children's area and an after-hours door
- Washrooms need to service all the areas, and their location is often the key to a working design

Summary of Options

Four expansion design options were explored in order to achieve the program goals and resolve access to Memorial Hall, as illustrated in the attached diagrams below and in Appendix A.

Front Door Location

The option to relocate the main library entrance back to the original location at the north end facing the downtown was examined. However, this approach for a library program is problematic since it requires the staff to also be at that end of the building, reducing sightlines to the public areas and thereby requiring additional staff. Instead, all of the subsequent working options are characterized by an entry from Queen Street, either in the current location of the vestibule or shifted slightly north to the old stable doors. This allows for a centralized location for circulation desk, staff work room and other administrative functions. The location of the washrooms in each option is one of the main differentiations.

Raised Floor option

In resolving the height difference between the Fire Hall and Memorial Hall, any of the options could introduce a raised floor in the old fire hall area so that the main floor was at one level (the higher Memorial Hall level). While eliminating the need for steps and a barrier-free lift, this sub-option has drawbacks. In general, raising the floor inside would necessitate a new exterior ramp, a reworking of all the existing windows at the south end of the building, another ramp to a future exterior patio to the west side and a significant increase in cost as the raised floor system must be designed to carry the weight of book stacks. The ceiling height throughout the south half of the building would be compromised and, in our opinion, would not be high enough for a public room of this nature. Notwithstanding, we have shown an optional cost for a raised floor for comparison.



Option #1 (See Appendix D for larger Plan)

The **Entry Vestibule** remains in its current location, along with the **Circulation Desk** and **Staff Room**, while the **Librarian Office** is relocated to open up a large central **Reading Room**. The Reading Room connects through to the new **Children's Library** and exits to a **Reading Courtyard** on the West by cutting openings in the existing masonry walls. This arrangement solves the circulation problem, increases Reading areas and introduces a new central space and natural light. Further, the Reading Room could be a large two-storey atrium space by removing the second floor above, adding to the dramatic effect.

The new expanded **Program Room** is located at the north side, immediately accessible to Children, the original **Front Doors** (for after-hours use) and the central **Washrooms**. The program area includes an operable wall which could subdivide the room into two smaller meeting rooms if desired. The existing Kitchenette and vault/storage room could either remain or be demolished to provide additional program space. If removed, a new **Servery** would be incorporated at the end wall of the room and new storage wall cupboard units. **Storage** for Book Sales and Program Room supplies is located in Cabinets, with shovels and ladders in Basement.

The new **Washroom** area is conceived as a series of unisex rooms and is accessible to the whole library. A new corridor links the Adult Library to the Program Room and Washrooms. The children's area would be divided from the washrooms via a glazed screen and a rolling security gate or door at the south end to allow for after hours use of the program space.

The **Adult Collection** would remain in its current location with study areas along the Queen St. windows. A barrier free lift would be introduced beside the circulation desk to allow for barrier-free access through the main level for wheelchairs, strollers and book carts. Stairs between these levels are generous and could be used as informal seating between the reading area and the children's area. The stairs to the basement would be relocated under the existing main stairs at the north end, requiring minor excavation and footing.



Option #2

Option #2 has many of the same characteristics as the first option. The main difference is that the new **Washrooms** are clustered to create a corridor between the children's area and the administrative space. This would reduce the children's program area but create a grand **2-storey Atrium** across the building, as the Entry and Staff area shifts north. There would be views directly to the new exterior patio space allowing a better and more intuitive connection.



Option #3

Option #3 experimented with relocating the washrooms to a small addition through one of the existing exterior walls off the main stacks. This has the advantage of allowing more space for the rest of the program, but the adjacencies pose problems for after hours security as well as proximity to the children's area that the option was not pursued further.



Option #4

Option #4 examines the option to flip the Program Room and Children's area to the south end. The washroom cluster would move to the west wall in order to provide the correct adjacency relationship. The adult area would be located on the upper level (again accessed via a barrier-free lift). The main rationale for adopting this approach is that the children's area would be located at the level of the main entry to the building eliminating the need to use the lift for multiple stroller access on days when young children's programming is being provided. However, the drawback is that the glazing along Queen St looks into the Program Room which is not always active. Instead the street windows should display a lot of activity to illustrate the exciting space and draw in casual patrons

Options Assessment

Based on the review and analysis, Options 1 and 2 meet the goals of the library staff in terms of increasing the amount of program area available to meet the projected population growth in coming years. Option 1 appears to best respond to all the criteria. It also better lays out the various program elements to eliminate undesirable aspects of the current plan including:

- ☐ New expanded Reading Room area
- ☐ New expanded Program Room, accessible to children, adults, after hours and washrooms
- ☐ New expanded Children's Library
- ☐ Consolidate and improved Washrooms
- ☐ Accessibility throughout

The other options are included for future reference. The costing is based on Option #1 but would equally represent the others, since the cost estimate is +/- 10% accurate.

FLOOR PLAN HIGHLIGHTS

Exterior Development

- Site Plan New exterior patio at the west side, including patio, optional fence, lighting, furnishing
- Zoning This study did not review Zoning because the renovations are minor.
- Parking Noted potential for additional on street parking in the future.

Main Level

- Renovate "Transition Space" to improve connection between Fire Hall & Memorial Hall
- New Teen and Children's Program Area expansion
- New Barrier-free lift up to Memorial Hall
- Revised and consolidated Staff/Admin Area
- Expanded Reading Room
- New Public washrooms centrally located
- Exterior patio for additional reading areas in summer months

Second Floor

- Available for Partner space, Business Incubator or eventual additional growth for library if required
- Atrium space over Reading Area with glass guards to allow light and view to the Reading Room



Diagrammatic View of open Atrium

Other Considerations

Phasing

Phasing of construction is a possibility should the library be unable to find an alternate temporary location from which to operate the library or be unwilling to close the operation of the branch for a 6 to 8 month construction period. Phasing would most likely make sense by creating a construction separation at the south of the original exterior wall of the historic building. The main collection space could then remain operational. Offices and staff work areas would need to be relocated and temporary washroom facilities would have to be provided. Once work was completed in Memorial Hall, the library could relocate to this side, while the minor renovations to the Fire Hall were undertaken. We anticipate this would add 6 to 8 weeks to the overall schedule. A cost has been provided in the optional line items.

Given the scale of the work, it is recommended that the entire library be relocated to a temporary location in the downtown core so the construction can proceed without phasing.

Future Expansion

The above four options fulfill the need for an expanded branch required in 5-10 years. It is also conceivable that Lakefield will continue to grow and will have needs for future expansion. There are three immediate possibilities for future expansion.

1. Existing Second Floor of Memorial Hall
2. Second Floor Addition over Fire Hall (subject to contract for FIT program with 17 years to run)
3. Addition to South end of Fire Hall

1. Currently the second floor of Memorial Hall is unoccupied, but it remains an impressive space with high ceilings and an unobstructed floor plate. This space is appropriate for an expanded Learning Centre and/or "MakerSpace" in the future. This is the most cost-effective solution but requires an Elevator for accessibility and additional washrooms to meet code.

The other options are new builds and are only options if, in the future, the second floor of Memorial Hall is occupied by a Partner.



Glass addition over Fire Hall

Functional Area Space Allocation Table

Functional Area	Area	Comment
Fire Hall Library	1950	Existing Library space, minor renovations
1 Entry Vestibule & Foyer	50	
2 Circulation Desk & Book Drop	50	New circulation desk
3 Adult Fiction	650	
4 Adult Non-Fiction	600	
5 Teen	200	
6 Computers	200	
7 Meeting Room	200	Revise existing Children's Space into meeting room
Memorial Hall Ground Floor	2975	
8 Reading Room	450	Lower existing floor
9 Staff Work Room	250	Existing space with alterations
10 Librarian Office	150	New space
11 Children's Library	400	Existing Centennial Room, with alterations
12 Program Room	800	Existing Retail Space, with alterations
13 Meeting Room #1/Storage	200	Existing Office Space, with storage
14 Main Stair	325	Existing Stair, with new Basement extension
15 Washrooms	250	New Washroom space, near existing plumbing
16 Gallery/Corridor	150	New Corridor
TOTAL Ground Floor Area	4,925 sf	



Cross Section showing 2'-8" level difference between buildings

OUTLINE SPECIFICATIONS

Based on the selected option, this Outline Specifications details the scope of materials, equipment and labour required to construct the proposed renovation/alteration. The outline spec includes an assessment of the existing building systems (architectural, structural, mechanical and electrical) to determine the degree to which existing systems may be maintained and to define the degree of renovation required. (See Appendix C for floor plan notes)

Highlights:

Structure:

- Demolish existing masonry walls in key areas to provide one continuous space on main level. Provide associated structure to support new openings
- New pit and footings for barrier-free lift
- New excavation for relocated stairs to basement level and possible future elevator to second floor
- Remove and replace existing floor in Transition zone
- Remove second floor over Reading Room (optional)

Architectural:

- Demolish designated interior partitions and finishes in the existing building.
- Provide new partitions, flooring, ceilings, doors & glass screens as noted.
- Replace existing windows as noted
- Provide new curtain wall glazing at new front entry and rear access to patio
- Provide new public and staff washrooms, as noted.
- Building elevations allow for brick repairs at new openings.
- New millwork for service desks, display cases, book drops, kitchenettes, vanities, etc.
- New integrated glass over custom bookshelf at Children's area/Corridor
- New sliding wall in Program Room
- Insulate exterior walls perimeter and finish with new drywall - option
- New Barrier-free Lift
- New Stairs at Reading Room and Staff Room
- New Basement Stair below existing Main Stair
- New Elevator to Second Floor (included as an Option Price)
- Signage on Tower

Landscape:

- Grade and pave patio area with new concrete patio stones
- 6' Steel fence with exit doors - Optional
- New exterior aluminum doors at Reading Room

Plumbing:

- Assume all new plumbing fixtures, and sanitary and water distribution on Ground Floor
- Assume existing site connections for water and sanitary are adequate
- New plumbing and drainage to new washrooms at main and lower level

Mechanical:

- New exhaust fans, AC units to be replaced
- Perimeter heating radiators to be relocated or added around new glazing

Electrical:

- Main distribution panel to remain. Assume it is satisfactory - no current issues
- All New lighting throughout to be LED
- New Fire Alarm Panel to be relocated to new entrance
- Increased IT and WIFI
- Button in Circulation Desk to authorize Lift

ORDER OF MAGNITUDE COSTING

Based on the above Schematic Design, Outline Specifications and various discussions, **Group GSA** generated a detailed Order of Magnitude Costing. An Order of Magnitude costing is typically prepared during the conceptual phase of a project in order to estimate construction cost during the formative stages of a project for the purpose of initial evaluation and funding. It is based primarily on the area of work and proposed use. The accuracy of these estimates is in the range of plus or minus 15%. In subsequent phases of the project, cost estimates are further refined and reflect a higher degree of accuracy. This costing provides cost escalation at 4% per annum assuming a construction start date in 2021.

SUMMARY OF PROPOSED BUILDING CONSTRUCTION COSTS

NET BUILDING COST	\$ 730,950	Excluding Contingencies and HST			730,950
CONTRACTOR	\$ 109,643	General Conditions (O/P) 10%	10%		73,095
		Contractor Fee	5%		36,548
CONTINGENCIES	\$ 432,191	Design Contingency 15%	15%		126,089
		Construction Contingency, 10%	10%		96,668
		Escalation at 4% per annum	5 yr	4%	209,434
TOTAL BUDGET	\$1,272,784				\$ 1,272,784
SQUARE FOOT COST			4,925	sf	\$/sf 258
OPTIONAL PRICES		70% Recommendation			
Raised Floor & Ramp	\$ 130,900	No			
Mechanical Screen	\$ 11,475	No			
Exterior Windows	\$ 140,250	Yes			
Remove Atrium Floor	\$ 12,750	Option			
Insulate Exterior	\$ 130,050	Yes			
Phased Construction	\$ 62,131	No			
Second Floor Reno	\$ 593,385	If Partner is found			
Furniture	\$ 36,125	\$7.34/sf			
Office Furniture	\$ 21,505	\$4.37/sf			
Operable wall	\$ 20,400				

This Costing assumes 2016 dollars with escalation costs to 2021 start date

Inclusions/Exclusions:

The following items are **included** in the above cost estimate:

- All items noted in Architectural, Structural, Mechanical and Electrical Outlines
- Loose furniture and furnishings
- 15% Design contingency to cover price & design unknowns
- 10% Construction contingency to cover construction unknowns
- 4% Escalation contingency for a construction start date of Spring 2021

The following are **excluded** from the cost estimate. These are items typically found in a *Project Budget*, which will be an appropriate next step for the Working Group:

- HST
- Legal & Professional Design fees
- Land, Development, Right-of-way fees and/or building permits
- Fundraising costs
- Staff management costs related to design/construction
- Relocation of facilities during construction, Premium costs due to Phasing of work – optional price
- Cost of remediation of designated substances (only Vinyl Asbestos Tile is currently expected.)
- Furniture, Fixtures & Equipment: Kitchen, Maintenance Equipment, Special Audio/Visual, Security or Computer Equipment



Sketch up Model of Existing Building (provided to Township for future use)

CONCLUSION

The Selwyn Public Library, Lakefield Branch requires an extensive renovation in order to meet the projected population growth and to transform the library into a contemporary Learning Centre to meet the needs of Lakefield. This study was undertaken in order to allow the Board and elected officials to evaluate the option of leaving the library in its current location in the event that other viable options are presented to the township.

Exterior renovations are relatively minor and include the replacement of the glazing and spandrel panels in the two central bays and new glazing and doors leading to a new exterior patio space for increased reading/browsing area during peak summer periods.

Interior renovations include complete demolition of interior, non-load bearing partitions and cutting new structurally reinforced openings into existing masonry walls, followed by new finishes, program areas, public washrooms, new electrical and mechanical systems (as these systems are already quite old and will need replacement by the time work is undertaken).

This study optimizes the use of the current building and provides a generous floor plan for public programming with great flexibility for future program changes.

The study concludes that the Lakefield branch can remain in its current location with the appropriate renovations and alterations, and recommends Design Option #1 as a way to successfully meet the immediate and future goals of this Library and the public.

Written by David Warne, OAA and Greg Latimer, OAA

Lakefield Public Library

Square footage of Current Library = 2,960 sq. ft) or 275 square metres

Addition of Centennial room measures 22' x 26.5 = 583 sq ft. Or 25.5 sq. m.

Total: 3,543 sq. ft.

Centennial Room Capacity

According to Ontario Building Code

Non-fixed seating the room will hold 72 people

With non-fixed seating and tables it will hold 57 people and standing space allows 135 people.

Children's Programmer indicates the Centennial room is ideal for a maximum of 50 people, 35 children and some adults. Using table decreases the available space.

This limits the number of participants that we can accept for certain programs – Silver Birch, Homeschooling program, PA Day

Challenges in Lakefield as Identified by Staff

- 1) Storage space – book sale items in particular
- 2) Seating availability in general but for laptop users in particular; trend away from using library computers
- 3) Quiet areas for study
- 4) Area for small group meeting
- 5) Easy and convenient access between program room and library without passing through staff work areas.
- 6) Clearly defined children's area

Appendix BSelwyn Township Library, Lakefield Branch Feasibility Study Cost Estimate

Category	Total	Description	Qty	Unit	Rate	Sub-Total
Demolition	\$ 23,625	Demolition as noted in drawings and outline spec	4,725	sf	5	23,625
Foundations	\$ 10,000	Column footing (assume existing can support new cols at	0	No	1,500	0
		Excavation at new stair to basement	1	LS	5,000	5,000
		Excavation at optional new elevator	1	LS	5,000	5,000
Floor	\$ 14,200	Reinforced concrete floor patching or rebuilt areas	700	sf	6	4,200
		Rebuild Wood-frame floor at existing office & stair	500	sf	20	10,000
		Reinforce existing floor assembly beneath stacks with new sheathing	1,750	sf	3	5,250
Structure	\$ 20,500	Structural steel columns -	10	No	800	8,000
		Provision for lintels, supports, in new openings at exist walls	5	LS	1,200	6,000
		Stair Construction	6,500	No	1	6,500
Exterior Façade	\$ 93,500	Masonry patching (allowance for areas at new openings)	500	sf	25	12,500
		Masonry patching at old fire hose tower (Allowance 25% of wall)	500	sf	25	12,500
		Glass curtainwall (including glazing at doors)	700	sf	75	52,500
		Glass door in curtainwall	4	No	1,500	6,000
		Hollow Metal Door	0	No	800	0
		Door Hardware	1	LS	10,000	10,000
		Building Signage	0	No	0	0
Roof	\$ 0	Roof assumed the roof is ok for 20 years	0	sf	5,000	0
Interior	\$ 54,200	Wall Concrete masonry block wall -190mm	25	sf	20	500
		Wall Interior Stud Wall GWB	1,700	sf	11	18,700
		Wall GWB furring on existing walls	1,500	sf	6	9,000
		Glass Interior screens	300	sf	45	13,500
		Doors Solid core wood door	10	No	1,250	12,500
Finishes	\$ 106,775	Floor Ceramic tile flooring (porcelain - washrooms)	500	sf	13	6,500
		Floor Carpet tile flooring	4,000	sf	7	28,000
		Floor Vinyl composite tile	500	sf	5	2,250
		Floor Rubber -	150	sf	7	1,050
		Floor Rubber - (Stairs)	150	sf	4	600
		Floor Recessed Metal Grilles	20	sf	10	200
		Floor Rubber base; 100mm high	500	ft	3	1,375
		Floor Ceramic tile base; 100mm high porcelain base in WR	150	ft	4	525
		Ceiling Composite acoustic ceiling - 600x1200 grid	950	sf	7	6,650
		Ceiling Gypsum board ceilings and bulkheads	1,500	sf	9	12,750
		Ceiling Exposed ceiling (at old fire hall addition?)	1,750	sf	3	4,375
		Wall Paint - General	25,000	sf	2	37,500
		Wall Ceramic tiles to washrooms and backsplash	500	sf	10	5,000
Millwork	\$ 58,000	Tackboards	2	rm	5,000	10,000
		Work room	1	rm	5,500	5,500
		Custom Stacks	15	Stack	1,000	15,000
		Library	0	rm	2,500	0
		Women's washroom	3	rm	1,500	4,500
		Men's washroom	2	rm	1,500	3,000
		Barrier free washroom	1	rm	500	500
		Janitor	1	rm	500	500
		Allowance for steel structure for interior millwork items	1		4,000	4,000
		Window coverings at perimeter windows only -Allowance	1	LS	10,000	10,000
		Security Grille	1	LS	5,000	5,000
Elevators	\$ 25,000	BF Lifts	1	LS	25,000	25,000
Mechanical	\$ 111,038	Plumbing & Drainage	10	sf	4,725	47,250
		Fire Protection	0	sf	4,725	0
		HVAC - heating	10	sf	4,725	47,250
		Controls (BAS)	4	sf	4,725	16,538
Electrical	\$ 144,113	Service & Distribution	8	sf	4,725	35,438
		Lighting, Devices & Heating	14	sf	4,725	63,788
		Systems & Ancillaries	10	sf	4,725	44,888
Site Works	\$ 30,000	Site Clearance, Preparation and Grading	1	LS	15,000	15,000
		Soft Landscaping	1	LS	7,500	7,500
		Site Structures, Fittings, etc	1	LS	7,500	7,500
		Mech Site Services Storm, Sanitary, Water - assuming sufficient	0	LS	0	0
		Elect Site Services - assuming existing service is sufficient	0	LS	0	0
Cash Allowance	\$ 40,000	Inspections \$25K, Signage \$15K		lump		40,000
Net Building Cost	\$ 730,950	Excluding Contingencies and HST				730,950
Contractor	\$ 1 09,643	General Conditions (O/P) 10%			10%	73,095
		Contractor Fee			5%	36,548
Contingencies	\$ 432,191	Design Contingency 15%			15%	126,089
		Construction Contingency, 10%			10%	96,668
		Escalation at 4% per annum	5	yr	4%	209,434
Total Budget	\$ 1,272,784					\$ 1,272,784
Square Foot Cost			4,925	sf	\$/sf	258
Optional Prices	70%	Gross up from Net				
Raised Floor & Ramp	\$ 130,900	Exterior ramp to new Raised Floor	100	lin ft	180	18,000
		Raised Floor Option	2,950	sf	20	59,000
Mechanical Screen	\$ 11,475	Metal Mechanical screen for new RTU's on flat roof (optional)	150	sf	45	6,750
Exterior Windows	\$ 140,250	Exterior Windows replacement; optional replacement of historic	1,100	sf	75	82,500
Remove Atrium Floor	\$ 12,750	Remove partial second floor (to create double height lobby	1	LS	7,500	7,500
Insulate Exterior	\$ 130,050	Ground floor insulation at exterior walls	5,100	sf	15	76,500
Phased Construction	\$ 62,131	Phased construction (5% of total cost)	5%	%	730,950	36,548
Second Floor Reno	\$ 593,385	Demolition	2,975	sf	4	11,900
		Mechanical	2,975	sf	24	69,913
		Electrical	2,975	sf	31	90,738
		Wall finishes	3,600	sf	15	54,000
		Washrooms	2	LS	5,000	10,000
		New Elevator - full 3 stop	1	LS	75,000	75,000
		New Foundation at elevator	1	LS	7,500	7,500
		New CMU walls at elevator shaft	1,000	Sf	20	20,000
		Miscellaneous tie in work	1	LS	10,000	10,000
Furniture	\$ 36,125	lounge chairs, adults	10	ea	450	4,500
		tables with set of 4 chairs	7	ea	750	5,250
		stools	6	ea	175	1,050
		lounge chairs, children	6	ea	300	1,800
		floor cushions, set of 4	8	ea	100	800
		play tables, set of chairs, children	4	ea	650	2,600
		periodical displays	6	ea	875	5,250
Office Furniture	\$ 21,505	Work Stations	3	ea	2,500	7,500
		cabinets	6	ea	425	2,550
		book carts	4	ea	650	2,600
Operable wall	\$ 20,400	at Program Room (includes steel beam and columns)	1	LS	12,000	12,000

Appendix C Selwyn Township Library, Lakefield Branch - Outline Specification

Updated		7/28/2016	
Element	Building Area		Comments
010000	Instructions		<div>Inclusions: The following items are included in the above cost estimate: <div>Architectural, Structural, Mechanical, Electrical, Civil, Landscape Loose furniture and furnishings 15% Design contingency to cover price & design unknowns 10% Construction contingency to cover construction unknowns 4% Escalation contingency for a construction start in 2021 Premium costs due to Phasing of work - listed as optional</div></div> <div>Exclusions: The following is excluded from the cost estimate. These are items typically found in a Project Budget.<div>- HST - Legal & Professional fees - Land, Development, Right-of-way fees and/or building permits - Fundraising costs - Staff management costs related to design/construction - Relocation of facilities during construction Cost of remediation of designated substances - Furniture, Fixtures & Equipment: (except as noted below)</div></div>
010000	General Conditions	Procurement Construction Date Phasing	Assume Design-Bid-Build Tender CCDC2 Assume Construction start 2021 Assume 2-phases Occupied during Construction - optional price
020000	Exterior Site	Rear patio area Ramp Repair Other:	Courtyard w/trees, fence/gate, terrace, stone patio, lighting, existing front entry ramp to remain. Repair concrete as required. Bicycle parking - 5 rings on sidewalk Remove cedar trees at base of old fire hall tower Benches
003000	Foundations	pad footings Other:	Assume existing foundation can support loads at opening in existing masonry walls Waterproofing - exclude
040000	Exterior Wall	General Sealant Brick	New sealant Repair mortar Allow for New sealant/windows in areas noted - Option to replace historical windows with new double glazed replacements to match. Allow for repointing brick around new exterior wall openings
005000	Metal Structure	Other:	New steel lintel and columns at openings in existing masonry walls
060000	Wood	Floor structure	Millwork New millwork as noted in plans: New Washroom vanities: wall mounted solid surface counter with under mounted sink and wall-mounted mirror New Reference Desk/Hub - Corian top with wood veneer face / door fronts New Children’s Desk/Hub - Corian top with wood veneer face / door fronts Servery at program room for catering: 3/4 MDF c/w P/lam finish, counter & lowers Bookshelf millwork - reclad existing shelves
070000	Exterior Doors Windows	Doors	At new front entrance, access to patio. Replace windows at new front entrance. Provide new windows at rear patio access. Option to replace the rest of existing windows
	Existing Roofing	Flat area and sloped roof	work done on sloped area in last couple of year No significant roofing work contemplated at this time
	Insulation		3 1/2” steel studs with 3” spray foam insulation; finish with 1/2” drywall. @ interior face of exterior wall - Optional price
080000	Curtain wall glazing Interior glass partitions New Interior Doors	Front Entry Children's area	Double-pane glazing in thermal CW frame Aluminum frame with 8mm glass Solid Core wood with Hardware (as noted on plan in red) 1/2” tempered glass doors with hardware (as noted on plan in blue) Interior sliding glass doors to office (manual) - 1 pair
090000	Existing Partitions New Partitions Ceilings Painting	Various	Remove & replace as noted New partitions: 1/2” GWB, on stud c/w Baseboard Remove & replace as noted New painting throughout Sandblast heavy timber roof structure at old fire hall. Clear sealant as noted - provide carpet tile stone tiles. including main stair All new washrooms
	Carpet Entry Tile Floor Tile @ washrooms	stone ceramic tile	
100000	WR Accessories Book drop Wayfinding Signage Window Blinds Entry foot grill		New washrooms only New book drop Allowance: Entry Signage, Building Signage, Doors, Historic Plaque All windows At front entrance
140000	Elevator		BF lift from entry level at grade to Children's area level New elevator serving second floor and possibly basement as an option
150000	Furniture		New furniture as noted: Stacks, reuse and reclad end in new millwork Merchandising Furniture with wheels
160000	Equipment		Book trucks (4) Security equipment: key pads (1 door) Building Security: Fire Alarm Panel connection to fire department A/V equipment rough-in - RFID equipment - not anticipated in next 5 years Tackboards (8), whiteboards (4) Mtg. room equipment - bar fridge Servery equipment - 30" refrigerator, microwave, additional outlets Additional A/V & audio by allowance
Electrical			Cable outlets WIFI Data drops additional drops by allowance Maker Space - Maker Space - 220V plug (3) Feature lighting - Allowance @ entry/reading room New lighting - All new washrooms including vanity lights all areas Exterior lights at new courtyard
Mechanical			All new systems contemplated and costed as existing systems will be reaching end of useful life cycle within next 5 to 10 years and electrical baseboards are already