

Proposal to Supply Space for the Truro Branch of the

# Colchester-East Hants Public Library

Normal College Renovation and Addition

**L&R Construction Limited**

July 12, 2013



## L&R Construction Limited

75 Stewiacke River Park Rd,  
MacKay Siding, NS B0N 2J0

July 12, 2013

## Town of Truro

PO Box 427  
695 Prince Street  
Truro, NS B2N 5C5

To the Town of Truro,

Thank you for the opportunity to submit a proposal to replace the current Truro Branch and Regional Headquarters of the Colchester-East Hants Public Library.

The Truro Library is a very special project for our Town. This library must become a vital public venue for our entire community and region. An economical and beautiful building is essential, not just for the Library visitors and staff, but to the future of the downtown core as well.

L&R Construction has assembled a team to design and build a quality library building. We have strong roots here and have worked in Truro close to 40 years. Because of the importance of this civic building and emphasis by the Town of Truro on the importance of quality design, we have engaged the services of world renowned, local architects MacKay-Lyons Sweetapple Architects to act as a liasson between our company, the user groups and the Library staff. They have worked with the Truro Library several years ago and lead an intense process of public engagement defined the program and established a working relationship with the staff. The Structural, Mechanical and Electrical consultants are all local and have proven track records. Our team has the experience and expertise to deliver a highly functional project on time and on budget.

Normal College may be our most important heritage building in town. I believe it should be saved and this may be our only chance. If the Town, the County, the Library come together with the top notch team I have assembled, we can overcome the challenges of a renovating the historic Normal College, transform it into a great library space and preserve its beauty for future generations.

It is with true passion and optimism that I submit our credentials for consideration.

Sincerely,

Leo Rovers



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Reading nook, Danielson House, NS  
MacKay-Lyons Sweetapple Architects



Library space, University of Toronto, ON  
MacKay-Lyons Sweetapple Architects



# 1.0 Team

## Project Manager

### General Contractor

#### L&R Construction Limited

75 Stewiacke River Park Rd  
MacKay Siding, NS B0N 2J0  
Phone: (902) 639-2433  
Fax: (902) 639-2885  
leo.rovers@ns.sympatico.ca  
**Contact: Leo Rovers**



Truro Town Hall, L&R Construction

## Consultants

### Architects

#### MacKay-Lyons Sweetapple Architects

2188 Gottingen Street, Halifax, NS B3K 3B4  
Phone: (902) 429-1867  
Fax: (902) 429-6276  
talbot@mlsarchitects.ca  
**Contact: Talbot Sweetapple**



Kentville Library, MacKay-Lyons Sweetapple Architects

### Structural

#### PDI Engineering Group

8 Treaty Trail, Truro, NS B2N 5N2  
Phone: (902) 843-4180  
Mobile: (902) 899-5897  
doug.bach@pdigroup.ca  
**Contact: Doug Bach**  
(formerly with Horners Engineering)



MacRae Library, PDI Engineering (Structural Design)

### Mechanical and Electrical

#### MCW

(formerly Thompson Engineering)  
186 Arthur Street, Truro, NS B2N 5G9  
Phone: (902) 893-8455  
Fax: (902) 893-3670  
bthompson@mcw.com  
**Contact: Bruce Thompson**



Commons/Library, University of New Brunswick, MCW  
(Mechanical and Electrical Design)

## We propose local subcontractors, supporting Truro's economy...

J C Mechanical, Truro, NS  
Jeff Deuville Electrical, Truro, NS  
Colchester Sprinkler, Truro, NS  
Dale Landsburg Masonry, Truro, NS  
Fosco Roofing, Truro, NS

...and a commitment to Kholer Windows will save the project \$100,000

## Our team offers...

*...sincere care and love for the Town of Truro*

*...understanding of the place—its history and people*

*...a strong local presence, resulting in fast, attentive response to your needs*

*...a track record of quality construction in Truro*

*...a proven ability to listen*

*...a portfolio of award-winning designs*

*...an ability to design for increasingly diverse users and changing information technologies*

*...an ability to translate rich programs into logical architectural solutions*

*...an established record of designing functional and cost-effective solutions*

*...ability to create civic landmarks that contribute to our town's identity*

*...sustainable design and construction of LEED certified projects*

## 2.0 Experience

### L&R Construction

L&R Construction has been doing business in central Nova Scotia since 1975. We are a medium size construction company with an average business of \$6 to 8 million per year. The job we are most proud of is the Town Hall on Prince Street where we completely restored the Old Post Office Building and completed an addition. The entire project was designed and built by L&R Construction.

Recently, L&R has completed a waste water treatment plant for the Municipality of Colchester (\$11,000,000). Similar waste water treatment facilities have been completed in Amherst, Pictou, Enfield and Milford, as well. We have built 7 Journey's End motels in Nova Scotia and Prince Edward Island. The Farmer's Market in Truro, converted Fire Hall, was finished last year. L&R Construction has completed many renovations to historical buildings in the area.

L&R Construction has a staff of up to 20 employees and they have on average 15-20 years experience in the construction industry, approximately 300 years of experience total. Project Manager Leo Rovers has worked in the industry for over 35 years. Chris Rovers and Adrian Rovers will be part of the management team, both have over 20 years experience. L&R has a safety program in place and is audited each year by the NSCSA who presented L&R with the award for the safest company of 2012.



Truro Town Hall, L&R Construction





Truro Town Hall, L&R Construction



# MacKay-Lyons Sweetapple Architects

MacKay-Lyons Sweetapple Architects is based in Halifax. The practice works locally and internationally on cultural, academic and residential projects, providing full architectural and interior design services. There are two Partners: Brian MacKay-Lyons and Talbot Sweetapple and one Senior Associate: Melanie Hayne.

In over 30 years of work, the practice has built an international reputation for design excellence confirmed by over 100 awards, including six Governor General's Medals and two American Institute of Architects Honor Awards. In addition, the firm's work has been featured internationally in over 300 publications and 100 exhibitions.

Both Partners are active in architectural education, Brian as a full professor and faculty member at Dalhousie University for over 30 years, and Talbot, as an Adjunct Professor since 1997, and now a Professor of Practice as of 2013. Together, they have held 18 endowed academic chairs and visiting professorships at leading universities worldwide, such as: The Peter Behrens School of Architecture, Washington University in St. Louis, and Harvard University. They have also given over 200 public lectures on their work worldwide.

The work of the firm continues to increase in scale and scope. Its focus on high design creates buildings that not only act as cultural landmarks, interpreting and invigorating their context, but also gracefully project the identity of the patrons who commission them.



Kentville Library, MacKay-Lyons Sweetapple Architects



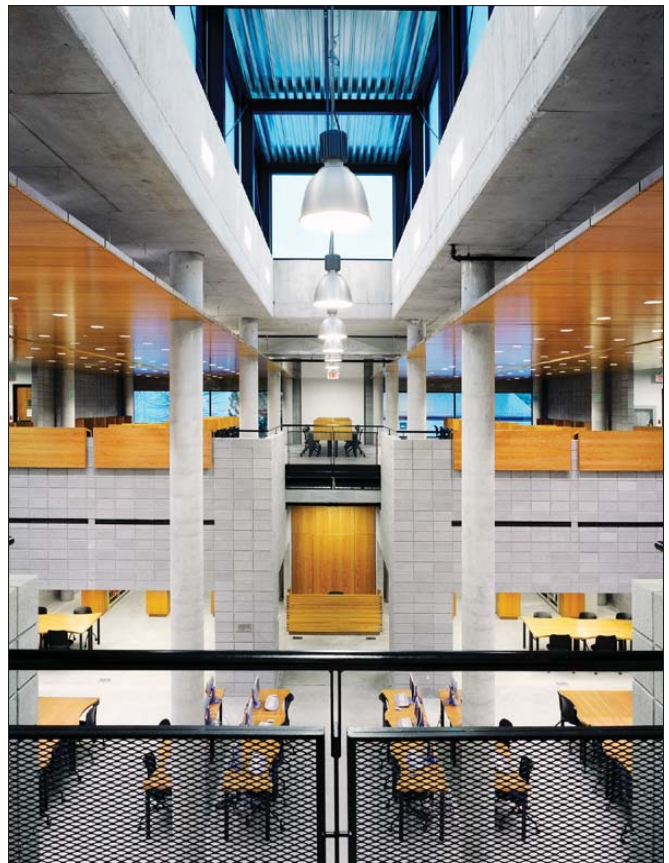
Brick addition to UPEI School of Business,  
MacKay-Lyons Sweetapple Architects



Canadian Embassy, Dhaka, Bangladesh  
MacKay-Lyons Sweetapple Architects

## Quality projects lead to quality work...

*We seek jobs and clients we genuinely believe have an agenda rooted in a desire for design excellence. The Town of Truro and Colchester-East Hants Library's aspirations make for an exciting project which provides an excellent environment for our firm to feel empowered and challenged. This contributes to our "culture of quality" in an intangible yet important way. We are not only "service architects," we are also "design architects" who are ultimately concerned with quality.*



Library space, University of Toronto, ON  
MacKay-Lyons Sweetapple Architects



# PDI Engineering Group

PDI Engineering Group Inc. is a team of professional engineers and technology specialists who deliver personalized, localized, and innovative solutions to clients and communities.

Our name represents our philosophy: Partner - Develop - Innovate.

We Partner with our Clients and other industry members to understand project needs and objectives to work to execute and deliver on time and on budget.

We Develop not only comprehensive project plans, designs, and solutions, but also work together with our Clients to collectively develop and share knowledge, skills and expertise.

We strive to Innovate through our partnerships with our Clients other industry members by delivering comprehensive project planning, design, engineering, and project management services striving to develop the most innovative solutions that are practical and localized to satisfy the needs and objectives of our Clients.

Our Mission:

Client Satisfaction  
Through Partnership &  
Efficient Execution

PDI Engineering Group Inc. is a versatile multi-discipline firm with associates possessing a wide range of engineering and project expertise and experience.

We deliver a vast range of project planning, design, and engineering services within the following Practice Areas:  
Infrastructure & Municipal Services, Buildings & Structures, Industrial and Sustainability



Truro Skate Park

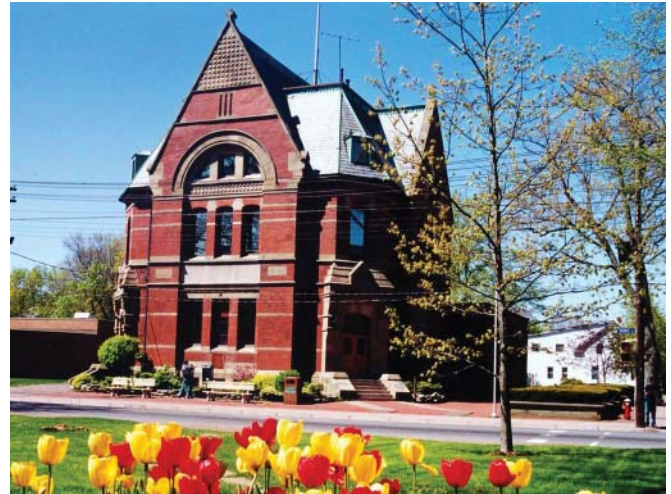


West Pubnico WWTF





Truro Farmer's Market



Truro Civic Building



MacRae Library



# MCW Maricor

MCW Maricor is one of Atlantic Canada's largest mechanical, electrical and energy engineering firms and we are supported by a nationwide network of MCW companies which have a solid reputation of delivering sound results.

Acquired by MCW in 2007, MCW Maricor is a full service facility engineering firm specializing in the fields of mechanical and electrical engineering design, energy efficiency and conservation, and sustainable development.

Our roots in Atlantic Canada date back to 1956 with a continuous expansion of our services since that time. We have extensive experience and expertise in offering engineering services for all types of institutional, medical, educational, commercial and industrial building projects. Since 1964, the MCW Group of Companies (MCW) has built a solid reputation for the delivery of Professional Consulting Engineering Services, Energy Management Services, and Engineering Development Services. By the very nature of the solutions provided, MCW help to create the environments required for clients to live, educate, work, play and heal.

Our diverse array of Clients have always brought us their toughest challenges and most exciting dreams, knowing that we will customize our designs and services to address their needs in a manner which will allow them to succeed and prosper. This success and prosperity is enhanced through the delivery of our services in a manner consistent with MCW's philosophy of sustainability, and our Clients' desire to reduce their environmental footprint.

Wholly owned by 19 active Canadian partners, MCW employs in excess of 300 people across Canada and has offices in Moncton, Saint John, Halifax, Truro, Toronto, Winnipeg, Vancouver and Ottawa.

Through satisfied clients we have created a company atmosphere where loyalty, accuracy & diligence are fostered and rewarded. This motivates us to align our goals with that of the organization and enlists us to expand our client relationships with the various MCW Companies.

Our staff works with our clients to develop comprehensive short and long range plans which meet their energy goals, reduce their greenhouse gas emissions and, more importantly, fit into their capabilities to implement the results and reap the benefits.

Our basic corporate philosophy is to provide innovative and cost effective engineering services with particular emphasis on service to our Clients. This philosophy is put into practice as follows:

- Each office is staffed with a group of experienced and highly skilled engineers, technologists and support staff, under the direct supervision of one of the firm's partners.
- Each project is designated the direct responsibility of one of the firm's senior personnel to ensure that the design will incorporate the firm's extensive experience.
- Design criteria are based on the "integrated design process" and the principles of "value engineering".
- Energy efficient and cost effective design solutions are developed with particular emphasis on the unique operational and performance requirements of each individual project.
- Project schedules and deadlines are strictly enforced.

As a leading edge consultant, the MCW Group of Companies has embodied the principles of partnership, innovation and flexibility within all its offices to ensure excellence of service and design.



Runnymede Library, Toronto



Centennial Library, Millenium Project, Winnipeg



City Library, North Vancouver



Agincourt Public Library



Windsor Public Library



Edmonds Library (currently under construction)

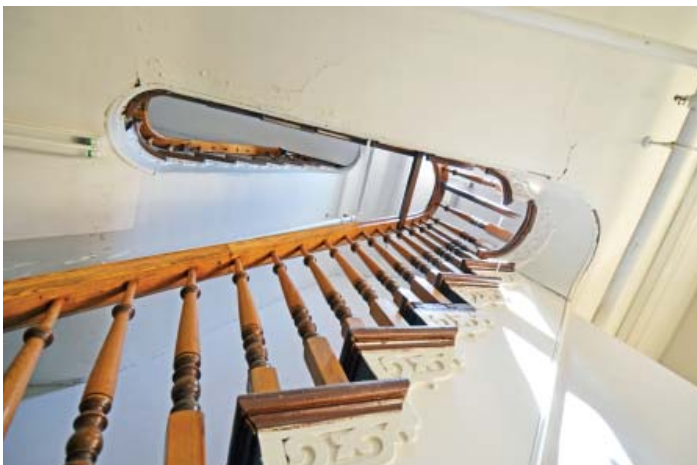
# 3.0 Approach

## Design Approach

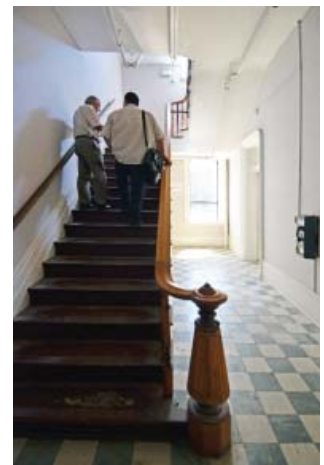
MacKay-Lyons Sweetapple Architects advocates a participatory design process; an integrated design team is fundamental to all of our projects. All consultants are involved from the very beginning, in a dynamic and interactive relationship. Clients are valued collaborators in shaping project programs and determining design direction. Participatory design ensures a broad scope of idea exchange and facilitates an appropriate sense of ownership of the design and its process for the client and the project team. Our team will utilize a rational, systems-based approach to architecture that integrates the building's construction systems for optimal functional relationships in the program. This "front-end" approach produces a flexible and unobtrusive architecture, facilitating a wide range of performance needs that eliminates inefficiencies in the allocation of program space. This methodology works at any scale and degree of programmatic complexity. Through participatory design, every project is endowed with a timeless, enduring architectural identity.

Our design philosophy is rooted in fundamental architectural issues that are clustered around three principal aspirations, each with its attendant scale of reference. The first, urbanity, involves the response of the building to its context - physical, cultural and climatic. The second, place making, concerns the design of a building as an entity in itself. The third, well-building, involves the successful integration of the building's construction systems in order to achieve economy, durability and elegance. We believe that sustainable design practices; environmental stewardship, social responsibility and conservation of natural and cultural resources are values rooted in the history of Maritime architecture and are inherent to good design practice.

Limited budgets impose a design focus on building technology that is practical rather than ideological. The result is a direct, economical architectural expression, a "frugal beauty", that affords a considerable efficiency in both construction cost and resources.



Existing conditions, Normal College, Truro





# Construction Approach

L&R Construction are known to achieve quality buildings without lavish budgets. Our experience attests to excellent building quality for the built cost. Innovative “value added” approaches are fundamental to all of our construction projects, and have always resulted in being demonstrably viable and achieving maximum value for the project within funded cost guidelines.

We have a long list of satisfied clients. Our projects are recognized for achievements by our peers. Modest buildings with limited budgets, with no compromise to quality and function, are part of our philosophy.

We deliver our products in a competent, professional, and timely manner by incorporating good communication, planning and organizational skills and utilizing good problem-solving skills. Our projects are routinely on time and on budget while delivering the highest quality project.

Our proposal for the Normal College Renovation and Addition presented in this document is a starting point, where we can engage the Town, Library Committee, Staff and Regional Office to refine the design and deliver a quality library space.



Leo Rovers and Talbot Sweetapple at Normal College

# 4.0 Objectives

## A successful Library Space for Truro must...

### 1. Downtown Location

...be located in a downtown location to ensure future prosperity, serve as a civic landmark and source of pride and inspiration. The Normal College building is the most civic site in Town. It offers a central location that will strengthen the downtown area. The new Library space will be a centrepiece, contributing to the economic revitalization of the downtown and sparking cultural and learning activities. Existing buildings in the downtown with underused meeting space would benefit from the proposed Library location. It is true, the Normal College Building is not suitable for a library in its current state, however, issues of accessibility are easily addressed by adding an elevator and ramps. With modern technology and well-placed cameras, the building can be easily monitored. A sprinkler system and proper exits solves safety concerns.

### 2. Space Requirements

...be adaptive and flexible space (25,000 to 30,000 square feet gross floor area), to accommodate new innovative technologies, meet the changing needs of users and facilitate easy supervision of all floor areas. Normal College will accommodate most of the program in historic, character filled spaces. An addition, sensitive to the existing architecture, will provide modern facilities to fulfill all of the space requirements.

### 3. Space Programming

...be functional and meet the required program. It must work. MacKay-Lyons Sweetapple Architects developed the program with the Library staff a few years ago so we best understand the needs of the Truro Library. The program and adjacencies were carefully considered during the previous workshops in 2011 and translated to the Normal College site. The new Library space will be a rich resource centre for knowledge, learning and personal growth. The library program suits the valuable historic quality of the Normal College, which will be lost if such an opportunity is not embraced.

### 4. Schedule

...be ready for occupancy by September 1, 2014. The schedule proposed is aggressive but achievable.

### 5. Parking and Loading

...be able to accommodate visitors and staff, providing adequate parking for 40 vehicles and allow for convenient off-street loading and unloading. The parking area next to the Normal College building is sufficient for the requirements of the RFP.

### 6. Outdoor Space

...be a welcoming destination, a centerpiece of the downtown with outdoor green space, and make a significant contribution to the existing fabric of the community. The Normal College site offers an opportunity to create a central Town Square framed by the existing Farmer's Market, Fire Hall, Police Station and Museum.

### 7. Landscaping

...be integrated with landscaping and walkways. Opportunities exist for strategically planted areas to define the outdoor space and circulation through the site to the Library.

## 8. Energy Efficiency

...be sustainable, energy efficient - including green design strategies and LEED initiatives. Many LEED initiatives result in increased capital costs, in addition to the administrative costs, which must be discussed and approved by the Town prior to proceeding. The adaptive reuse of an existing structure with such historic significance is the most sustainable idea of all. Normal College will be upgraded to modern standards by replacing windows and installing insulation.

## 9. Natural Lighting

...be comfortable and have bright airy spaces filled with natural light. The windows in the Normal College building are tall and generous throughout and the addition will have clerestory to fill the space with soft diffused light.

## 10. Environmental Quality

...be safe, free of hazardous waste or materials. The Normal College Building will be totally renovated with most of the interior materials removed and replaced with non-toxic, environmentally safe materials.

## 11. Accessibility

...be a welcoming destination for all, providing opportunities for civic and social interaction as well as quiet, individual use without barriers and with accessibility as a priority. The Normal College Building will be equipped with an elevator and ramps to make it entirely accessible on all levels.

## 12. Materials Specifications

...be durable and express timeless high-quality materials. The materiality of the Normal College is difficult to recreate. The enduring, quality brick exterior has exceptional details. The design of the addition will compliment the existing architecture.

## 13. Mechanical, Electrical and HVAC

...be designed to meet or exceed mechanical, electrical and HVAC demands. The mechanical, electrical and HVAC systems shall be optimally sized and selected for library requirements including humidification. Energy consumption shall be minimized through the use of high efficiency fixtures, heat pumps and equipment. The Normal College Building will be upgraded to modern standards by replacing electrical and mechanical systems.

## 14. Floor Load Requirements

...be designed to support structural loads typical for a library space. Strategies to increase the loading capacity of the Normal College Building floors have been considered like adding new structure inside the existing brick walls to carry the required occupancy loads. One of the first things we will do is conduct a structural evaluation of existing components once they become visible and accessible. Minimum floor loadings required by NBCC are as follows:

Library stack rooms:	150 psf
Library reading and study rooms:	60 psf
Basement and first storey offices:	100 psf
Offices located above the first storey:	50 psf

## 15. Property Ownership

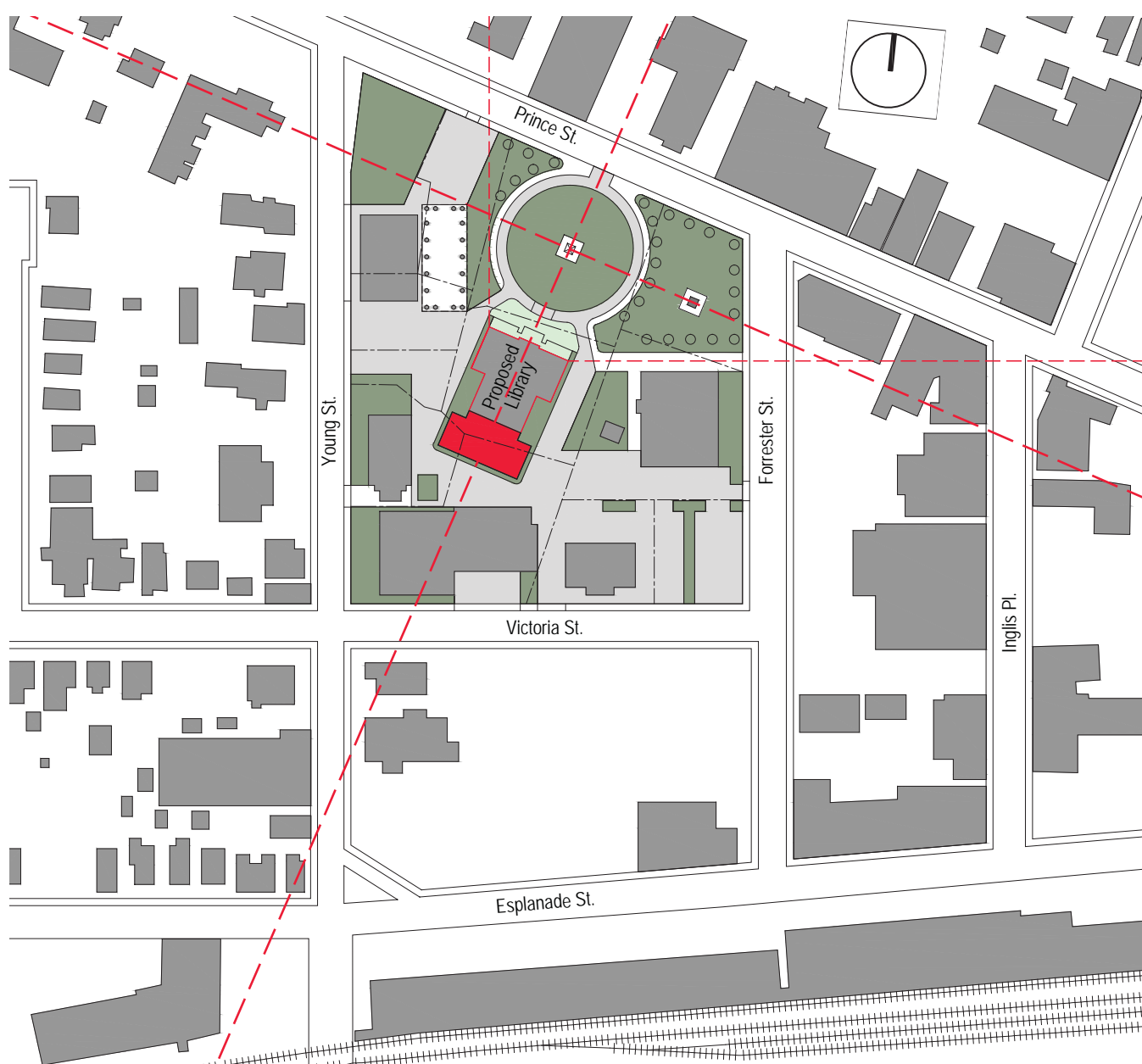
...be a good use of Truro's property. The Normal College Building is vacant and in danger of being lost. The desire to find a use for this historic treasure and the need to find a central location for the Truro Library Space makes this project feasible.

*Research has shown that the building, with the addition of sprinklers and proper exits, will meet code.*

# 5.0 Site

## Normal College

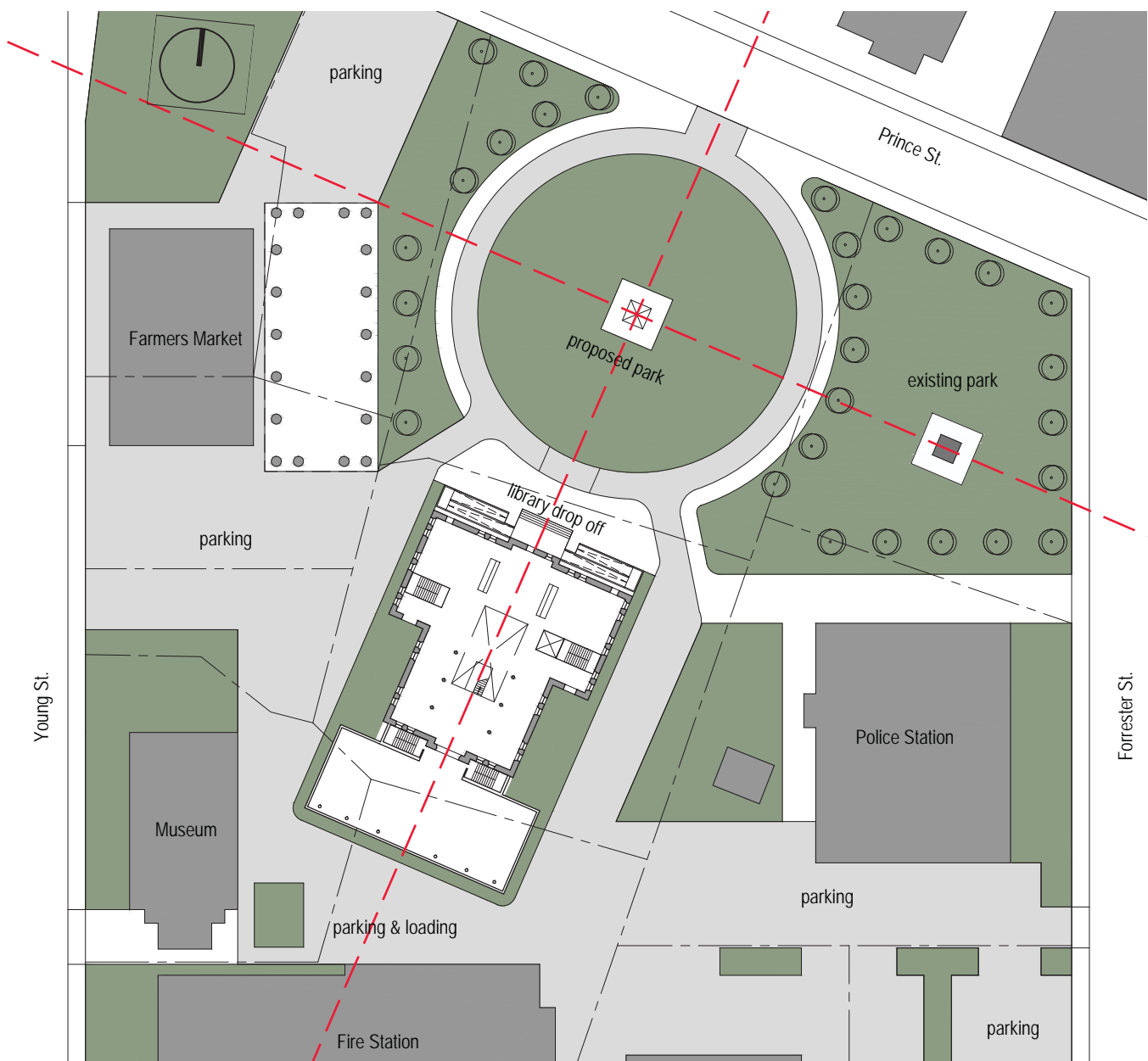
A library is an essential part of a community and it should be located in the heart of the downtown. Normal College would be the best possible place to relocate the existing library. It is in the heart of the town, the cultural and institutional precinct, and would be an excellent use of a heritage building in desperate need of occupancy. Normal College has good bones and a rich history as an educational institution in Truro, built in 1876 as a teaching college. Creating a library within its walls would continue Truro's proud history as an educator of young minds.





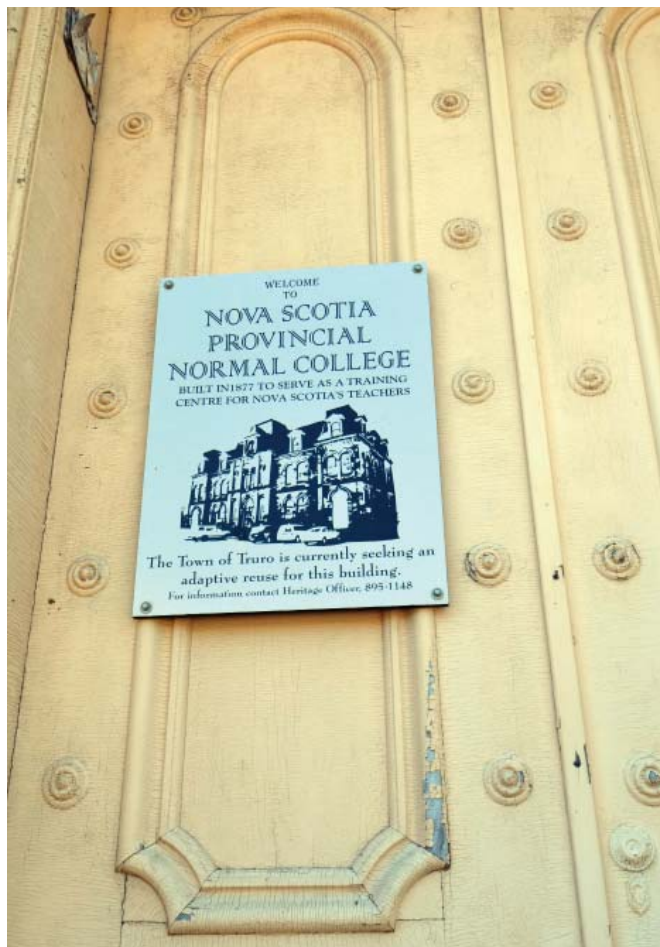
## Declaration of easements or other encumbrances

The proposed design encroaches on the adjacent museum property. The extension would require an area of land approximately 40' by 40' from the province. There is ample room to accommodate both the museum and library programs here. We understand that it is reasonable to expect the Town of Truro to negotiate with the province to make the best use of the properties.



Site plan

Existing conditions...



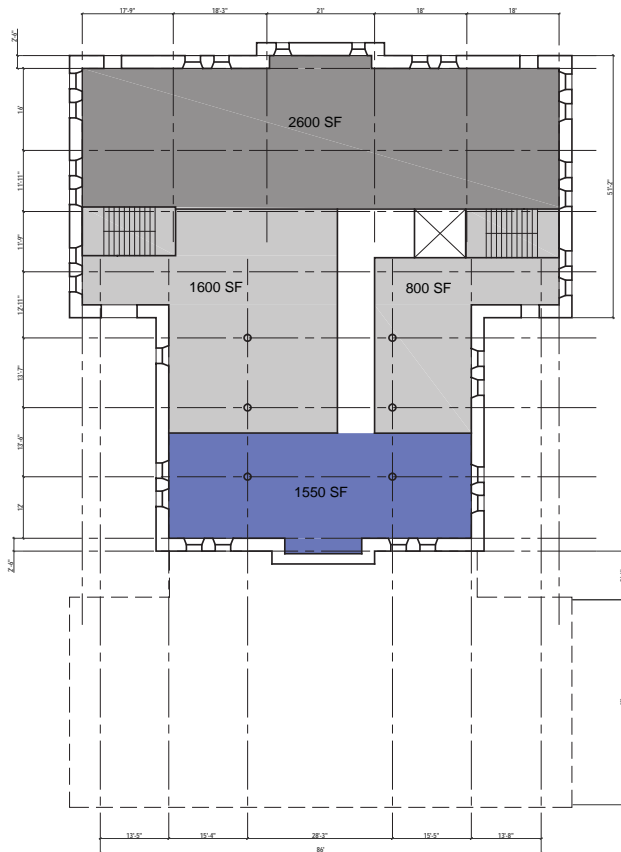




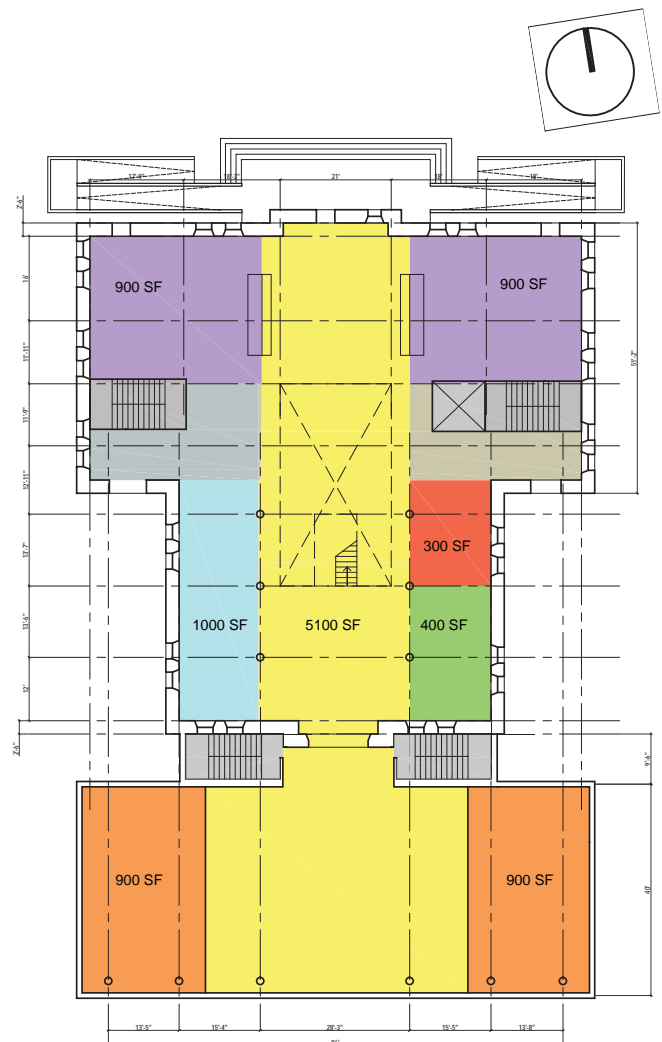
# 6.0 Design

## Program

At its heart, this proposal is based on a belief that the library is an essential public space and is more than a place to store books or provide information. A library functions to enrich an entire community. The library is a regional resource serving a wide range of community-based functions, from the practical (parking) to the conceptual (relaxing). Our team understands that the role of a library within a community is changing. A culture-based library is one that taps into the spirit of the community, assessing priorities and providing resources to support the things deemed most important. Our approach to this project is based on the belief that libraries are becoming cultural centres as their roles expand into the future, serving not merely as an information resource, but much more, with the exact mission and goals evolving and changing over time.



Lower Level



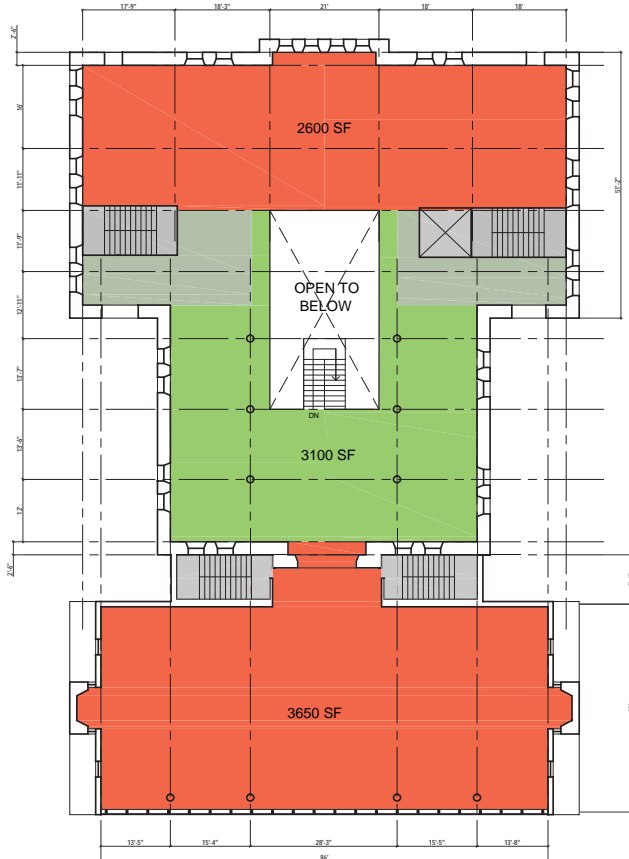
Main Level



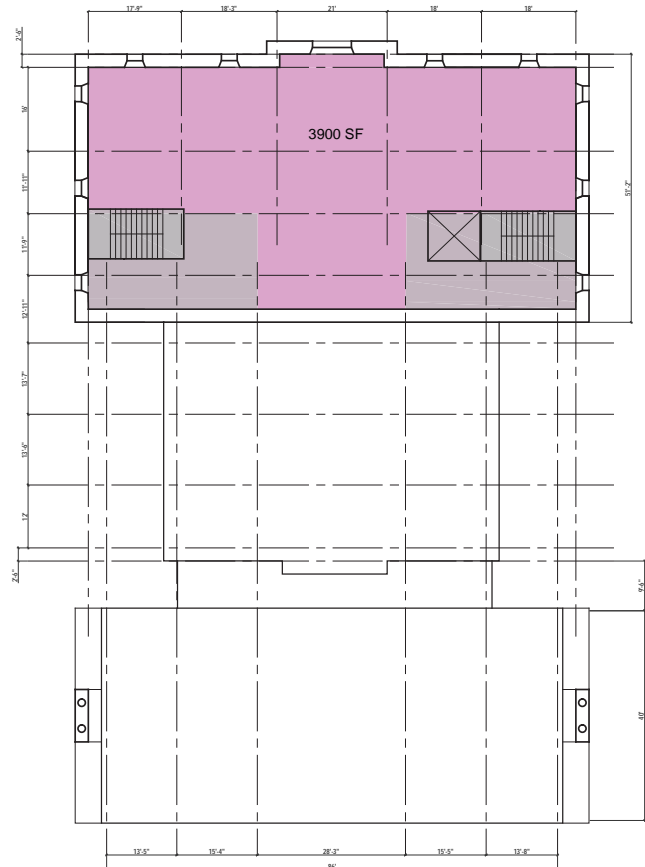
- STAFF
- BUILDING SERVICES
- MECHANICAL
- CHILDRENS COLLECTION
- TEEN COLLECTION
- ADULT COLLECTION
- COMMUNITY ROOMS
- PUBLIC ENTRANCE
- REGIONAL ADMINISTRATION
- I.T. TRAINING + STUDY

TOTAL

NET SQ FT	GOAL	DIFFERENCE
1800 SF	1850 SF	-50 SF
2400 SF	3800 SF	+1200 SF
2600 SF	N/A	
3500 SF	3600 SF	-100 SF
1000 SF	1000 SF	0 SF
6550 SF	6500 SF	+50 SF
1800 SF	1800 SF	0 SF
5100 SF	5800 SF	-700 SF
3900 SF	4000 SF	-100 SF
1550 SF	650 SF	+900 SF
29450 SF	29000	



Third Level



Fourth Level

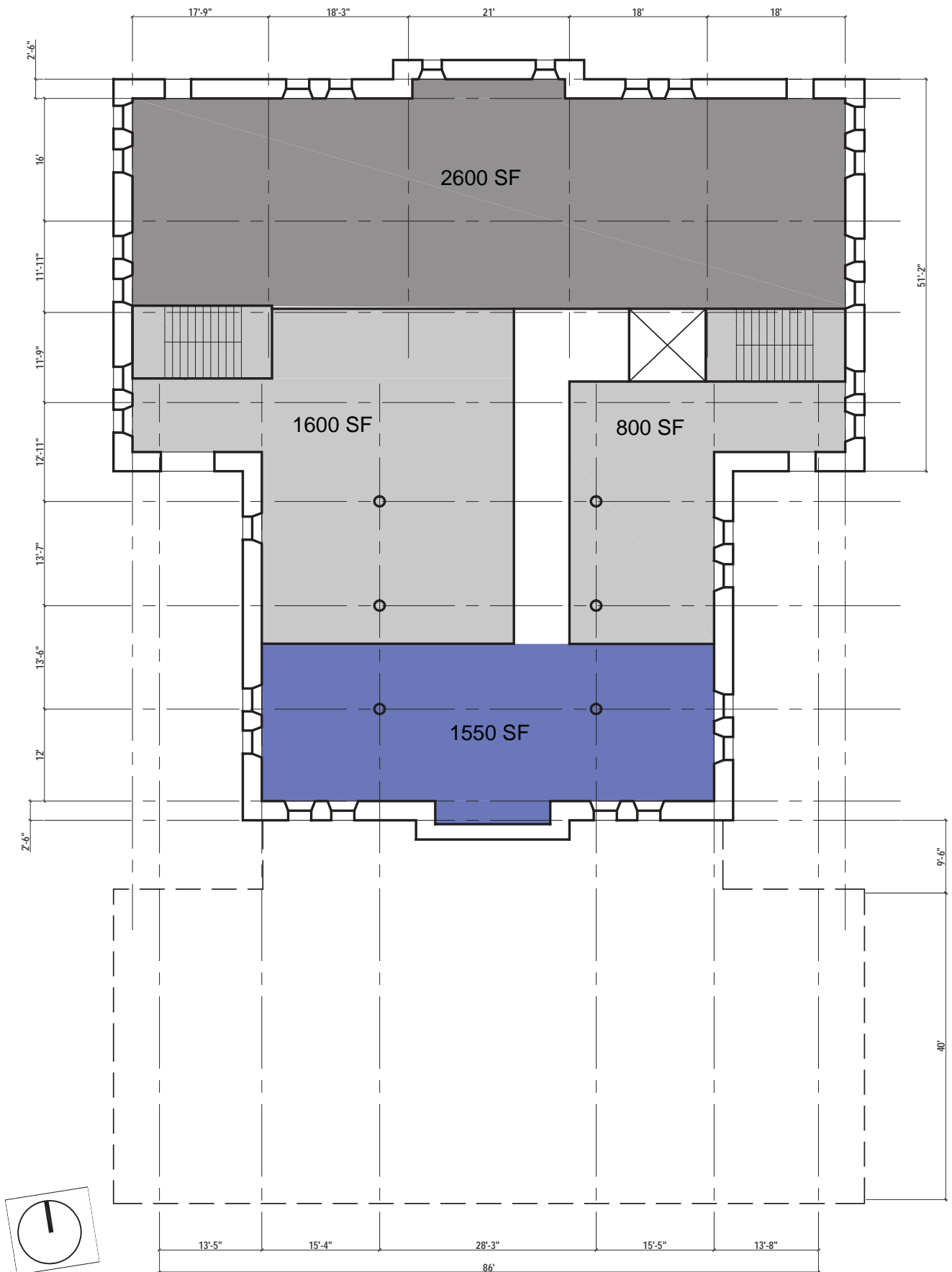
# Lower Level

The lower level of the library contains mainly the building service spaces as well as the Computer Training Room. The Lower Floor Program is contained wholly within the footprint of the existing building. Obviously, a thorough inspection of the existing basement would need to occur during schematic design to assess whether or not the basement, with the proper remediation, would be suitable to serve the new facility. As high-density and secure storage rooms are located in this area, the basement environment must be suitable for storage of books and paper – i.e. cool and dry.

The Lower Level of the Library contains:

- Computer Training Room
- Secure Storage
- Mechanical Room
- Sprinkler Room
- High Density Storage
- Elevator Machine Room
- Maintenance Shop/Janitor
- Electrical Room
- Communications Room

	NET SQ FT	GOAL	DIFFERENCE
STAFF	1800 SF	1850 SF	-50 SF
BUILDING SERVICES	2400 SF	3800 SF	+1200 SF
MECHANICAL	2600 SF	N/A	
CHILDRENS COLLECTION	3500 SF	3600 SF	-100 SF
TEEN COLLECTION	1000 SF	1000 SF	0 SF
ADULT COLLECTION	6550 SF	6500 SF	+50 SF
COMMUNITY ROOMS	1800 SF	1800 SF	0 SF
PUBLIC ENTRANCE	5100 SF	5800 SF	-700 SF
REGIONAL ADMINISTRATION	3900 SF	4000 SF	-100 SF
I.T. TRAINING + STUDY	1550 SF	650 SF	+900 SF
TOTAL	29450 SF	29000	



## Main Level

The Main Level of the Library is the most popular part of the Library. It will have a general ambience similar to new large bookstores. It will be a busy and active place, a well-loved and used community resource.

The main entrance is located on the north side and faces the Civic Square. Dual ramps make a pleasing and accessible entrance. A secondary entrance on the south side allows for secure after-hours access to the Community Rooms.

### Staff Areas

The Staff Area at either side of the main entrance offers staff functions specific to the Truro Branch Library.

The Library Staff Area is serviced by a convenient delivery and receiving area on the east side.

### Public Areas

The Public Areas of the Library contain:

- Browsing and New Materials
- Audio/Visual Materials
- Popular Collections
- Periodicals and Newspapers
- Informal Comfortable Seating
- Holds – This growing service allows patrons to pick up previously reserved materials
- Circulation Desk
- Self-Check-out
- Computers for short term use
- Café (including café tables and chairs)

This part of the Library will contain retail-style displays of new and popular materials.

The material will be displayed in a manner consistent with current merchandising techniques of display and organization, resulting in a considerable increase in the amount of materials in circulation. The existing tall arched windows around this room provide natural daylight and a wonderful environment for browsing, reading, and lounging.

The Main Level also contains two Community Rooms, the Teen Area, and specific parts of the Adult and Children's Areas. A separate entrance at the south end of the building is provided and these rooms are configured to allow for independent after-hours access, including access to public washrooms.

### Teen Area

This space is located along one side of the public room and provides a specific place to house the Teen Collection which is easily identifiable and accessed from the main entrance. At the same time, it is near the service points on the floor, providing staff with unobstructed sight lines into the area.

The Teen Area will contain:

- A single specific collection of A/V material, graphic novels, and books of particular interest to teens
- A media viewing area
- Computers allowing group video game players
- A wall for Teens to pick up material of interest to them.

All of the above program elements are ideally located as they are all active social spaces which benefit from high visibility.

The highest levels of use are expected in these areas.

	NET SQ FT	GOAL	DIFFERENCE
STAFF	1800 SF	1850 SF	-50 SF
BUILDING SERVICES	2400 SF	3800 SF	+1200 SF
MECHANICAL	2600 SF	N/A	
CHILDRENS COLLECTION	3500 SF	3600 SF	-100 SF
TEEN COLLECTION	1000 SF	1000 SF	0 SF
ADULT COLLECTION	6550 SF	6500 SF	+50 SF
COMMUNITY ROOMS	1800 SF	1800 SF	0 SF
PUBLIC ENTRANCE	5100 SF	5800 SF	-700 SF
REGIONAL ADMINISTRATION	3900 SF	4000 SF	-100 SF
I.T. TRAINING + STUDY	1550 SF	650 SF	+900 SF
TOTAL	29450 SF	29000	





## Second Level

The Second Level feels more like a traditional Library. It is, in essence, a large open room that connects the old building with the new. It houses both the Adult and Children’s Collections. The Second Level makes good use of 18’-0” ceilings, a luxury that is unaffordable today except in a renovation setting such as this one.

The Second Level is zoned into two distinct areas grouped around the central Atrium. The atrium provides a visual and spatial connection that draws all parts of the library together. This allows the areas to be visually linked but physically separate.

### Children’s Area

The Children’s Area is located in the middle of the building and wraps around the atrium. This puts the children at the heart of the library. The Children’s Area contains a Children’s Program Room with a separate storage area which contains a small Kitchenette. The area also contains a Family Washroom.

The Children’s Program Room can be closed off or remain completely open to the rest of the floor. There is an informal story-time area and gathering on the east side, and on the west side is a Children’s Discovery Centre with a series of age-specific collections and educational resources.

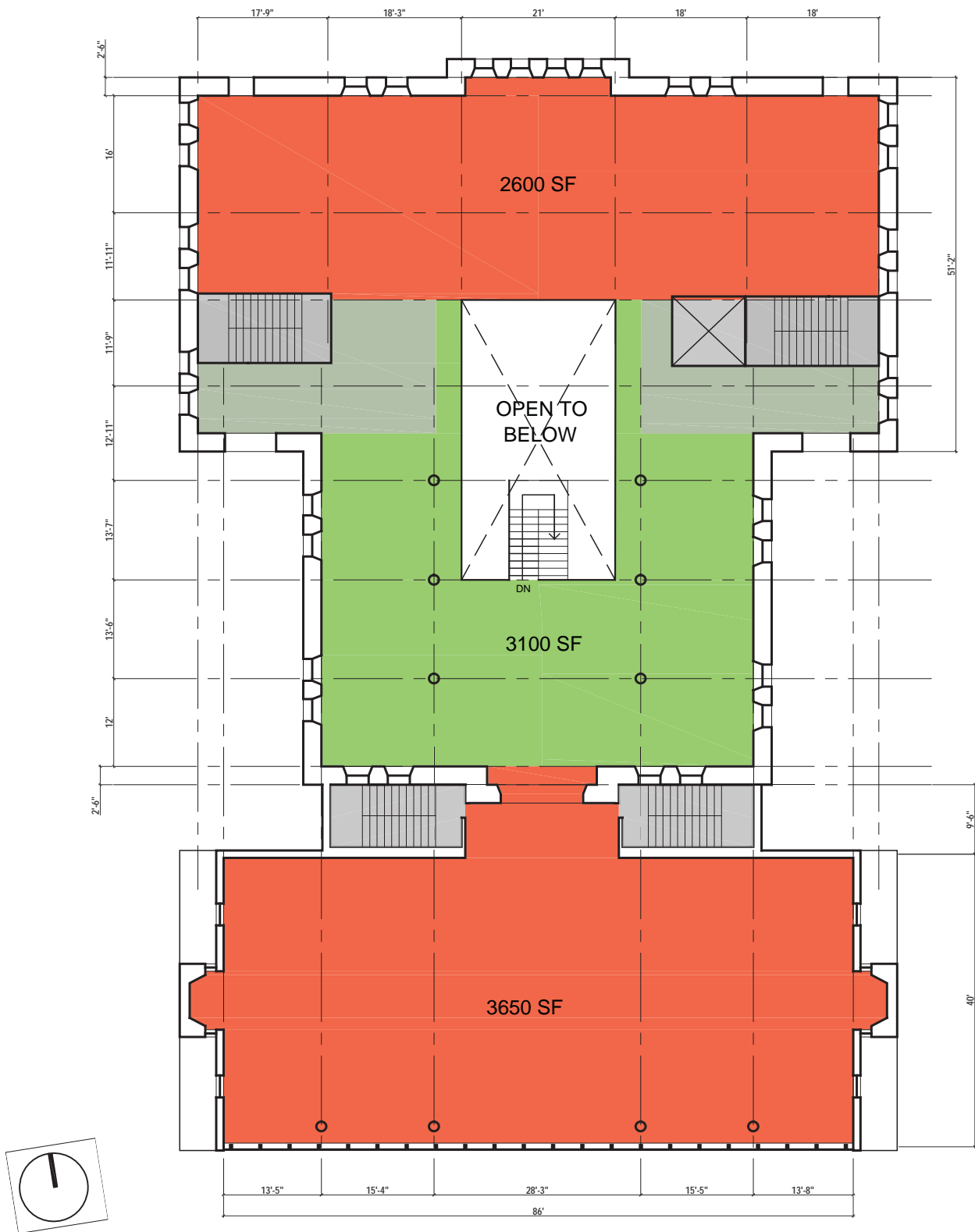
### Adult’s Area

The main collection is contained in shelving which is five shelves high for optimum site lines. The shelves are located in the column-free zone of the plan, allowing for future reorganization in response to changing needs.

The lighting system will also allow for reorganization, as required.

The Adult Collection is split on either side of the Children’s Collection. The north collection looks over the Civic Square and has a traditional feel, with informal reading spaces and a view through the atrium to Ground Floor. The south collection is entirely in the addition. Stepping through the existing brick wall brings one to an expansive glass wall with views over Truro to the south. Either end of this grand room, would be ideal for fireplaces.

	NET SQ FT	GOAL	DIFFERENCE
STAFF	1800 SF	1850 SF	-50 SF
BUILDING SERVICES	2400 SF	3800 SF	+1200 SF
MECHANICAL	2600 SF	N/A	
CHILDRENS COLLECTION	3500 SF	3600 SF	-100 SF
TEEN COLLECTION	1000 SF	1000 SF	0 SF
ADULT COLLECTION	6550 SF	6500 SF	+50 SF
COMMUNITY ROOMS	1800 SF	1800 SF	0 SF
PUBLIC ENTRANCE	5100 SF	5800 SF	-700 SF
REGIONAL ADMINISTRATION	3900 SF	4000 SF	-100 SF
I.T. TRAINING + STUDY	1550 SF	650 SF	+900 SF
TOTAL	29450 SF	29000	



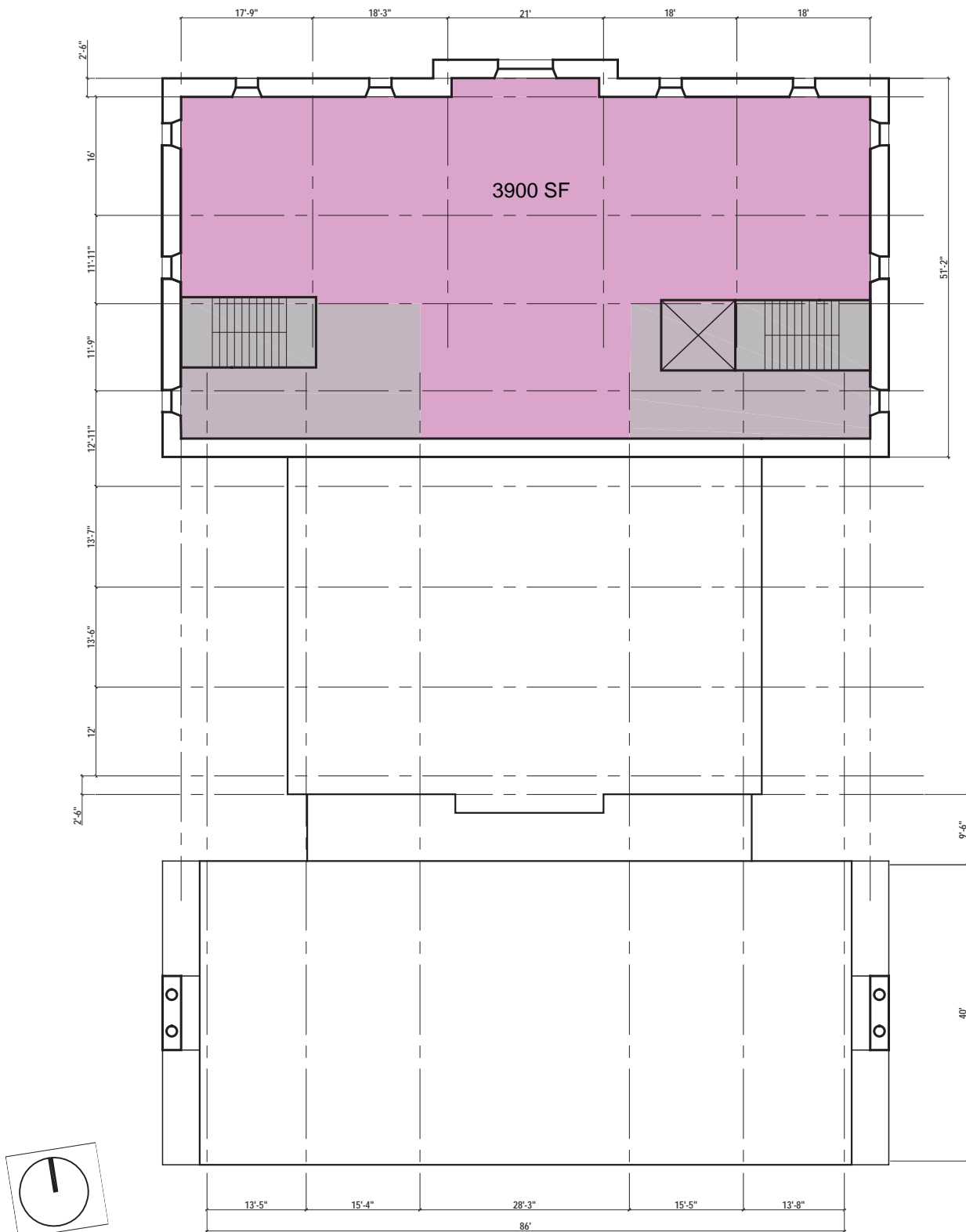
## Third Level

The prime views over the Civic Square are located on this top floor with tall ceilings and large windows. Large exposed wood trusses contrast with the clean white walls of this renovated modern office space.

By locating the Regional Administration Centre in the building, the overall square footage required for these two functions has been reduced by sharing space wherever possible.

	NET SQ FT	GOAL	DIFFERENCE
STAFF	1800 SF	1850 SF	-50 SF
BUILDING SERVICES	2400 SF	3800 SF	+1200 SF
MECHANICAL	2600 SF	N/A	
CHILDRENS COLLECTION	3500 SF	3600 SF	-100 SF
TEEN COLLECTION	1000 SF	1000 SF	0 SF
ADULT COLLECTION	6550 SF	6500 SF	+50 SF
COMMUNITY ROOMS	1800 SF	1800 SF	0 SF
PUBLIC ENTRANCE	5100 SF	5800 SF	-700 SF
REGIONAL ADMINISTRATION	3900 SF	4000 SF	-100 SF
I.T. TRAINING + STUDY	1550 SF	650 SF	+900 SF
TOTAL	29450 SF	29000	





## Form and Materiality

The Normal College building is a three-storey Second Empire style brick building. Built in the late 1800s, the building is notable for the mansard roof and its brick and stone decorative detail.

According to the Nova Scotia Historic Places Initiative, the building is a good example of the work of Halifax architect Henry Frederick Busch, who also designed a number of public buildings in Halifax. The geometric patterns, motifs, and colours of this building are characteristic of Busch's work. Originally, the building was finished with a cupola and spire which were lost to fire in 1951.

Key character defining elements:

- Second Empire characteristics including basic form and massing; alternating concave and convex forms in the mansard roof; moulded cornices supported by brackets; facade lightly articulated in contrasting patterns and colours; segmented keystone arches outlining windows on the first two storeys; pedimented gable dormers on classical supports;
- Original or historic windows and door elements; pairs of sashed Palladian-style windows in the lower storeys; single sashed Palladian-style windows in the dormers; clerestory-style and ocular windows in the central pavillion; round window above the central dormer; double-width door openings.
- Original or historic building materials; pressed brick in contrasting red, black and white colours; thin-set mortar joints; granite foundation course; cut sandstone sills, columns bases and capitals, keystones, belt courses and entry stairs.

The Addition to the Normal College is inspired by the character of the heritage building drawing from its rich material palette and robust form. Modern elements including glazing and innovative materials will ensure the library addition is an exciting and beautiful expansion of a historic building.

## Renderings of the proposed Normal College Renovation and Addition...



Exterior rendering





Interior rendering

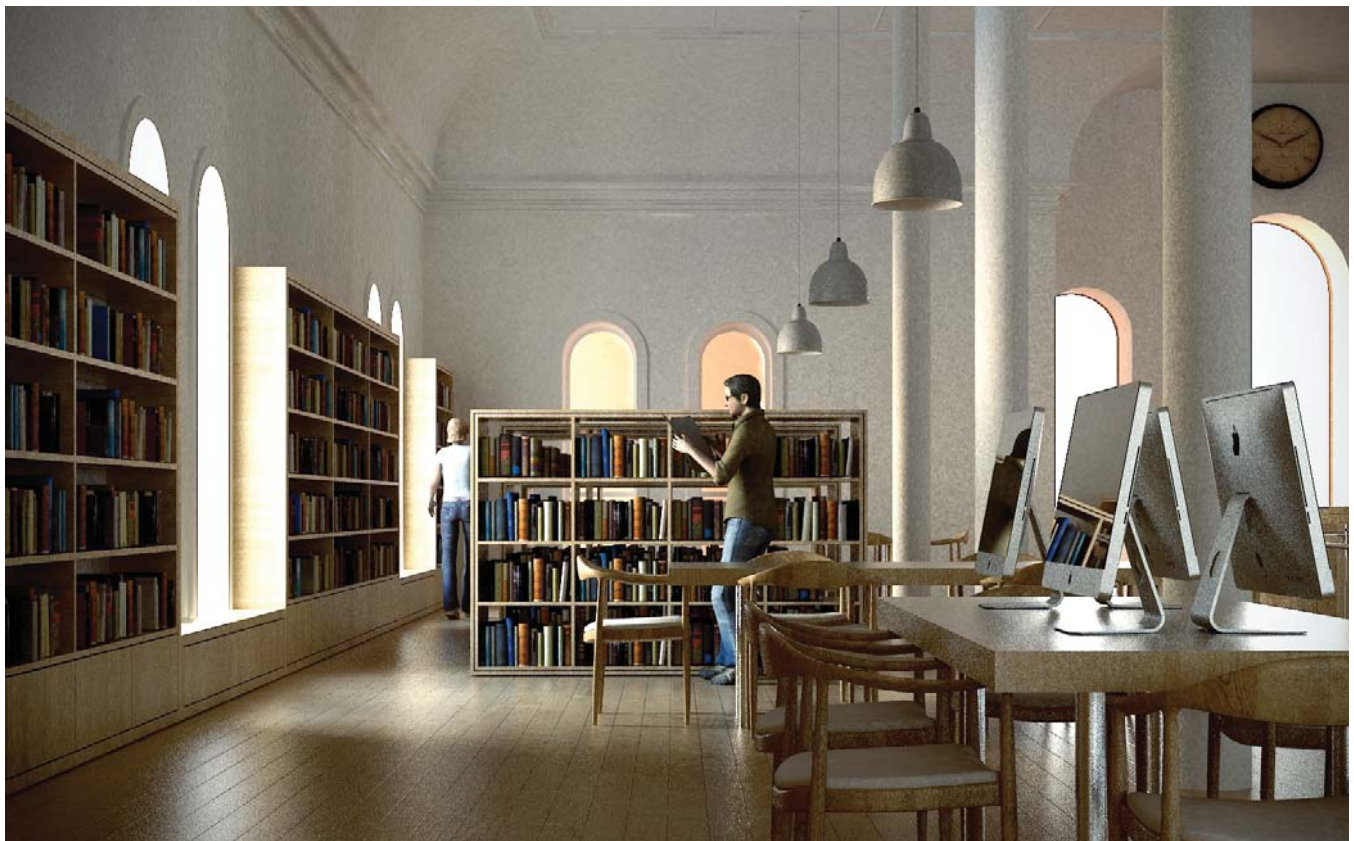


Interior rendering

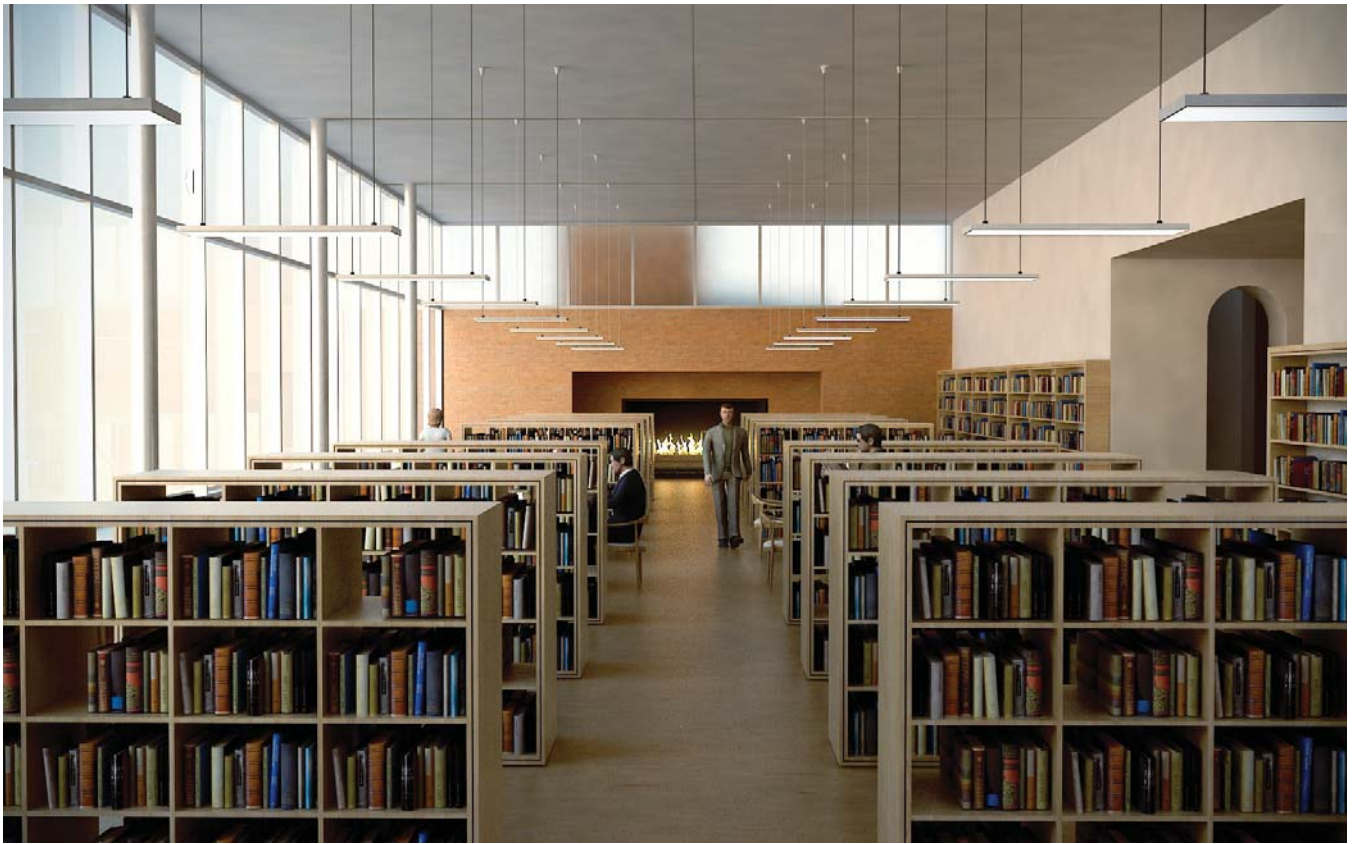




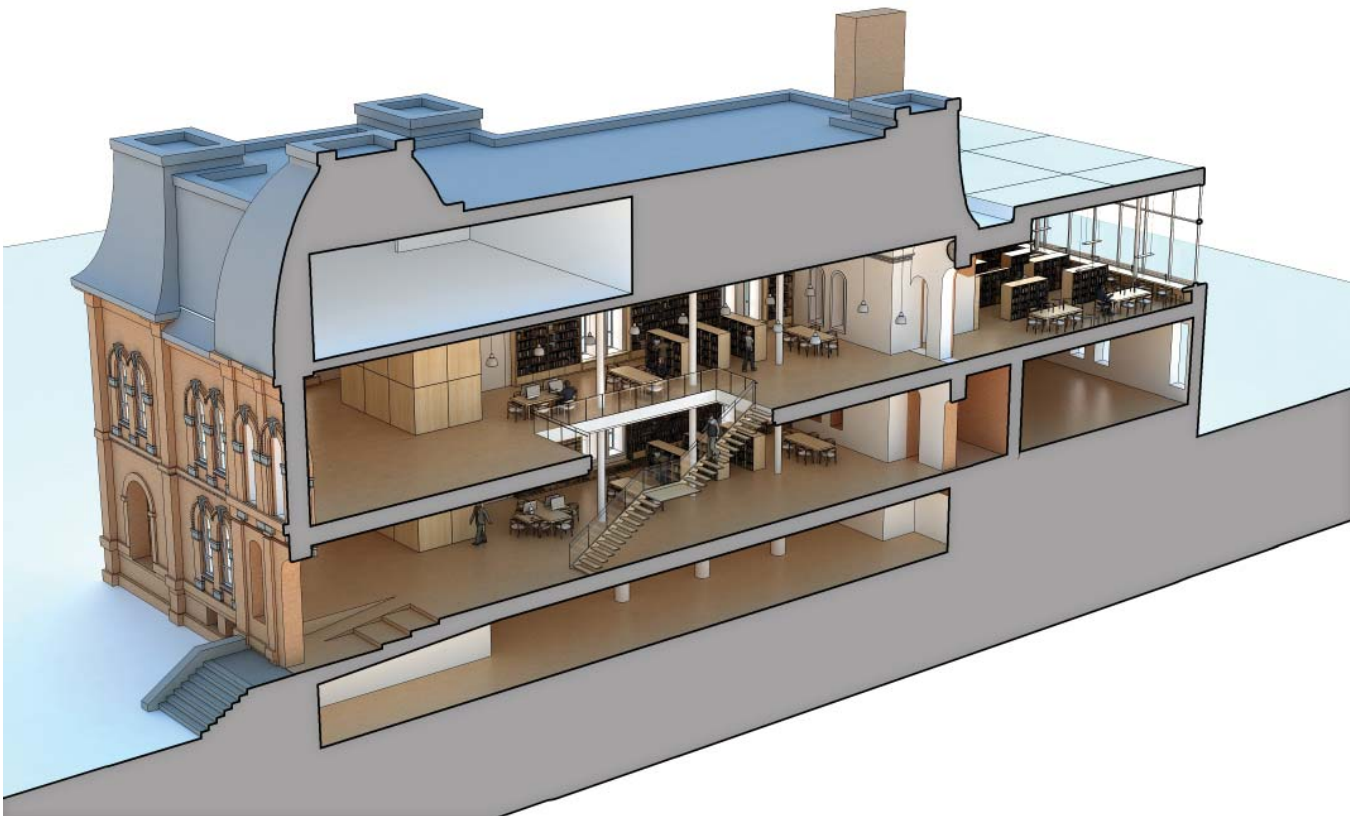
Interior rendering



Interior rendering



Interior rendering



Section



# Sustainability

Sustainable design practices, environmental stewardship, social responsibility and conservation of natural and cultural resources are values rooted in the best of the history of architecture and are inherent to good design practice. Our work consistently exemplifies this philosophy.

Our process creates buildings that have an inherent 'greenness' and sustainability. Many of the steps that of late have been identified as green practices, are steps that have always made sense from a practical, economical, and performance standpoint. The approach that the firm has taken from the beginning has been one of common sense, respecting the siting of the project, actively engaging the social, economic & environmental qualities of the place in shaping buildings.

## Sustainable design for Normal College Renovation and Addition...

- ...energy consumption shall be minimized through the use of high efficiency fixtures, heat pumps and equipment*
- ...locate library in the downtown close to amenities - promote walkable places to live*
- ...extend the natural landscape to include tangible examples of sustainable design across the site*
- ...optimal natural daylighting*
- ...daylighting controls and occupancy sensors for lighting sensors*
- ...durable, sustainable material palette*
- ...low-flow plumbing fixtures*

### *Renovation*

- ...adaptive reuse of existing Truro building*
- ...use less material for new library*
- ...prevent additional building material in landfill*
- ...upgrade poor performance with energy efficient mechanical and electrical systems*
- ...large windows allow natural daylighting*
- ...new windows for energy savings*
- ...insulation for energy savings*
- ...culturally sustainable, preserve historic building*

### *Additon*

- ...energy efficient new construction*
- ...passive solar*

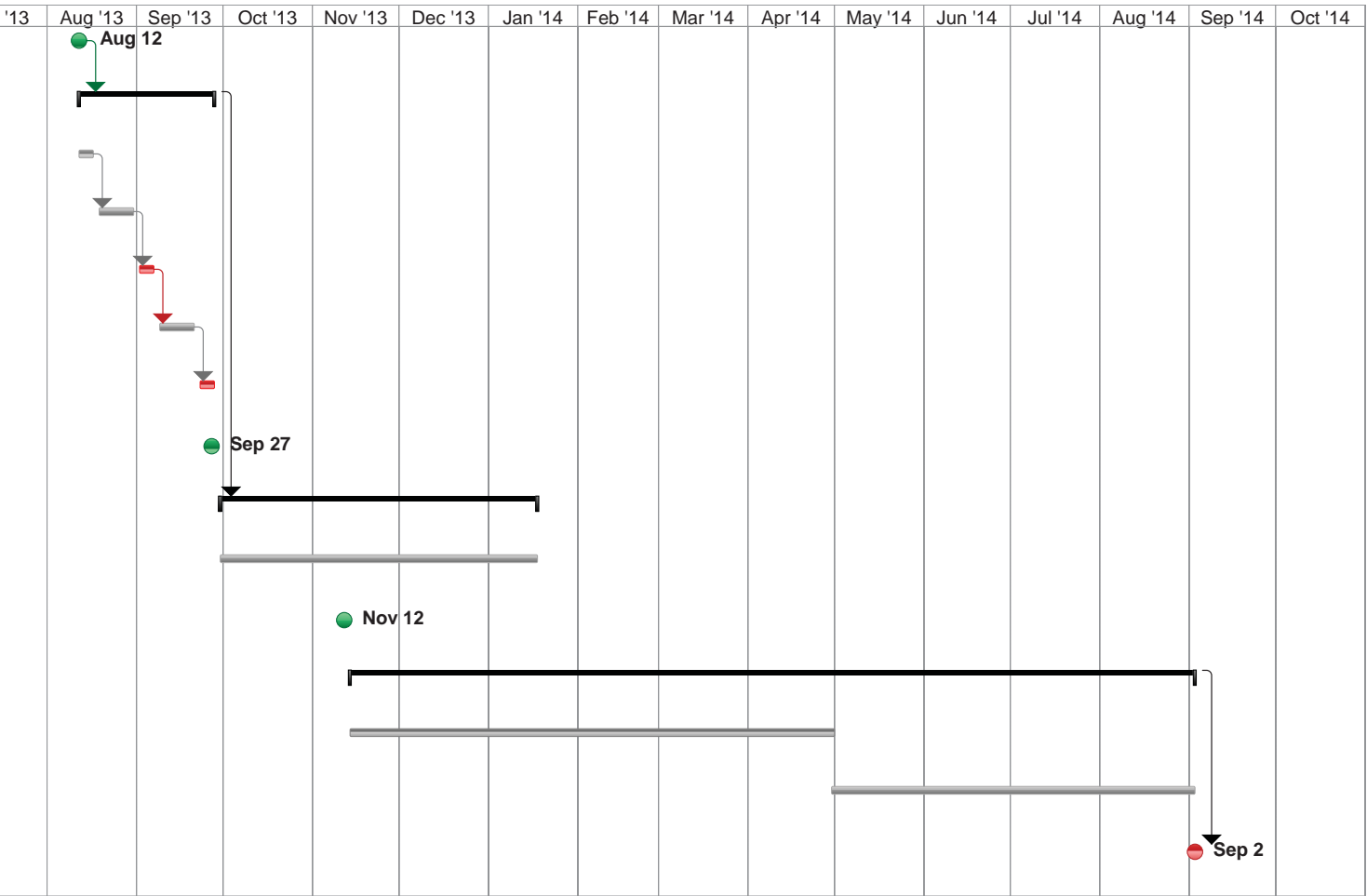
# 7.0 Schedule

## Truro Library Space July 12, 2013

Task Name	Duration	Start	Finish	Jul
<b>Project Awarded</b>	<b>0 days</b>	<b>Mon 8/12/13</b>	<b>Mon 8/12/13</b>	
<b>Design</b>	<b>7 wks</b>	<b>Mon 8/12/13</b>	<b>Fri 9/27/13</b>	
Pre-Design	1 wk	Mon 8/12/13	Fri 8/16/13	
Schematic Design	2 wks	Mon 8/19/13	Fri 8/30/13	
Client Review	1 wk	Mon 9/2/13	Fri 9/6/13	
Design Development	2 wks	Mon 9/9/13	Fri 9/20/13	
Final Client Review	1 wk	Mon 9/23/13	Fri 9/27/13	
Final Design Approval	0 wks	Fri 9/27/13	Fri 9/27/13	
<b>Construction Documents</b>	<b>16 wks</b>	<b>Mon 9/30/13</b>	<b>Fri 1/17/14</b>	
Detailed Construction Drawings	16 wks	Mon 9/30/13	Fri 1/17/14	
Final Client Approval	0 wks	Tue 11/12/13	Tue 11/12/13	
<b>Construction</b>	<b>41.8 wks</b>	<b>Thu 11/14/13</b>	<b>Tue 9/2/14</b>	
Renovation of existing Normal College	24 wks	Thu 11/14/13	Wed 4/30/14	
Construction of Addition	18 wks	Wed 4/30/14	Tue 9/2/14	
<b>Occupancy</b>	<b>0 days</b>	<b>Tue 9/2/14</b>	<b>Tue 9/2/14</b>	



The office of MacKay-Lyons Sweetapple Architects Limited



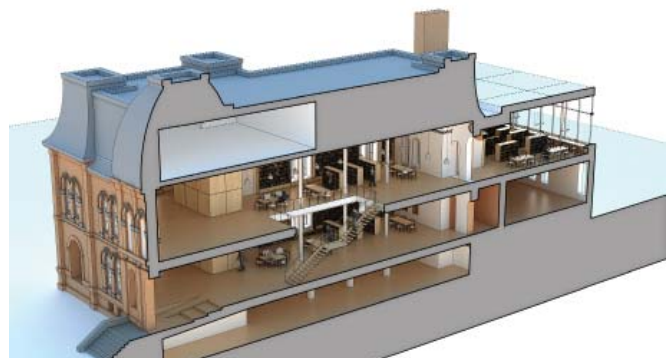
# 8.0 Cost

## Cost Breakdown

Pre design	No charge
Design	\$375,000
Construction	\$6,655,000
Construction Inspection	\$20,000
Building Commissioning	\$50,000
<b>Total Cost (excluding HST)</b>	<b>\$7,100,000</b>

### Notes:

1. Costs are based on concepts provided any significant alterations through design process will be fairly negotiated.
2. Prices include basic landscaping and parking around immediate building.
3. Design, supply and installation costs of furniture, fixtures and loose equipment are not included in cost. This service can be provided at additional expense which will be fairly negotiated.
4. Renderings show fireplaces and chimneys which are not included in the price.





*"... successful bid from a contractor is almost 15 percent below the budgeted construction cost of \$15.4 million. This reverses the trend of the last couple of years in which bids for University building projects mostly seem to have been 10 percent or more over budget ..... Brian MacKay-Lyons from the outset realized the need to design a structurally simple building ... all the bids received were well below the budgeted cost."*

*Ted Relph  
Associate Principal - Campus Development  
about the University of Toronto at Scarborough*



Library, University of Toronto, ON  
MacKay-Lyons Sweetapple Architects

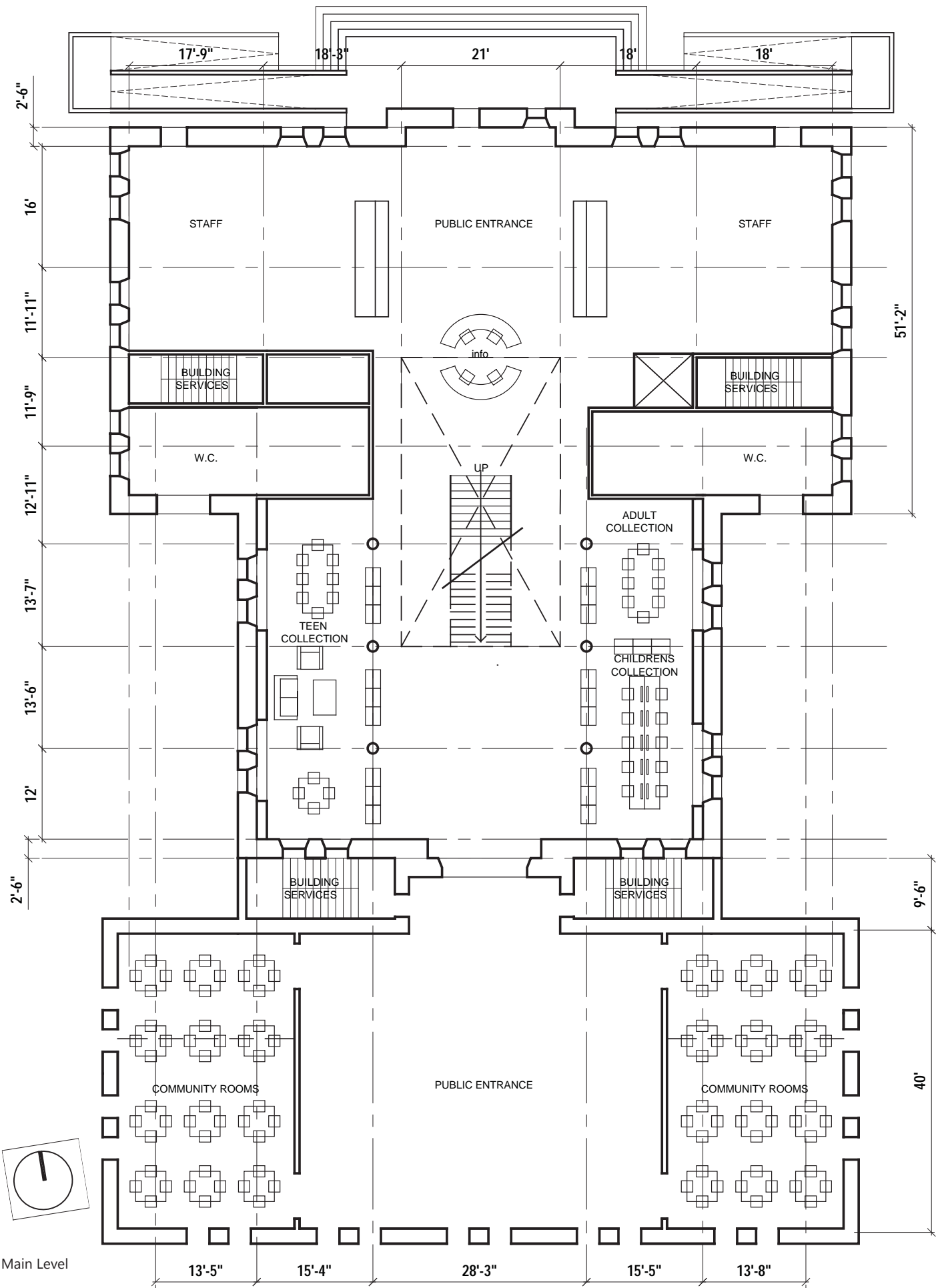


# Appendix A

## Plans

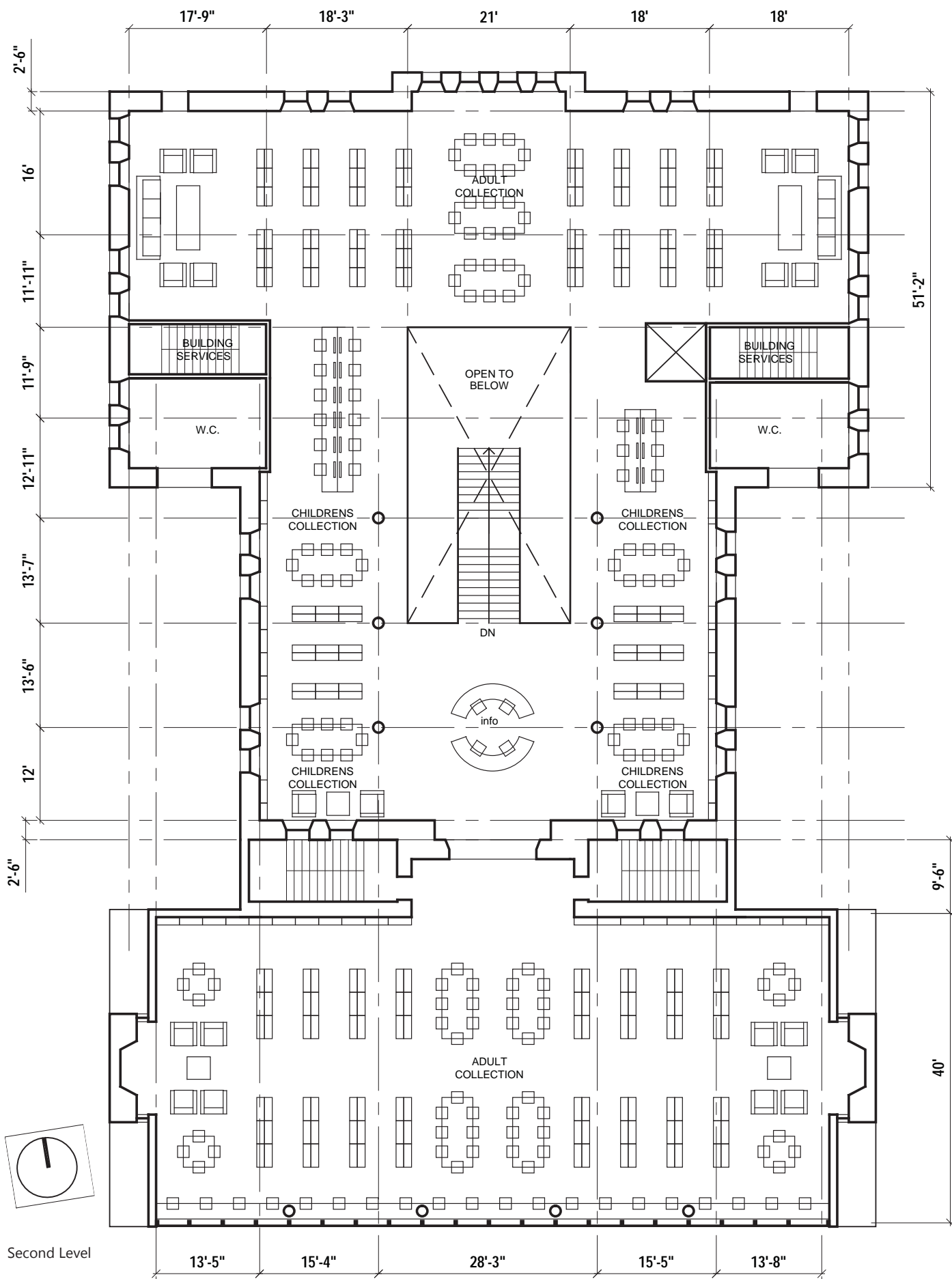






Main Level





Second Level





# Appendix B

## Letters



June 19, 2013

L R CONSTRUCTION LIMITED  
75 STEWIACKE RIVER PARK  
ROAD  
MACKAY SIDING NS BON 2J0

**RE: BN: 103404067 Firm: 703737**

Please accept this letter as our confirmation that the above noted account is in good standing. This clearance letter is valid to **September 30, 2013**.

Clearance Officer  
Telephone: (902) 491-8370  
Toll Free: 1-877-211-9267  
Direct Fax: (902) 491-8325  
Clearance@wcb.gov.ns.ca

**NOTE:** Although this letter does not hold the author's handwritten signature, it is considered a valid document and any concerns with respect to its authenticity should be directed to the above-noted telephone numbers.

RB/rb  
12316959





# Letter of Good Standing

## Certificate of Recognition Program

INDUSTRY FUNDED  
**NSCSA**

Tel: 902-468-6696  
Toll Free NS: 800-971-3888  
Fax: 902-468-8843  
Web: [www.nscsa.org](http://www.nscsa.org)

35 MacDonald Ave.  
Dartmouth, Nova Scotia  
B3B 1C6

Member ID	LRCON000
Member Type	M
Certificate No.	44635

Issued to: **L & R CONSTRUCTION LTD.**  
**75 STEWIACKE RIVER PARK RD,**  
**MACKAY SIDING, NS**  
**B0N 2J0**

Size: **Intermediate - 5 to 19 Persons Employed**

Based on active participation in the Certificate of Recognition Program, the Nova Scotia Construction Safety Association hereby issues a letter of good standing:

**2012/11/26**

Date of Issue

**2013/12/17**

Expiry Date

This letter of good standing is issued to a firm actively participating in NSCSA programs and whose current standing falls into the category noted below:

**Certificate of Recognition ☒**

*See reverse for category definitions.*

**COR Pending ☐**

Conditions:



  
NSCSA Representative



# Appendix C

## Resumes





## **BRIAN MacKAY-LYONS**

Architect, Professor, FRAIC, RCA, (Hon.) FAIA

### **EDUCATION**

Master of Architecture (Urban Design), University of California at Los Angeles, CA  
Residency, International Laboratory for Architecture and Urban Design, (ILAUD), Siena, Italy

Bachelor of Architecture, Technical University of Nova Scotia, Halifax, NS

Study Abroad, China and Japan

Bachelor of Environmental Design, Technical University of Nova Scotia, Halifax, NS

Science, Dalhousie University, Halifax, NS

### **PRACTICE (1975 – Present)**

MacKay-Lyons Sweetapple Architects Limited, Halifax, NS

Brian MacKay-Lyons Architecture Urban Design, Halifax, NS

Emodi and MacKay-Lyons Architects, Halifax, NS

Moore, Ruble, and Yudell, Santa Monica, CA

The Urban Innovations Group, Los Angeles, CA

Networks Limited, Halifax, NS (President)

W. Brian Edwards Architect Ltd., Edmonton, AB (Intern)

Design Workshop Ltd., Moncton, NB (Intern)

### **ACADEMIC (240)**

**PROFESSORSHIPS (16)**

**PUBLIC LECTURES (183)**

**GUEST CRITICS (17)**

**JURIES (40)**

## **BRIAN MacKAY-LYONS (cont'd)**

Architect, Professor, FRAIC, RCA, (Hon.) FAIA

### **AWARDS (100)**

**INTERNATIONAL AWARDS (18)**

**CANADIAN AWARDS (24)**

**REGIONAL AWARDS (53)**

**ACADEMIC AWARDS (7)**

### **PUBLICATIONS (332)**

**MONOGRAPHS (7)**

**ENCYCLOPEDIAS (7)**

**BOOKS (80)**

**JOURNAL ARTICLES (222)**

**WEB PUBLICATIONS (24)**

### **TELEVISION / FILM / RADIO (28)**

### **EXHIBITIONS (100)**

### **MEMBERSHIP**

Ordre des architectes du québec (OAQ)

Fellow, Royal Architectural Institute of Canada (FRAIC)

Board of Architects, State of New Hampshire

Honorary Fellow, American Institute of Architects (Hon. FAIA)

Ontario Association of Architects (OAA)

Board of Architects, State of Vermont

Architects Association of Prince Edward Island (AAPEI)

Royal Canadian Academy of Arts (RCA)

Royal Architectural Institute of Canada (RAIC)

Nova Scotia Association of Architects (NSAA)

## **Talbot Sweetapple**

Architect, BA, BEDS, M. Arch, MRAIC

### **EDUCATION**

Master of Architecture, Technical University of Nova Scotia, Halifax, NS

Bachelor of Environmental Design Studies, Technical University of Nova Scotia, Halifax, NS

Bachelor of Arts, Major in Philosophy, Dalhousie University, Halifax, NS

### **PRACTICE (1993 – Present)**

MacKay-Lyons Sweetapple Architects Limited, Halifax, NS

Brian MacKay-Lyons Architecture Urban Design, Halifax, NS

Kuwabera Payne McKenna Blumberg Architects, Toronto, ON

Shin Takamatsu Architects and Associates, Berlin, Germany

MacKay-Lyons Architecture Urban Design, Halifax, NS

### **ACADEMIC (17)**

#### **PROFESSORSHIPS (6)**

Dalhousie University, Faculty of Architecture, 1997 - Present

The Peter Behrens Visiting Professor, Peter Behrens School of Architecture, Düsseldorf

Ruth and Norman Moore Visiting Professor, University of Washington in St. Louis

Thesis Advisor, Dalhousie University

John Williams Professor, University of Arkansas

Sargent Visiting Professor of Architecture, Syracuse University

#### **PUBLIC LECTURES (7)**

#### **GUEST CRITIC (1)**

#### **JURIES (3)**

### **AWARDS (38)**

INTERNATIONAL AWARDS (12)

CANADIAN AWARDS (6)

REGIONAL AWARDS (20)

**Talbot Sweetapple** (cont'd)  
Architect, BA, BEDS, M. Arch, MRAIC

## **PUBLICATIONS (241)**

### **MONOGRAPHS (4)**

*Ideas in Things* by Brian MacKay-Lyons and Robert McCarter, in progress

*Work of MacKay-Lyons Sweetapple Architects* (untitled) by Robert McCarter, in progress.

*Ghost: Building an Architectural Vision* by Brian MacKay-Lyons  
Princeton Architectural Press: New York, 2008.

*Plain Modern: The Architecture of Brian MacKay-Lyons* by Malcolm Quantrill  
Princeton Architectural Press: New York, 2005.

### **ENCYCLOPEDIAS (7)**

### **BOOKS (68)**

### **JOURNAL ARTICLES (140)**

### **WEB PUBLICATIONS (22)**

## **TELEVISION / FILM / RADIO (13)**

## **EXHIBITIONS (54)**

## **ARCHITECTURAL MEMBERSHIP**

American Institute of Architects, AIA  
Royal Architectural Institute of Canada, MRAIC  
Nova Scotia Association of Architects, NSAA  
Architects Association of New Brunswick – AANB  
Architects Association of PEI - AAPEI  
New Hampshire – AANH



## **MELANIE HAYNE**

Senior Associate

### **EDUCATION**

Master of Architecture, Dalhousie University, Halifax, NS  
Bachelor of Environmental Design, Dalhousie University, Halifax, NS

### **PRACTICE**

MacKay-Lyons Sweetapple Architects Limited, Halifax, NS  
Pin-Matthews Architects, Yellowknife, NWT

### **ACADEMIC**

#### **AWARDS & SCHOLARSHIPS**

Royal Architectural Institute of Canada Honor Roll  
American Institute of Architects Henry Adams Medal  
Rosetti Scholarship and Teaching Assistantship  
Mobil Oil Canada Scholarship

### **MEMBERSHIP**

Nova Scotia Association of Architects (NSAA) Architectural Intern



# Doug Bach, CET, P.Eng., FEC

Practice Lead - Industrial

Co-practice Lead - Buildings & Structures



Engineering  
Group Inc.

Partner • Develop • Innovate

## Education:

**P.Eng., Completion of  
APENS License to Practice  
Requirements**

TUNS  
1993

**Diploma of Highway  
Engineering Technology**

ICS  
1981

**Diploma of Technology  
Civil Technology  
(Structural)**

NBIT  
1974

## Professional Affiliations:

**Engineers Nova Scotia**

TechNova

## Areas of Expertise

Building & Structural Engineering  
Municipal Engineering  
Industrial Engineering  
Project Management  
Land Development

## Overview

Doug Bach, CET, P.Eng., FEC, is a 1974 graduate of the Civil Technology program at the New Brunswick Institute of Technology. Mr. Bach worked as a technologist until 1993 when he completed all academic requirements for a license to practice with the Association of Professional Engineers of Nova Scotia (APENS). The required academic training was obtained during part time and full time studies at the NSAC in Truro and at TUNS in Halifax. Mr. Bach has been employed in the Truro area since 1974 and has been involved with a variety of structural engineering projects, primarily throughout the province of Nova Scotia. Mr. Bach is a past president of the Society of Engineering Technicians and Technologists of Nova Scotia, is the current chair of the Certification Board for TechNova, and Engineers Nova Scotia Councillor for 2010 - 2012.

## Employment History:

**Exp Services Inc**

Truro, NS  
2007 – 2012

**N L Sobey & Associates  
Limited**

Truro, NS  
1978 – 2007

**D. Latimer Engineering Ltd.**

Truro, NS  
1974 - 1978

## Project Experience

**Redcliff Middle School**

Bible Hill, NS

Structural design (concrete, masonry, timber and steel) for a 70,000 square foot public school building located in Bible Hill, Nova Scotia.

**MacRae Library**

Bible Hill, NS

Structural engineering services for the design of a two storey library building located at Dalhousie University, Agricultural Campus in Bible Hill, Nova Scotia.

**Truro Civic Building Renovations**

Truro, NS

Structural engineering services for the renovation and addition to the Civic Building located on Prince Street in Truro, Nova Scotia.

**Rothsay Rendering Plant**

Truro, NS

Several structural engineering projects involving the design of new industrial facilities, including concrete storage tanks and structural steel framed buildings.

*Client Satisfaction through Partnership & Efficient Execution*

**Doug Bach, CET, P.Eng., FEC**  
**Practice Lead - Industrial**  
**Co-practice Lead - Buildings & Structures**



- **Lafarge Cement Plant**

Several structural engineering projects involving safety related issues including monorails and access platforms.

- **Intertape Polymer Group, Truro, NS**

Several structural engineering projects, including building expansions, overhead crane modifications and equipment foundations.

- **NSPI Lingan Generating Station, Lingan, NS**

Structural engineering for new Ash Containment Building and for Water Storage Pumping Project.

- **Trenton Generating Station, Trenton, NS**

Several structural engineering projects, including water storage system review, as well as lifting devices and access platforms.

- **Northern Pulp Nova Scotia Corporation, Abercrombie, NS**

A number of structural engineering projects, including building expansions, lifting devices, access platforms, field services and structural evaluations.

- **L & R Construction Limited**

Structural engineering services related to the construction of the Truro Public Works Facility located in the Truro Industrial Park.

- **L & R Construction Limited**

Structural engineering services related to the addition of storage space at the Napa Auto Parts store on King Street in Truro, Nova Scotia.

- **Westmorland Albert Solid Waste Corporation**

Structural building condition review of existing steel framed building at the WASWC in Moncton, New Brunswick.

- **Hubtown Housing Co-operative**

Building condition review and project management services relating to building upgrades at the Hubtown Housing Co-operative in Truro, Nova Scotia.

- **Portable Welders Limited**

Structural engineering services for a new fabrication facility located in the Truro Industrial Park as well as other structural engineering projects in Central Nova Scotia.

*Client Satisfaction through Partnership & Efficient Execution*



**EDUCATION**

Diploma in Engineering (1976)  
Dalhousie University

Bachelor of Science in Engineering (1976)  
Dalhousie University

Bachelor of Electrical Engineering (1979)  
Nova Scotia Technical College

**PROFESSIONAL ASSOCIATIONS**

Association of Professional Engineers of Nova  
Scotia

Association of Professional Engineers and  
Geoscientists of New Brunswick

Association of Professional Engineers of Prince  
Edward Island

Professional Engineers and Geoscientists of  
Newfoundland & Labrador

Consulting Engineers of Nova Scotia

Architects/Engineers Practice Institute

Associate Member of Illuminating Engineering  
Society

American Society of Heating, Refrigerating and  
Air Conditioning Engineers, Inc.

**EXPERIENCE**

Mr. Thompson was President of Thompson Engineering for 12 years prior to joining the MCW group of Companies in April of 2011. He has 35 years of experience in electrical engineering and project management.

**RESPONSIBILITIES**

Mr. Thompson is responsible for electrical design of various projects, specification writing, site inspections and project management. As a key client contact, he manages total project delivery, including scheduling, coordination with other disciplines and project scope.

**REPRESENTATIVE PROJECTS**

- NSCC Truro Campus – Library Renovations
- NSAC Campus Library, Bible Hill
- Acadia University – Vaughan Library Addition, Wolfville
- Mount Uniacke Library
- Ecole Acadienne de Truro, NS
- Tobique School, Tobique, NB
- Indian Brook School, Indian Brook, NS
- Fire Alarm Upgrades at: Noel & Riverside School, Hants North School,
- West Pictou Elementary, Parrsboro Elementary School
- Chignecto Central School Board – Bus Garage, Truro
- CSAP, Bedford & Dartmouth
- Pictou Elementary School
- Portland Estates Elementary School
- Sackville Heights Elementary School
- Enfield Elementary School
- Cox Institute, N.S.A.C.
- Animal Science Building, N.S.A.C.
- Boulden Building, N.S.A.C.
- Elliott Hall, Acadia University
- Patterson Hall, Acadia University
- Fleet Maintenance Depot, CFB Halifax
- Steam Plants, N.S.A.C.
- Distribution System, N.S.A.C.

### **EDUCATION**

Presently working towards Certified Engineering Technician with TechNova

Hants Campus, Windsor, N.S. (1990-1992)  
Completion of Architectural Drafting Diploma with AutoCad Program

### **EXPERIENCE**

Mr. Hughes has been with MCW Maricor (formerly Thompson Engineering) since 1992. Mr. Hughes is responsible for the complete design and project control for plumbing and HVAC systems including plans, schematics and layouts for residential, commercial and industrial buildings.

### **RESPONSIBILITIES**

Design of complete HVAC systems, sizing, selecting and detailing heating, ventilation and air conditioning systems, fire protection, site construction, site sewage & storm sewer layout & design.

Electrical experience including electrical design and layouts of lighting, circuiting and controls of lighting and electrical equipment in commercial and industrial buildings.

PLC experience in design of equipment and layout of control PLC cabinets  
System design for LEED accredited building  
Additional responsibilities include:

- On-site inspections and troubleshooting mechanical systems
- System proposals, project meetings and contractor coordination
- Project Management
- Design build projects

### **REPRESENTATIVE PROJECTS**

- Tobique Elementary School (Tobique, NB)
- Pubnico School Boiler Replacement/Controls Upgrade (Pubnico, NS)
- Shannex Nursing Home Complex, Sydney, NS
- Shannex Nursing Home Complex, Fredericton, NB
- Shannex Nursing Home Complex, Quispamsis NS
- Shannex Nursing Home Complex, Halifax, NS
- Shannex Nursing Home Complex, Debert, NS
- Shannex Nursing Home Complex, Truro, NS
- Shannex Nursing Home Complex, Brookfield, NS
- New Fire Halls in Brooklyn, Hubley and Herring Cove (all LEED buildings)
- Millwood Senior Apartments, Halifax, NS
- St. Mary's School Apartment Renovations, Truro, NS
- Braemar Court Development, Truro, NS

**ROSS PENNER, MIT**  
**Mechanical Engineer-in-Training**



**EDUCATION**

Bachelor of Mechanical Engineering (2010)  
Dalhousie University

Diploma in Engineering (2008)  
Nova Scotia Agricultural College

**PROFESSIONAL ASSOCIATIONS**

Association of Professional Engineers of Nova  
Scotia

**EXPERIENCE**

Mr. Penner joined MCW Maricor (formerly Thompson Engineering) in 2010 and has gained experience in various aspects of mechanical building services such as heating and ventilation, plumbing, fire protection and controls. He has been involved in new design projects, renovation projects, and fit-up projects.

Mr. Penner has been working toward the requirement for professional certification for two years.

**RESPONSIBILITIES**

Mr. Penner is involved in the design, layout and drafting of heating, ventilation, air conditioning, fire protection and plumbing systems for commercial and institutional buildings. Design work involves the calculation of heat loss and heat gain for buildings and the selection of equipment for noted systems. Other responsibilities include specifications writing, coordination of systems with design team, attending design meetings, site inspections, construction management and processing of shop drawings.

**REPRESENTATIVE PROJECTS**

- Tobique Elementary School, Tobique, NB
- NSDTIR Dust Collection Remediation (50+ Jr. and Sr. High schools throughout NS)
- Pubnico School Boiler Replacement/Controls Upgrade, Pubnico, NS
- Shannex Nursing Home Complexes in Fredericton and Sydney
- New Fire Halls in Brooklyn, Hubley and Herring Cove (all LEED buildings)
- Millwood Senior Apartments, Halifax, NS
- St. Mary's School Apartment Renovations, Truro, NS
- Breamar Ct. Development, Truro, NS
- Haley Rd Development, Antigonish, NS



**GARRY ATKINS, CET**  
**Project Manager, Building Design and Technology**



**EDUCATION**

Diploma in Architectural Technology,  
College of Trades & Technology, 1973  
Certified CET with TechNova and AETTNL  
BRC - Root Cause Analysis Training  
NRC - NBCC 2010 & 2005 Codes Training  
NRC - Roofing Building Science  
CSC - Masterformat Specifications  
Sustainable Buildings Training  
PSMJ - Principals Bootcamp  
PSMJ - A/E/C Business Development  
PSMJ - Project Managers Training  
PSMJ - Proposals & Presentations  
CaGBC LEED Buildings Training  
ISO 9001 Quality Assurance Training for Project Managers  
Risk Management Solutions – Mould  
WHIMIS & OH&S  
Emergency First Aid & CPR

**PROFESSIONAL ASSOCIATIONS**

Canadian Council of Technicians and Technologists (CCTT)  
Society of Certified Engineering Technicians and Technologists of Nova Scotia (SCETTNS)  
The Association of Engineering Technicians and Technologists of Newfoundland (AETTNL)  
Canada Green Building Council's Atlantic Chapter (CaGBC)

**ACHIEVEMENTS**

NOC Quality Award for superior commitment to project quality for the HIBERNIA Topsides Development Project.

**EXPERIENCE**

Mr. Atkins joined MCW Thompson in January 2012. He brings over 30 continuous years of experience in the architectural/buildings design industry, including strong knowledge of architectural engineering principles, methods and practices, construction and contracting techniques.

Before joining MCW Maricor, Mr. Atkins worked with a prominent Atlantic Canada engineering consulting firm providing technical expertise and construction management on many building projects. Mr. Atkins also developed and managed proposals, prepared and controlled project budgets, developed project scope, schedule and budget, and administered construction contracts.

**RESPONSIBILITIES**

Mr. Atkins is responsible for Project Management and Buildings Design & Technology including the co-ordination of construction projects during design and following through to end of construction.

**REPRESENTATIVE PROJECTS**

- CCRSB Dust Collectors, Various Schools, NS
- Millbrook Preschool, Millbrook, NS
- Amaranth Elementary School, Orangeville, ON
- Elgin Elementary School, Cambridge, ON
- Queen Elizabeth High School, Foxtrap, NL
- Mt Pearl Elementary School, Mt. Pearl, NL
- Musgravetown Elementary, Musgravetown, NL
- St. Augustines Elementary, Bell Island, NL
- St. Augustine Elementary, Bell Island, NL
- Conception Elementary School, Bell Island, NL
- Shubenacadie Water Treatment Plant, Shubenacadie, NS
- Clare Health Centre, Meteghan, NS
- West Pubnico STP, Argyle, NS
- Glooscap Heritage Centre, Truro, NS
- FM Global Insurance Water Damage Forensic Evaluation, Truro Hotel/Convention Centre, Truro, NS,
- FM Global Insurance Building Fire Investigation, Irving Paper Mill, Saint John, NB
- Millbrook Administration Building, Millbrook, NS
- Millbrook Health Centre, Millbrook, NS
- Millbrook Convergys Interior Tenant Layouts, Truro, NS
- Acadian Cultural Centre, Church Point, NS
- Millbrook RCMP Detachment, Millbrook, NS