DISTRICT OF COLDSTREAM

REPORT/RECOMMENDATION TO COUNCIL

FROM: Trevor Seibel, BBA, CPA, CA
Chief Administrative Officer

FILE NO. 5330-01-04

DATE May 31, 2022

SUBJECT: **Public Works Yard Facilities Replacement/Renovation - Referendum**

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1. Purpose:

For Council to consider a referendum for the Public Works Yard Facilities Replacement/Renovation project.

2. Recommendation:

THAT the Committee of the Whole recommends to Council that the Public Works Yard Facilities Replacement/Renovation project, at an estimated cost of $8,500,000, be funded from Long-Term Debt;

AND THAT Committee of the Whole recommends to Council that the effective tax rate increase to cover the estimated debt servicing be phased over three years;

AND FURTHER THAT staff prepare the necessary documents for a referendum to coincide with the 2022 Municipal Election.

3. Alternatives & Implications

There are three options to consider at this time.

Option #1: Complete the Entire Project with Long-Term Borrowing – Phased (Option #1)

With this option, Council would include the Public Works Yard Facilities Replacement/Renovation project as part of a borrowing referendum with the October 2022 municipal elections. If successful, the funds would be available to complete the design and construction. Declining this option does not mean that the construction does not move forward, just that long-term borrowing is the preferred financing mechanism to fund the project. This is the recommended option.

Option #2: Complete the PW Building Project with Long-Term Borrowing – Phased (Option #2)

With this option, Council would include the Public Works Yard Facilities Replacement only as part of a borrowing referendum with the October 2022 municipal elections. The renovations to the old fire hall would be considered at a later date. If successful, the funds would be available to complete the design and construction. Declining this option does not mean that the construction does not move forward, just that long-term borrowing is the preferred financing mechanism to fund the project.

Should Council wish to move forward with this option, the following resolution would be required:

THAT the Committee of the Whole recommends to Council that the Public Works Yard Facilities Replacement/Renovation project, at an estimated cost of $7,850,000, be funded from Long-Term Debt;

AND THAT Committee of the Whole recommends to Council that the effective tax rate increase be phased over three years;

AND FURTHER THAT staff prepare the necessary documents for a referendum to coincide with the 2022 Municipal Election.

Option #3: Complete the Project with Other Funding Sources

With this option, Council would need to establish a strategy to generate the funds to complete the Public Works Yard Facilities Replacement/Renovation project through taxation, grants and/or short term borrowing. This would prevent the project from moving forward in the immediate future and push the issue 5, 10 or 20 years down the road and not properly plan for the ultimate replacement of these facilities. This would also prevent the Coldstream/Lavington Heritage Society from accessing the small house east of the Municipal Hall. An increase in funding would be required, just over a longer period of time. An additional advantage is that, if successful, we could have grant funds contribute to the project which reduces the taxation impact. However, accessing grants for this type of project will be challenging.

Should Council wish to move forward with this option, the following resolution would be required:

THAT the Public Works Yard Facilities Replacement/Renovation project, at an estimated cost of $8,500,000, be funded through a 2.5% tax increase commencing in 2023;

AND THAT staff be directed to find possible grant programs and other funding sources to complete the Public Works Yard Facilities Replacement/Renovation project.

4. Discussion/Analysis

EXECUTIVE SUMMARY

With a continually expanding operation, and the request for available community space, the District needs to address the current and future building needs in order to support the services provided to our community. Our public works facilities are at the heart of the roads, drainage, utilities and parks services that we provide to our community. It is imperative that we have proper functioning workspaces for our staff.

There are several key points that need to be front of mind as this report is read. They include the following:

- The existing Quonset has surpassed its useful life
- The old Mechanic shop and storage areas have surpassed their useful life
- There are operational inefficiencies with the departments spread out in their current locations
- We no longer have space to expand any services or store additional equipment without adjusting the buildings in the works yard
- Operationally, the most efficient approach is to complete all at one. Each segment is dependent upon the other in order to work
- The top priority is the Public Works buildings and secondly the old firehall renovations
- The renovations to the old firehall could be deferred but will need to be completed before the employees in the small house could be moved out. This in turn prevents the Coldstream/Lavington Heritage Society from getting access to the small house until the old firehall is complete.
- Continued cost escalation and interest rate growth will only make this project more costly in the future.

BACKGROUND

The Public Works Yard – Site Plan is a 2022 Priority Project that will examine the current space requirements, current buildings in use and identify options for efficiencies. This priority project was initiated after the Coldstream/Lavington Heritage Society expressed a desire to use the existing house to the east of the Municipal Office for a museum/display/storage.

The key elements of this project include reviewing the operational, storage and office space. The Quonset has surpassed its useful life and needs replacement. One of the challenges that we face is how our current operations have spread out across our property and would need to consolidate to not only make our operations more efficient but accommodate the request from the Coldstream/Lavington Heritage Society. The issue of the existing public works yard (Quonset & mechanic shop), old firehall renovation and former building/bylaw office was previously presented in 2009/2010. At that time, Council chose only to move forward with the new Mechanic shop. It should be noted that since the construction of the new mechanic shop in 2013, we have added a parks department to our operations, complete with human resources and equipment and have had to “squish” all of that into the existing site. We are now busting at the seams in terms of operating space and storage and need to renovate and replace the existing facilities to ensure a safe working environment and provide proper working space for the services we provide to the community.

The existing property and buildings can be shown in the following graphic:

The following index is a summary of the site:

1. Currently houses 3 staff offices; will need to be moved to the old firehall
2. Old Firehall currently houses parks and utilities. Will be renovated to accommodate displaced employees and provide a proper “store front” for the community which will improve service delivery.
3. Current storage building that will be demolished and incorporated in new facility
4. Old Mechanic shop that will be torn down and storage incorporated in new facility
5. Outside storage that will be removed and incorporated in new facility
6. Quonset will be torn down and incorporated in new facility
7. Current lunchroom which will be removed (salvaged) and incorporated in the new facility

It should be noted that, except for the old firehall which underwent a partial renovation in 2008, the remainder of the facilities are at least 50-60 years old and in a rapidly deteriorating state.

PROJECT ASSESSMENT

SAHURI + Associates Architecture Inc. was engaged to undertake a preliminary design and cost estimate. This information will assist Council in determining whether to proceed with a referendum to coincide with the 2022 Local Government Elections. The proposed public works facility contains the following:

- Six (6) drive bays
- Approximately 17,400 square feet in total space
- Outside, covered parking for public works vehicles
- Office space for 4 persons (2nd floor)
- Lunch room, training room, lockers and washrooms/showers (2nd floor)
- Shell space; could be used for possible recreation infrastructure, information technology storage or Inventory storage (2nd floor)

The Schematic Design Report (Attachment "A") covers all the relevant specifications for the design of this facility. This concept maximizes the available space in the current public works yard while providing a functional yet practical structure to support our operations.

As part of the Schematic Design Report, a Class D cost estimate for this entire project was completed. A class D cost estimate generally contains a 40% contingency. We are currently seeing 30-50% increases in price escalation for capital infrastructure projects. It should be noted that this cost estimate is approximately 40% higher than the preliminary numbers provided in the fall of 2021. It is imperative that we have an appropriate contingency to guard against cost escalation. The class D cost estimate for this project is $10,920,000. This can be broken down as follows:

	PW Bldg	Storage	Old FH	TOTAL
Construction	$ 6,451,651	$ 1,990,168	$ 789,136	$ 9,230,955
Contingency	1,180,102	364,079	144,864	1,689,045
	$ 7,631,753	$ 2,354,247	$ 934,000	$ 10,920,000

As the plan is designed those variables are eliminated and we establish a stronger cost estimate.

There are essentially two options to proceed.

- **Option 1** is to proceed with the entire project as presented and
- **Option 2** is to remove the renovations to the old fire hall.

The following highlights potential other funding sources and shows the impact on the budget and potential borrowing:

	Option 1	**Option 2**	
Construction Cost	$ 10,920,000	$ 9,986,000	
Building Reserve contribution	(500,000)	(500,000)	Financial contribution
COVID-19 Restart Contribution	(750,000)	(750,000)	Allowable renovation component
Contingency reduction	(670,000)	(636,000)	Achieved with better cost estimate
	$ 9,000,000	$ 8,100,000	

A broad understanding of the financial strategies and borrowing implications for this project is needed to help assess how we move forward. There are several variables that could impact the overall project and funding opportunities. The following table shows the borrowing effect of the two options with an interest rate of 3.92% and a term of 30 years. Currently, a 1% tax increase is equal to $71,500.

	Option 1	**Option 2**
Borrowing Cost	$ 9,000,000	$ 8,100,000
Estimated Annual debt servicing	$ 557,800	$ 502,000
Estimated Tax Increase	7.8%	7.1%

There are a couple of different strategies to reduce the burden, both the amount borrowed and the annual cost. They are noted as follows:

- An additional contribution from the Building Reserve of $250,000 to the amount borrowed would reduce the annual borrowing costs by approximately $15,500.
- An additional contribution of COVID monies of $250,000 to the amount borrowed would reduce the annual borrowing costs by approximately $15,500.
- The current contribution to the Building Reserve of $193,610 could be partially reallocated to fund the equivalent of 1% of the increase or $71,500.

The first two bullet points are contributions that would reduce the amount borrowed. The third bullet point is an option to address the annual debt servicing requirements. If **Option 1** is selected, we would be doing all the required works, so it is easy to justify the additional contributions from the Building Reserve and COVID-19 Restart Funds. If **Option 2** is selected it would not be prudent to utilize an additional contribution form the Building Reserve as those funds would be needed to complete the renovations to the old firehall. If applied, the revised borrowing would be as follows:

	Option 1	**Option 2**
Borrowing Cost	$ 9,000,000	$ 8,100,000
Building Reserve additional contribution	(250,000)	-
COVID-19 Restart additional contribution	(250,000)	(250,000)
	$ 8,500,000	$ 7,850,000
Estimated Annual Debt Servicing	$ 526,800	$ 486,500
Estimated Tax Increase	7.4%	6.8%
Average residential home (2022)	$ 888,000	$ 888,000
Estimated increase on Avg. Residential Home	$ 110.60	$ 102.20

Once the amount to be borrowed has been established, the funding strategy needs to be established. There are two approaches to be taken: full application or phased. With full funding, the entirety of the tax increase would be absorbed in the 1st year of the borrowing. With the phased approach, the increase could be spread over 3 years. The following table shows the impact of spreading the tax increase over 3 years:

Option 1	Year 1 Annual Debt	Tax Inc.	Year 2 Annual Debt	Tax Inc.	Year 3 Annual Debt	Tax Inc.
Tax Increase	$ 178,750	2.5%	$ 178,750	2.5%	$ 169,500	2.4%
Building Reserve	178,750		169,500		-	
Community Works Funding	169,500		-		-	
	$ 526,800		$ 348,050		$ 169,500	
Avg. Residential home	$ 37.55		$ 37.55		$ 35.50	

Option 2	Year 1 Annual Debt	Tax Inc.	Year 2 Annual Debt	Tax Inc.	Year 3 Annual Debt	Tax Inc.
Tax Increase	$ 178,750	2.5%	$ 178,750	2.5%	$ 129,000	1.8%
Building Reserve	178,750		129,000		-	
Community Works Funding	129,000		-		-	
	$ 486,500		$ 272,000		$ 93,250	
Avg. Residential home	$ 37.55		$ 37.55		$ 27.10	

The impact on the annual contribution to the Building Reserve is shown as follows:

	Option 1	**Option 2**
Contributions to Reserve - Current	$ 193,610	$ 193,610
Year 1	14,860	14,860
Year 2	24,310	64,610
Year 3	193,610	193,610

A few points to consider from this analysis:

- The Community Works funding is to address environmental efficiencies in the building (heating, cooling, etc…)
- The annual contribution to the building reserve would be used to phase in the borrowing costs. By year 3 the current level of contribution would be back to normal
- We will realize new growth tax revenues coming in the coming years from the significant development activities currently underway in the community. These amounts could reduce the annual tax adjustment in the year they are realized.

5. Strategic Objectives

The Public Works Yard – Site Plan is a 2022 Priority Project which addresses the following areas of significance: Sustainable Infrastructure, Environment, Rural.

6. Legislative Authority

At the December 13, 2021 Regular Meeting of Council, the following resolution was adopted:

That a preliminary design be completed for the Public Works Yard Facilities Replacement/Renovation project, at an estimated cost of $100,000, to be funded from the Building Reserve.

At the January 24, 2022 Regular Meeting of Council, the following resolution was adopted:

THAT Council award the Public Works Facility Design contract to SAHURI + Associates Architecture Inc., at a cost of $70,000 plus applicable taxes, based on their proposal submitted on January 14, 2022;

7. Financial Implications

As outlined in the report

8. Attachments

Attachment "A" – Schematic Design Report
Attachment "B" – Public Works Facility - Site Plans

Prepared by:

Trevor Seibel, BBA, CPA, CA
Chief Administrative Officer

Approved for submission to Council:

Trevor Seibel, BBA, CPA, CA
Chief Administrative Officer

REVIEWED WITH		DATE
Financial Admin	TDS	June 1/2022
Corporate Admin		
Infrastructure Services		June 01/2022
Development Services		
Other: _____		

COUNCIL AGENDA INFORMATION

- ☐ Regular Date: _____
- ☐ In-Camera Date: _____
- ☒ CoW Date: **Jun 6/22**
- ☐ CoW In Camera Date: _____
- ☐ Other _____ Date: _____

ATTACHMENT "A"

District of Coldstream

Public Works Building

SCHEMATIC DESIGN REPORT

SAHURI + associates architecture inc

May 30, 2022

Approved by

(Signature)

May 31, 2022

(Date)

1.0 INTRODUCTION

1.1 PURPOSE AND DOCUMENT ORGANIZATION

SAHURI + Associates Architecture and the consultant team have been retained to take this project from Functional Programming through to schematic design completion. For the scope of SAHURI's work, our sub-consultant team will include Structural, Mechanical, Electrical, Civil, and Costing services.

This Functional Program & Schematic Design Report presents the functional programming for the District of Coldstream's new Public Works Building, the conceptual plan, and the resulting schematic design developed through this front-end exploration.

The report contains the following:

- *Chapter 1: Introduction* - includes a description of the project scope, organization of the document and project methodology
- *Chapter 2: Project Context* – includes the planning principles and the project planning parameters that have guided the design.
- *Chapter 3: Functional Programme* – includes summaries of the programmed space and highlights changes in the program as a result of the initial design process.
- *Chapter 4: Site Analysis* – includes the zoning bylaw review, site analysis, and existing site constraints.
- *Chapter 5*: *Schematic Design* – includes a summary of the concept development and continued schematic development.

1.2 PROJECT METHODOLOGY

The approach used to complete the work included the following:

- Meetings with the project team, including the owner, building users, and the sub-consultant team.
- Tours of the existing Public Works Maintenance Garage.
- Initial meetings with the team to refine and detail their space requirements through commentary on the design options (meetings with the user group will be ongoing).
- Inclusion of user comments to develop the schematic design document further.
- Ongoing review of the overall as well as the component floor plans.

The functional programming and schematic design documents were developed with the active involvement of owner representatives.

1.3 PROJECT TEAM

To support this project, the following team has been assembled. This team has been actively engaged in an integrated design discussion from the project's onset.

Client Team:	District of Coldstream
Architectural:	SAHURI + Associates Architecture
Structural:	ROV Engineering
Mechanical:	Reinbold Engineering
Electrical:	Falcon Engineering
Civil:	Urban Systems
Costing:	Altus Group

1.4 ACKNOWLEDGEMENTS

The Sahuri + Partners Architecture team wishes to acknowledge the input, review, and ongoing support of the District of Coldstream team in conducting this work.

2.0 PROJECT PARAMETERS

2.1 PROJECT BACKGROUND

The District of Coldstream (DOC) requires a new Public Works Building (PWB), located at 8010 Aberdeen Road, Coldstream, BC. The project will involve the construction of a new building that will consolidate a number of aging facilities, including a Quonset, old mechanics shop, storage shed, lunchroom, parks operations/storage and utilities operations/storage. The project will include the demolition of the existing facilities located on the same site. In addition to the construction of the new PWB, and based on RFP-2021-17, an interior renovation will be undertaken to change the layout of the old Fire Hall at 9903 Kalamalka Rd, Coldstream, BC.

2.2 BUILDING PERFORMANCE STANDARDS

The new DOC Public Works Building, and renovated Fire Hall structure are required to meet the following standards:

- BC Building Code, current edition.
- National Energy Code for Buildings, current edition.
- Canadian Electrical Code
- National Fire Code of Canada
- National Plumbing Code
- BC Fire Code
- ASHRAE 90.1
- District of Coldstream Zoning Bylaws

2.3 PLANNING PARAMETERS

Based on early project discussions and understanding of this project type, the following planning parameters were developed to guide the programming and design phases of the project. The parameters include:

1. **Operational Parameters**: These parameters provide an initial set of assumptions and an understanding of how the District of Coldstream - Public Works Building and Site and the renovated Fire Hall will operate. They act as a framework for developing program requirements.

2. **Functional Parameters**: Functional parameters help to establish the scope of the programming, i.e., what is to be included and what is not.

Operational Parameters:

- Enhanced efficiency through review of building flow
- The site development needs to consider short and long-term requirements for the site
- Site development needs to consider access and operations in adjacent buildings
- Be a good neighbour to adjacent properties
- Build the building to industry-standard/code-compliant energy efficiency. The design should also consider and allow for enhanced sustainability measures
- Provide for expansion opportunities.

Functional Parameters for the DOC Public Works Building

- The facility will be designed to best practice standards providing a healthy work environment
- Increased efficiency through a review of the building flow
- Accommodations for staff in a consolidated space that supports their required operations
- Provide services for anticipated future building growth

2.4 PROJECT PLANNING PRINCIPLES

The following planning principles guide the project's functional programming and schematic design for the **DOC Public Works Building**:

- Safety is a primary concern for the building and site
- The site is to be developed to allow for internal growth and expansion
- The site must accommodate fleet parking
- Heavy truck traffic must be accommodated on the site
- Components and services will be organized to enhance both staffing efficiency and user accessibility
- Based on the site masterplan, the proposed Public Works Building will fully replace the current buildings on the site.
- The new construction will affect the existing building and site functionalities, and it is the client's responsibility to arrange for the continuity of services executed in that locality. Sahuri will do its best to ensure less interference as possible

As per the interior renovation of the **Old Fire Hall**, planning principles guide the project's functional programming, and schematic design should also be followed:

- Safety is a primary concern for the building and site
- Existing structural conditions, materials and constructions should be protected and cared for in the new construction development where possible
- Existing infrastructure should be maintained where possible – This includes maintaining existing plumbing in close proximity to its original location.
- Space should provide a clear organization that supports the requisite internal functions
- The exterior of the building was previously upgraded to match the adjacent Municipal Hall. Further renovations should strive to match this aesthetic where practical.

3.0 FUNCTIONAL PROGRAMME FOR THE NEW PUBLIC WORKS BUILDING

The consultant team, led by Sahuri + Associates Architecture, has been awarded the contract to complete Schematic Design for the DOC Public Works Building. This section of the report contains a summary of information gained in the RFP and the initial stages of this project.

The existing facilities at the DOC Public Works yard are old and need to be replaced. This project will provide a new, modern facility that amalgamates the existing buildings into one efficient structure that will streamline operations and provide appropriate accommodations for materials, equipment, and staff. Efficiencies in both the building systems and the building layout will support the District of Coldstream in optimizing its operations in the future.

Through discussions with the user team, a functional program was created. This section details the space requirements and sizes based on the current schematic design.

3.1 FUNCTIONAL PROGRAMME DEVELOPMENT

The following is a list of changes that shaped the final functional program document:

- → Refer to Section 4.0 for site location and boundary The Public Works Yard has existing fences surrounding the entirety of the site. Access is permitted via two gates located on the south and east boundaries. The new Public Works Building will have additional fencing to secure the outdoor parking area, with access gates located on the west and north sides of the building.
- → Proposed PWB will be constructed in the middle of the site, in the approximate location of the existing Quonset. New outdoor covered parking will be constructed to the south adjacent to the PWB. Three new cold storage buildings, meaning not mechanically conditioned (not heated or cooled) will be constructed along the north property line.
- → As observed on site the following items will need to be addressed.
    - Existing lift station located where new building will be constructed. Propose relocating lift station further west between existing maintenance shop and new PWB.
    - Existing outdoor service pit for oil and blade changes. With user and client input, a new indoor maintenance pit was proposed for one of the new PWB service bays.
    - Existing shed for incoming fibre connections. Propose relocating existing connection into new PWB electrical room.
    - Existing water meter storage shed with electrical equipment servicing existing maintenance shop and cover large machinery parking. Proposed building new cold storage structure around existing shed, maintain existing electrical equipment, tie in existing equipment with new PWB electrical room.
    - Existing electrical pole and transformer located immediately east of the existing water meter storage and electrical shed. Propose removing this pole and relocating a new pad mounted transformer to previous pole in the line. Previous pole is located in the north-east corner of the site.
    - Existing above ground fuel storage tank and pump located north of Quonset. Propose relocating to underground fuel storage tank with fill pump adjected to east side of new cold storage structure.
- → On the site there is an old firehall that the District would like to repurpose for office and storage use. In the late 2000's the old firehall underwent a roof renovation to match the aesthetic appearance of the existing Municipal Hall. Interior renovations are now proposed as described later in this document. Briefly the following renovations will take place.
    - The existing washrooms, mechanical room and staff room will be maintained and updated as required.
    - New interior construction, such as demolish, alteration and addition of new walls, doors, millwork, paint, flooring, ceilings, lighting, plumbing fixtures, will take place.
    - New roof top mechanical equipment will be installed to heat and cool the building as required for an office space.

- Existing exterior person doors will be maintained.
- 4 Existing overhead doors on the south façade will be infilled with concrete block.
- New windows and doors will be added per plans shown later in this document.
- A new overhead door will be installed on the north side of the building.

3.2 BUILDING AREA

Based on the RFP, the two proposed, non-interconnected buildings (primary PWB and cold storage) will be approximately 17,500 sq. ft. The PWB includes 140' x 40' work bay area with an adjacent 11' x 40' Mechanical and Electrical room. The PWB also includes a 140' x 40' second floor administrative space. The cold storage building will be 158' x 29'. The structural grid has been set based on work bay parameters. The RFP had prescribed an area of approximately 16,000sq. f.t. Our current building exceeds this area for the following reasons:

→ The size and area of the 6 work bays were not defined in the RFP.
→ A second-floor area has been increased to match the footprint of the main floor. The increased area is currently attributed to future shell space, which can be used currently for storage and expansion of the office or training rooms in the future.

Based on our current functional programme, our gross floor areas are as follows:

Public Works Building – Main Floor	6,438sf (598m^2)
Public Works Building – Second Floor	5,995sf (557m^2)
Cold Storage	4,972sf (462m^2)
Total Gross Floor Area	17,405sf (1,617m^2)

Grossing Factor

The above areas are based on a 43% and 5% grossing factor for the office and maintenance areas. This area accounts for interior and exterior wall thicknesses and circulation space. The maintenance bays have minimal circulation space, which is reflected in the lower grossing factor.

Old Firehall has an area of approximately 3,950sq.ft. to be renovated.

3.3 FUNCTIONAL PROGRAMME

The functional programme for the DOC – Public Works Building is as follows:

Functional Programme April-29-2022
District of Coldstream - Public Works Building
Spatial Requirement

Rooms/Spaces	Qty.	Area (sq. ft.)	Area (m^2)	Sound Attenuation	Requirements
Offices Main Building					
Offices					
Office Area (2nd floor)	1	688.9	64.0	yes	Shared office space for 3-4 people
Copy Room	1	65.7	6.1		
Training/Meeting (2nd floor)	1	907.4	84.3	yes	Accommodate 35 people
Future	0	0.0	0.0		Will be provided in future shell space
Support Spaces					
Staff/Lunch Room	1	795.5	73.9	yes	Accommodate 45 people
Lockers Area	45	441.3	41.0		45 - 18"x18" lockers to be provided
Barrier-Free Washroom	1	42.0	3.9	yes	
Gender Neutral Wash.&Shwr.	1	468.2	43.5	yes	
First Aid Room	1	100.1	9.3	yes	
Stairs		0.0	0.0		Included in the gross-up factor
Circulation		0.0	0.0		Included in the gross-up factor
Utility Space					
Laundry & Janitors Room	1	81.8	7.6	yes	
Electrical room	1	198.1	18.4		
Mechanical/Elec. room	1	200.2	18.6		
Flammable Storage	1	235.7	21.9		Must be on Main F. w/ exterior access
Circulation		0.0	0.0		Included in gross-ups up factor
Shell Space					
Future Shell Space	1	904.2	84.0		This space will be developed pending future requirements
Offices Main Building Subtotal		5,129.0	476.5		
43% gross-up factor		2,205.5	204.9		
Offices Main Building gross area	Mornin	**7,334.5**	**681.4**		686.7m2 actual (129.6m2 on the main floor and 557.1 on the 2nd)

Maintenance Bays					
Work/Service bays	6	4,843.8	450.0		6 bays x 75m^2
Circulation		0.0	0.0		Included in the gross-up factor

Work/Service Subtotal		4,843.8	450.0	
5% gross-up factor		242.2	22.5	
Offices Main Building gross area		**5,085.9**	**472.5**	468.4m2 actual

Total number of staff	**0**			
Total gross area		**12,420.4**	**1,153.9**	1,155.1m2 actual

Cold Storage Building				
Cold Storage A	1	1,379.9	128.2	
Cold Storage B	1	1,554.3	144.4	
Cold Storage C	1	1,540.3	143.1	
Electrical room	1	144.2	13.4	Relocate existing
Circulation		0.0	0.0	Included in the gross-up factor
Cold Storage Building Subtotal		4,618.8	429.1	
5% gross-up factor		230.9	21.5	
Cold Storage Building gross area		**4,849.7**	**450.6**	463.12m2 actual

note:
1. Areas for noted rooms/spaces are taken to the inside face of the wall
2. Gross up factor includes exterior wall thickness and will vary depending on the final wall assembly details

The functional programme for the DOC – Old Firehall Building is as follows:

Functional Programme April-29-2022
District of Coldstream - Old Firehall
Spatial Requirement

Rooms/Spaces	Qty.	Area (sq. ft.)	Area (m^2)	Sound Attenuation	Requirements
Old Firehall Building					
Offices					
Office	3	441.1	41.0	yes	New exterior windows to be added to the offices.
Office	1	177.0	16.4	yes	New exterior windows to be added to the offices.
Meeting Room	1	297.0	27.6	yes	Accessible from lobby and staff sides
Reception	1	256.1	23.8		Shared reception will be located adjacent to main door
Support Spaces					
Lobby	1	237.4	22.1		
Filing area	1	264.9	24.6		
Existing Staff Room	1	353.1	32.8		
Barrier Free Washroom	1	55.8	5.2	yes	
Gender Neutral Washroom	1	26.4	2.5	yes	
Flexible Storage	1	1,105.3	102.7		Retain existing overhead door
Circulation		0.0	0.0		Included in gross up factor
Utility Space					
Existing Mech/Elec Room	1	81.8	7.6	yes	
Old Firehall Building Subtotal		3,295.7	306.2		
19.83% gross up factor		1,417.2	60.8		
Old Firehall Building Gross Area		**4,712.9**	**367.0**		366.97m2 actual

note:
1. Areas for noted rooms/spaces are taken to the inside face of the wall
2. Gross up factor includes exterior wall thickness and will vary depending on the final wall assembly

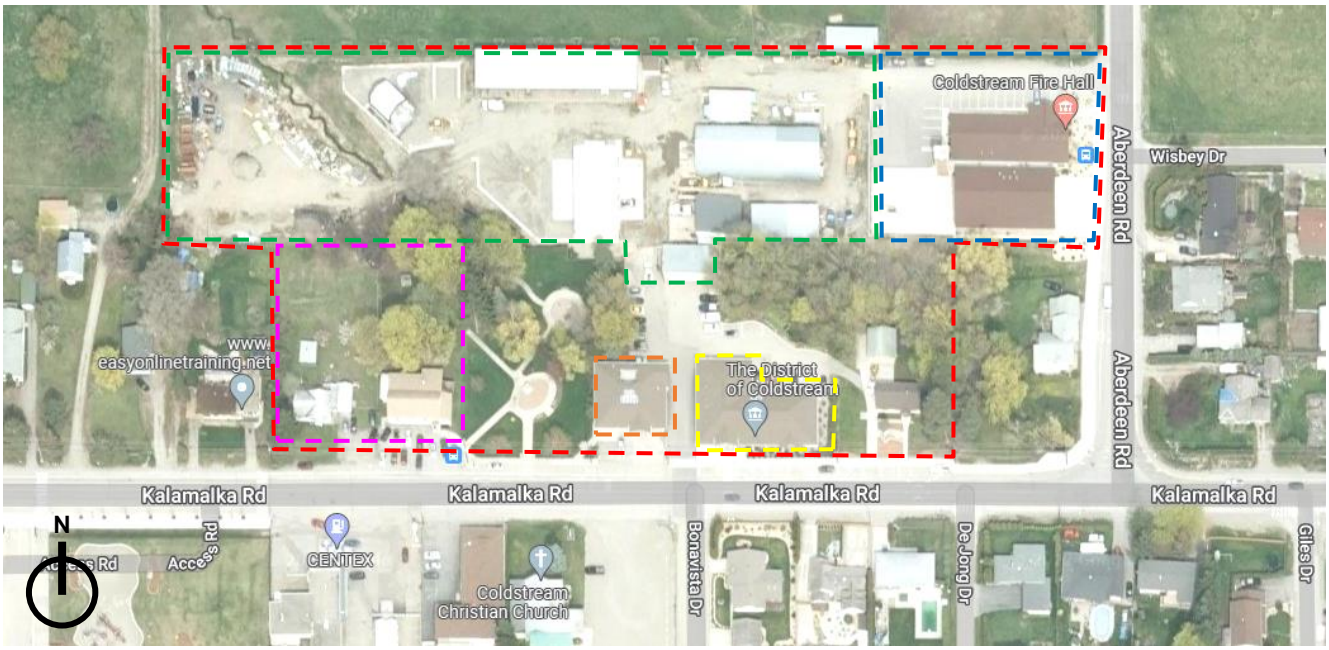
details.

4.0 SITE ANALYSIS

4.1 CONTEXT

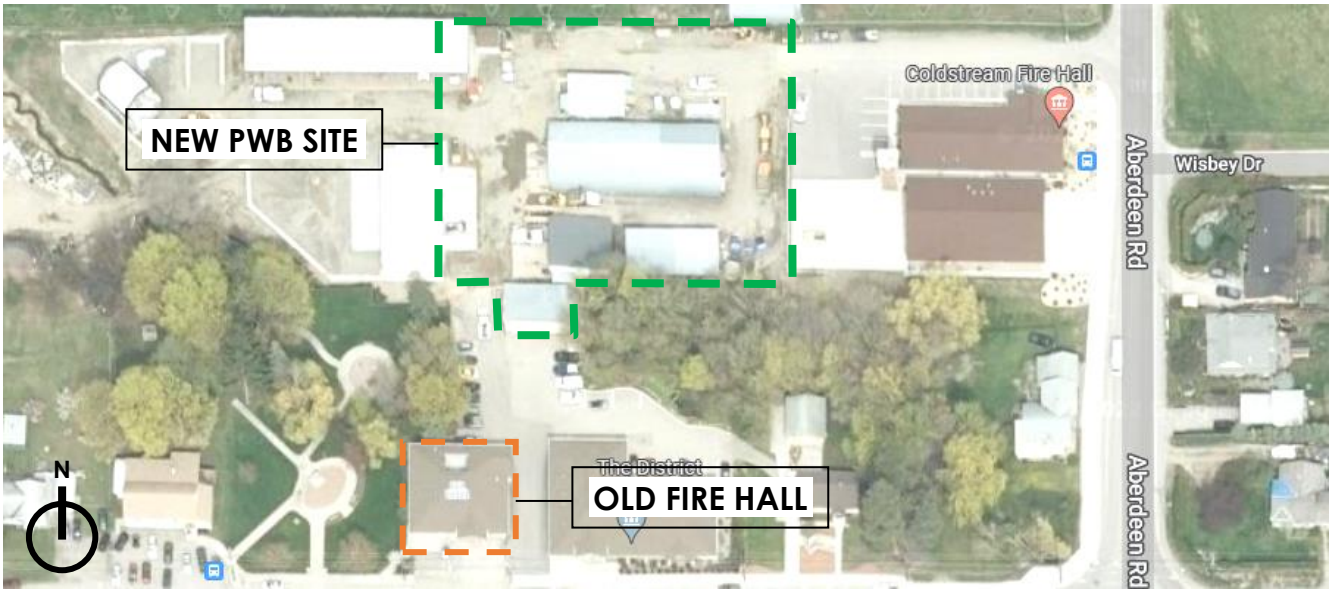
The DOC – Public Works Site is located at 8010 Aberdeen Road, Coldstream, BC. The district owns a large block of land west of Aberdeen Road and north of Kalamalka Road. The block accommodates the Municipal Office, Fire Hall, Public Works Yard, Future Community Hall and Childcare Facility and various other accessory buildings, as seen in Site Image 1 below. The intent is for the new Public Works Building to be located within the existing Public Works Yard. The new building will be located where an existing service building (Quonset) is built and will be demolished, Site Image 2 below.

Site Image 1



- Coldstream Owned
- Public Works Work
- Future Coldstream Hall and Childcare Facility
- Old Fire Hal
- District of Coldstream Municipal Building
- New Fire Hall

Site Image 2



The current site has the following characteristics:

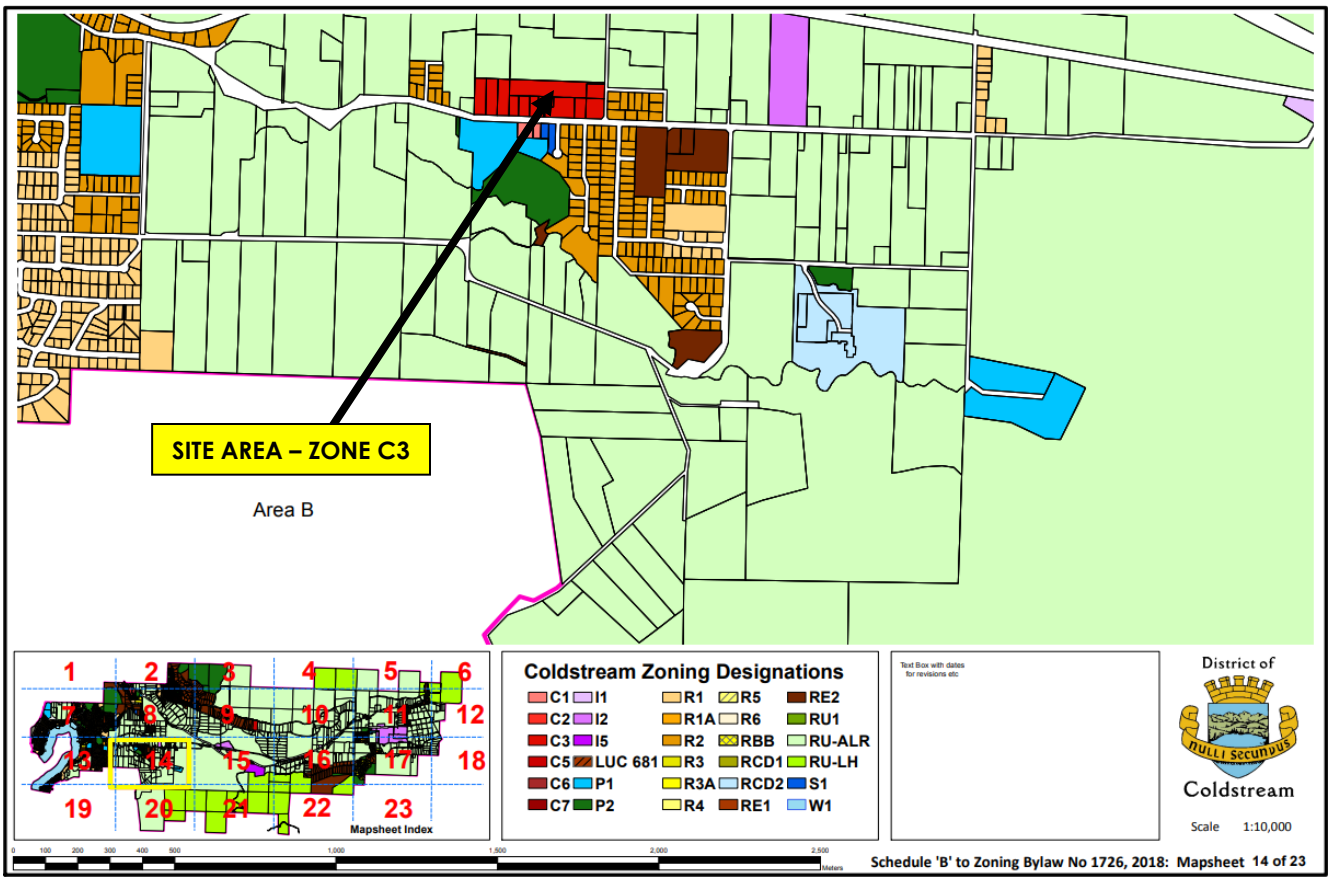
- → The site's existing topography is high in the north-east corner, sloping down to the south-west corner.
- → The existing site is finished with compacted gravel, with some concrete aprons adjacent to existing structures
- → Power is provided to all existing accessory buildings and main vehicle parking areas. Select building have water and sewer services.

4.2 ZONING BYLAW

Relevant sections of the Zoning Bylaw are included below for reference.

300 – General Regulations
USES PERMITTED IN ALL ZONES
314.1 The following uses are permitted in all zones:
(c) Public utility use. Despite the site area and setback requirements cited elsewhere in this Bylaw, no minimum lot area or lot frontage is required for public utility uses. The minimum setback from all property lines must not be less than 2.0 m (6 ft.-7 in.).

DOC - Zoning Designation Map and site location:


SITE AREA – ZONE C3
Area B
Coldstream Zoning Designations
C1 I1 R1 R5 RE2
C2 I2 R1A R6 RU1
C3 I5 R2 RBB RU-ALR
C5 LUC 681 R3 RCD1 RU-LH
C6 P1 R3A RCD2 S1
C7 P2 R4 RE1 W1
Mapsheet Index
District of
Coldstream
Scale 1:10,000
Schedule 'B' to Zoning Bylaw No 1726, 2018: Mapsheet 14 of 23

Zone Bylaw requirements and regulations:

403 – Town Centre Mixed Use Commercial Zone (C3) C3

403 TOWN CENTRE MIXED USE COMMERCIAL ZONE

INTENT

403.1 The intent of the Town Centre Mixed Use Commercial Zone is to create a vibrant, sustainable and community focussed town centre along the Kalamalka Road corridor, between Aberdeen Road and Whetzell Drive, in accordance with the Central Coldstream Neighbourhood Plan. The intent is for the Town Centre Mixed Use Commercial Zone to promote commercial and commercial-residential mixed use buildings while maintaining a rural feel.

PERMITTED USES

403.2

Permitted Uses Table for C3 Zone
(1) Primary Uses (a) Assembly (b) Educational Facility (c) Entertainment Facility (d) Farmer's Market (e) Food Establishment (f) Office (g) Personal Service Establishment (h) Religious Assembly (i) Retail Sales (j) Service Station Use
(2) Secondary Uses (a) Accessory Use (b) Dwelling, Apartment (c) Dwelling, Multi-Unit (d) Dwelling, Row House

DEVELOPMENT REGULATIONS

403.3

Development Regulations Table for C3 Zone	
Column I	Column II
(1) Density (maximum)	(a) Floor Area Ratio – 2.0
(2) Minimum setbacks (front lot line)	(a) First and Second Floors of Multi-Storey Building - 3.0 m (9 ft.-10 in.) (b) Third Storey of a Multi-Storey Building – 6.0 m (19 ft.-8in.)
(3) Minimum setbacks (rear lot line)	(a) 6.0 m (19 ft.-8 in.)

403 – Town Centre Mixed Use Commercial Zone (C3) C3

(4) Minimum setbacks (interior lot line)	(a) Lots abutting Residential zones or separated by a lane from a Residential zone – 3.0 m (9 ft.-10 in.) (b) Lots not served by lanes – 3.0 m (9 ft.-10 in.) (c) All other lots – 0 m
(5) Minimum setbacks (exterior lot line)	(a) 3.0 m (9 ft.-10 in.)
(6) Height (maximum)	(a) 10.0 m (32 ft.-10 in.)

SUBDIVISION REGULATIONS

403.4

Subdivision Regulations Table for C3 Zone	
Column I	Column II
(1) Lot area (minimum)	(a) 600 m^2 (6,458.4 sq. ft.)
(2) Lot frontage (minimum)	(a) 17.0 m (55 ft.-9 in.)

OTHER REGULATIONS

403.5 (1) Every business or undertaking must be conducted within a completely enclosed building, except for parking and loading facilities, restaurants, farmers markets and outdoor garden shops.

(2) The portion of buildings and structures used for one individual permitted use, or one individual business or undertaking licensed under the District's current Business Licence Bylaw must not exceed 1,000 m^2 (10,763.9 sq. ft.) of net floor area.

(3) Primary or secondary uses may be located on any storey within a permitted building.

(4) A residential use on the first storey must not occupy more than 50% of the net floor area of the first storey.

(5) A commercial use on the first storey must occupy a minimum of 50% of the net floor area of the first floor and be situated adjacent to the front or street side of the building.

SAHURI will continue to review the zoning as the project moves forward. Of note:

- → Current required setbacks will be met
- → In the RFP, the project requested 18-22 covered vehicle stalls. As part of our design we have been able to accommodate 14 exterior stalls, with the ability to park an additional 6 vehicles within the bays.

4.3 SITE CONSTRAINTS

The site constraints identified for this project including the property boundaries and adjacent buildings to the west that will remain as part of the Public Works Yard. Building code limiting distances, vehicle access points, and required turning radius must be considered to accommodate the new constructions.

Construction logistics are also an important consideration for the constraints of this site. Public works operation will need to continue during construction of the new PWB. Additionally, construction activities must not interfere with the existing fire hall to the east. Lastly, a goal of the project is to limit potential disruption to adjacent buildings, users and the citizens of Coldstream.

From an electrical point of view, the project needs to respect short and long-term power requirements, including BC Hydro equipment. Additionally, this project will create disruptions during the construction period for the existing buildings to the west that will remain. These buildings will need temporary power during construction and will need to be permanently reconnected as part of this project.

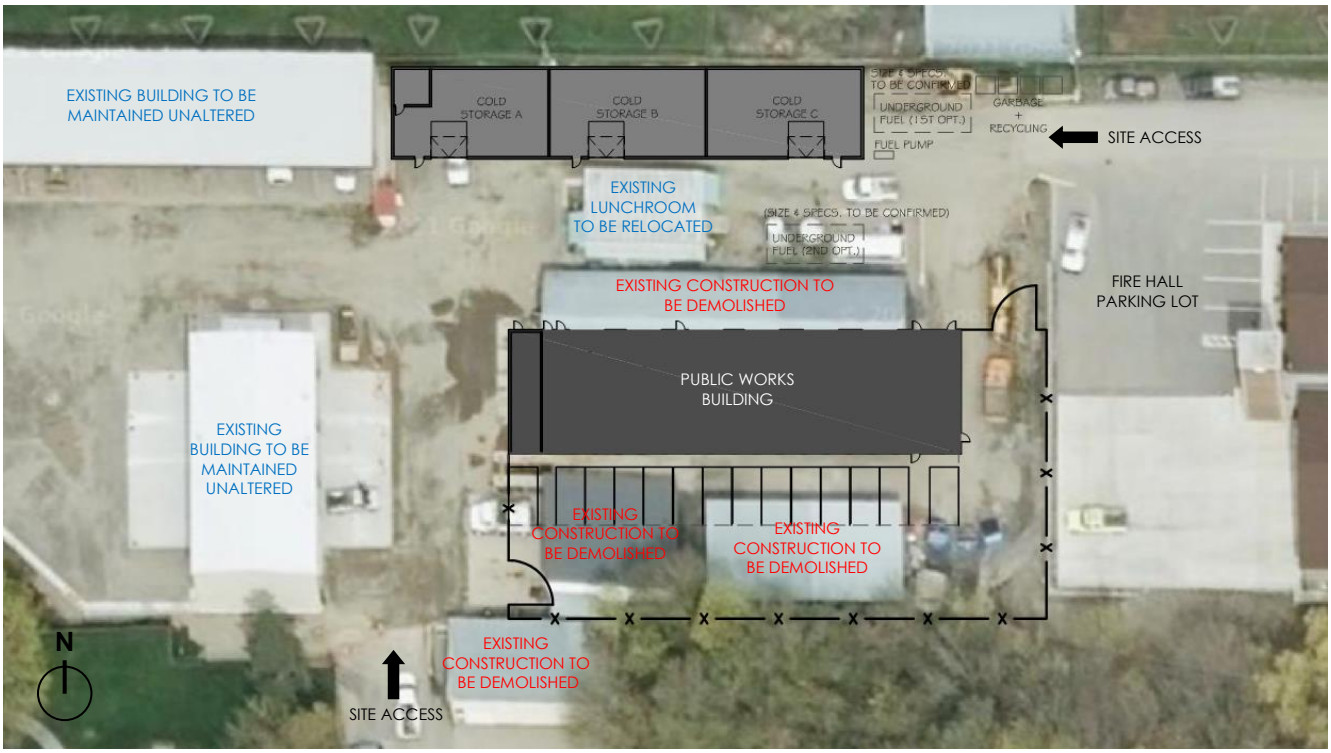
5.0 SCHEMATIC DESIGN

5.1 GENERAL OVERVIEW

Based on the information provided in the RFP and initial discussions with the project design team, Sahuri + Associates Architecture worked with the District of Coldstream, their Project Manager, and the sub-consultant team to prepare a schematic design for the building. The team worked through the general building and site requirements such that we are confident the parameters for the project have been met. The anticipation at this stage is that we have finalized the overall layout for the building. While small shifts in wall and door locations are expected as we move forward, most of the footprints can now be fixed.

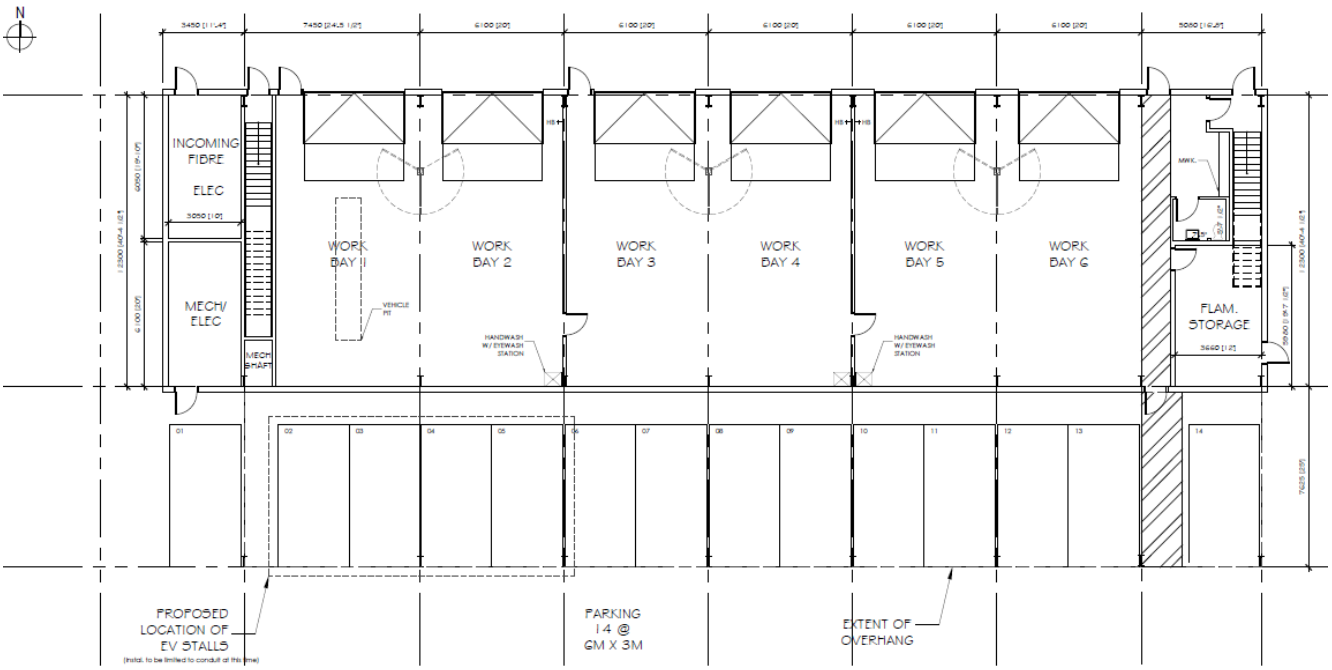
The new DOC - Public Works Building follows the following technical requirements, design principles and criteria:

- → The building layout should accommodate the rooms listed in the functional programme summary document
- → Electrical Room must be on the main floor with exterior access
- → Free span maintenance space is nice but must be balanced with providing the required services into the bay
- → The building is to consider the economics of construction balanced with the building schedule. For this reason, a pre-engineered building structure has been selected
- → As a first option, the underground fuel storage tank should be installed on the east side of the Cold Storage Building. If for any reason this location does not work, per manufacturer's specification or other site conditions, the underground tank should be installed in the roadway between the Cold Storage Building and Public Works Building. per the site plan below.
    - o For both tank locations, the fuel pump should be located east of Cold Storage C.



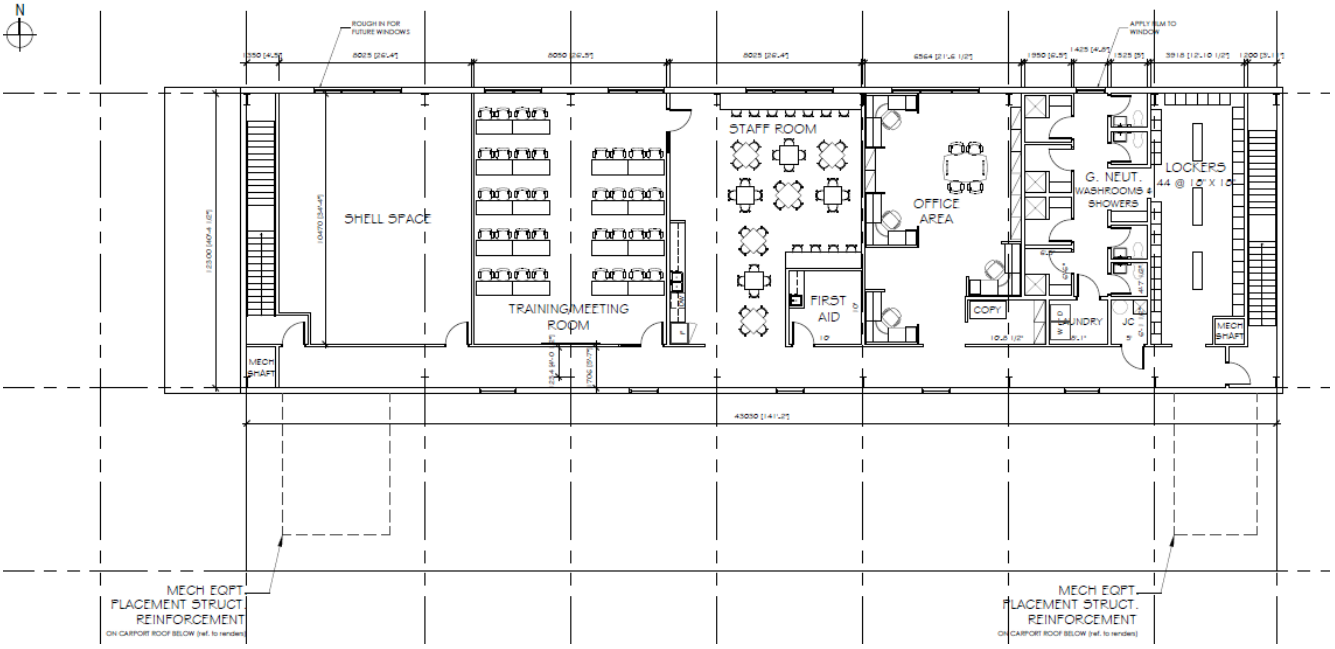
5.2 CONCEPTUAL PLANS

Conceptual designs were produced and presented to the District of Coldstream. Through an integrated design process with the District, end users and the consultant team the follow Schematic Design is being proposed.



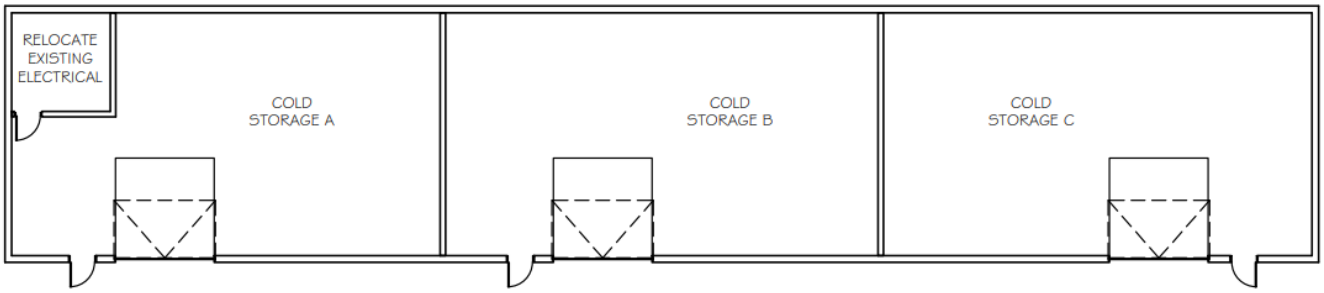
Main Floor - Public Works Building

- → The main floor includes the 20’ wide working bays, 6 in total.
- → One of the working bays should have a vehicle pit for maintenance and blade changes (as per the client's req) – dimensions to be confirmed
  - Bay 1 include a vehicle inspection pit
  - Bays 2-5 are typical concrete slab on grade.
- → The shop bays must have 4.2m (14’) wide by 4.2m (14’) high doors
- → Flammable storage room on the main floor with door interior and exterior access doors
- → Covered vehicle parking is provided on the south side of the building to accommodate 14 vehicles. Parking stalls are 6m long by 3m wide and will have electrical outlets for each parking spot.
- → 4 of the 14 vehicle parking spots will be designed for electric vehicle charging. At this time the 4 designated stalls will be limited to the installation of conduit and supporting infrastructure for EV charging
- → Primary access for the building occurs on the north face. Two access doors on the south face are provided for the mechanical room and shop, and one on the east face, for the Flammable Storage room.
- → Gender-neutral washrooms are provided throughout the building. The majority of washrooms are on the second floor, while the barrier free washroom is accessible on the main floor.
- → Each double bay include a handwash sink with built-in eyewash station
- → Each double bay will have a cold water hose bib.
- → The stairs assume a 16’ floor to floor height



Second Floor - Public Works Building

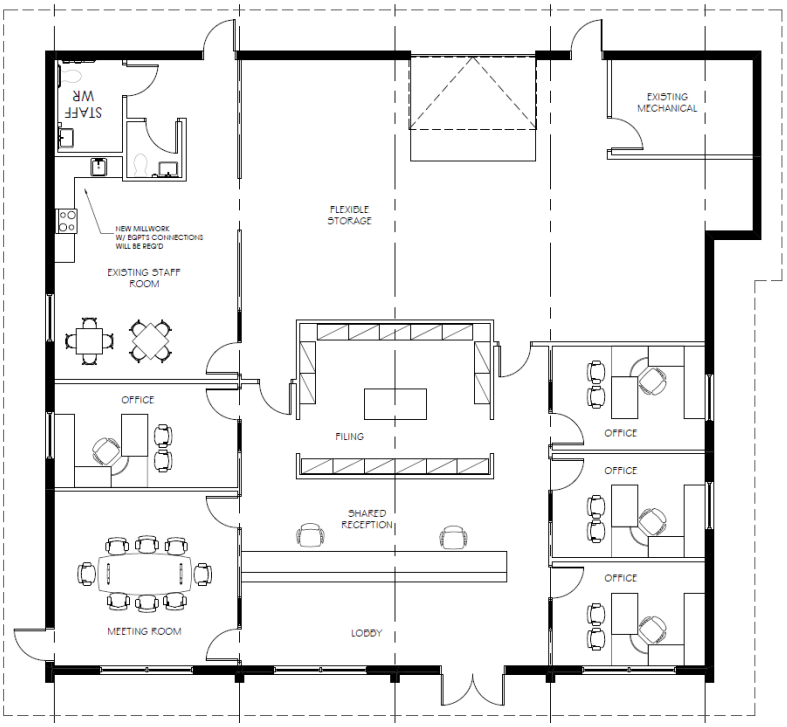
- → Second-floor shell space is added to the project. This space can be future offices, an additional training room or a meeting room
- → Training/Meeting room was designed to accommodate 36 persons
- → Staff/Lunchroom was designed to accommodate 47 persons
- → Office Area was designed to accommodate 4 persons with space for more if needed
- → The gender neuter washroom and shower area includes 4 washroom enclosures and 4 shower enclosures. All 8 enclosures can be used as individual changing rooms
- → The locker area will accommodate 44 half height lockers at 18" wide x 18" deep x 36" tall (72" total height for 2 lockers)
- → Mechanical shafts should be incorporated on the east and west side of the building. However, the final location and size will require confirmation by the mechanical engineer.
    - Mechanical shaft located were initially planned for rooftop equipment placement, however, after structural consultation mechanical units will be placed on the carport roof. Input for mechanical unit size, placement and corresponding shafts is required. Additionally, structural input to reinforce portions of the carport roof is required.



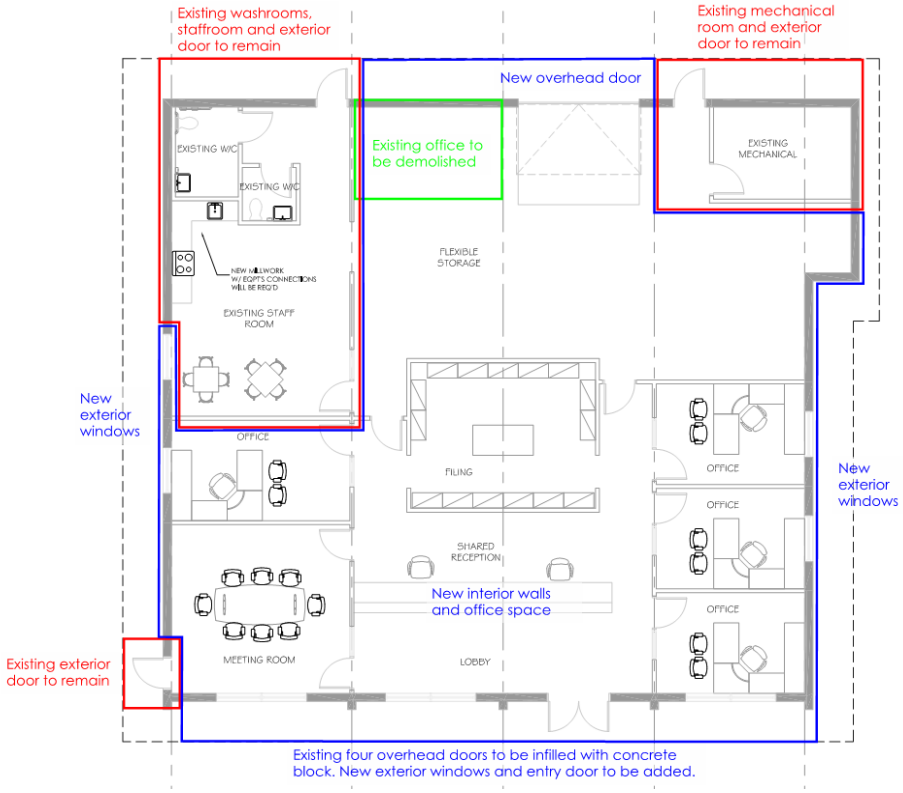
Storage Building

- → As per the client's specification, the 3 storage areas are not internally connected, are not heated or cooled, have internal partition walls, and are accessed through man doors or electrically powered overhead doors.
- → All storage rooms are to be supplied with electricity for lighting and outlets
- → Construction of the storage building impacts an existing electrical building. The current assumption is the electrical equipment services the existing maintenance shop and large vehile covered parking that will remain to the west.
    - o Option 1. The preferred option is that the existing electrical equipment is relocated to the new PWB electrical room, and that any buildings to remain will be reconnected to the new electrical room.
    - o Option 2: If option 1 is not possible, the existing electrical equipment and 2 interior walls will be maintained with in Cold Storage A

Old Firehall Renovation



Proposed Firehall Renovation



Overview of Existing Spaces and New Renovation

Old Firehall Renovation

→ Exterior

- 3 x Existing exterior person doors to remain
- 4 x Existing overhead doors on south façade to be removed. Openings to be infilled with concrete block, new windows and new entry door.
- New windows on east and west facades
- New overhead door added to north façade
- New exterior cladding on all 4 façade (entire perimeter of building)
  - Stone base (from grade up 3ft) with Hardie Plank lap siding above to match existing Municipal Office (See pictures above)
- Exterior patching and painting as required
- Existing roof to remain. No upgrades or renovations expected.

→ Interior

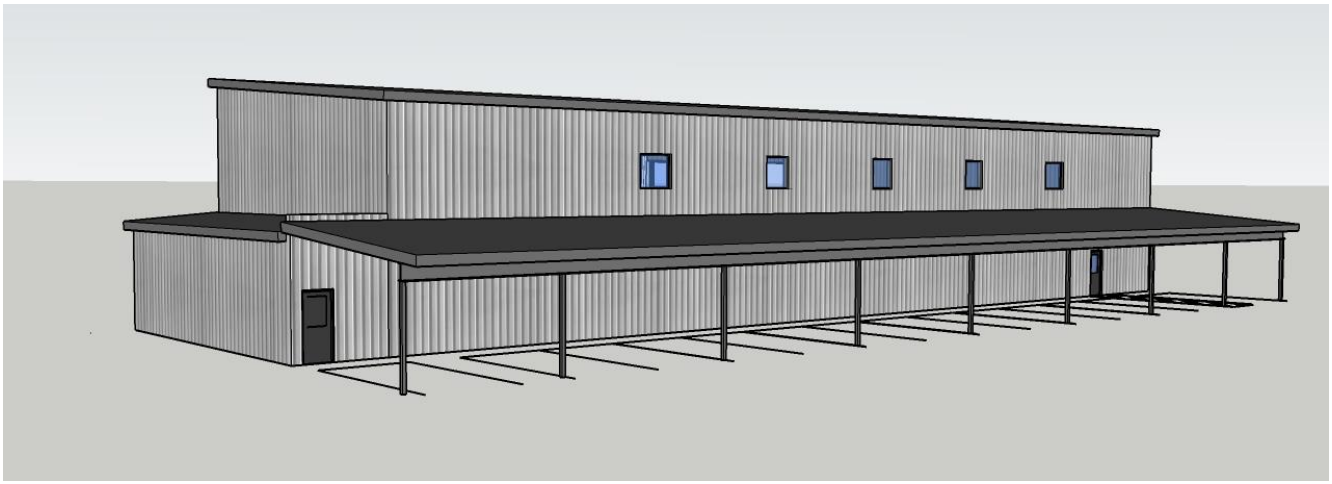
- Existing washrooms and staff room in north-west corner and existing mechanical room in north-east corner to remain
  - Washrooms to be redesigned to meeting accessibility requirements, but are to remain in the same general location.
  - New plumbing fixtures and millwork in washrooms and kitchen
  - Existing office on north wall to be demolished
- Existing internal walls to be utilized if possible. Internal walls to be demolished and added as required
- Construction of new interior walls, doors, millwork, as required to develop proposed office space. etc. in south half of the building

Please refer to **Appendix A** for the finalized Schematic Design.

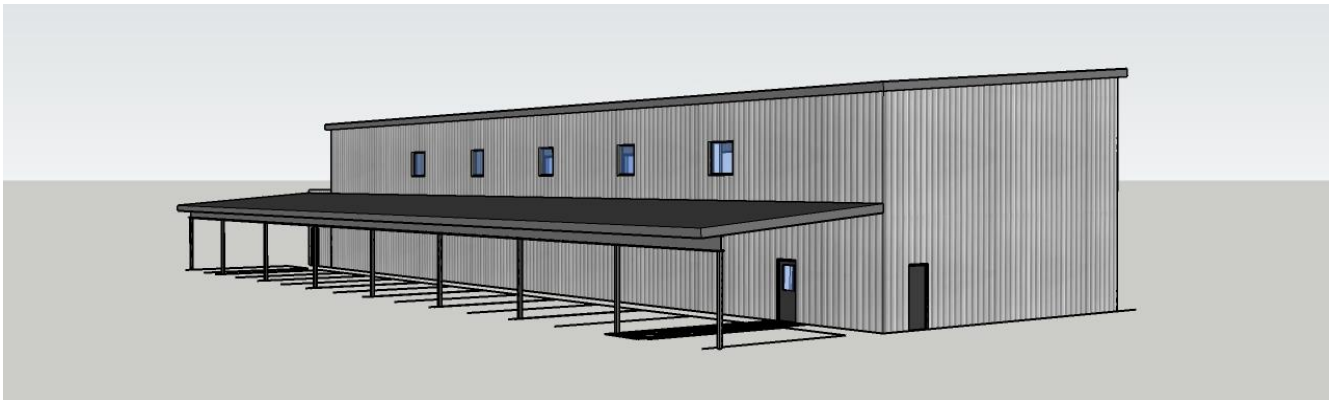
5.3 SCHEMATIC MASSING

We anticipate the building will be a pre-engineered structure finished with insulated metal panels. The schematic images below were developed to give a preliminary idea of what the building will look like. Please note these are introductory images, further design development is required to select materials, finishes and colours.

Public Works Building – North and West facades



Public Works Building – South and West facades



Public Works Building – South and East facades

Public Works Building – North and East facades

5.4 BUILDING SYSTEMS

This has been an inclusive process, with all team members actively participating from the project's onset. The following information can be provided related to the building systems.

5.4.1 Structural

Please see **Appendix B** Structural brief. Please note that this includes options for the 2nd floor systems that will need to be reviewed as the project moves forward.

5.4.2 Mechanical

Please see **Appendix C** Mechanical brief. Please note that this includes options for the air handling units that will need to be reviewed as the project moves forward.

5.4.3 Electrical

Please see **Appendix D** Electrical brief. Please note that this includes options for the electrical site servicing that will need to be reviewed as the project moves forward.

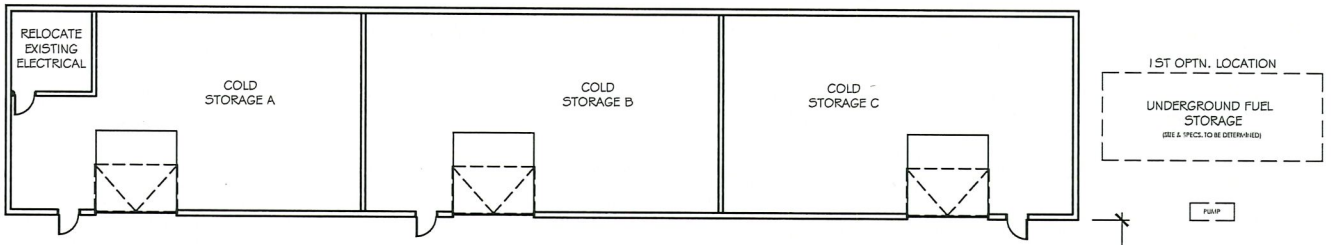
5.4.4 Civil

Please see **Appendix E** Civil brief. Please note that this includes options for the electrical site servicing that will need to be reviewed as the project moves forward.

5.5 NEXT STEPS

Running concurrently with this process is a Class D cost estimate. See **Appendix F** Cost Estimate. This costing will confirm whether the project aligns with the anticipated construction budget and will provide a basis for a referendum to obtain funding.

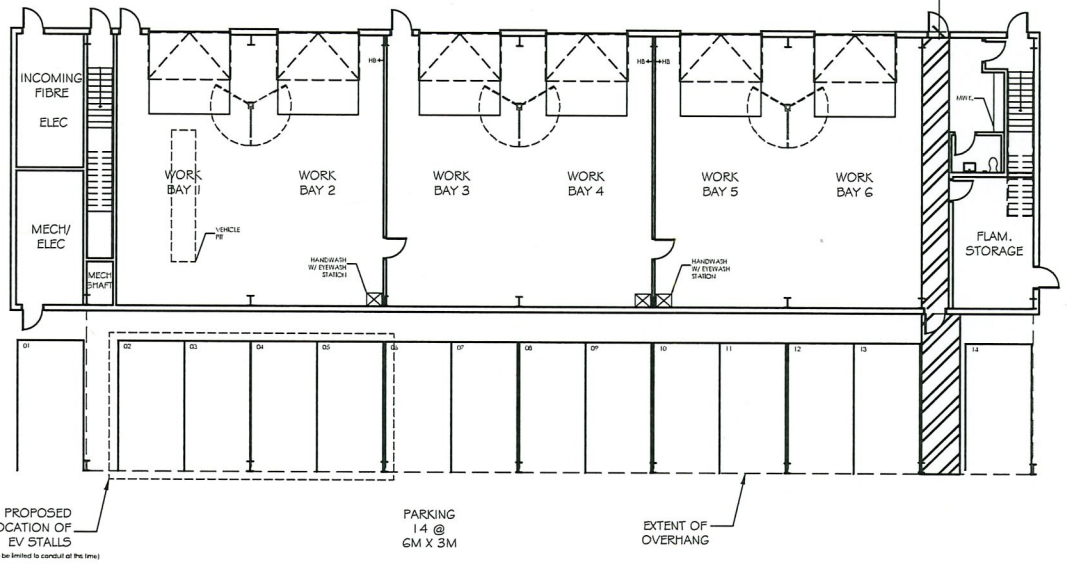
The next stage of the project is presenting this Schematic Design Report to the District of Coldstream Council. Upon review, Council will deliberate on whether to hold a community referendum. If Council decides to hold a referendum and the referendum is successful, the project will move forward to design development of the building. This includes laying out the built spaces in significantly more detail and reviewing all furniture, fixtures, and millwork and confirming the specific requirements for the building systems.



STORAGE

2ND OPTN. LOCATION
UNDERGROUND FUEL STORAGE
(SEE & SPECS. TO BE DETERMINED)

17,375mm



MAIN FLOOR - PUBLIC WORKS BUILDING

MAIN FLOOR AREA:	598m²	(6,438sf.)
SECOND FLOOR AREA:	557m²	(5,995sf.)
TOTAL AREA	1,155m²	(12,433sf.)
COLD STORAGE A:	154m²	(1,657sf.)
COLD STORAGE B:	154m²	(1,657sf.)
COLD STORAGE C:	154m²	(1,657sf.)
TOTAL AREA	462m²	(4,972sf.)

1:175
2022-05-04

22-004

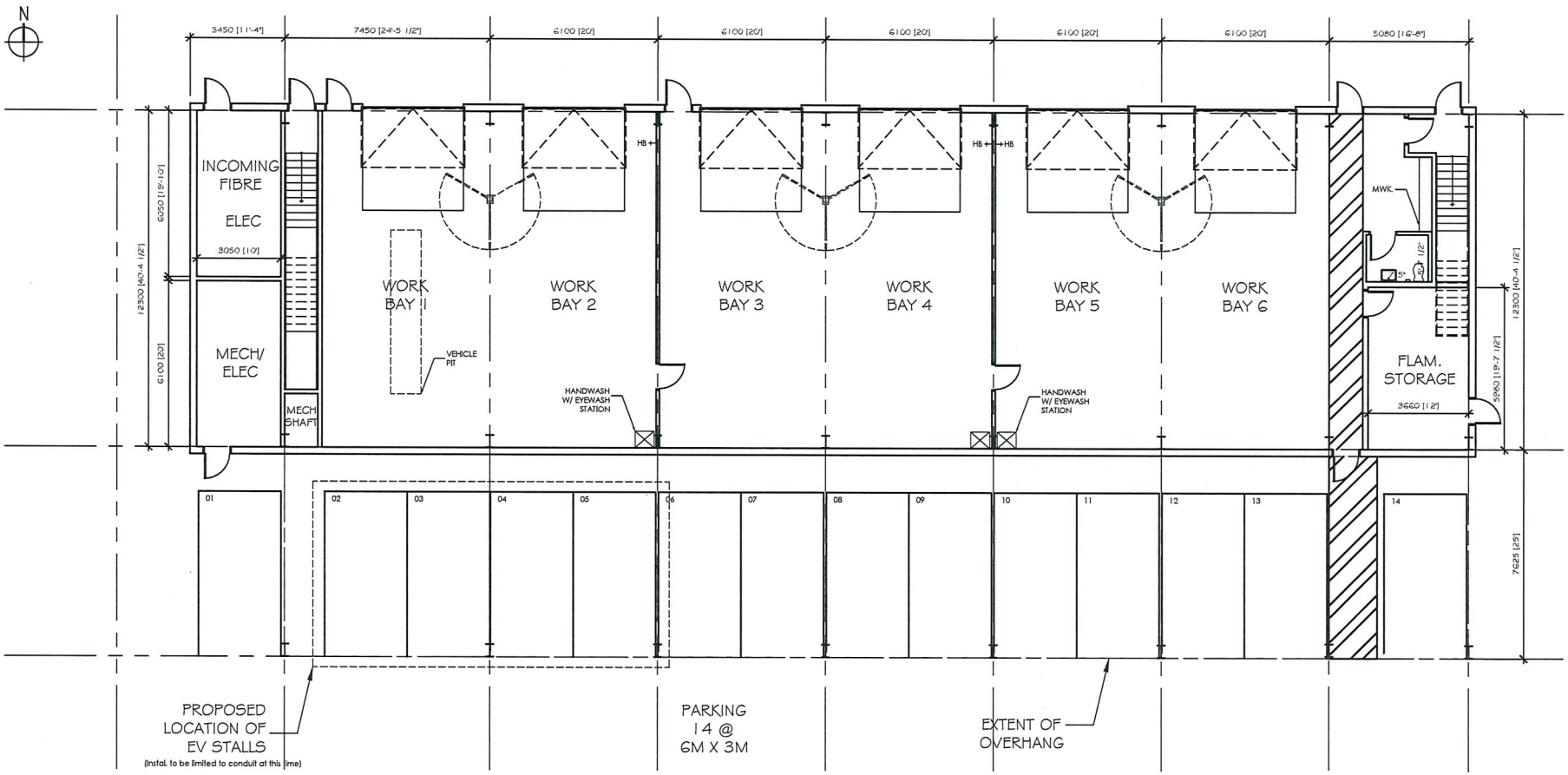
SAHURI + associates architecture inc

ATTACHMENT "B"

1:150
2022-05-04

22-004

SAHURI + associates architecture ltd

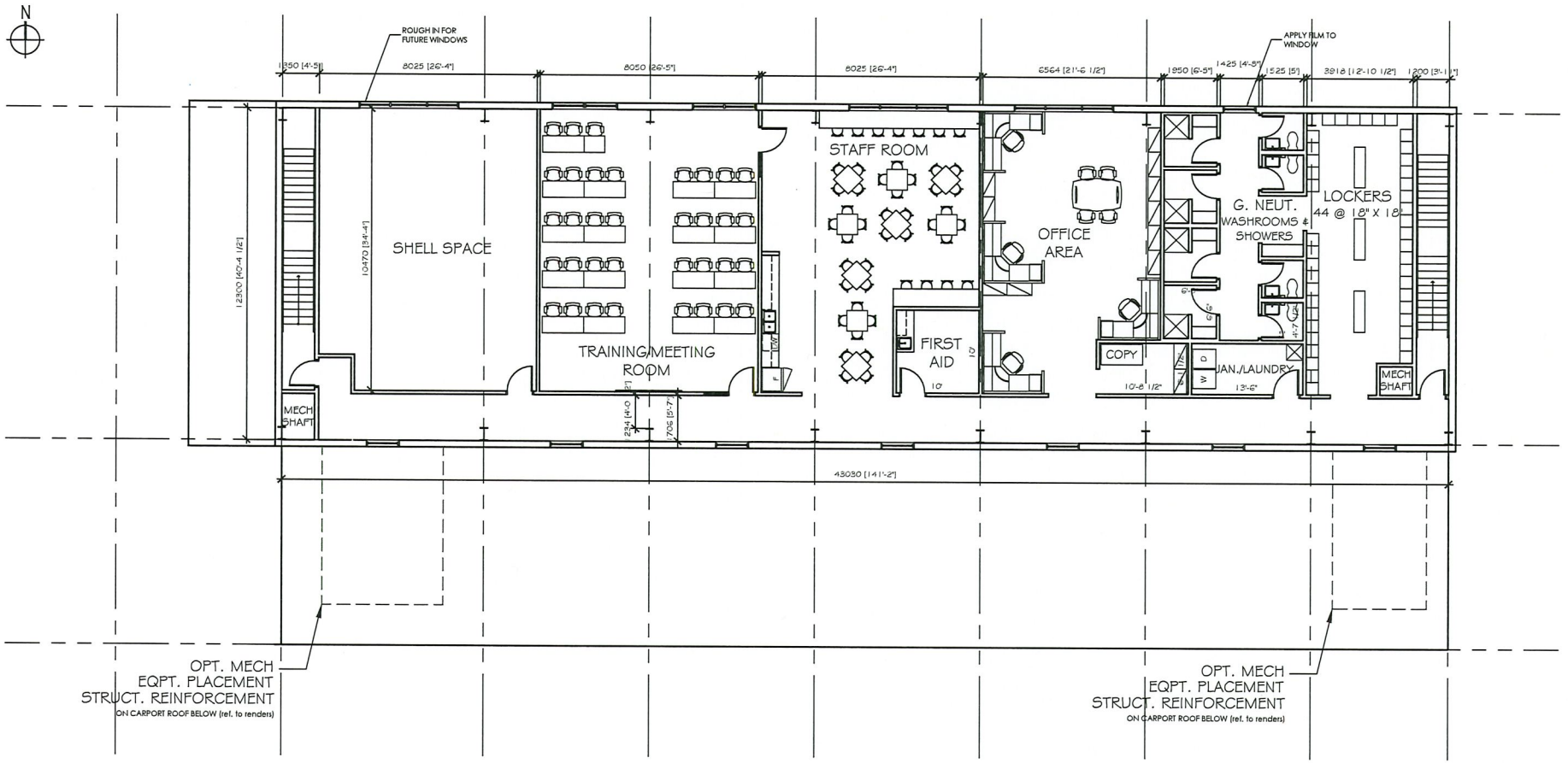


MAIN FLOOR

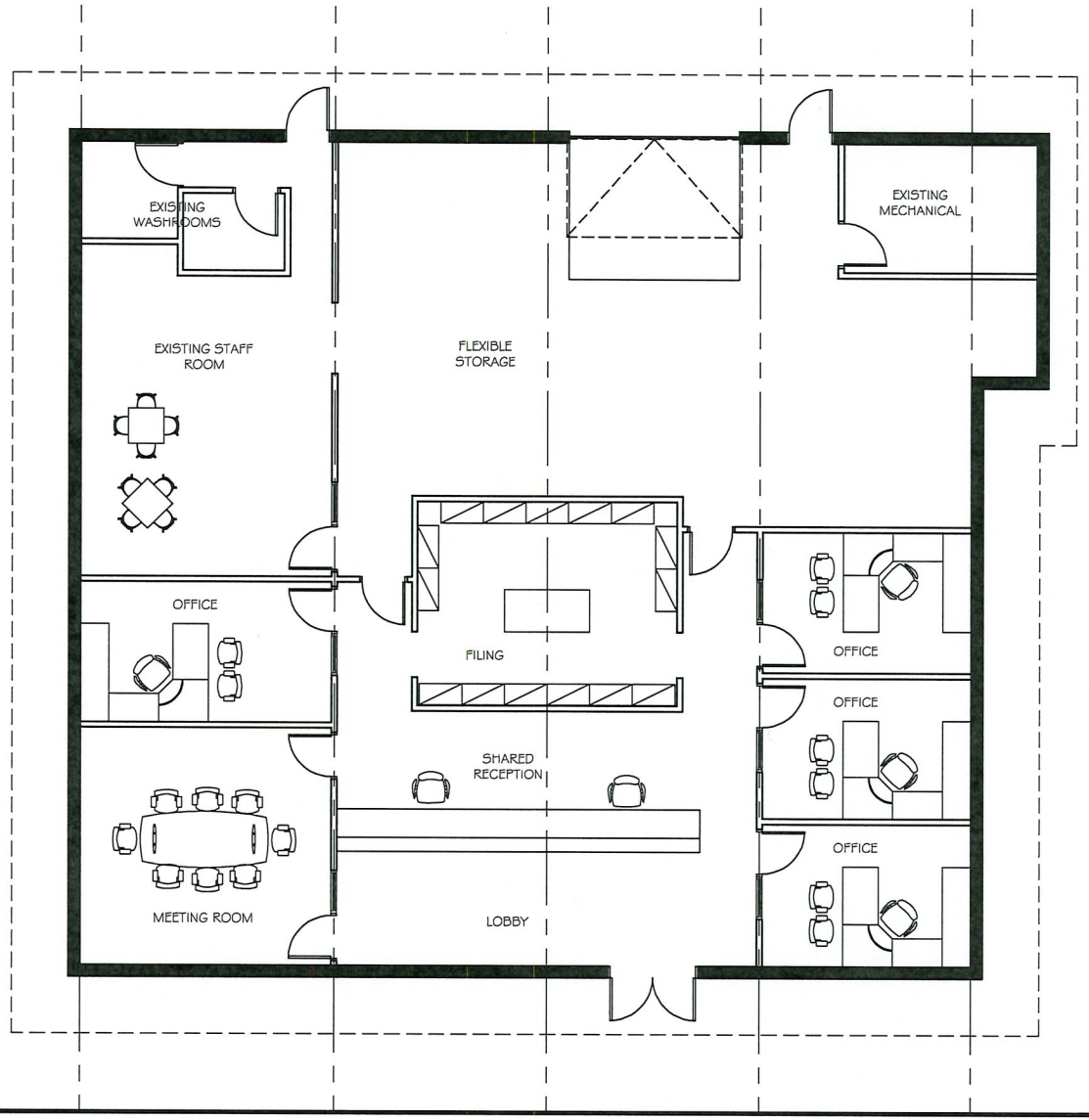
1:150
2022-05-04

22-004

SAHURI + associates architecture inc



SECOND FLOOR



Coldstream Old Fire Hall
CONCEPTUAL PLAN
SITE DEVELOPMENT - option one

1:500
2021-11-24

SAHURI + associates architecture