

Staff Report to Council

Engineering Department

FILE: 02-0890-01/21

REPORT DATE: February 24, 2021

MEETING DATE:

March 02, 2021

TO: Mayor and Council

FROM: Justin Hart, Project Manager, Major Projects

SUBJECT: Recommended Site for the New Independent RCMP Detachment

CHIEF ADMINISTRATIVE OFFICER REVIEW/APPROVAL:



RECOMMENDATION(S): THAT Council:

- A. Receive for information the Staff Report titled "Recommended Site for the New Independent RCMP Detachment " dated February 24, 2021; AND
- B. Approve Site E-2, the Art Gallery / Athletic Building, as the site preferred for the new independent RCMP detachment; AND
- C. Refer to Staff to advance conversations and processes required pertaining to statutory right of way, land consolidation, and park designation amendment; OR
- D. Other.

PURPOSE

To obtain approval from Council for the preferred site for the proposed independent RCMP detachment and advance several required next steps associated with the selection of the preferred site, including potential statutory right of way amendments, Park Designation Bylaw amendments, approval of the electors and parcel consolidation.

☐ Information Report

☐ Direction Report

☒ Decision Report

DISCUSSION

Background:

As part of the process of moving towards establishing an independent RCMP detachment for the City, staff through a competitive procurement process, enlisted KMBR Architects in fall 2020 to conduct a feasibility study to review the business case of renovating the existing CPO versus building a new standalone detachment in various locations within the City. The feasibility study was presented to Council in detail during the February 9, 2020 Engagement and Priorities Committee (EPC) meeting.

This feasibility study will be used to further inform the Minister's approval decision with respect to the City's request to de-integrate and form an independent RCMP detachment.

Analysis:

City staff identified 13 options at 10 sites within the City for the potential independent RCMP detachment. With input from staff and the RCMP, KMBR evaluated the following possible locations and their suitability for an independent RCMP detachment. After a high level review of all 13 considered options, 6 were eliminated as they did not fit enough City and RCMP criteria. A detailed review was conducted on the remaining 7 options:

- A – Athletic Park
 - A-1 – Athletic Park South
 - A-2 – Athletic Park North
- B – Annex
 - B-1 – Annex lot
 - B-2 – Gravel lot North of Annex lot (Eliminated)
 - B-3 – Annex lot combined with gravel lot (Eliminated)
- C – Amenity Lands
- D – North Lougheed (Eliminated)
- E – Harris Rd Properties
 - E-1 – Chevron Gas Station (Eliminated)
 - E-2 – Art Gallery/Athletic Building
- F – Current CPO / Recreation Centre
 - F-1 – Renovate existing space, expand into daycare, expand over parkade
 - F-2 – Renovate existing space, expand over parkade, leave daycare space (Eliminated)
 - F-3a – Demo existing CPO and build new detachment in larger footprint (Eliminated)
 - F-3b – Build new over parkade north of Recreation Centre

The total estimated costs of the 7 options that were subjected to a detailed review are shown in Table 1, which takes into consideration construction costs (including furnishing/equipment), contingency, escalation, and additional projects. Additional projects are defined as works that are created as a result of the selection of a particular site. Examples include addressing existing community infrastructure, organizations, and amenities.

Table 1 – Cost Estimate Comparison for an RCMP detachment (rounded to the nearest \$1,000)					
Site	Construction Cost	Potential Additional Projects (Est)	Class D Contingency (20%)	Escalation to August 2022 (10%)	Total Cost
A-1 Athletic Park South	\$16,285,000	\$250,000	\$3,307,000	\$1,654,000	\$21,496,000
A-2 Athletic Park North	\$16,751,000	\$1,450,000	\$3,640,000	\$1,820,000	\$23,661,000
B-1 – Annex lot	\$16,815,000	\$2,100,000	\$3,783,000	\$1,892,000	\$24,590,000
C – Amenity Lands	\$16,390,000	\$1,000,000	\$3,478,000	\$1,739,000	\$22,607,000
E-2 – Art Gallery/Athletic Building	\$12,639,000	\$1,400,000	\$2,808,000	\$1,404,000	\$18,251,000
F-1 - Renovate existing space, expand into daycare and over parkade	\$15,581,000	\$1,200,000	\$3,356,000	\$1,678,000	\$21,815,000
F-3b – Build New over parkade north of Recreation Centre	\$14,361,000	\$1,450,000	\$3,162,000	\$1,581,000	\$20,554,000

Recommended Site Selection

After completing the evaluation, both staff and KMBR agree that the Art Gallery / Athletic Building site, Option E-2, is the most feasible. The site option met a large majority of City and RCMP criteria and was the most cost effective. A high-level summary of the reasoning is provided below:

- Most cost effective, including potential additional projects such as the Art Gallery relocation and park washroom expansion.
- Met spatial and security requirements
- City-owned site
- Centrally located, proximity to the public and visible presence in the community
- Low construction and timeline risks
- No disruption to current RCMP options
- No disruption to childcare services

- Re-purpose opportunities for the existing CPO, which could potentially involve the Art Gallery
- Not located in the flood hazard zone or the ALR

Recommended Site Selection - Steps to Undertake

Currently to the north of the recommended site lies a statutory right of way on private property which, in its current configuration, does not allow for preferred direct access to site E-2. If Council chooses the E-2 site, staff would discuss potential amendments to the current right of way to allow vehicular access to the site from the north. This would allow for the highest quantity of detachment layouts to be considered during design. If amendments cannot be implemented, there are still a number of other options staff can consider to accommodate the access needs of the site.

The recommended site currently contains a park designation on portions of the land, which would need to be removed. Removal of the park designation will require a bylaw amendment and the approval of the electors as per section 30 of the Community Charter. If Council chooses the E-2 site, then Staff will prepare an amendment to the Park Designation Bylaw for Council's consideration, at which time they will also provide a recommendation to seek the approval of the electors.

In the preliminary design phase of the project, details around specific site layout, access, accommodation of future spatial needs, parking options, aesthetics and more can be determined. It is expected that lot consolidation and subdivision processes will need to be undertaken in order to achieve the final site layout and access configuration. Staff would initiate these processes subsequent to the outcome of the approval of the electors.

In summary, these administrative steps could add 4 to 6 months to the project timeline. Although staff will work on these steps concurrently to maximize efficiencies and reduce the timeline as much as possible, there are some legislative requirements associated with certain steps that must be completed before the next step can be realized (*see italics below for details*). Here is a summary of the required steps associated with the E-2 site:

1. Obtain Council's approval of site E-2
2. Seek amendments to the current right of way north of the site
(*Amendments to ROW will determine site access, which will then allow steps 3-5 to unfold*)
3. Propose a Park Designation Bylaw amendment
(*Park designation bylaw cannot be presented to Council for consideration until site access [step 2] is determined*)
4. Undertake an approval of the electors process
(*Park designation bylaw in step 3 needs first 3 readings before step 4 is triggered*)
5. Consolidation of the parcels included in the E-2 site
(*Consolidation will happen concurrently with steps 3 and 4*)

COUNCIL STRATEGIC PLAN ALIGNMENT

- ☐ Principled Governance ☐ Balanced Economic Prosperity ☐ Corporate Excellence
☒ Community Spirit & Wellbeing ☒ Transportation & Infrastructure Initiatives
-

FINANCIAL IMPLICATIONS

- ☐ None ☐ Budget Previously Approved ☐ Referral to Business Planning
☒ Other

The recommended site, the Art Gallery/Athletic Building (E-2) is estimated to cost \$18,251,000.

Given the presently favourable interest rate environment, staff recommend borrowing from the Municipal Finance Authority (MFA) in order to fund up to \$20 million for this project. This is well within the City's existing debt capacity of \$165 million as permitted by the limits established by the Community Charter Section 174 and BC Regulation 254/2004. As per the Community Charter, the City's Assent Free borrowing limit is \$34 million, which means Council can approve borrowing up to this level within their own authority.

For analytical purposes, the annual cost of principle and interest payments (debt servicing cost) on \$20 million debt at MFA's current borrowing rate of 2.32% over a 25 year term is \$1.1 million.

Staff's recommended option for funding the debt servicing cost is to:

- use construction growth revenue (estimated at \$525,000) allocated by staff in anticipation of this project proceeding; and
- re-direct existing annual funding for the Future Capital Reserve (\$575,000). This funding is designated, by bylaw, to fund new capital infrastructure such as the police building.

Staff would also endeavour to obtain external grant funding from senior levels of government to reduce the City's funding contribution.

PUBLIC PARTICIPATION

- ☒ Inform ☒ Consult ☐ Involve ☐ Collaborate ☐ Empower

The RCMP Feasibility Study was presented to Council and the public at the February 9,

2021 EPC meeting.

Further updates would be provided once the outcome of the Minister's review is known.

KATZIE FIRST NATION CONSIDERATIONS

Referral ☒ Yes ☐ No

For the past 2 years, in our pursuit of an independent RCMP detachment in Pitt Meadows, the City has been working closely with Katzie First Nation. These collaboration efforts will continue as the next phases progress, as the City believes an independent RCMP detachment in Pitt Meadows would benefit all parties by enhancing public safety, responsiveness and a higher quality of service.

SIGN-OFFS

Written by:

Justin Hart,
Project Manager – Major Projects

Reviewed by:

Samantha Maki,
Director of Engineering & Operations

Anne Berry,
Director of Planning & Development

Kate Barchard, Corporate Officer

ATTACHMENTS:

A. Pitt Meadows RCMP Feasibility Study – Volume 1 (Partially redacted)



PITT MEADOWS RCMP FEASIBILITY STUDY

ANALYSIS OF VARIOUS SITES FOR NEW RCMP DETACHMENT FOR CITY OF PITT MEADOWS

VOLUME 1



KMBR | ARCHITECTS
PLANNERS

300 – 152 West Hastings Street
Vancouver BC, V6B 1G8

January 21, 2021
Revised February 3, 2021

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Appendices

Appendix A: Detailed Programming Document

Appendix B: Structural, Mechanical and Electrical Reports

Appendix C: Detailed Cost Report

Appendix D: Previous Study - RCMP Services & Structure Review by CPM
Under Volume 2

Executive Summary

The purpose of this Study is to provide a preliminary assessment of site options for a new RCMP Detachment for the City of Pitt Meadows. The requirements for the proposed detachment are based on the needs identified by the City of Pitt Meadows staff and the RCMP.

City Evaluation Criteria:

- Ownership of the land - Is it owned by the City or by others?
- Potential impact on other facilities, community services, neighbours, infrastructure, ALR
- Does the site fit the required RCMP program for the building, parking, and circulation?
- Is the site adequately sized to deal with sloping grades or required fill?
- Cost effective / good value for money
- Compliant with City bylaw and policy
- Avoid floodplain if possible
- Generally fits the construction timeline previously expressed by the City
- Near population centre
- Meets the long-term policing service needs for the community

RCMP Evaluation Criteria:

- Minimum site frontage: 53m x 35m
- Corner lot
- 2 points of egress for site parking
- Located on an arterial road
- 3:1 site ratio (site area to building area)
- Site is more than 600m from railroad tracks
- Preference for surface parking --Underground parking is more costly and complex
- Disruption to current RCMP operations --No disruption to RCMP operations preferred
- Potential flood hazard --Sites not in the flood hazard zone are preferred
- Located near population it serves
- Preference for south side of tracks

Risk or Other Criteria (not identified above):

- Time risk
- Construction schedule
- Risks to construction costs
- Potential spin off costs to City as a result of displaced services
- Creation of potential revenue sources for City or spaces for City use
- Nearby archeological sites or heritage designated buildings
- Known site contamination

This study explores 13 options at 10 sites identified by the municipality for the potential development of the future Pitt Meadows RCMP Detachment. The RCMP have participated throughout the study, providing feedback on selected sites, criteria, and priorities. Each site option is evaluated based on high-level municipal and RCMP priorities and criteria, including: cost, impact on neighbours and other community services, and functionality from the RCMP's perspective.

Executive Summary Cont'd

Option A-1 (Athletic Park South)

4,940sm site
Current on grade parking on site
Construction of a new building
Detailed review - \$16,285,000*

Option A-2 (Athletic Park North)

4,940sm site
Current structure and tennis courts on site
Construction of a new building
Detailed review - \$16,751,000*

Option B-1 (Annex Building)

2,500sm site
Current structure on site
Construction of new building
Detailed review - \$16,815,000*

Option B-2 (Lot North of Annex)

1,533sm site
Current developer owned vacant lot
Construction of a new building
High level review

Option B-3 (Annex and Developer Site)

4,035sm site
Current structure on site
Construction of a new building
High level review

Option C (Amenity Lands)

5,000sm site (subdivide from 28,000sm)
Undeveloped land
Construction of a new building
Detailed review - \$16,390,000*

Option D (North Lougheed)

5,240sm site (from larger development site)
Undeveloped land
Construction of a new building
High level review

Option E-1 (Chevron Gas Station)

2,200sm site
Current structure on site
Construction of new building
High level review

Option E-2 (Art Gallery/Athletic Building)

2,275sm site
Current structure on site
Construction of a new building
Detailed review - \$12,639,000*

Option F-1 (Existing CPO/Daycare/Community Centre)

2,600sm site
Existing CPO/Daycare/Community Centre
Renovate existing + expand into Community Centre
Detailed review - \$15,581,000*

Option F-2 (Existing CPO/Daycare/Community Centre)

2,070sm site
Current structure on site
Renovate existing and expand to North
High level review

Option F-3a (Existing CPO/Daycare/Community Centre)

2,600sm site
Current structure on site
Demolish and Reconstruction of existing building
High level review

Option F-3b (Existing CPO/Daycare/Community Centre)

2,880sm site
Current structure on site
New Construction over existing Parkade
Detailed review - \$14,361,000*

A multi-faceted comprehensive comparison was conducted and the team has concluded the recommended Option E-2 (Art Gallery/Athletic Building Site) to be the option that satisfies the most number of functional requirements as identified by the CPM and RCMP, and is the most financially feasible.

Note: * All cost estimates above are subject to +/-20% for contingency, and +/-10% for escalation and exclude other potential spin-off project costs that may result from the displacement of other community services.

1. Project Background

a. Context

Currently, a single integrated facility, The Ridge Meadows RCMP Police Detachment, services both the City of Pitt Meadows and the City of Maple Ridge. However, due to their differences in population size and land attributes, the two communities have unique demands. This study was commissioned in response to a recent council-supported motion to review the existing consolidated police services delivery model and consider the option to move to separate detachments.

The current Community Police Office (CPO) is located at 12027 Harris Road, and is part of the Pitt Meadows Family Recreation Centre. It was opened in the year 2000 and as the City grew, its needs evolved. In 2013 the CPO was expanded to accommodate more resources and was changed into a “satellite detachment”. The CPO’s area was increased from approximately 230sm to 420sm. This 420sm area includes 390sm of area used solely by the RCMP and 30sm of meeting space shared with the Community Centre.

Background:

Pitt Meadows is a unique, small city that is made up of a relatively small central and condensed urban core (approx. 2.0 km in diameter) and 78% is in the Agricultural Land Reserve for farming. In contrast, the City of Maple Ridge (CMR) is a much larger city with a substantially spread-out community. Pitt Meadows enjoys a lower crime rate than Maple Ridge, has experienced a reduction in calls for service, and demonstrates a stable crime severity index.

A previous report (attached as Appendix D, Volume 2) was initially compiled and presented to Council at their January 21, 2020 Closed Meeting to supplement the information and advice contained in the Blueline Vantage

Consulting report, titled “City of Pitt Meadows: Review of Policing Service Delivery”, dated January 2020.

The report also gave Council the staff’s recommendation to proceed with the implementation of an independent and autonomous RCMP police detachment. This study was transitioned into a confidential, informational report to be shared with key rightsholders/stakeholders as directed by Council. CPM’s Council has also expressed their vision of a policing model to “truly embrace community policing” where the police and the community build a strong relationship around safety, security, families and improving on quality of life.

The recommendations contained in the aforementioned report include:

- Enhance visibility, public safety, service levels and responsiveness to the community;
- Increases sense of pride, spirit, ownership and involvement in the community;
- Augment the direct relationship between the RCMP, City Hall and our Community;
- Promote more direct accountability and a better understanding and appreciation of the nuances in Pitt Meadows; and,
- Deliver a higher quality of service tailored to the PM community at “relatively the same operating costs, but based on the assumption that there will be one-time transitional and capital costs required” (emphasis has been adjusted to meet Council’s direction to consultant).

1. Project Background Cont'd

Purpose:

The City of Pitt Meadows, through a competitive procurement process, hired consultants who are experienced in the design and standards of RCMP buildings, led by KMBR Architects, to examine all the development options and technical perspective in order to generate sufficient information for a Class D Estimate.



b. Study Process

This study was conducted using a comprehensive process that included the following steps:

1. Identifying all possible sites
2. Conducting an analysis for the development potential of all possible sites
3. Analyzing the possible sites using the following criteria:
 - Zoning Requirements
 - Geotechnical information, structural, mechanical and electrical analysis
 - Physical constraints
 - City of Pitt Meadows requirements
 - RCMP requirements
 - Other rightsholders/stakeholders
 - Potential risks
4. Eliminating the options that were deemed not fit for examination based on the above criteria
5. Identifying the potentially feasible options based on the above criteria
6. Examining the feasible options in greater detail and further developing those options in order to determine the probable cost and budget for each
7. Based on potential cost, potential risks and the functional and long term benefit to the City of Pitt Meadows and the RCMP, recommend a preferred option.

1. Project Background Cont'd

c. Project Team

CITY OF PITT MEADOWS:	<p>Samantha Maki <i>Director of Engineering & Operations</i></p> <p>Justin Hart <i>Project Manager, Major Projects</i></p>
RCMP:	<p>Wayne Sutherland <i>Executive Services Advisor</i></p> <p>Harpreet Rai <i>Senior Project Manager</i></p>
DESIGN TEAM: KMBR Architects	<p>Kate Lemon <i>Principal</i></p> <p>Bassem Tawfik <i>Principal</i></p>
Fast & Epp (Structural)	Duane Palibroda <i>Managing Principal</i>
Smith & Andersen (Electrical)	Jeff Chen <i>Associate</i>
Smith & Andersen (Mechanical)	Brent Frayne <i>Associate Principal</i>
SSA Quantity Surveyors	Paul Mitchell <i>Partner</i>

d. Engagement

For the purpose of this study, the engagement process was limited to the City of Pitt Meadows and the RCMP. The next phase of engagement will involve these organizations in addition to:

- Katzie First Nation, as rights holder
- Community representatives (the Public)
- Others as deemed necessary by the City of Pitt Meadows

The engagement process will follow the steps outlined below:

- Present the project in an open and transparent way to all identified rightholders/stakeholders
- Set up communication protocols and channels for information flow with all rightholders/stakeholders
- Receive, analyze information provided and align with project goals
- Provide feedback to rightholders/stakeholders and demonstrate how the project incorporated their input and the reasons why it couldn't if that is the case
- Keep an accurate record of all communications

Using the engagement process will ensure a transparent and inclusive project delivery.

1. Project Background Cont'd

e. Demand

With the growing population and the ongoing large developments, the need for an autonomous, safe detachment that conforms to current RCMP standards has become necessary.

This will also allow increased functions and posts that are currently unavailable in the CPM. The population of CPM is approximately 18,600 (2016 Census), and comparably-sized cities such as White Rock, Squamish and Cranbrook all have their own detachments.

Chart 1 - Population¹

	Current Population	Current % of Region	2040 Regional Growth Strategy	New Residents	Projected % in Region
Pitt Meadows	19,772	18.24%	23,500	3,728	16.49%
Maple Ridge	88,626	81.76%	119,000	30,371	83.51%
Ridge Meadows	108,398	100.00%	142,500	34,102	100.00%

*CMR will grow over 8x (30,374 / 3,728) that of CPM, far greater than the current ratio and that of the historical 80/20% distribution.

Chart 2 - Calls for RCMP Service¹

	2014	2015	2016	2017	2018
Pitt Meadows	5,118	5,304	4,902	4,691	4,687
Maple Ridge	23,500	25,704	25,704	24,788	25,880
Ridge Meadows	28,616	32,008	30,505	29,613	30,567
CPM % of total calls	17.89%	17.09%	16.07%	15.84%	15.33%

*CPM files are dropping despite increases in population whereas CMR files are increasing.

*CPM % of overall Ridge Meadows Detachment files decreased from 17.89% (2014) to 15.33% (2018).

*The current housing and support agreement is based on a split of 18.24% (approx.. 3% higher than the count).

Chart 3 - 2017 Adjusted Police to Population and costs/capita¹

	Population	Police to Pop	Crime Rate	Case Load/ Member	Cost/ Capita
Coquitlam	150,198	875	50	43	\$215
Langley Township	128,524	853	66	57	\$232
White Rock	19,187	810	79	57	\$284
Maple Ridge	88,032	804	74	59	\$252
Port Coquitlam	62,201	791	61	48	\$246
Pitt Meadows	19,580	790	59	46	\$235

*CPM Police to Population is the lowest in the table, which is positive, indicating the city enjoys a higher than average number of officers/ 1,000 citizens.

*CMR members have a 28% higher caseload/ member than CPM members ((59-46) / 46).

*CMR crime rate is 20% higher than CPM ((74-59) / 59).

*The data includes contribution to Integrated Teams

¹ From City of Pitt Meadows Chief Administrative Officer's Staff Report on RCMP Services and Structural Review, January 23, 2020.

1. Project Background Cont'd

The following are concerns that Council identified in 2019:

- Police visibility in the community;
- Lack of continuity of General Duty members transferring out every 4-6 months;
- Lack of clarity/accountability around the organizational structure, deployment and financial expenditures demonstrating value for \$ expended, lack of financial tracking to monitor costs for specific investigations or services; and
- Communication and the relationship between the detachment leadership were not as frequent and at the level the City believed it needed to be.

As a result, on May 21st, 2019, there was a unanimous Council motion to create a RCMP Police Services Review committee and to conduct a policing review to:

- Enhance visibility, public safety, service levels and responsiveness to the community;
- Increase sense of pride, spirit, ownership and involvement in the community; Augment the direct relationship between the RCMP, City Hall and our Community;
- Promote more direct accountability and a better understanding and appreciation of the nuances in Pitt Meadows; and
- Deliver a higher quality of service tailored to the PM community at the same cost.

¹ From City of Pitt Meadows Chief Administrative Officer's Staff Report on RCMP Services and Structural Review, January 23, 2020.

2. Functional Program Requirements

a. Spatial Requirements

A preliminary Spatial Needs Analysis by the RCMP dated March 20, 2020 estimates the detachment requires approximately 1300sm. The area analysis was based on a recent needs assessment done for the White Rock detachment. However, the RCMP's area analysis remains preliminary and the needs and required areas for Pitt Meadows may vary from those in White Rock. Further analysis is required from the RCMP to fully assess the programming needs.

The RCMP's preliminary area analysis did not include detention cells. However, it is currently

anticipated that detention cells will be a requirement in the new facility. This study therefore assumes that the required area will include up to 3 detention cells and the necessary facilities to service them. A minimum area of 1363sm was therefore used to evaluate the various sites.

A 10% growth factor was applied to the program areas. This percentage is in keeping with the RCMP standard. However, further consideration of that growth rate is recommended to be undertaken by the Municipality and the RCMP in their final programming needs analysis.



2. Functional Program Requirements Cont'd

Table: Pitt Meadows RCMP Building Program Area Summary

Pitt Meadows Detachment Area Requirements		Required	Level 1	Level 2	Existing CPO
January 17, 2021					
Department		Area (m ²)	Area (m ²)	Area (m ²)	Area (m ²)
100	PUBLIC ACCESS	41.2	41.2	-	43.0
200	OFFICE	130.9	130.9	-	195.0
300	GENERAL SUPPORT	207.2	114.0	93.2	90.0
400	OPERATIONAL SUPPORT	229.1	190.8	38.3	35.0
500	DETAINEE SECURITY	143.0	143.0	-	27.0
	COMMON UNITS	74.2	-	74.2	
Net Assignable Area Subtotal		825.6	619.9	205.7	
Internal Circulation (24%)		198.1	148.8	49.4	
Sub-Total		1,023.7	768.7	255.1	
Service, Common Area + Structure (10%)		102.4	76.9	25.5	
Sub-Total		1,126.1	845.5	280.6	
Major Vertical Penetrations + Exterior Walls (10%)		112.6	84.6	28.1	
Total Building Gross (BGSM)		1,238.7	930.1	308.6	
TOTAL			Level 1	Level 2	TOTAL
Total Growth Factor @ 10%		123.9	93.0	30.9	
TOTAL		1,363	1,023	339.5	390

Notes:

1. Refer to Appendix A for a detailed breakdown of the table.
2. 390sm is the gross area strictly used by the CPO. There is also meeting space shared between the CPO and the Community Centre. The total area used by the CPO, including the shared meeting space, is 420sm.

2. Functional Program Requirements Cont'd

Only one of the sites proposed by the Municipality is large enough to allow for a single storey detachment. Therefore the design team undertook a high-level analysis of the spatial needs to determine the feasibility of a two-storey detachment from a programming perspective. Certain parts of the building (reception, victim services, interview rooms, vehicle bays, mechanical and electrical rooms, duty bags and equipment, and all detention related spaces) need to be located on the ground floor. Of the building's 1,363sm gross area, 1,023sm (76%) will be on the ground floor. Up to 340sm of area may be located on second floor. A detailed breakdown is provided in Appendix A.

In addition to the gross building area, additional area is required on site for parking, loading, vehicles maneuvering areas, security, refuse, a generator for post-disaster electrical needs, and various other utility and RCMP requirements.

The RCMP estimates it will require fourteen (14) secure parking stalls for RCMP fleet vehicles, and twenty-one (21) non-secured stalls for staff. It should be noted that the twenty-one (21) staff vehicles can be secured or non-secured from the RCMP's perspective. Locating all parking within the secured zone is recommended on some sites to reduce area allocated to additional fencing, gates, and maneuvering aisles. The municipal parking bylaw does not have explicit public parking requirements, nor does the RCMP. However five (5) public parking stalls are recommended where it can be accommodated. Some of the sites brought forward for consideration are below the 3:1 site to gross-floor-area ratio recommended by the RCMP. Therefore conceptual plans for each site showing parking and building area were produced to determine the feasibility of each site. Those are explored under Section 4 of this Report. A detailed breakdown and size of stalls is provided in Appendix A.



3. Gap Analysis - Required Versus Existing

a. Existing Site

The existing RCMP community Police Satellite Office is co-located within the Pitt Meadows Family Recreation Centre on a large site, containing City Hall and the Annex Building to the east, a large parking area to the north, and an outdoor recreational area and basketball court to the north-west.

When compared with the requirements of a modern RCMP detachment, the following site deficiencies were identified:

- The suggested ratio of site size to gross building area is not 3:1. For detachment buildings, the minimum site size should be 53m frontage by 35m depth, exclusive of applicable setback requirements.
- The site does not have a Secure Operational Vehicle Compound on the property that is equipped with two options for ingress/egress that are adequately spaced apart. These ingress/egress points (utilizing access control vehicle gates, at least one of which must be automated) should not intersect or conflict with any public or non-operational parking.
- Lack of direct access to a main thoroughfare from the Operational parking lot. This is required in order to aid in a timely response to calls for service, and to minimize potential conflict and delay related to public vehicle and pedestrian traffic.

b. Building

The following deficiencies have been identified by the RCMP E Division via letter on March 19, 2020, they only reflect the existing RCMP space and do not relate to the issues of the

joint Ridge Meadows detachment:

- Co-locating a full RCMP detachment with detention facilities in the Community Centre would trigger a need to upgrade the separation between the two uses, in order to comply with present day Building Code. Construction of a firewall to separate the two occupancies would be costly and disruptive to both the Community Policing Office and the Community Centre.
- BCBC-2018 Building Code requires that all detention facilities be built to post-disaster standards such that they can remain standing and operational even after a seismic event. Mechanical and electrical systems must be on a generator and the seismic structural design requirements are more significant as they are not only focused on the safety of occupants during an earthquake but also the more stringent requirements of allowing for the building to continue to function after an earthquake. The existing mechanical, electrical, and structural design of the Community Centre and Community Policing Office do not meet these requirements for post disaster buildings and therefore significant mechanical, electrical, and structural upgrades would be required.
- Doors and door hardware do not meet minimum baseline standards
- Meeting rooms do not meet minimum baseline standards
- Perimeter security is compromised due to common spaces being shared with the Recreation Centre.

3. Gap Analysis - Required Versus Existing Cont'd

- Secure compounds/storage do not meet minimum baseline standards
- Building exterior including fencing, landscaping, lighting does not meet minimum baseline standards Security enhancements including CCTV, Intrusion Alarm and Access control do not meet minimum baseline standards
- Speech privacy requirements do not meet minimum baseline standards
- The public lobby and surrounding construction does not meet minimum baseline standards
- The contained use area does not meet minimum baseline standards
- Location of the existing CPO in a multi-tenant building does not align with The

Operational Security Standard on Physical Security Article 7.5.2 "Daycare Centres". When daycare centres are planned for federal facilities, consideration must be given to the safety of both the tenants and the public in the context of the Government of Canada's responsibilities and liability. Daycare Centres should not be co-located with departments whose programs or operations may be subject to interruption or increased threats due to events such as demonstrations, or with departments that might deal with high-risk clients (including potentially violent individuals).

The Pitt Meadows CPO is located directly adjacent to a childcare centre. The area where detainees exit the CPO is directly adjacent to the children's outdoor play area with only a low chainlink fence separating them. The adjacency is presently creating operational issues for the policing office.



3. Gap Analysis - Required Versus Existing Cont'd

Although the adjacency is presently grandfathered-in, if the CPO were replaced with a full detachment, the daycare could not remain in its current location.

In addition to the aforementioned deficiencies, the existing satellite RCMP office is far smaller than 1,363sm minimum required for a new detachment. Therefore a 750sm-1000sm expansion would be required in addition to renovating the existing satellite office. A high-level analysis of this option is outlined in Section 4 of this Report (site options F-1, F-2, F-3a, and F-3b).

4. Concept Design Options

a. High Level Review Options

- B-2 New Construction (Developer owned lot north of Annex)
- B-3 New Construction (Consolidated/joint development of Annex site with developer-owned lot north of Annex)
- D New Construction (North Lougheed)
- E-1 New Construction (Chevron Gas station)
- F-2 Renovation & Expansion (to Existing CPO/Daycare/Community Centre Site)
- F-3a Demolishing & Reconstruction at Existing CPO/Daycare/Community Centre Site

The above options were excluded early in the process due to incompatibility with RCMP and City criteria, project schedule, inadequate lot size, or were dropped in favour of more cost effective development schemes on the same site.

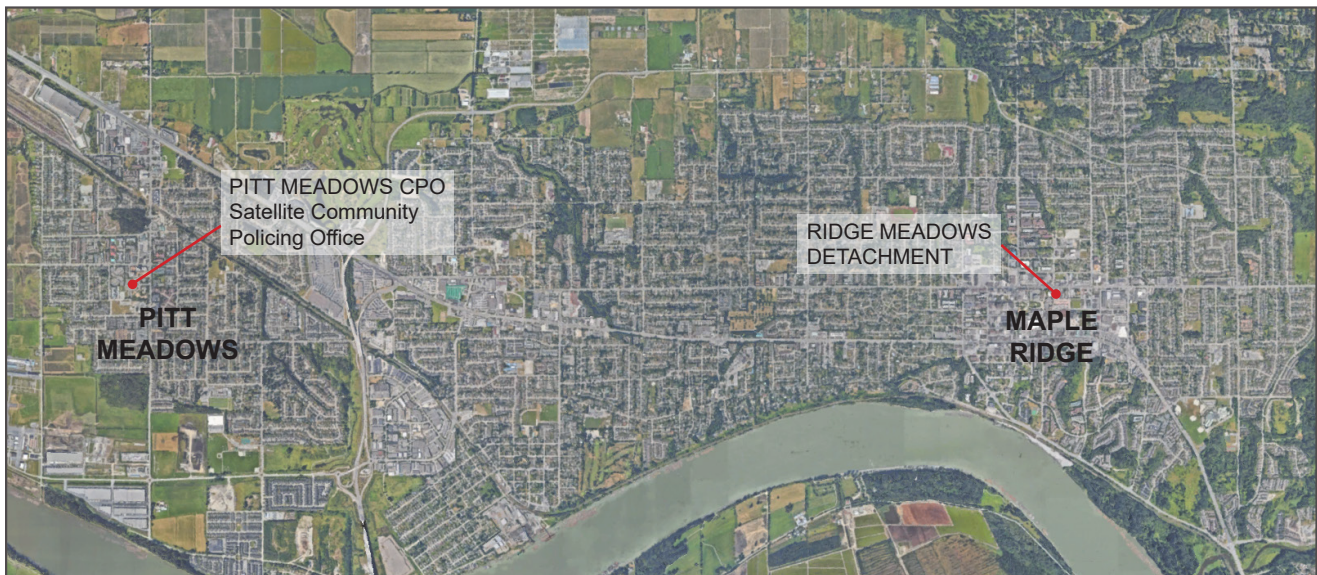
b. Detailed Review Options

- A-1 New Construction (Athletic Park South)
- A-2 New Construction (Athletic Park North)
- B-1 New Construction (Demolish and build at Annex site)
- C New Construction (Amenity Lands, Airport Road)
- E-2 New Construction (Art Gallery/Athletic Building)
- F-1 Reno and Addition to Existing CPO/Daycare/Community Centre
- F-3b New Construction adjacent to Existing CPO/Daycare/Community Centre

c. Status Quo

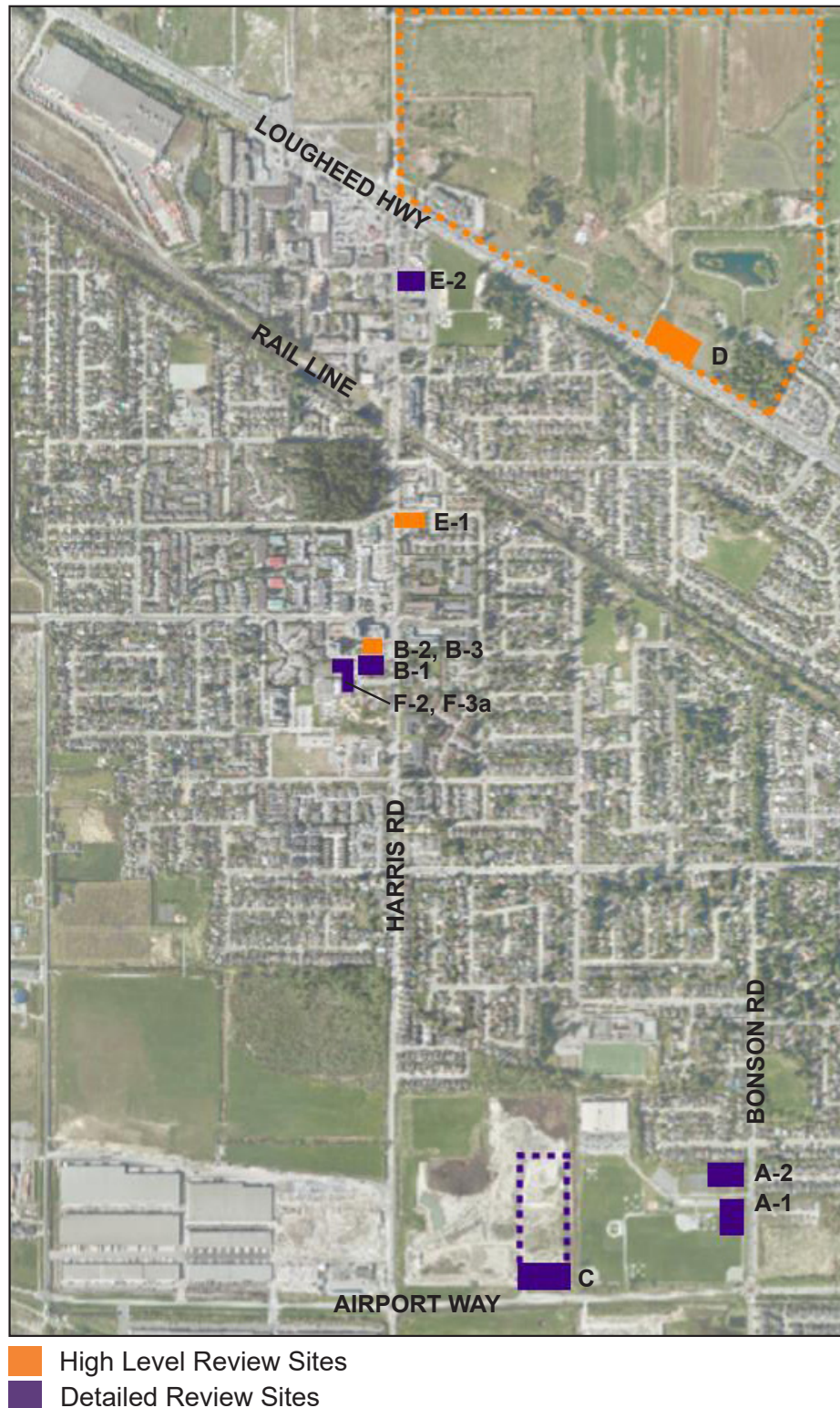
This option represents keeping and improving the current model of shared policing with Maple Ridge. Basic upgrades to the existing Pitt Meadows satellite facility would be required in order to maintain the status quo.

Status Quo



4. Concept Design Options Cont'd

Site Options Considered for New Pitt Meadows Detachment



4. Concept Design Options Cont'd

a. High Level Review Options

Option B-2

Developer-owned lot north of Annex



ADDRESS

12089 Harris Road, Pitt Meadows

PROPOSED DEVELOPMENT

New Construction

Ground Floor: 1,023sm
Second Floor: 340sm
Total Floor Area: 1,363sm

Lot Area: 1,533sm
Lot Dimensions: 46.3m x 33.1m

Legend:

--- Property Line
--- Required Setback

ZONING + SITE

TC – Commercial – Towncenter Commercial

CURRENT USE

Vacant lot

COMMENTS

The site is too small to comfortably fit the required program and is owned by a developer. The site was excluded due to the required negotiation with the developer which would put the project timeline in jeopardy. The costs to harden the interface between RCMP and other building uses, and the cost of underground parking were also of concern.

Pros:

- Site is currently vacant so no community services would be displaced
- Prominent location on arterial road
- Close to City Hall and other services
- Site avoids ALR and floor hazard zone
- No disruption to existing CPO during construction
- Existing CPO could be re-purposed after construction

Cons:

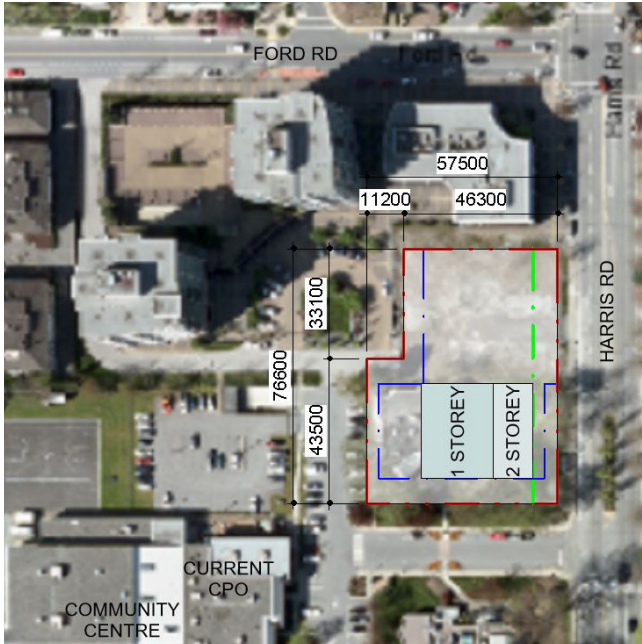
- Site is small
- Site is not owned by the City therefore negotiation and legal agreements with developer required
- Co-location of RCMP detachment and residential tower raise security concerns for RCMP
- Parking would be entirely underground which is costly
- Parking for developer tower would need to be located on an adjacent site
- Unlikely to meet City's timeline

4. Concept Design Options Cont'd

a. High Level Review Options

Option B-3

Consolidated and joint development of Annex Site with developer-owned lot north of Annex



ZONING + SITE

Combine B1 (P1 - Institutional - Community Assembly) + B2 (TC - Commercial - Towncenter Commercial)

COMMENTS

Site B-1 (Annex Building) and B-2 (developer-owned site) are both small sites. The team therefore explored combining the two adjacent lots. Proposed development would include:

- Demolition of Annex
- Amalgamation of the 2 sites
- New RCMP detachment
- Possibly co-housed with tower

This site however, poses potential risks due to negotiations required with the developer for both the legal discussions with respect to amalgamation/land ownership, as well as construction. The site is also a concern in terms of the costs to harden/separate the tower from the RCMP detachment. As a result, this option was determined to present too many challenges to overcome in a timely manner.

Pros:

- Combined site is more feasible than the two individual sites, meets minimum RCMP lot size
- Prominent location on arterial road
- Close to City Hall and other services
- No disruption to current CPO during construction
- Current CPO could be re-purposed post-const.

Cons:

- Row may be required bisecting site
- B-2 site not owned by City
- Site unlikely to meet City timelines
- Cost and security concerns developing RCMP co-located with residential or commercial tower
- City staff, daycare, BCEHS would be displaced

ADDRESS

12089 Harris Road, Pitt Meadows

PROPOSED DEVELOPMENT

New Construction

Ground Floor: 1,023sm
Second Floor: 340sm
Total Floor Area: 1,363sm

Lot Area: 4,035sm

Legend:

- Property Line
- Required Setback

CURRENT USE

Proposed development site is composed of two sites:

- Annex which currently houses City staff, a daycare, and BC Emergency Health Services (BCEHS)
- Vacant lot owned by developer directly to the north

4. Concept Design Options Cont'd

a. High Level Review Options

Option D

North Lougheed Site



ZONING + SITE

A1 - Agricultural - General Agricultural—likely to be rezoned

Flood Hazard Zone

ALR Land

Potential archeological findings in area

COMMENTS

This site was excluded primarily due to timeline. There is a long range plan to develop this area but it will likely be executed after the anticipated construction start date for the new detachment. The site would also require coordination with the various developers of the site, adding to schedule risks. Additionally, potential archeological factors could affect timeline and cost.

Pros:

- No services displaced
- Ample space to allow for 3:1 site size and minimum frontages recommended by RCMP
- Adjacent to arterial road
- Could be entirely 1 storey building
- No disruption of services to current CPO
- No displacement of other community amenities
- Existing CPO could be re-purposed post-const.

ADDRESS

19499 Lougheed Hwy, Pitt Meadows

PROPOSED DEVELOPMENT

New Construction

Ground Floor: 1,023sm

Second Floor: 340sm

Total Floor Area: 1,363sm

Lot Area: 5,240sm

Legend:

— · · — Potential Site Location

CURRENT USE

Mixed, primarily agricultural land slated for redevelopment

Cons:

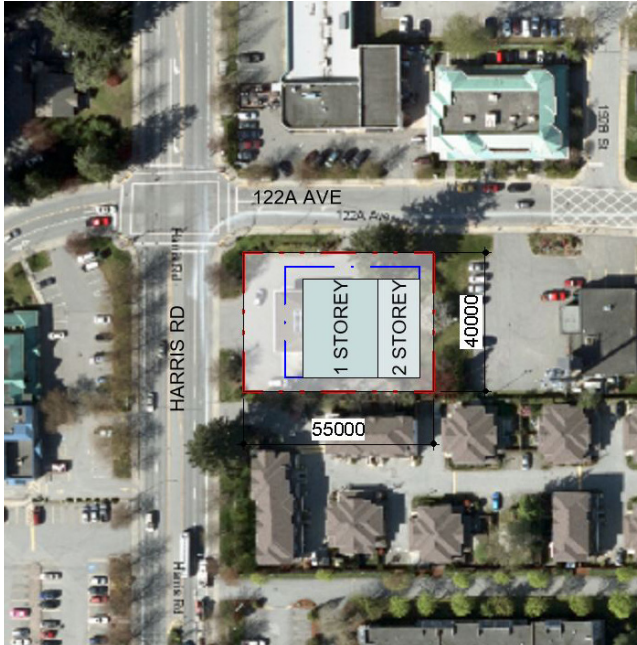
- Remote from other services
- Remote from the population it serves
- In flood hazard zone
- Currently ALR land, although slated for development
- Not currently owned by City
- Project timeline cannot be met with this site
- Potential archeological risks

4. Concept Design Options Cont'd

a. High Level Review Options

Option E-1

Chevron Gas Station Site



ADDRESS

12214 Harris Road, Pitt Meadows

PROPOSED DEVELOPMENT

New Construction

Ground Floor: 1,023sm
Second Floor: 340sm
Total Floor Area: 1,363sm

Lot Area: 2,200sm
Lot Dimensions: 55m x 40m

Legend:

--- Property Line
--- Required Setback

ZONING + SITE

C-5 –Commercial –Gas Station Commercial

CURRENT USE

Gas station

COMMENTS

Site was identified as having too many risks and has been excluded. The proposed development would include demolition of the existing gas station, any required site remediation work, and construction of new detachment with underground parking.

Pros:

- Located on an arterial road
- Not in ALR
- Not in flood hazard zone
- Site is located within city-centre
- No disruption of services to current CPO
- No displacement of other community amenities
- Existing CPO could be re-purposed post-const.

Cons:

- Possibly costly decontamination measures
- Proximity to tracks is a concern for the RCMP both for logistics due to traffic congestion around the level crossing and due to potential impact of a rail disaster
- Site is not owned by City
- Site is extremely small, acquisition of additional adjacent sites likely required in order to fit required RCMP program

4. Concept Design Options Cont'd

a. High Level Review Options

Option F-2

Existing CPO/ Daycare/ Community Centre



ZONING + SITE

P1 – Institutional – Community Assembly

COMMENTS

Renovation of existing CPO and build a new addition to the north. This option was excluded as costs are high to meet post-disaster renovation requirements. An entirely new construction to the north would be a better option for cost and minimal disruption. Cost to relocate daycare is not part of this study but is listed in Section 6 of this report as a potential spin-off project that may result from developing the new detachment on this site.

Pros:

- Site is not in flood hazard zone
- Site is not in ALR
- Site is adjacent to City Hall and other community services
- Site is near an arterial road

Cons:

- Daycare would need to be relocated because it is not permitted adjacent to detachment
- Existing CPO would be displaced during construction, and would be temporarily housed either in portables on site or in a temporary renovation elsewhere
- Disruptive to current CPO, daycare, and Community Centre
- Site is less visible from Harris Road
- Post-disaster renovations are costly
- Parking space loss for Community Centre and City staff

ADDRESS

12079 Harris Road, Pitt Meadows

PROPOSED DEVELOPMENT

Renovation + New Construction

Renovation of CPO: 390sm
 New Addition: 973sm
 New Ground Floor: 633sm
 New Second Floor: 340sm
 Total Building Area: 1,363sm

Lot Area: 2,070sm

Legend:

- Proposed Development Area
- Existing CPO
- Existing Daycare/ Meeting Room

CURRENT USE

Existing CPO + parkade

4. Concept Design Options Cont'd

a. High Level Review Options

Option F-3a

Existing CPO/ Daycare/ Community Centre



ZONING + SITE

P1 – Institutional – Community Assembly

COMMENTS

The proposal is to tear down a wing of the existing Community Centre which houses the current Community Policing Office (CPO) as well as daycare, meeting rooms and fitness centre, and rebuild a now 2 storey detachment on the footprint of the existing CPO wing. The proposed development includes:

- Demolish existing community policing office, meeting room, fitness room, and daycare
- Temporarily relocate community policing during construction
- Permanently relocate daycare because it is not permitted adjacent to RCMP detachment. This cost is not included in this study but could be significant
- Build new 2 storey detachment on footprint for current CPO
- Rebuild 335sqm area to replace Community Centre, public washroom, fitness centre and janitor on west side of new detachment. Replacement Community Centre spaces would be mainly on level 2 accessed from Community Centre lobby and requires an elevator

Pros:

- New construction is more cost effective than renovation
- No need to upgrade or secure the underground parking because the new detachment remains on footprint of existing
- Adjacent to arterial road

Cons:

- Disruptive to existing CPO, cost for temporary portables
- Disruptive to daycare
- Disruptive to Community Centre programming and services

ADDRESS

12079 Harris Road, Pitt Meadows

PROPOSED DEVELOPMENT

New Construction on Footprint of Existing CPO

Ground Floor: 1,078sm
Second Floor: 620sm
Total Floor Area: 1,698sm

Lot Area: 2,650sm

Detachment: 1,363sm
Community Spaces: 335sm

Legend:

- Proposed Development Area
- Existing CPO
- Existing Daycare/ Meeting Room

CURRENT USE

Existing CPO and Community Centre Uses (daycare, fitness facility, meeting rooms)

4. Concept Design Options Cont'd

b. Detailed Review Options

Option A-1

Athletic Park South

ADDRESS

11431 Bonson Road, Pitt Meadows

PROPOSED DEVELOPMENT

New Construction

PROBABLE COST

\$16,285,000

Ground Floor: 1,023sm

Second Floor: 340sm

Total Floor Area: 1,363sm

CURRENT USE

Parking, greenspace, and ball-diamond

Lot Area: 4,940sm

Lot Dimensions: 92m x 53.7m

ZONING + SITE

P1 – Institutional – Community Assembly

Flood Hazard Zone

ALR Land



Option A-1 Continued**PARKING**

- 35 Parking Stalls (24 Secured and Staff Parking Stalls + 11 Non-secured Parking)
- 1 Loading Zone required by RCMP 3x12m

COMMENTS

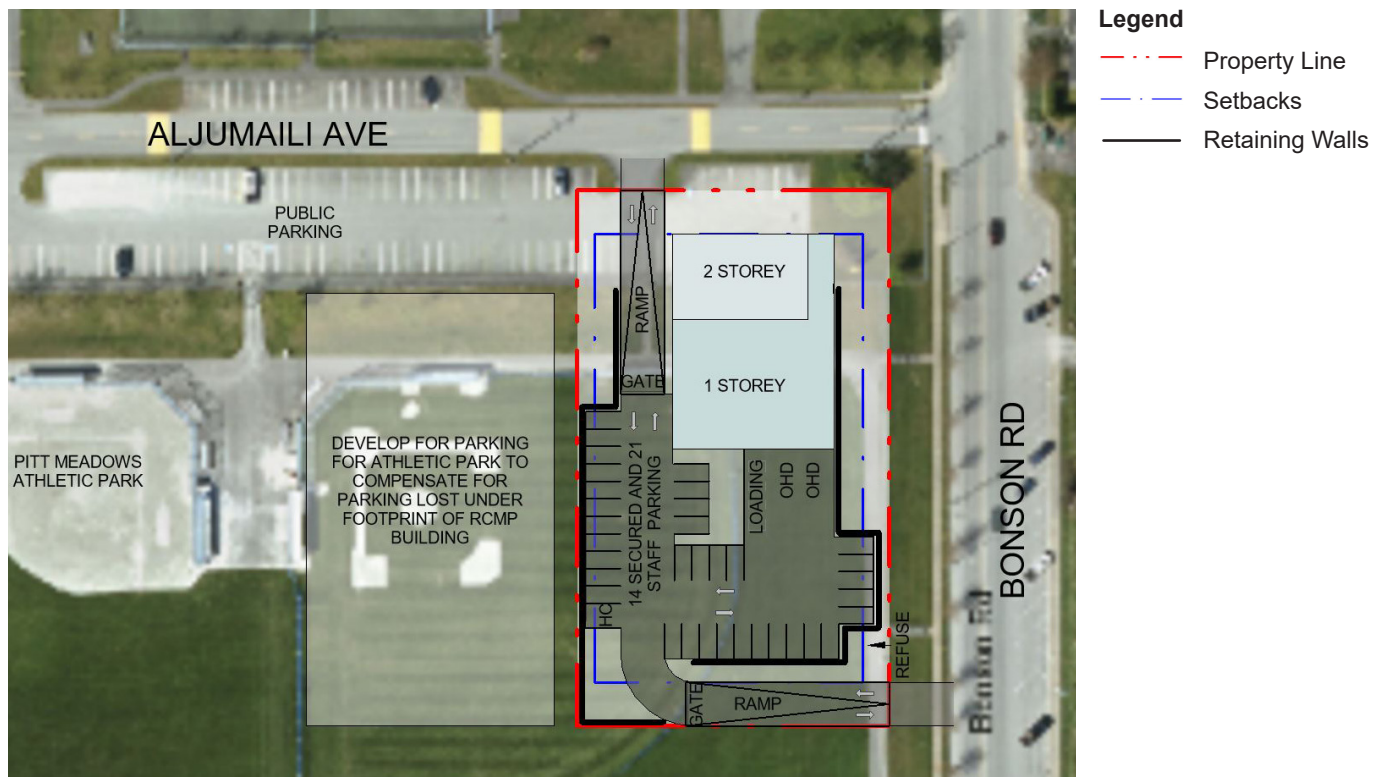
Proposed development for two (2) storey detachment replacing parking spaces and a baseball diamond on south side of Aljumaili Avenue at Bonson Road. The development within the flood hazard zone will require preload as well as fill and ramps to raise the floor to required elevation above flood hazard level.

Pros:

- Site is close to highway and relatively centralized
- No disruption to existing CPO (satellite policing office) during construction
- Site approach is open from all sides which is favourable from a security perspective
- Opportunity for City to re-purpose CPO space for other uses post-construction

Cons:

- Adjacent residential homeowners may raise concerns about impact from sound and 24hr operations
- Site is on ALR land, however, impact to ALR is minimal as lot is not currently used for agriculture
- Site is within the flood hazard zone. Fill is required to raise ground floor to mitigate flood risks
- Ramps and retaining walls will be required as a result of fill and included in construction cost estimate
- One baseball diamond eliminated
- RCMP noted concerns about Bonson Road being in flood hazard zone --further discussion with RCMP is required to determine if road improvements would be required



4. Concept Design Options Cont'd

b. Detailed Review Options

Option A-2

Athletic Park North

ADDRESS

11455 Bonson Road, Pitt Meadows

PROPOSED DEVELOPMENT

New Construction

PROBABLE COST

\$16,751,000

Ground Floor: 1,023sm

Second Floor: 340sm

Total Floor Area: 1,363sm

CURRENT USE

Tennis courts, basketball courts, and caretaker unit

Lot Area: 4,940sm

Lot Dimensions: 92m x 53.7m

ZONING + SITE

P1 – Institutional – Community Assembly



Option A-2 Continued**PARKING**

- 35 Parking Stalls (14 Secured Parking Stalls + 21 Staff Parking)
- 1 Loading Zone required by RCMP 3x12m
- 5 Public Parking Stalls

COMMENTS

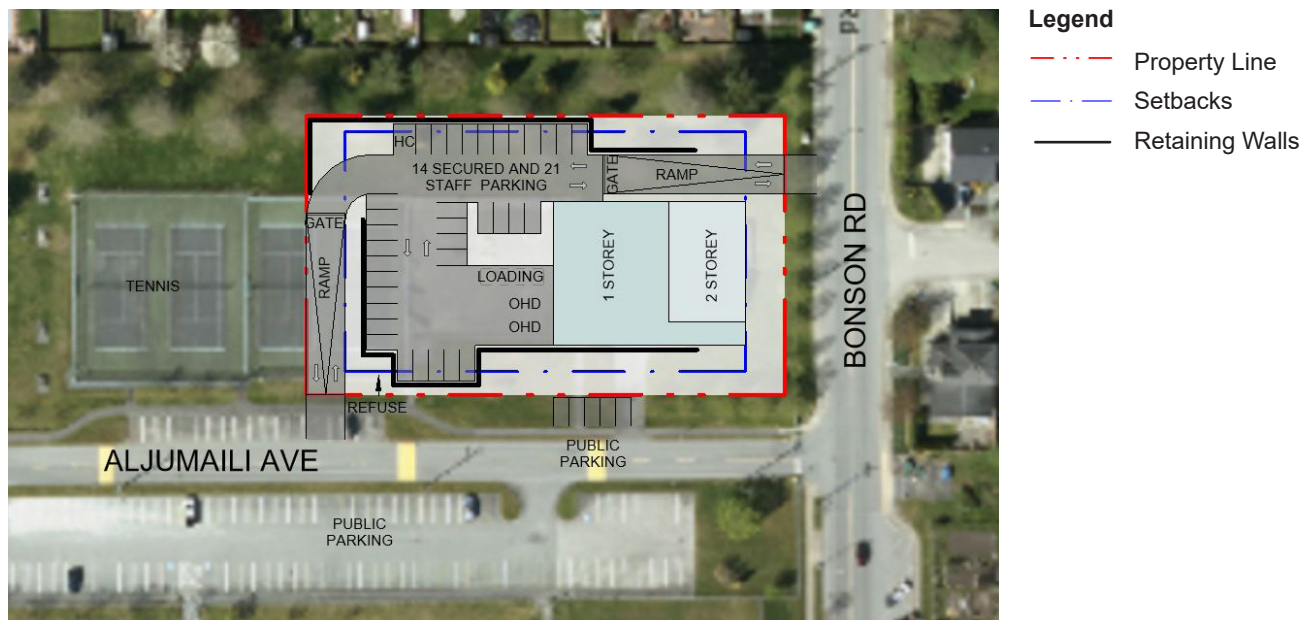
Proposed development for two (2) storey detachment on north side of Aljumaili Avenue at Bonson Road on the current site of caretakers unit, tennis courts, and basketball courts. The caretakers unit, two (2) tennis courts, and two (2) basketball courts would be demolished, with two tennis courts retained. Proposed site is in the flood hazard zone. Preload, fill, and ramps would be required but to a lesser degree than site A-1.

Pros:

- Site appears to be sufficiently sized for the detachment and parking
- Orientation to south is good for daylight and solar controls
- Site is adjacent to but not on ALR land. No impact to ALR.
- Site is fairly central, and is close to the highway
- Minimal impact to existing satellite CPO during construction
- Opportunity for City to re-purpose existing CPO space for other uses post-construction

Cons:

- Site is adjacent to residential land uses and homeowners may experience some impact such as sound, light, ingress, or increased activity at night from 24hr operations. Public path provides some buffer between the two uses
- Site is within the flood hazard zone. Fill and preload is required to mitigate flood risks
- Ramps and retaining walls will be required and will increase costs
- Site is outside City Centre
- Raising Bonson Road above the flood hazard level may need to be considered, adding cost
- Relocation of caretaker unit adds costs



4. Concept Design Options Cont'd

b. Detailed Review Options

Option B-1
Demolish and Build at Annex Site

ADDRESS
12047 Harris Road, Pitt Meadows

PROBABLE COST
\$16,815,000

CURRENT USE
City Hall Annex building, housing City staff offices, daycare, and BCEHS office

ZONING + SITE
P1 – Institutional – Community Assembly

PROPOSED DEVELOPMENT
New Construction

Ground Floor:	1,023sm
Second Floor:	340sm
Underground	
Parking:	2,500sm
Total Floor Area:	3,863sm
Lot Area:	2,500sm
Lot Dimensions:	57.5m x 43.5m



Option B-1 Continued

PARKING

- 35 Parking Stalls (14 Secured Parking Stalls + 21 Staff Parking)
- 1 Loading Zone required by RCMP 3x12m
- All parking is provided underground or on the street
- Underground parking layout is tight—two levels of underground parking may be required
- Public parking will be on the street, however, impact to public parking is neutral due to fleet vehicle stalls for existing satellite policing centre being reallocated to public parking

COMMENTS

Proposed development includes:

- Demolition of existing Annex Building
- Construction of 2,500sm underground parking
- Construction of new 1,363sm two-storey detachment
- Existing satellite Community Policing Office (CPO) can be re-purposed after new detachment is built. The space vacated CPO could be used by one of the displaced occupants from Annex Building, such as City Hall staff, daycare, or BCEHS office

Pros:

- No displacement or interruption to CPO operations during construction
- Location is central to the population it serves and is outside the ALR and flood hazard zone
- Located on arterial road and adjacent to other services
- Opportunity for City to re-purpose CPO for other uses post-construction

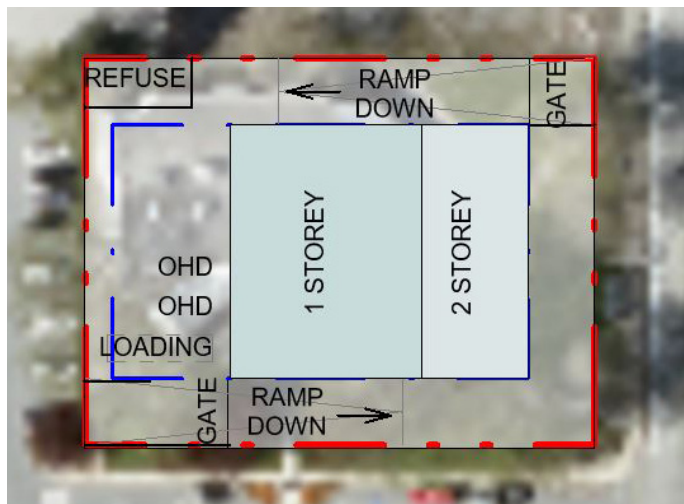
Cons:

- Site is small, however, there is the potential to reorientate the access roads surrounding Annex and City Hall to fit a larger lot. This would add project cost and schedule.
- Underground parking is required for this site resulting in increased cost to develop this site.
- Daycare, BCEHS office, and City Staff currently housed in Annex Building will be displaced
- Developing this site may spur additional projects such as city staff offices or daycare. Costs of potential spin-off projects are summarized in Section 6 of this report.

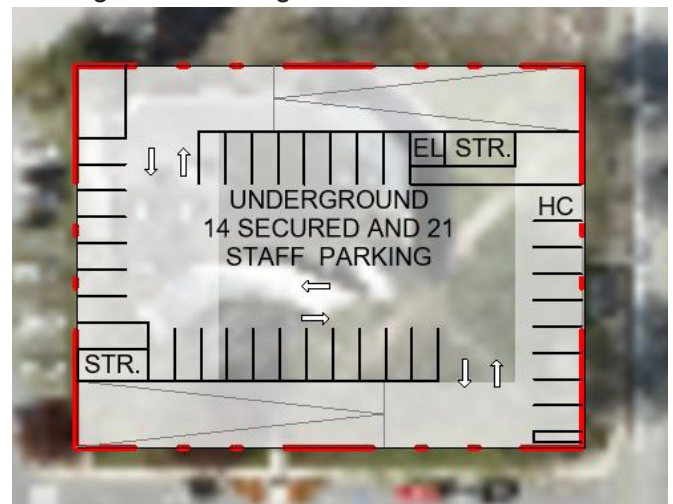
Legend

- Property Line
- Setbacks

Above Grade



Underground Parking



4. Concept Design Options Cont'd

b. Detailed Review Options

Option C
Amenity Lands, Airport Road

ADDRESS
19265 Airport Way, Pitt Meadows

PROBABLE COST
\$16,390,000

CURRENT USE
Industrial

ZONING + SITE
I-3 Industrial: Light Industrial Business Park

PROPOSED DEVELOPMENT
New Construction

Ground Floor:	1,023sm
Second Floor:	340sm
Total Floor Area:	1,363sm
Lot Area:	5,000sm
Lot Dimensions:	50m x 100m



Option C Continued**PARKING**

- 35 Parking Stalls (14 Secured Parking Stalls + 21 Staff Parking)
- 1 Loading Zone required by RCMP 3x12m
- 5 Public Parking Stalls

COMMENTS

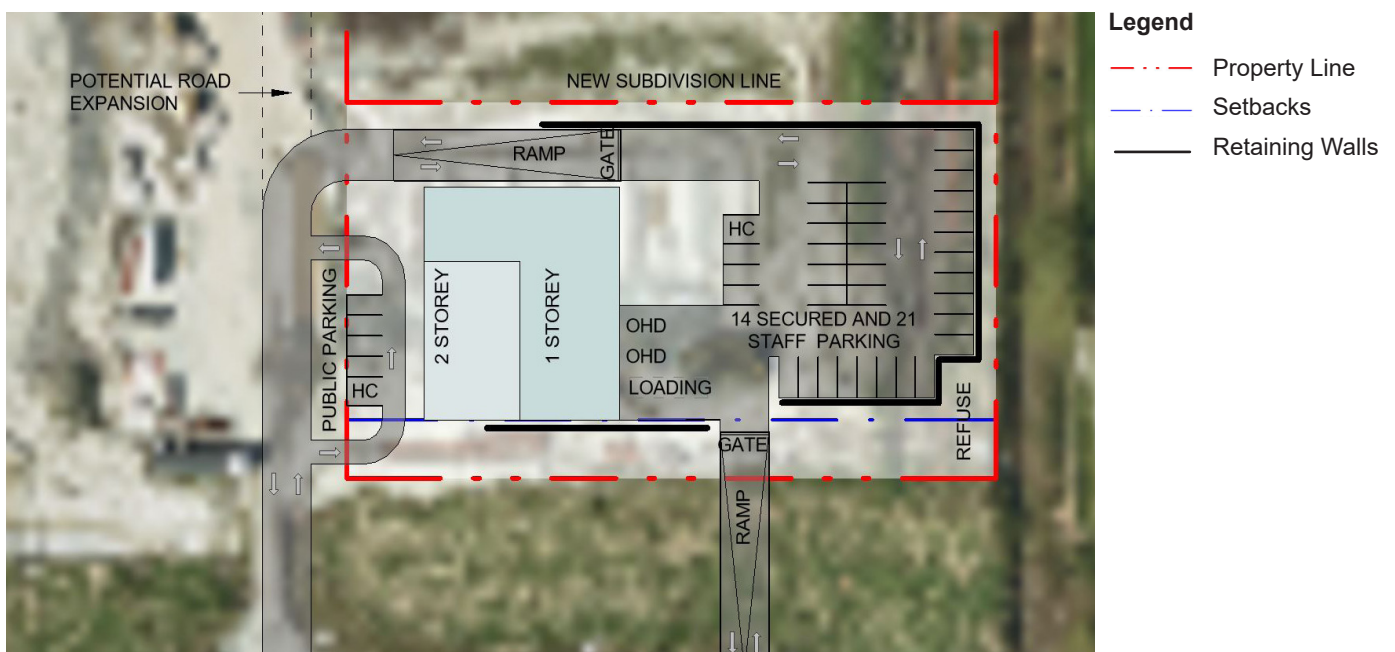
Proposed development includes initial preload and fill, extend utilities to site, construction of new detachment and parking. Possible road extensions TBD.

Pros:

- No impact to neighbours, or community services (adjacent but not on ALR land)
- Satellite Community Policing Centre would not be disrupted during construction
- Lot is larger than required --can be subdivided and a portion retained for public amenity or other use
- Site is located further away from residential land uses, reducing impacts such as sound, light, ingress, or increased activity at night from 24hr operations
- Opportunities with respect to layout, single-storey detachment is possible using more of the site

Cons:

- This site is fairly remote to the population it serves --RCMP confirmed it can still be considered
- Cost of structural preload is significant for this site
- Located within flood hazard zone;
- The structural preload will add additional construction costs. This is captured in the cost estimate
- Not a corner lot – a second road would need to be added if a corner lot is imperative for the RCMP. This cost would be significant and is not included in the current estimated construction value.
- Road access via Airport Way remains in flood hazard zone; road flooding is a concern for RCMP



4. Concept Design Options Cont'd

b. Detailed Review Options

Option E-2

Art Gallery/ Athletic Building

ADDRESS

12484 Harris Road, Pitt Meadows

PROPOSED DEVELOPMENT

New Construction

PROBABLE COST

\$12,639,000

Ground Floor: 1,023sm
Second Floor: 340sm
Total Floor Area: 1,363sm

CURRENT USE

Art gallery, parking, and Athletic Building

Lot Area: 2,275sm
Lot Dimensions: 65m x 35m

ZONING + SITE

C-3 – Commercial
Community Commercial



Option E-2 Continued**PARKING**

- 35 Parking Stalls (16 Secured Parking Stalls + 19 Non-secured Parking)
- 1 Loading Zone required by RCMP 3x12m
- At grade parking can be accommodated on this site by using 780sm of area from the adjacent public parking. Adjacent lot can be reconfigured to maintain same number of stalls.

COMMENT

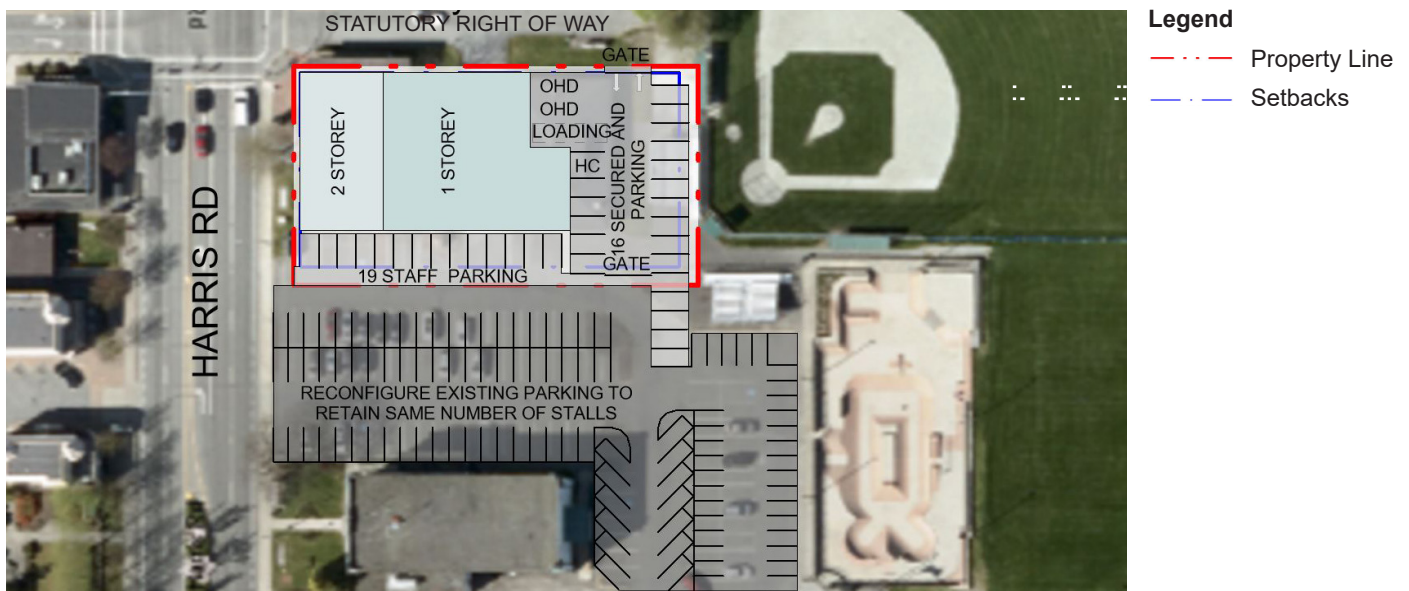
Proposed development includes the demolition or relocation of existing art gallery structure, demolition of the existing boarded up athletics building, and construction of two-storey detachment with at grade parking.

Pros:

- Location is central to the population it serves
- On arterial road
- Not located in flood hazard zone nor on ALR land
- Current satellite Community Policing Office would not be disrupted during construction
- This option offers the least amount of disruption to police and other community services:
 - a) existing daycares can remain as they are
 - b) existing satellite policing office can remain operational during construction; and
 - c) current CPO could be re-purposed for the art gallery; therefore, no community services displaced
 - d) there may be sufficient space for other uses in re-purposed CPO in addition to the art gallery

Cons:

- RCMP noted a preference to locate detachment south of tracks. Future underpass planned for level crossing at Harris Road will alleviate some concerns; quick access to South side of City also available via Lougheed Hwy and Golden Ears Way
- Costs associated with replacing Harris Park washroom, and with demolishing athletic building
- Bleachers on west side of diamond impacted
- Decommissioned athletic building houses some storage which will require accommodation elsewhere
- Cost of temporary or permanent relocation of the Art Gallery is excluded from the RCMP project probable costs but an estimate of gallery relocation costs is included on page 47 of this report



4. Concept Design Options Cont'd

b. Detailed Review Options

Option F-1

Existing CPO/ Daycare/ Community Centre

ADDRESS

12079 Harris Road, Pitt Meadows

PROPOSED DEVELOPMENT

Renovation + New Construction

PROBABLE COST

\$15,581,000

Ground Floor Renovation

(390sm existing CPO + 30sm meeting room + 200sm daycare): 620sm

CURRENT USE

Existing CPO, daycare, and public parking

Two Storey Addition: 744sm
(372sm on each floor)

Total Floor Area: 1,364sm
Plus seismic upgrade to existing parkade

ZONING + SITE

P1 – Institutional – Community Assembly

Development / Lot Area: 2,600sm



Option F-1 Continued

PARKING

- Secure parking is required below the building footprint –RCMP does not want public parking below the building for security reasons
- Renovation to underground parking
- 18 secure staff parking underground
- 14 secure RCMP and 3 staff parking at grade
- 10 additional non-secured parking at grade
- Street parking for current RCMP satellite office fleet vehicles will be returned to public parking for the Community Centre and surrounding municipal buildings

COMMENTS

Proposed development includes:

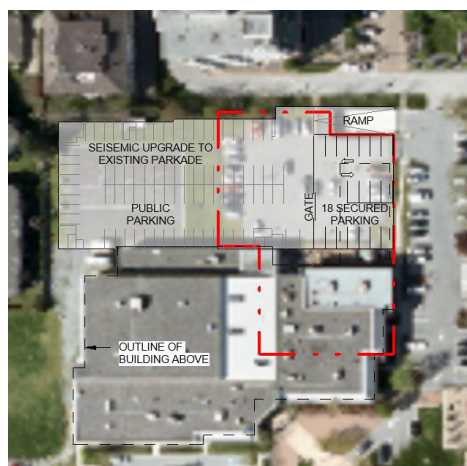
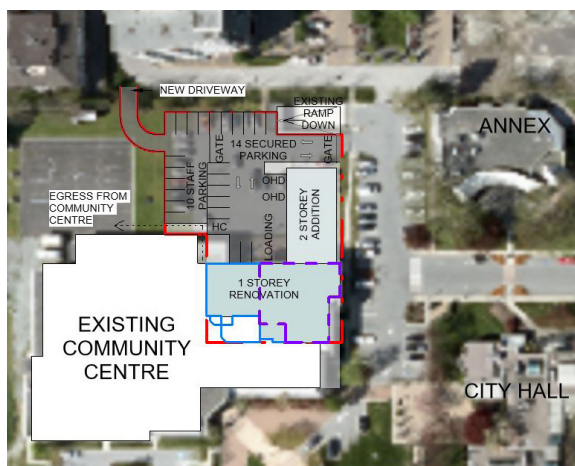
- Temporary portables to house existing CPO during construction
- Renovation to current 1 storey CPO
- Area of adjacent daycare and meeting rooms renovated and incorporated into new detachment
- Two storey addition added over parking structure to North
- Seismic upgrade to existing parking structure. The parkade was designed to allow a future structure to be build above. However, a police detachment will require additional seismic and mechanical upgrades to meet post-disaster requirements in the Building Code.

Pros:

- Site is centrally located and not in a flood hazard zone, nor in ALR
- Adjacent to arterial road

Cons:

- Daycare will need to be relocated because it is not permitted adjacent to detachment for security reasons
- Seismic upgrade to parkade required
- New second ramp to enter and exit parkade roof will be required (RCMP requires to means of entry/egress)
- Renovation will have significant impact to Community Centre during construction
- Satellite Community Policing Centre will need to be temporarily relocated
- Building will require significant Structural upgrades for post-disaster construction
- Building will require significant wall assembly changes to separate detention and/or office occupancies from the Community Centre
- Mechanical and Electrical upgrades will be required for post-disaster and for RCMP needs–new separate service connections required



Legend

- Proposed Development
- Existing CPO
- Existing Daycare and Meeting Room

4. Concept Design Options Cont'd

b. Detailed Review Options

Option F-3b
Existing CPO/ Daycare/ Community Centre

ADDRESS	PROPOSED DEVELOPMENT	
12079 Harris Road, Pitt Meadows	New Construction	
PROBABLE COST	Ground Floor:	1,023sm
\$14,361,000	Second Floor:	340sm
	Total Floor Area:	1,363sm
CURRENT USE	Development / Lot Area:	2,880sm
Parking		
ZONING + SITE		
P1 – Institutional – Community Assembly		



Option F-3b Continued**PARKING**

- Secure parking is required below the building footprint –RCMP does not want public parking below the building for security reasons
- Renovation to underground parking
- 14 at grade secure parking on parkade roof
- 5 at grade public parking on parkade roof
- Second driveway required for parkade roof to meet RCMP security requirements
- Re-purpose existing RCMP fleet parking for Community Centre street parking
- New Community Centre parking developed west of Community Centre

COMMENTS

Proposed development includes:

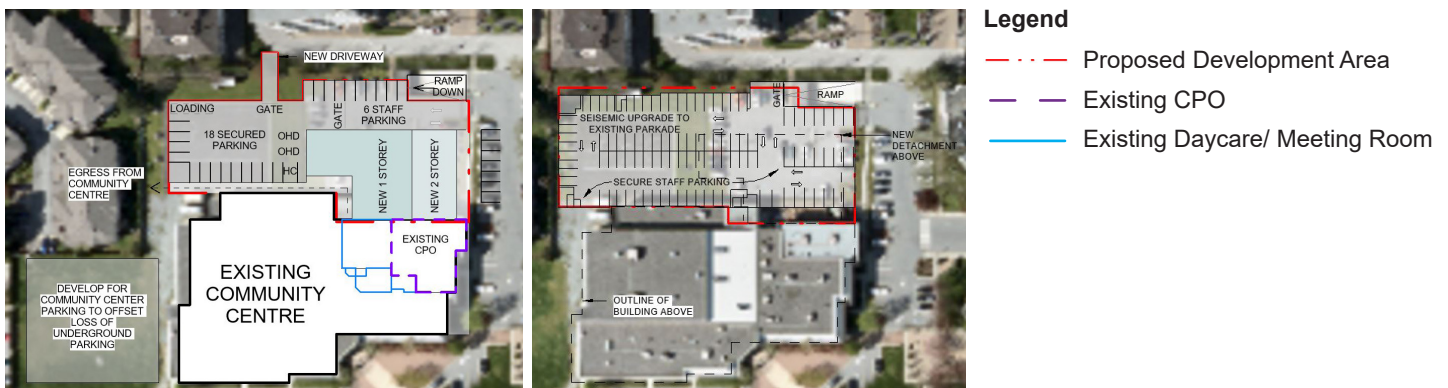
- Seismic upgrade to existing parkade to post-disaster construction code requirements
- Secure underground parking below new structure to meet RCMP requirements
- Build new 2 storey structure over existing parkade
- Existing CPO remains operational during construction and can be re-purposed for other uses after completion of the new detachment
- Daycare will need to be relocated (not included in project probable cost)

Pros:

- Satellite Community Policing Centre can remain operational with minimal or no disruption during construction
- Existing satellite Community Policing Office area can be re-purposed for community/municipal use after occupancy of new detachment
- Site is near an arterial road, centrally located, and not in a flood hazard zone, nor in ALR
- Existing parkade design allows new structure to be built on top

Cons:

- Daycare will need to be relocated as it is not permitted adjacent to detachment for security reasons
- Seismic upgrade to parkade required
- Egress path required to be kept open from north-east corner of Community Centre limiting extent of security fence on top of parkade
- Community Centre parking will be impacted but will gain the former daycare space for other community use
- Basketball Courts will be lost in order to provide additional parking



4. Concept Design Options Cont'd

c. Status Quo

Status Quo

This option represents leaving the existing satellite Community Police Office (CPO) in its current form, retaining the integrated police services with Maple Ridge out of the Ridge Meadows Detachment while trying to address concerns raised by CPM. The retention of the status quo is unlikely to meet the intent and goals of the City of Pitt Meadows as much of the day-to-day policing for Pitt Meadows will continue to be done from Ridge Meadows. Unfortunately, the existing satellite Community Policing Office in Pitt Meadows does not have sufficient space nor the required facilities to accommodate a full range of functions required of a detachment. Detention, detainee processing, record keeping, and many other services would continue to be delivered from facilities outside Pitt Meadows.



Ridge Meadows Joint Detachment for Pitt Meadows and Maple Ridge.



Pitt Meadows Community Policing Office.

5. Options Evaluation

Below is an Evaluation from the Building and Site point of view, notwithstanding the budget and funding.

a. Development Goals and Priorities

The Evaluating Criteria used below are based on the RCMP design standards as well as technical (Architectural, Seismic, Structural, Mechanical and Electrical) requirements, and the evaluation criteria identified by the City at the onset of the study.

The options in Section 4a that were reviewed on a high level were excluded from further, more detailed review as they did not meet enough of the above stated requirements to justify further evaluation.

b. Functionality

The RCMP provided numerous criteria for evaluating the sites as shown in the table below.

The following table depicts the evaluation of the Detailed Reviewed Options as either meeting (✓) or not meeting (x) the criteria for evaluation. Options that were reviewed only at a high level before being excluded from the detailed review are indicated with a dash.

Building and Site Evaluation													
	A-1	A-2	B-1	B-2	B-3	C	D	E-1	E-2	F-1	F-2	F-3a	F-3b
<i>RCMP Criteria</i>													
53m Frontage	✓	✓	✓	–	–	✓	–	–	✓	x	–	–	x
35m Depth	x	✓	✓	–	–	✓	–	–	✓	x	–	–	x
Corner Lot	✓	✓	✓	–	–	x ³	–	–	x ⁴	x	–	–	x
2 Points of Egress	✓	✓	✓	–	–	✓	–	–	✓	x	–	–	✓
On Arterial Road	x ²	x ²	✓	–	–	✓	–	–	✓	✓	–	–	✓
3:1 Site Ratio (4,050sm) ¹	✓	✓	x	–	–	✓	–	–	x	x	–	–	x
Site > 600m from Tracks	✓	✓	x	–	–	✓	–	–	x	✓	–	–	✓
Surface Parking	✓	✓	x	–	–	✓	–	–	✓	✓	–	–	✓
No Disruption to Operation	✓	✓	✓	–	–	✓	–	–	✓	x	–	–	✓
Avoid Flood Plane	x	x	✓	–	–	x	–	–	✓	✓	–	–	✓
Near Population	x	x	✓	–	–	x	–	–	✓	✓	–	–	✓
South Side of Tracks	✓	✓	✓	–	–	✓	–	–	x	✓	–	–	✓

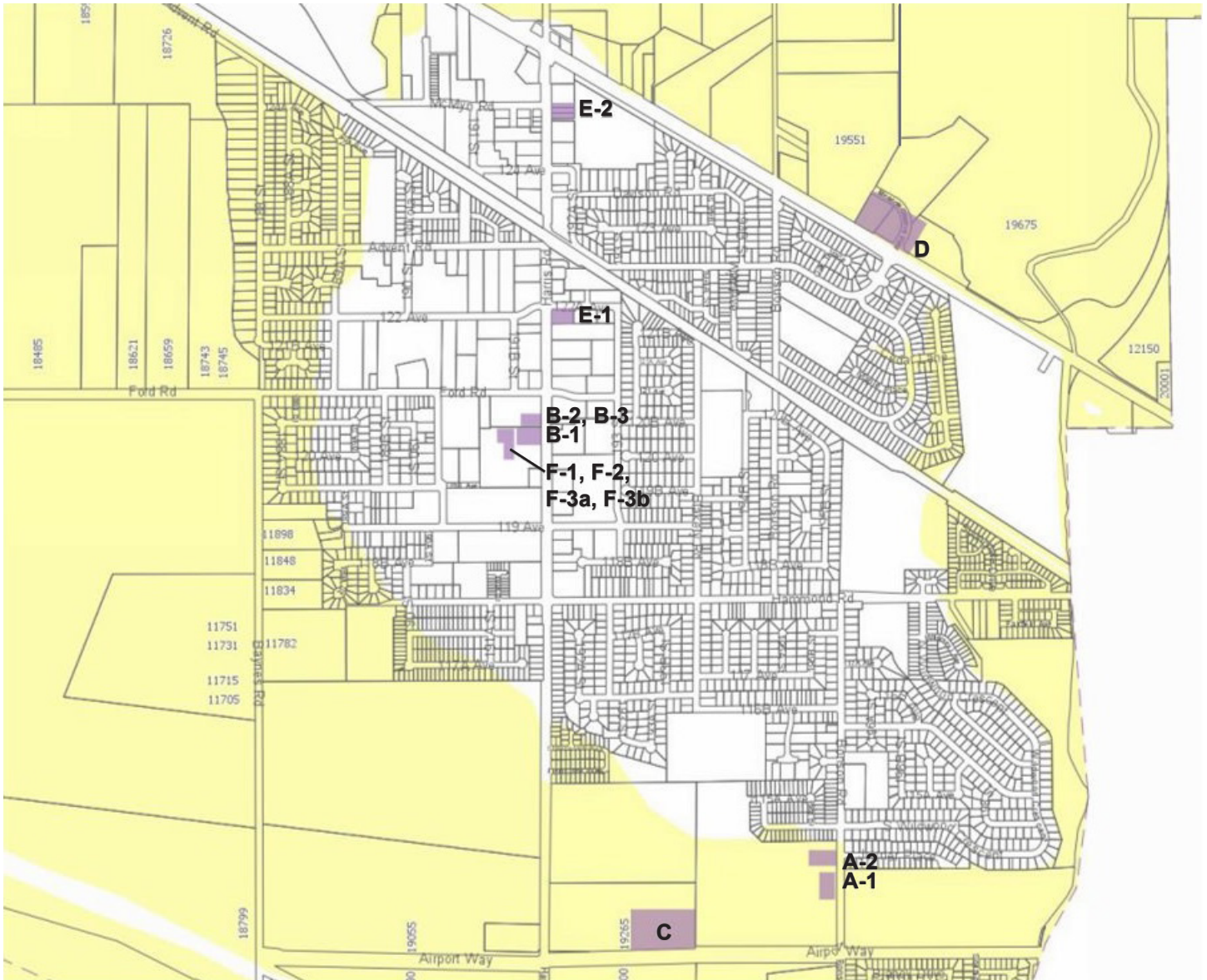
Notes:

1. 4,050sm minimum site area is based on RCMP standard of 3:1 site-to-building ratio and an assumption of 1,363sm gross building area
2. Bonson Road is a collector road and not technically designated as an arterial road.
3. Location C can be converted to a corner lot, but there would be significant additional cost to develop new road on west side of site.
4. North of E-2 there is a Statutory Right of Way that is associated with the privately owned property to the north. The ROW is an extension of McMyn Road but is not technically a municipal road. Further review of ROWs around this site is required by the City to confirm the proposed driveway to the north can exit onto the ROW.

Building and Site Evaluation													
	A-1	A-2	B-1	B-2	B-3	C	D	E-1	E-2	F-1	F-2	F-3a	F-3b
35 At Grade Parking Stalls	✓	✓	x	x	✓	✓	✓	x	✓	✓	✓	✓	✓

5. Options Evaluation Cont'd

Figure 1: Flood Hazard Map



Credit: "Meadows Mapview," City of Pitt Meadows interactive mapping site, Dec 1, 2020 (www3.pittmeadows.bc.ca/map/)

Notes:

- Options C, A-1, and A-2 are within the floodplain, however, the sites are either in the process of being filled (Option C) or will be filled (Option A-1, A-2) if selected. The costs of fill have been included in the cost estimate.

- Reviewed Sites
- Flood Hazard Zone

5. Options Evaluation Cont'd

Building and Site Evaluation													
	A-1	A-2	B-1	B-2	B-3	C	D	E-1	E-2	F-1	F-2	F-3a	F-3b
<i>City Criteria</i>													
City Owned Land	✓	✓	✓	✗	✓	✓	✗	✗	✓	✓	✓	✓	✓
Impact on ALR	M ¹	L	None	-	-	L ²	-	-	None	None	-	-	None
Impact on Other Facilities	L	L	M ³	-	-	L	-	-	L ⁴	M-H ⁵	-	-	M ⁶
Adequate Size if Sloped	✓	✓	✓	-	-	✓ ⁷	-	-	✓	✗	-	-	✓

H=High, M=Medium, L=Low

Notes:

1. Site A-1 and part of A-2 are on ALR land, however, the site is not currently used for agriculture and the majority of the site and surroundings has been developed for community recreation purposes. Therefore it's questionable whether developing this corner of the site would have any real impact on the ALR given the current site use. If the Municipality chooses to develop site A-1 or A-2 for the new RCMP Detachment, they could consider allocating another equal sized parcel to the ALR to compensate. The net impact on the ALR would thus be positive as other sites, not surrounded by residential and recreational uses, may be more conducive to agricultural use.
2. Site is adjacent to ALR land according to the municipality's interactive mapping website. However, the adjacent ALR site is amenity lands and has been developed for community recreation purposes and is not currently being used for agriculture. Impact of this site on ALR is therefore minimal or nil.
3. Daycare, BCEHS, and City Staff would need to be relocated.
4. Some parking from adjacent site would be used.
5. Daycare would need to be relocated. Community Centre and parking for Community Centre would be impacted.
6. Daycare would need to be relocated and parking for Community Centre would be impacted.
7. Size of development has been assumed to be increased to allow sloped driveways up to flood plain fill level.

Risk Evaluation													
	A-1	A-2	B-1	B-2	B-3	C	D	E-1	E-2	F-1	F-2	F-3a	F-3b
<i>Risk</i>													
Time Risk	L	L	L	-	-	H	-	-	L	H	-	-	H
Construction Schedule	L	L	L	-	-	H	-	-	L	H	-	-	H
Ability to Use or Lease Existing CPO Post-Construction	✓	✓	✗ ¹	-	-	✓	-	-	✓	✗	-	-	✓

H=High, M=Medium, L=Low

Note:

1. More services are displaced than area made available in existing CPO post-construction.

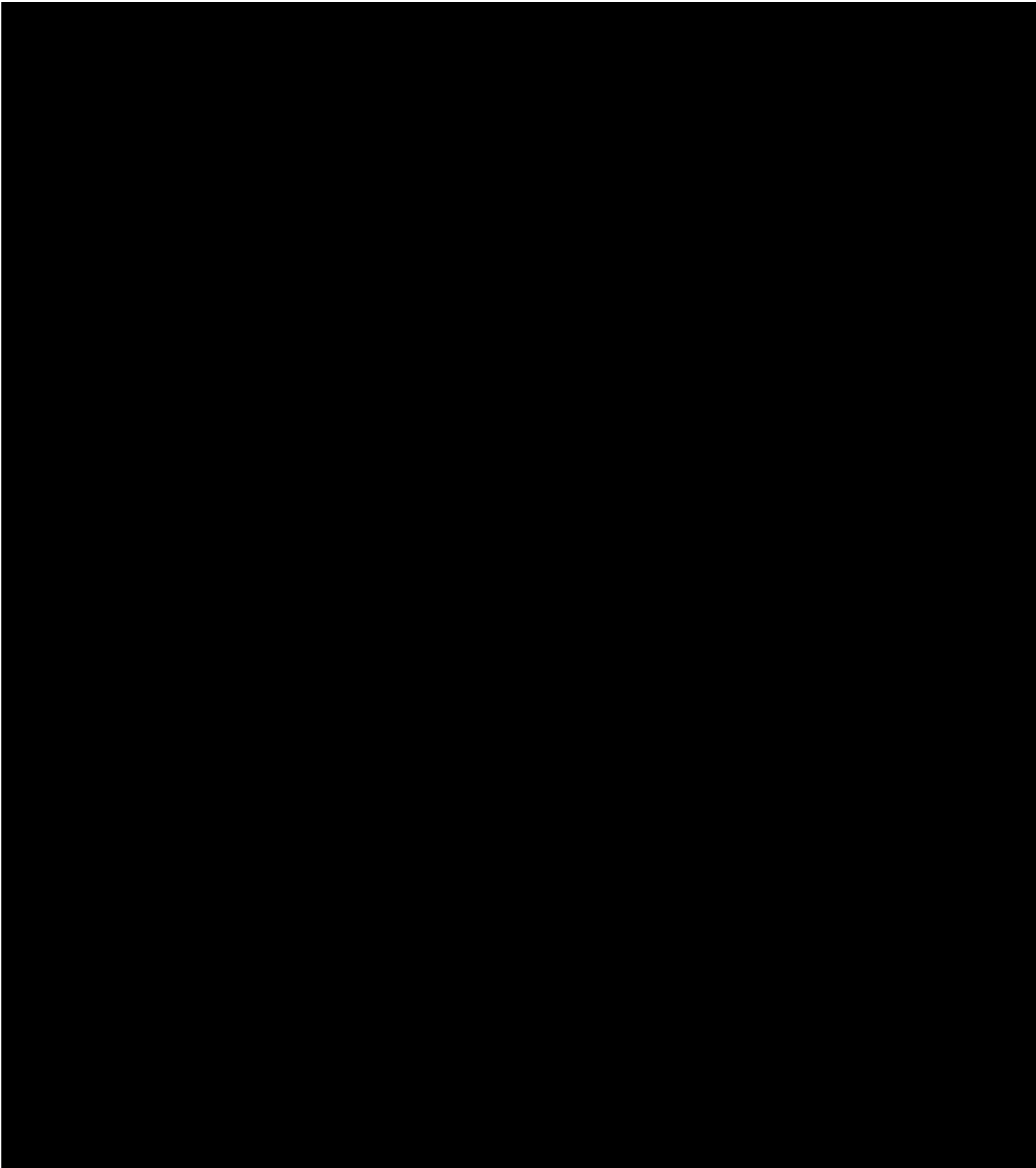
5. Options Evaluation Cont'd

Figure 2: ALR Map



Credit: "Meadows Mapview," City of Pitt Meadows interactive mapping site, Dec 1, 2020 (www3.pittmeadows.bc.ca/map/)

- Reviewed Sites
- ALR Land



6. Preliminary Budget Estimates for Examined Options

a. Capital Costs

A preliminary cost estimate based on unit rates is shown below. Refer to Appendix C for the Detailed Cost Report.

ESTIMATE CONSTRUCTION COST VALUE (EXCL GST) (Values rounded to closest thousand \$)							
	Option A-1	Option A-2	Option B-1	Option C	Option E-2	Option F-1	Option F-3b
	Athletic Park South	Athletic Park North	Annex	Amenity Lands	Art Gallery/ Athletic Building	Reno and Addition to Existing CPO/ Daycare/ Community Center	New Construction Adjacent to Existing CPO/ Daycare/ Community Center
Hard Cost	\$12,811,000	\$13,214,000	\$13,254,000	\$12,872,000	\$9,557,000	\$11,950,000	\$11,103,000
Soft Cost	\$2,004,000	\$2,059,000	\$2,103,000	\$1,942,000	\$1,564,000	\$2,211,000	\$1,823,000
Permits	\$220,000	\$228,000	\$208,000	\$326,000	\$268,000	\$170,000	\$185,000
Equipment	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000
TOTAL	\$16,285,000	\$16,751,000	\$16,815,000	\$16,390,000	\$12,639,000	\$15,581,000	\$14,361,000

Notes:

1. 5% construction contingencies are included in the cost/m², Total project contingencies are not included.
2. This is a high level cost estimate. All costs are +/- 20%.
3. All cost estimates are subject to a 10% escalation by 2022.
4. Areas used in the calculations are approximate.
5. Relocation/Leasing cost is an estimate only.



Based on preliminary estimates by the Quantity Surveyor, the recommended site E-2 is approximately \$1.72 million less than the next most cost effective option; a similar \$1.67 million difference remains even when considering potential additional projects associated with each site selection (see next page).

6. Preliminary Budget Estimates for Examined Options Cont'd

The displacement of community services in the various options may result in the need for the City to take on additional Capital projects. These projects are outside the scope of this study. However, the table below provides some information of potential offshoot projects and very rough estimates of overall cost.

ADDITIONAL PROJECTS THAT MAY ARISE AS A RESULT OF NEW DETACHMENT (Values rounded to closest thousand \$)							
	Option A-1 Athletic Park South	Option A-2 Athletic Park North	Option B-1 Annex	Option C Amenity Lands	Option E-2 Art Gallery/ Athletic Building	Option F-1 Reno and Addition to Existing CPO/ Daycare/ Community Center	Option F-3b New Construction Adjacent to Existing CPO/ Daycare/ Community Center
Description: Potential Additional Offshoot Projects Outside of the Scope and Budget for the new RCMP Detachment	One ball diamond eliminated. Public parking could be developed west of new detachment to compensate for displaced parking.	Replace 166sm caretakers suite and replace x2 outdoor tennis courts (1200sm) and x1 basketball court (830sm).	New or temporary 110sm daycare facility and new 720sm offices for city staff. It is assumed that BCHS will find and fund TI for new 61sm space.	New road may be required running north-south on west side of site. RCMP to confirm.	Temporarily and permanently relocate art gallery building. Option 1 is a +/-60sm TI in another building, option 2 is to relocate the existing +/-60sm structure to another location. New 50 sm field washrooms if required.	New +/-230sm daycare. Note: Cost of temporary portable rentals for existing CPO during construction is included above in detachment project cost estimate.	New +/-230sm daycare and replacement Community Centre parking southwest of Community Centre.
Potential Cost: Tenant Improvement (TI)	—	—	\$2,100,000 (\$600,000 Daycare TI + \$1,500,000 Offices TI)	—	\$250,000 Art Gallery TI or \$150,000 to relocate structure	\$1,200,000 Daycare TI	\$1,200,000 Daycare TI
Potential Cost: New Build	\$250,000 Parking	\$1,450,000 (\$700,000 Caretakers Unit + \$750,000 tennis and basketball courts)	\$4,300,000 (\$1,200,000 Daycare NB + \$3,100,000 Offices NB)	\$1,000,000 to \$4,800,000 (\$600/m2)	\$1,400,000 (\$650,000 Art Gallery NB + \$750,000 Washrooms NB)	\$2,500,000 Daycare NB	\$2,750,000 (\$2,500,000 Daycare NB + \$250,000 Parking)

Notes:

- These are rough order of magnitude construction cost estimates. Further study of these potential additional projects is required for an accurate understanding of potential scope, timelines, and costs of any offshoot projects.
- The CPM is not required to provide alternate space for all of the displaced tenants/services. Lease agreements for both daycares and the BCEHS office have expired and the design team is advised that the City is not contractually obligated to find or build new facilities for those tenants. However, in the case of the daycares, the CPM may have other motivations to provide replacement facilities.
- CPM will need to determine what their needs are in terms of the replacement/relocation of City Staff, Art Gallery, field washrooms, athletic park caretakers unit, and sport courts.
- Options A-1, A-2, C, and E-2 all have the potential to be income generating in the long-run, as the existing CPO space can be made available post-construction and can be used as a tenancy revenue generating space if desired.
- Estimate for new road in Option C is based on a rough budget of \$600/m2. Road length and width requirements TBD by CPM in conjunction with RCMP. The minimum cost is a rough estimate is for dead-end road connecting south only to Airport Way. The larger estimate is for a through-road connecting to both Airport Way at the south and to Harris Road at the north-west.
- Examination of Art Gallery structure is required to determine if relocating the structure is feasible.
- Land acquisition costs excluded.

6. Preliminary Budget Estimates for Examined Options Cont'd

b. Procurement

Based on the preferred option location, nature of site and current market conditions, it is recommended to use a Design-Bid-Build procurement method.

c. Market Status

The construction sector continues to remain busy. Although there has in 2020 been less overheating than was experienced in previous years it still remains a significant factor due to the increasing number of different types of institutional projects anticipated to be coming to the market in 2021 and beyond. This, we believe, will maintain escalation at 4-6% for at least the coming year.

Shortages of skilled trades that normally work on complex institutional projects has remained and the stress on skilled labour costs has continued and will continue for the foreseeable future resulting in higher costs. Demand for construction services in the private sector, especially the high rise condominium market in the Lower Mainland, initially reduced, but subsequently increased and will continue this way for at least the next 12 to 24 months.

NAFTA and trade tariff issues have, for the present, been resolved.

A number of school projects have tendered in the recent past. From these tender results it appears that medium sized general contractors from Alberta have entered that part of the market and caused some stabilization in prices. The Covid-19 pandemic is a once in a generation issue that no one was able to foresee and the effects are very difficult to project. The short term effect has been to create shortages of materials for construction projects, and to reduce the number of workers allowed on construction sites, while adding the

requirements for social distancing, cleansing and special safety measures that are required by the Public Health authorities. However, the anticipated significant layoffs of workers in the construction sector who are reliant on a regular income has not materialized.

The provincial economy in Alberta is in deep trouble with oil prices dropping to levels not seen for many years. Alberta does not appear to have diversified its economy, so it was anticipated that those workers who are now out of work have found that they will have to move to BC to find work. This will, we believe, assist in alleviating some pressure on the supply of the skilled labour in BC.

As a result, we have seen more competitive bids for construction work procured within the last few months.



7. Preliminary Project Schedule & Next Steps

Concept Study Completion	Jan 2021
Council Review	Jan 2021
RCMP Review and Input	Feb 2021
City Review of RCMP Ridge Meadows De-integration Report	Feb 2021
Engagement	Feb 2021
Final RCMP Area Analysis	Feb 2021
Final Requirements Confirmed by Council and Staff	Mar 2021
Approval to Proceed	Mar 2021
Design	Apr 2021 to Apr 2022
Review of 99% Tender Documents	May 2022
Tender	Jun 2022 to Jul 2022
Contract Award	Aug 2022
Construction	Sept 2022 to Apr 2024
Occupancy	May 2024

*This schedule is preliminary and is subject to change as the site is chosen and the project progresses.

*This schedule assumes a greenfield project and provides an idea of a best case scenario timeline and does not necessarily apply to each site option

*This schedule does not include duration for demolition, ground improvements, or any other additional site specific scope item which many (but not all) of the examined sites will require. These additional scope items could increase construction duration by up to 2 years.



8. Conclusion and Recommendations

After evaluating multiple options on 10 potential sites, this study concluded that Option E-2 (the Art Gallery / Athletic Building site), at the probable cost of \$12,639,000 plus contingency, escalation, and the cost of any associated projects, is the most feasible option based on the following criteria:

- The site is City-owned property
- The proposed development generally fits the construction timeline proposed by the City
- Meets the majority of the criteria identified by the RCMP
- The site is centrally located in Pitt Meadows
- It is not located in a flood hazard zone
- The proposed site is not on ALR land
- It represents the lowest cost option in the quantity surveyor's report
- Less disruption to other community services compared to other options
- No disruption to ongoing police operations
- The site satisfies the safety and security of all rightsholders/stakeholders
- Low construction risk
- Childcare services are not affected
- It offers the possibility of re-purposing the existing satellite Community Police Office
- The site is in close proximity to public transit and thus accessible to more of the population
- The prominent, central location offers a community presence for the RCMP within the community

Based on the previous criteria and a collaborative process which involved the City, the RCMP, and multiple consultants, the design team is recommending **Option E-2** to be further explored and developed.



9. Glossary of Terms and Abbreviations

ALR - Agricultural Land Reserve

ASHRAE - American Society of Heating, Refrigerating, and Air-Conditioning Engineers

Founded in 1894, it is a global society advancing human well-being through sustainable technology for the built environment. The Society focuses on building systems, energy efficiency, indoor air quality, refrigeration and sustainability.

BCEHS - BC Emergency Health Services

In the case of this report, BCEHS is used in reference to the BC Emergency Health Services organization which rents a small space in the Annex Building.

CAO - Chief Administration Officer

CMR - City of Maple Ridge

CPM - City of Pitt Meadows

CPO - Community Police Office

This is the existing satellite community policing office that is currently located in Pitt Meadows adjacent to the community centre. It is serviced as a satellite office to the joint RCMP detachment that serves both Maple Ridge and Pitt Meadows out of the Ridge Meadows centralized detachment.

Design-bid-build

A project delivery method in which the agency or owner contracts with separate entities for the design and construction of a project. Design–bid–build is the traditional method for project delivery and differs in several substantial aspects from design–build.

Design-build (D/B)

A project delivery system used in the construction industry to deliver a project in which the design and construction services are contracted by a single entity known as the design–builder or design–build contractor.

Gap Analysis

The comparison of actual performance with potential or desired performance.

NAFTA

North American Free Trade Agreement

OCP - Official Community Plan

A comprehensive plan created by an incorporated municipality which dictates public policy in terms of transportation, utilities, land use, recreation, and housing.

P3, or Public-Private Partnership

A government service or private business venture which is funded and operated through a partnership of government and one or more private sector companies. These schemes are also sometimes referred to as PPP.

RCMP - Royal Canadian Mounted Police

ROW - Statutory Right of Way

A binding legal clause registered on the title of a property, that allows the right to pass over or through property owned by someone else. Statutory Right of Ways are often between a landowner and a municipality or utility provider.

Stipulated Sum Contract

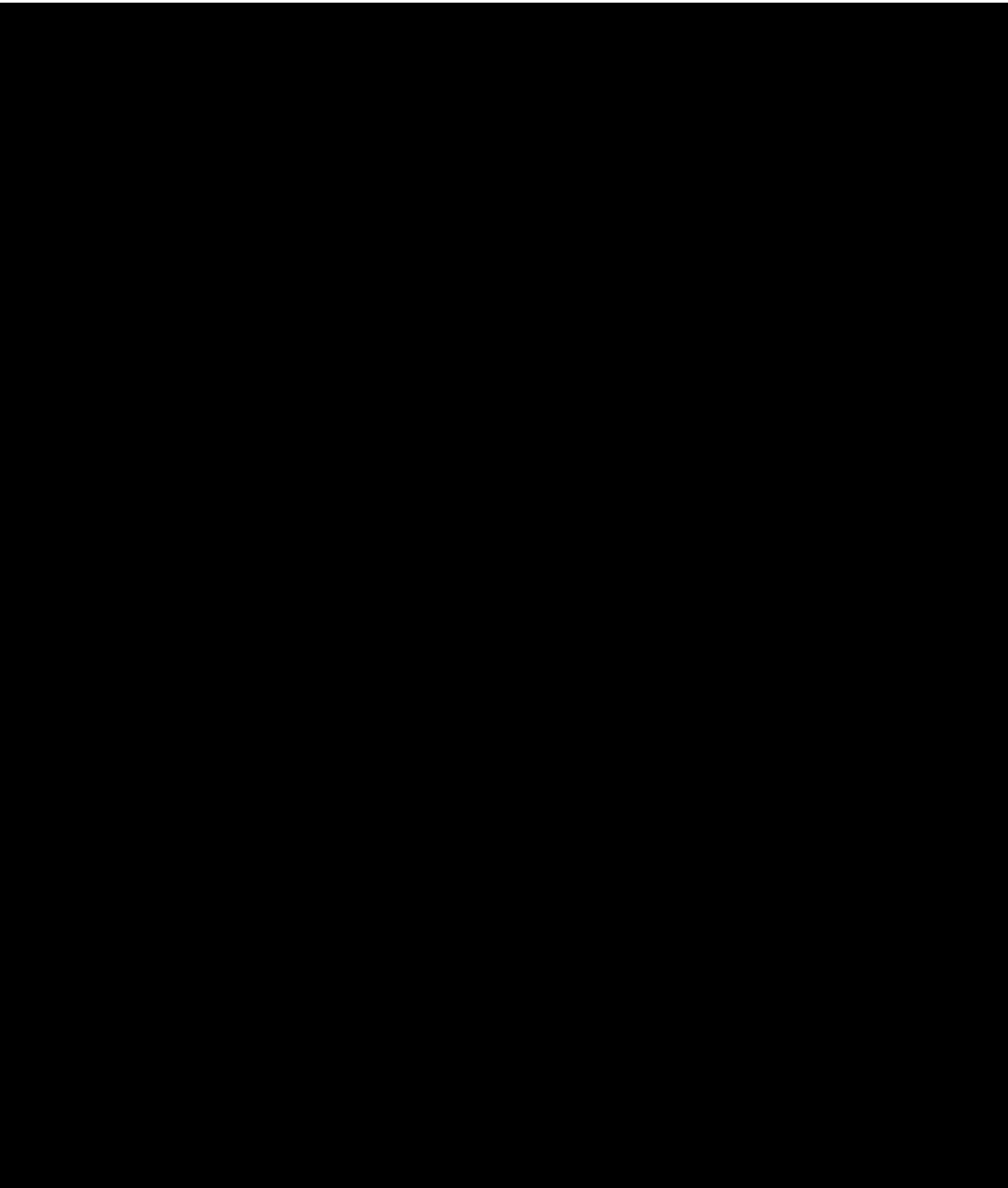
A form of contract where a lump-sum construction cost is stated at the outset. Any adjustments to the contract price can only occur by way of written agreement by the owner and the contractor.

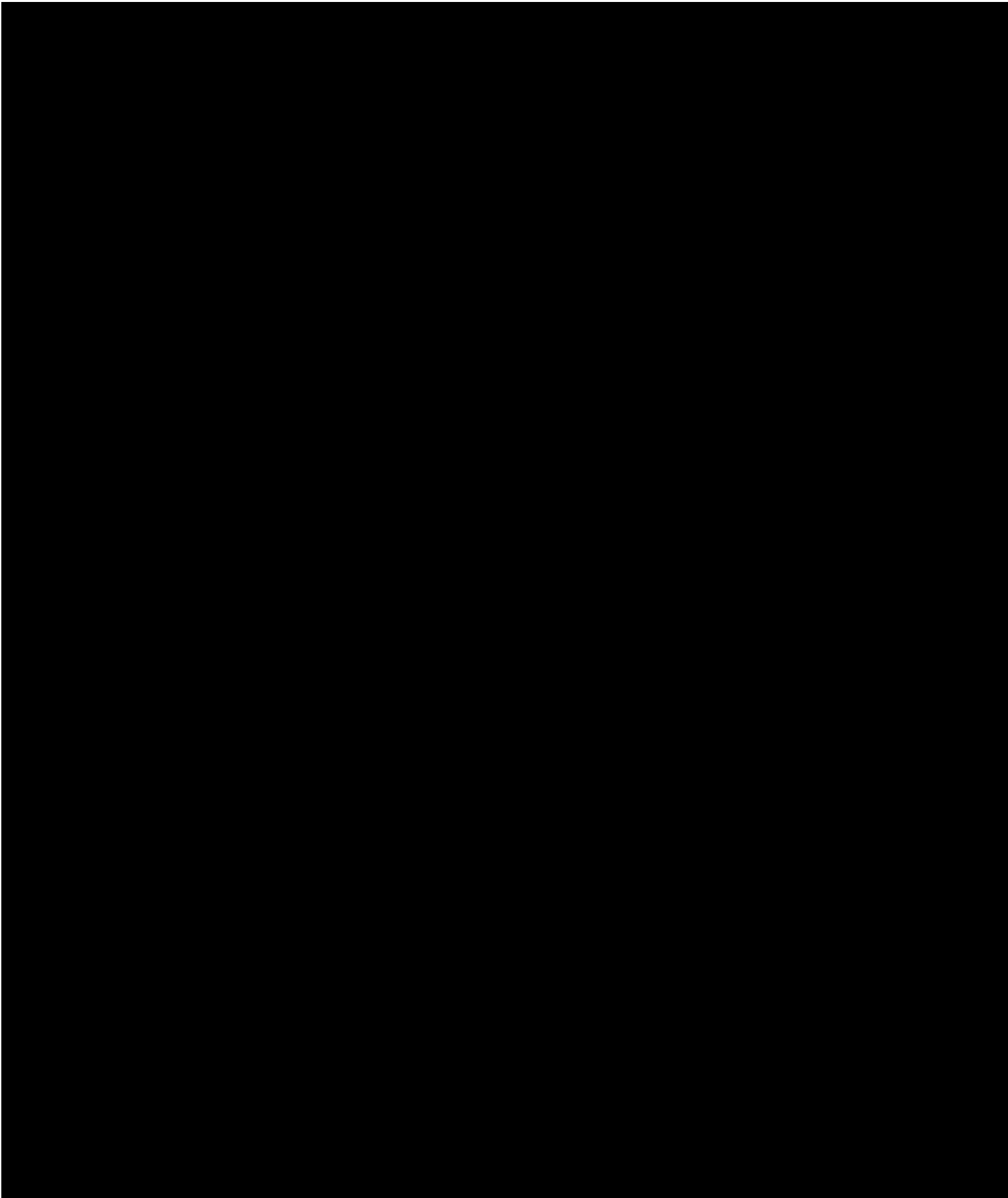
TI - Tenant Improvement

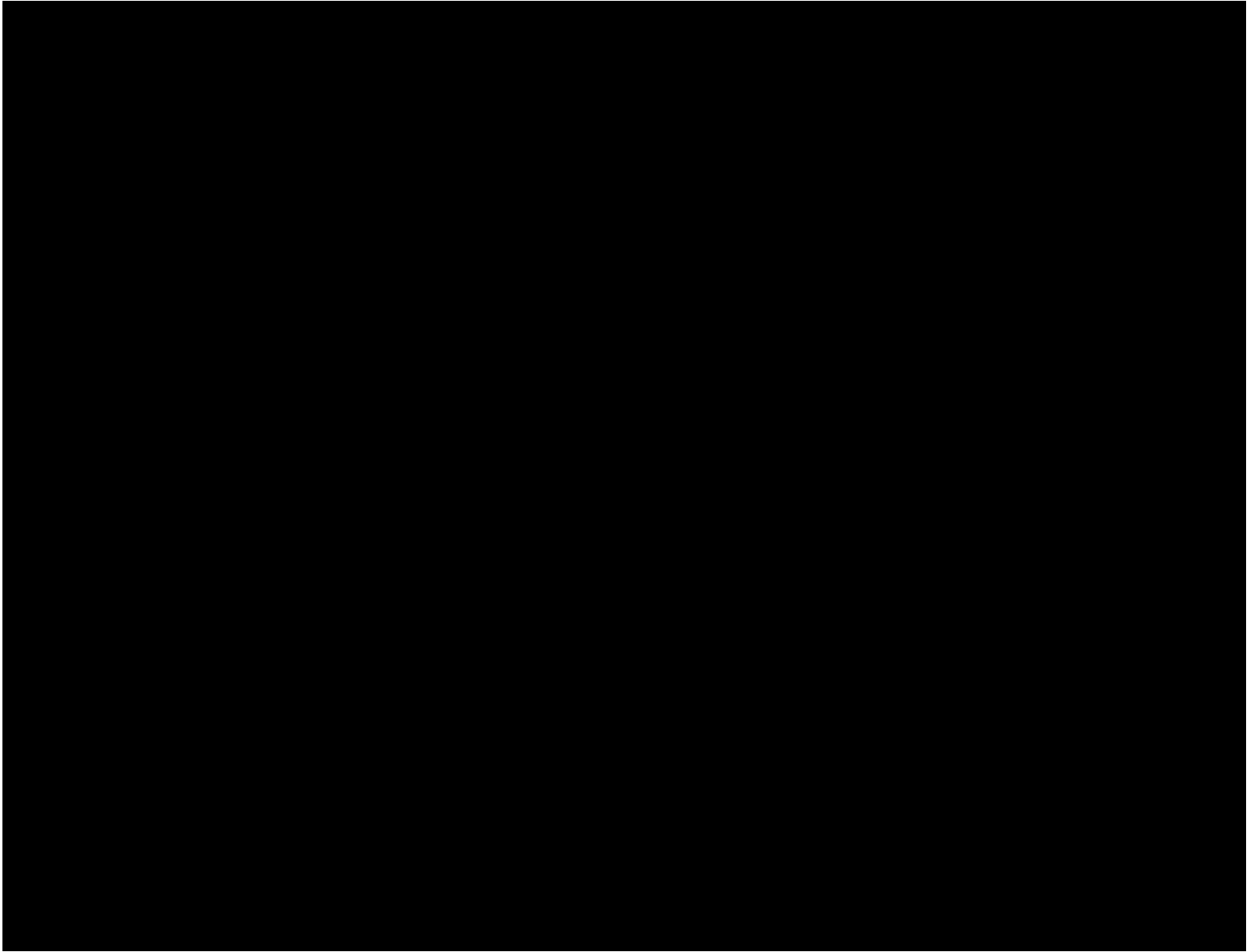
Renovation or modification (often to the interior) of a rental building or to a suite within a rental building, for use by a tenant.

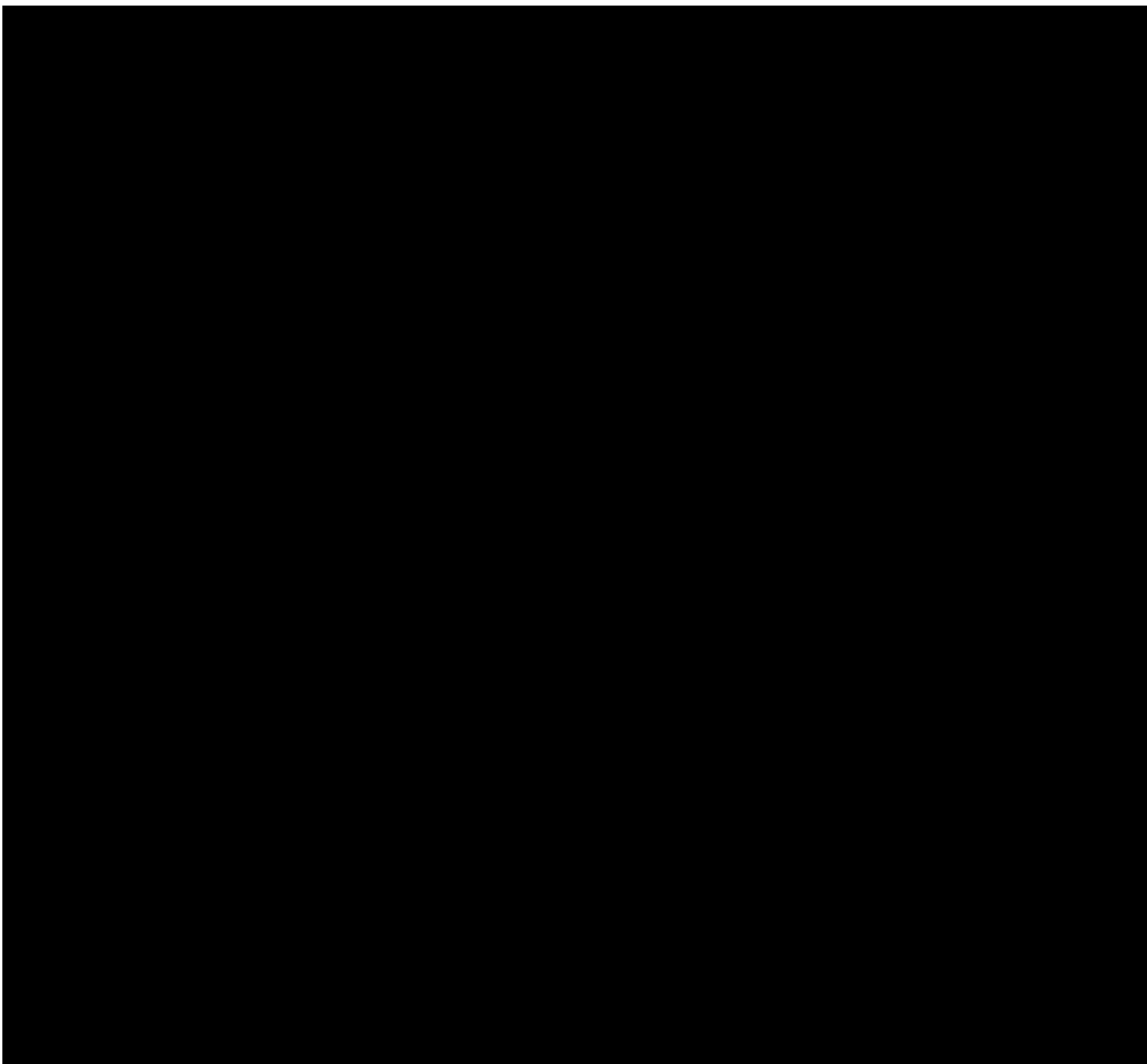
UPS - Uninterrupted Power Supply

Appendix A: Detailed Programming Document









Appendix B: Structural, Mechanical and Electrical Reports

General:

Fast + Epp has undertaken a high-level structural desk study of the proposed locations for the new RCMP Detachment building in Pitt Meadows. This review was based on available geotechnical information at each site, as well as a cursory field review and study of the existing drawings at the current Community Centre site.

Our review was focused on the following:

- Locations identified as “GO”, meaning these sites warrant a high level of consideration.
- Locations identified as “HOLD” which means these sites are also being considered, but not to the same degree at this time.

Location A-1 & A-2:

Site A-1 is located at 11431 Bonson Road. Site A-2 is located at 11455 Bonson Road. Both sites are located to the east of Site C.

A geotechnical investigation was undertaken by Golder Associates Ltd on March 16th, 2001. The investigation was based on a site located just north of Site A-2. General findings and recommendations are as follows:

- There were significant variations in the soil conditions based on the test holes at various locations on site, but the site generally comprised up to 3m of fill material, followed by silty sand, and peat layer at approximately 3-4m below grade.
- Groundwater was encountered at approximately 1-2m below grade.
- The existing grade will need to be raised to 5.33m relative to the Geodetic datum to comply with the local Municipal Flood Plain elevations, which will require raising the grade by approximately 2-3m.
- Foundation recommendations include:
 - o Initial pre-loading of the site to mitigate short and long-term settlements.
 - o Preservative-treated timber friction piles supporting a suspended slab.
 - o Raising the site grade above the flood plain using structural fill is one option, however the additional load will likely initiate increased long-term settlements within the building footprint (including the timber piles), as well as increased differential settlement beyond the footprint of the structural fill.
 - o The report therefore concluded, in consultation with the city of Pitt Meadows, to consider a full crawl space over the entire building footprint to reduce the requirement for structural fill, thereby mitigating the long-term and differential settlements.

Location B1:

This site is located to the northeast of the existing Community Centre and is just west of Harris Road. The site is currently occupied by an existing ambulance, daycare and City staff building which we assume will be demolished.

There was no existing information pertaining to this site. However, available geotechnical information from the adjacent Community Centre and underground parkade (to the southwest of Location B1) suggests that shallow foundations will be feasible, with bearing pressures in the range of 60kPa +/-.

Location C:

This site is located just north of Airport Way and east of Harris Road. As we understand it, this site is currently unoccupied.

Two geotechnical investigations were undertaken, one by Terra Engineering Ltd on November 4th, 1999 and the other by Geopacific Engineering in 2013. The investigations were based on a site located on Harris Road, near 116th Avenue (northwest of Location C). General findings and recommendations as follows:

- The geotechnical report mentions that the existing grade would need to be raised by approximately 1-2m to comply with the local Municipal Flood Plain elevations.
- The report also mentions a peat layer that will need to be excavated, followed by preloading.
- Shallow foundations are deemed to be feasible, albeit with relatively low bearing pressures in the range of 40-70kPa.

Location E2:

This site is located north of the rail tracks, on the east side of Harris Road at the intersection of McMyn Road.

A geotechnical investigation was undertaken by Horizon Engineering Inc. on March 27th, 2012. The investigation was based on a site at 12423 Harris Road, across the street to the west of Location E2. General findings and recommendations as follows:

- The groundwater table is estimated at 4.1m below grade, so we anticipate this will not be an issue for the proposed RCMP building.
- The report also recommends keeping the building foundations above 2m below grade to avoid liquefaction issues.
- Shallow foundations are deemed to be feasible, with bearing pressures in the range of 95kPa.

Location F1:

This site is located adjacent to and just north of the existing Community Centre, and over the existing underground parkade. The existing structural drawings for the underground parkade (prepared by Glotman Simpson Consulting Engineers, dated November 7th, 2008) indicate that the parkade structure was designed to accommodate a future 2-storey light weight structure over.

The new RCMP building is required to be designed to Post Disaster code criteria. Based on our review of the existing structural drawings, there is no mention of the level of Importance for the existing structure, so we assume it was designed to the Normal Importance category. A high-level structural review suggests that a new RCMP building over the existing underground parkade is feasible, however we note the following:

- The design roof snow load has increased from 1.53kPa to 2.63kPa, due to the increase ground snow load in the current code and due to the higher Post Disaster requirements. It appears that there is some potential residual capacity at the second floor of which an allowance of 4.8kPa has been made throughout (office space typically only requires 2.4kPa, except in common spaces).
- There does not appear to be any allowance for a lateral system for the new 2-storey structure over. Therefore, any future design should allow for the lateral braces to line up with the existing column grid below, as well as an allowance for upgrading of the existing concrete columns at these locations (steel jacket around concrete column, etc.).
- The Post Disaster criteria also requires that any lateral system (braced bays, shear walls, etc.) are vertically continuous, without any offset discontinuities, therefore allow for cross bracing to extend into the underground basement at the brace locations.

Location F3b:

This location and building footprint are the same as Location F1, with the only difference being the 1-2 storey configuration. Therefore, the commentary for Location F1 applies similarly to this site.



Smith + Andersen

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2020-12-08

KMBR

300 – 152 West Hastings Street
Vancouver, BC
V6B 1G8

Attention: Bassem Tawfik

**RE: PITT MEADOWS RCMP FEASIBILITY STUDY
S+A PROJECT # 20426-001-001
FEASIBILITY OPTIONS**

Bassem:

See below for a summary of mechanical and electrical impacts for each feasibility option.

For each option identified below, new mechanical systems will be provided to suit either the new building or both renovated areas and any new additions. Below is a summary of the systems proposed for the new Pitt Meadows RCMP Detachment.

Option A1

Heating and cooling: It is proposed that a VRF system will be to provide heating and cooling to the new facility. This new system will have an approximate capacity of 175 kW (50 tons for cooling) and 73 kW (250 MBH) for heating.

Ventilation: Ventilation will be provided by a high efficiency enthalpy recovery unit (ERV). This ERV will have a minimum effectiveness of 80% and be sized for approximately 2,360 l/s (5,000 CFM).

Domestic Water: A new 150Ø combined incoming domestic water and fire protection service will be provided to serve the facility. The domestic water and fire services shall be isolated from the municipal water supply by approved backflow prevention devices. Domestic hot water shall be generated by two 450 L (120 gallon) storage water heaters each sized at 50% of the building load. Domestic water piping shall be copper type L. Domestic hot and cold water systems will comply with the British Columbia Plumbing Code.

Storm and Sanitary: A complete system of plumbing fixtures and sanitary drainage and vent piping and a complete system of roof drains and storm drainage piping shall be provided for the new facility.

Fire Protection: A wet pipe, hydraulically sized sprinkler system shall be installed for the building. Sprinkler design shall be to NFPA 13. General areas including offices shall be covered by water type extinguishers. Mechanical rooms, electrical rooms and similar spaces shall be provided with chemical fire extinguishers.

Normal Power: A new incoming service shall be installed for the building. The service will be 120/208V, 1200A. A BC Hydro owned pad mount transformer (300kVA) will be located outside of the building.

Emergency Power: A new 100kW generator with 72 hours runtime shall be installed for the building. The generator could be in outdoor enclosure c/w belly tank.

Fire Alarm: A new addressable fire alarm system shall be provided for the building.

Lighting: High efficiency LED luminaires will be provided as per the recommendation of the IES.

Special Considerations: None.

Option A2

Heating and cooling: It is proposed that a VRF system will be to provide heating and cooling to the new facility. This new system will have an approximate capacity of 175 kW (50 tons for cooling) and 73 kW (250 MBH) for heating.

Ventilation: Ventilation will be provided by a high efficiency enthalpy recovery unit (ERV). This ERV will have a minimum effectiveness of 80% and be sized for approximately 2,360 l/s (5,000 CFM).

Domestic Water: A new 150Ø combined incoming domestic water and fire protection service will be provided to serve the facility. The domestic water and fire services shall be isolated from the municipal water supply by approved backflow prevention devices. Domestic hot water shall be generated by two 450 L (120 gallon) storage water heaters each sized at 50% of the building load. Domestic water piping shall be copper type L. Domestic hot and cold water systems will comply with the British Columbia Plumbing Code.

Storm and Sanitary: A complete system of plumbing fixtures and sanitary drainage and vent piping and a complete system of roof drains and storm drainage piping shall be provided for the new facility.

Fire Protection: A wet pipe, hydraulically sized sprinkler system shall be installed for the building. Sprinkler design shall be to NFPA 13. General areas including offices shall be covered by water type extinguishers. Mechanical rooms, electrical rooms and similar spaces shall be provided with chemical fire extinguishers.

Normal Power: A new incoming service shall be installed for the building. The service will be 120/208V, 1200A. A BC Hydro owned pad mount transformer (300kVA) will be located outside of the building.

Emergency Power: A new 100kW generator with 72 hours runtime shall be installed for the building. The generator could be in outdoor enclosure c/w belly tank.

Fire Alarm: A new addressable fire alarm system shall be provided for the building.

Lighting: High efficiency LED luminaires will be provided as per the recommendation of the IES.

Special Considerations: None.

Option B1

Heating and cooling: It is proposed that a VRF system will be to provide heating and cooling to the new facility. This new system will have an approximate capacity of 175 kW (50 tons for cooling) and 73 kW (250 MBH) for heating.

Ventilation: Ventilation will be provided by a high efficiency enthalpy recovery unit (ERV). This ERV will have a minimum effectiveness of 80% and be sized for approximately 2,360 l/s (5,000 CFM).

Domestic Water: A new 150Ø combined incoming domestic water and fire protection service will be provided to serve the facility. The domestic water and fire services shall be isolated from the municipal water supply by approved backflow prevention devices. Domestic hot water shall be generated by two 450 L (120 gallon) storage water heaters each sized at 50% of the building load. Domestic water piping shall be copper type L. Domestic hot and cold water systems will comply with the British Columbia Plumbing Code.

Storm and Sanitary: A complete system of plumbing fixtures and sanitary drainage and vent piping and a complete system of roof drains and storm drainage piping shall be provided for the new facility.

Fire Protection: A wet pipe, hydraulically sized sprinkler system shall be installed for the building. Sprinkler design shall be to NFPA 13. General areas including offices shall be covered by water type extinguishers. Mechanical rooms, electrical rooms and similar spaces shall be provided with chemical fire extinguishers.

Normal Power: A new incoming service shall be installed for the building. The service will be 120/208V, 1200A. A BC Hydro owned pad mount transformer (300kVA) will be located outside of the building.

Emergency Power: A new 100kW generator with 72 hours runtime shall be installed for the building. The generator could be in outdoor enclosure c/w belly tank.

Fire Alarm: A new addressable fire alarm system shall be provided for the building.

Lighting: High efficiency LED luminaires will be provided as per the recommendation of the IES.

Special Considerations: None.

Option C

Heating and cooling: It is proposed that a VRF system will be to provide heating and cooling to the new facility. This new system will have an approximate capacity of 175 kW (50 tons for cooling) and 73 kW (250 MBH) for heating.

Ventilation: Ventilation will be provided by a high efficiency enthalpy recovery unit (ERV). This ERV will have a minimum effectiveness of 80% and be sized for approximately 2,360 l/s (5,000 CFM).

Domestic Water: A new 150Ø combined incoming domestic water and fire protection service will be provided to serve the facility. The domestic water and fire services shall be isolated from the municipal water supply by approved backflow prevention devices. Domestic hot water shall be generated by two 450 L (120 gallon) storage water heaters each sized at 50% of the building load. Domestic water piping shall be copper type L. Domestic hot and cold water systems will comply with the British Columbia Plumbing Code.

The new water service will need to be extended into the site from nearest street main.

Storm and Sanitary: A complete system of plumbing fixtures and sanitary drainage and vent piping and a complete system of roof drains and storm drainage piping shall be provided for the new facility.

The new storm and sanitary services will need to be extended into the site from nearest street main.

Fire Protection: A wet pipe, hydraulically sized sprinkler system shall be installed for the building. Sprinkler design shall be to NFPA 13. General areas including offices shall be covered by water type extinguishers. Mechanical rooms, electrical rooms and similar spaces shall be provided with chemical fire extinguishers.

Normal Power: A new incoming service shall be installed for the building. The service will be 120/208V, 1200A. A BC Hydro owned pad mount transformer (300kVA) will be located outside of the building. The new services will need to be extended into the site from nearest street main.

Emergency Power: A new 100kW generator with 72 hours runtime shall be installed for the building. The generator could be in outdoor enclosure c/w belly tank.

Fire Alarm: A new addressable fire alarm system shall be provided for the building.

Lighting: High efficiency LED luminaires will be provided as per the recommendation of the IES.

Special Considerations: All mechanical and electrical equipment will need to be located above the site's flood plain.

Option E2

Heating and cooling: It is proposed that a VRF system will be to provide heating and cooling to the new facility. This new system will have an approximate capacity of 175 kW (50 tons for cooling) and 73 kW (250 MBH) for heating.

Ventilation: Ventilation will be provided by a high efficiency enthalpy recovery unit (ERV). This ERV will have a minimum effectiveness of 80% and be sized for approximately 2,360 l/s (5,000 CFM).

Domestic Water: A new 150Ø combined incoming domestic water and fire protection service will be provided to serve the facility. The domestic water and fire services shall be isolated from the municipal water supply by approved backflow prevention devices. Domestic hot water shall be generated by two 450 L (120 gallon) storage water heaters each sized at 50% of the building load. Domestic water piping shall be copper type L. Domestic hot and cold water systems will comply with the British Columbia Plumbing Code.

Storm and Sanitary: A complete system of plumbing fixtures and sanitary drainage and vent piping and a complete system of roof drains and storm drainage piping shall be provided for the new facility.

Fire Protection: A wet pipe, hydraulically sized sprinkler system shall be installed for the building. Sprinkler design shall be to NFPA 13. General areas including offices shall be covered by water type extinguishers. Mechanical rooms, electrical rooms and similar spaces shall be provided with chemical fire extinguishers.

Normal Power: A new incoming service shall be installed for the building. The service will be 120/208V, 1200A. A BC Hydro owned pad mount transformer (300kVA) will be located outside of the building.

Emergency Power: A new 100kW generator with 72 hours runtime shall be installed for the building. The generator could be in outdoor enclosure c/w belly tank.

Fire Alarm: A new addressable fire alarm system shall be provided for the building.

Lighting: High efficiency LED luminaires will be provided as per the recommendation of the IES.

Special Considerations: None.

Option F3a

Heating and cooling: It is proposed that a VRF system will be to provide heating and cooling to the new addition and renovated areas. This new system will have an approximate capacity of 175 kW (50 tons for cooling) and 73 kW (250 MBH) for heating.

Ventilation: Ventilation for both the new addition and renovated areas will be provided by a high efficiency enthalpy recovery unit (ERV). This ERV will have a minimum effectiveness of 80% and be sized for approximately 2,360 l/s (5,000 CFM).

Domestic Water: A new 150Ø combined incoming domestic water and fire protection service will be provided to serve the new addition renovated areas. The domestic water and fire services shall be isolated from the municipal water supply by approved backflow prevention devices. Domestic hot water shall be generated by two 450 L (120 gallon) storage water heaters each sized at 50% of the building load. Domestic water piping shall be copper type L. Domestic hot and cold water systems will comply with the British Columbia Plumbing Code.

Storm and Sanitary: A complete system of plumbing fixtures and sanitary drainage and vent piping and a complete system of roof drains and storm drainage piping shall be provided for the new addition.

Existing storm drainage will remain for the renovated area but will be reconfigured to suit the new layout. The existing sanitary service serving the renovated area will remain. New branch piping will be provided to serve new fixtures and connected to the existing sanitary main.

Fire Protection: A wet pipe, hydraulically sized sprinkler system shall be installed for the building. Sprinkler design shall be to NFPA 13. General areas including offices shall be covered by water type extinguishers. Mechanical rooms, electrical rooms and similar spaces shall be provided with chemical fire extinguishers.

Normal Power: The existing community centre PMT needs to be relocated and re-feed into the existing electrical distribution. As the community centre is expanding for the new detachment, the PMT would need to be upsized. Upgrading the incoming service may trigger the upsizing the incoming electrical distribution system (costly and destructive). We recommend to treat the expansion as a separate building and allow for a new coming service.

A new incoming service shall be installed for the expansion building. The service will be 120/208V, 1200A. A BC Hydro owned pad mount transformer (300kVA) will be located outside of the building.

Emergency Power: A new 100kW generator with 72 hours runtime shall be installed for the building. The generator could be in outdoor enclosure c/w belly tank.

Fire Alarm: A new addressable fire alarm system shall be provided for the building.

Lighting: High efficiency LED luminaires will be provided as per the recommendation of the IES.

Special Considerations: Demolition of existing ventilation, roof top units and domestic water, sanitary and storm piping will be required.

The existing louvered exhaust enclosure serving the existing parking located in area of the new addition will be relocated.

The existing gas service in the area of the new addition will be relocated.

The existing oil interceptors serving the existing parkade drawing system located in the area of the new additional will be relocated.

Yours truly,

SMITH + ANDERSEN

Brent Frayne, P. Eng
Associate Principal

C.C. Jeff Chen – Smith + Andersen

Appendix C: Detailed Cost Report

PITT MEADOWS RCMP

**CONCEPT DESIGN OPTIONS CLASS 'D' ESTIMATE REPORT
(OPINION OF PROBABLE COST) Rev 3**

January 21, 2021



SSA QUANTITY SURVEYORS LTD

COST PLANNING | VALUE MANAGEMENT | PROJECT CONTROLS

203 – 3320 Richter Street, Kelowna, BC V1W 4V5 **TEL** 250 763 6677 **FAX** 250 762 6684 **WEB** ssaqs.com

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PITT MEADOWS RCMP
CONCEPT DESIGN OPTIONS CLASS 'D' ESTIMATE REPORT Rev 3
January 21, 2021

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PITT MEADOWS RCMP
CONCEPT DESIGN OPTIONS CLASS 'D' ESTIMATE REPORT Rev 3
January 21, 2021

1. INTRODUCTION

The City of Pitt Meadows is preparing to develop a business case for the creation of an independent RCMP Detachment Building.

KMBR has provided Concept Design Option site location plans and building stacking for seven “Examined Options” with accompanying notes received December 1, 2020 and January 21, 2021. A Functional Program for the detachment building has been prepared by KMBR which was also received December 1, 2020.

A basic outline of the associated site development work associated with each option has been indicated on the initial site location plans supplemented by high level briefing notes provided Dec 8, 2020 by Fast and Epp (Structural) and Nov 20, 2020 by Smith & Andersen (Mechanical & Electrical) with regard to impacts in relation to potential Geotech/Structural and Mechanical/Electrical system implications.

SSA Quantity Surveyors Ltd. (SSAQS) has prepared this Class 'D' Estimate (Opinion of Probable Costs) to include each option based upon the KMBR site location plans and information received up to January 21, 2021.

This Opinion of Probable Costs is intended to provide, at a Class D level, a reasonable and realistic opinion of the project hard and soft construction costs for each proposed option of the facility and is intended to assist in the development of the business case for the project. Please note the exclusions detailed in this report.

This estimate has been developed at a Class D level and carries a risk of $\pm 20\%$, 18 times out of 20. There is no detailed design available. We have used historical information from recent similar projects to assist in developing this report.

Notes:

- Areas for renovation and new build have been taken from the KMBR functional program, site location plans and accompanying notes.
- We have used unit rates for each discipline based upon current information from similar projects and our benchmarked assumptions and allowances for a project that, in our opinion are appropriate for a project of this size and type in Pitt Meadows.
- We have had initial discussions with the design consultants regarding the building design, systems etc.
- We have made provisions for unusual soil conditions as noted by the Structural Engineer.
- It is assumed new constructions will be built to Code, in non-combustible construction and designed to post disaster standards.
- We have included allowances for DCCs, Building Permits etc as per the current City bylaws.
- We have excluded forward escalation.
- We have included a cash allowance for Furniture, Furnishings and Equipment.
- We have included a cash allowance for IT and Security Equipment, Software, Computers and Wiring etc.
- We have included cash allowances for Off Site Services.
- Site acquisition costs are excluded.
- Relocation and decanting costs are excluded.
- Operational and maintenance costs are excluded.

PITT MEADOWS RCMP
CONCEPT DESIGN OPTIONS CLASS 'D' ESTIMATE REPORT Rev 3
January 21, 2021

- Rental and revenue costs are excluded.
- Life Cycle Costs are excluded.
- Assumptions and allowances made are identified in this report.

The Class 'D' Estimate (Opinion of Probable Costs) is based on the areas described above. Our knowledge of the project is limited to the information provided to us.

Pricing is based upon **4th Quarter 2020** unit rates that we consider reasonable, but competitive, for the size, type and complexity of project, and its location in Pitt Meadows.

The estimated construction costs reflect our opinion of the current construction industry market conditions for this size and type of project in Pitt Meadows. It has been assumed that the work will be tendered on a Design Bid Build (DBB) basis, competitively tendered to a minimum of 3 contractors, where each trade contract is bid on a competitive stipulated price basis. The pricing in this estimate is predicated upon a minimum of three qualified trade contractors for each significant trade, bidding for the work on a competitive basis and there will be no sole source non-competitive trade contracts. It is also predicated upon the assumption that the project will be bid with normal and reasonable market conditions and that any unforeseen, aberrant or abnormal market conditions are not contemplated in the estimate.

Provincial Sales Tax (PST) is included.

General Sales Tax (GST) is excluded.

This estimate is our opinion of fair market value for the construction of this project, and is not a prediction of low bid.

2. SUMMARY

	ESTIMATED CONSTRUCTION COST VALUE (EXCL GST) (Values rounded to closest thousand \$)						
	Option A-1	Option A-2	Option B-1	Option C	Option E-2	Option F-1	Option F-3b
Hard Costs	\$12,811,000	\$13,214,000	\$13,254,000	\$12,872,000	\$9,557,000	\$11,950,000	\$11,103,000
Soft Costs	\$2,004,000	\$2,059,000	\$2,103,000	\$1,942,000	\$1,564,000	\$2,211,000	\$1,823,000
Permits	\$220,000	\$228,000	\$208,000	\$326,000	\$268,000	\$170,000	\$185,000
Equipment	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000
TOTAL	\$16,285,000	\$16,751,000	\$16,815,000	\$16,390,000	\$12,639,000	\$15,581,000	\$14,361,000

3. LEVEL OF RISK

It is our opinion that the risk associated with this Opinion of Probable Costs at a Class D level is $\pm 20\%$, 18 times out of 20. This is also predicated upon the assumption that the project will be bid with normal and reasonable market conditions. Any unforeseen, aberrant or abnormal market conditions are not included. We have not carried out

PITT MEADOWS RCMP
CONCEPT DESIGN OPTIONS CLASS 'D' ESTIMATE REPORT Rev 3
January 21, 2021

any risk analysis on this Opinion of Probable Costs.

4. EXPLANATION OF TERMS

- Hard Costs: Construction Costs including all construction costs for the building, site, demolition, Design Contingency, General Contractor's Overhead and Profit.
- Construction Contingency: A reserve of funds which is allocated to cover change orders that are required during the course of construction, and is not intended to be a scope change contingency.
- Design Fees: Fees for Design Consultants based upon current fee scale guidelines published by the various governing bodies or calculated based upon prevailing market knowledge.
- Commissioning: Funds allocated to cover the cost of ensuring that the facility is fully commissioned as a working facility and that all systems are working as specified both on an individual basis and on a whole facility basis.
- Testing and Inspections: Funds allocated to cover testing of items such as soils, materials etc. during design and construction.
- Administrative and Project Management Costs: Funds to cover the management of the overall project from the Client's perspective. These funds can be allocated for in-house or contracted resources.
- Off-Site Services: Funds allocated to cover possible charges by the local authority and other service providers for items such as road and sidewalk upgrades, underground service upgrades etc.

5. BASIS OF THE ESTIMATE

5.1. Cost Base

Pricing shown reflects our opinion of probable construction costs obtainable in the 4th Quarter of 2020.

This estimate is our opinion of fair market value for the construction of this project, and is not a prediction of low bid.

5.2. Contingencies

5.2.1. **Design Contingency** – An allowance of 20% has been included. This allowance, when included, is a reserve of funds included in the estimate and which is allocated to cover pricing adjustments resulting from incomplete design information and design detailing that is not currently available. It is not a scope change contingency.

5.2.2. **Escalation Contingency** – Forward escalation has been excluded. This allowance, when included, is a

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reserve of funds to cover possible price increases from the time that the estimate is prepared to the time that the project is tendered. Please refer to the projected escalation information contained in this report.

5.2.3. **Phasing Allowance** – Phasing allowance has been included in the relevant cost scenario option. This allowance, when included, is for any work required to maintain the operation of the facility while construction proceeds.

5.2.4. **Construction Contingency** – An allowance of 5% has been included for newbuild construction and 7.5% for newbuild/renovation. The construction contingency is a reserve of funds which is allocated to cover change orders that are required during the course of construction, and is not intended to be a scope change contingency.

6. EXCLUSIONS

The following items are specifically excluded from this estimate:

- 6.1. Escalation.
- 6.2. Hazardous Materials identification and removal.
- 6.3. Archaeological conditions/discoveries.
- 6.4. Adverse environmental conditions.
- 6.5. Adverse soil and/or subsoil conditions above the values included in the Estimates.
- 6.6. Project Procurement costs.
- 6.7. Relocation and Decanting costs.
- 6.8. Operating and Maintenance costs.
- 6.9. Rental costs.
- 6.10. Land Acquisition costs.
- 6.11. Project Financing Costs.
- 6.12. Significant Utility Upgrades above the values included in the Estimates.
- 6.13. General Project Reserves.

7. STATEMENT OF PROBABLE COSTS

Estimates of construction costs prepared by SSA Quantity Surveyors Ltd. represent our best judgement as Professional Cost Consultants/Quantity Surveyors familiar with the construction industry. It is recognised, however, that we do not have control over the cost of labour, materials or equipment, over architect/engineering design, over a contractor's method of determining prices, or over market or negotiating conditions. Accordingly, we cannot and do not warrant or represent that bids or negotiated prices will not vary from this nor any subsequent estimate of design/construction cost or evaluation prepared by or agreed to by us.

8. CLASS 'D' ESTIMATE SUMMARIES AND BACKUP – DESIGN BID BUILD

BUDGET SUMMARY SHEET						
	VALUES ROUNDED TO THE CLOSEST THOUSAND \$					
		\$	Reimbursables	Sub-Total	GST (Excl)	TOTAL
1	Construction (Current \$)	\$11,725,000		\$11,725,000	\$0	\$11,725,000
2	Construction Contingency 5%	\$586,000		\$586,000	\$0	\$586,000
3	Architect	\$739,000	\$37,000	\$776,000	\$0	\$776,000
4	Structural Engineer	\$74,000	\$4,000	\$78,000	\$0	\$78,000
5	Mechanical Engineer	\$215,000	\$11,000	\$226,000	\$0	\$226,000
6	Electrical Engineer	\$151,000	\$8,000	\$159,000	\$0	\$159,000
7	Quantity Surveyor	\$29,000	\$1,000	\$30,000	\$0	\$30,000
8	Facility Programmer	\$10,000	\$1,000	\$11,000	\$0	\$11,000
9	Landscape Consultant	\$25,000	\$1,000	\$26,000	\$0	\$26,000
10	Survey	\$15,000	\$1,000	\$16,000	\$0	\$16,000
11	Geotechnical	\$15,000	\$1,000	\$16,000	\$0	\$16,000
12	Civil Engineer	\$38,000	\$2,000	\$40,000	\$0	\$40,000
13	Other Consultants	\$50,000	\$3,000	\$53,000	\$0	\$53,000
14	Commissioning	\$50,000	\$3,000	\$53,000	\$0	\$53,000
15	Testing & Inspections	\$35,000	\$2,000	\$37,000	\$0	\$37,000
16	Legal Fees	\$85,000	\$4,000	\$89,000	\$0	\$89,000
17	Site Acquisition - EXCLUDED	EXCLUDED		\$0	\$0	\$0
18	Administrative Costs (ALLOWANCE 2% of Construction value, lines 1 and 2)	\$246,000		\$246,000	\$0	\$246,000
19	Insurance (ALLOWANCE \$12.00/thousand Construction value, lines 1 and 2)	\$148,000		\$148,000		\$148,000
20	Municipal Development Cost Charges	\$58,000		\$58,000		\$58,000
21	Metro Vancouver DCCS	\$39,000		\$39,000		\$39,000
22	Building Permit	\$123,000		\$123,000		\$123,000
23	Off-Site Services (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
24	IMIT, Radio, Comms, Security etc. Equipment Costs (CASH ALLOWANCE)	\$750,000		\$750,000	\$0	\$750,000
25	Furniture, Furnishings & Equipment (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
26	Escalation Contingency - EXCLUDED	EXCLUDED		\$0	\$0	\$0
27	General Project Reserve - EXCLUDED	EXCLUDED		\$0	\$0	\$0
28	SUB-TOTAL			\$16,285,000	\$0	\$16,285,000
29	GST REBATE		EXCLUDED			EXCLUDED
	TOTAL PROJECT					\$16,285,000
	Less Other Contributions					\$0
	ADJUSTED TOTAL PROJECT COST					\$16,285,000

OPTION A-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$2,044,000
												\$9,000
												\$9,000
												\$3,000
												\$3,000
												\$3,000
												\$17,000
												\$14,000
												\$22,000
												\$16,000
												\$44,000
												\$22,000
												\$12,000
												\$11,000
												\$15,000
												\$5,000
												\$15,000

OPTION A-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$11,000
												\$7,000
												\$5,000
												\$15,000
												\$27,000
												\$9,000
												\$46,000
												\$8,000
												\$19,000
												\$9,000
												\$1,000
												\$15,000
												\$26,000
												\$6,000
												\$3,000
												\$15,000
												\$17,000
												\$6,000
												\$21,000
												\$31,000

OPTION A-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$10,000
												\$23,000
												\$19,000
												\$22,000
												\$8,000
												\$12,000
												\$19,000
												\$25,000
												\$3,000
												\$17,000
												\$20,000
												\$5,000
												\$1,000
												\$15,000
												\$20,000
												\$6,000
												\$7,000
												\$16,000
												\$19,000
												\$1,000
												\$2,000
												\$1,000
												\$48,000

OPTION A-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$19,000
												\$40,000
												\$11,000
												\$10,000
												\$38,000
												\$31,000
												\$31,000
												\$38,000
												\$7,000
												\$14,000
												\$4,000
												\$7,000
												\$30,000
												\$191,000
												\$44,000
												\$1,000
												\$2,000
												\$1,000
												\$457,000
101												
102	Sub-Total			1,362.6								\$3,856,000
103	SITE SPECIFIC ALLOWANCES											
104	Site Preparation	1	l/s		1,700,000.00							\$1,700,000
105	Add Unserved Crawlspace	1	l/s		750,000.00							\$750,000

OPTION A-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
106	Existing services diversions/removals	1	l/s		50,000.00							\$50,000
107												
108	Site Specific Allowances											\$2,500,000
109	BUILDING LUMP SUM ALLOWANCES											
110	Canopies, Ramp Approaches etc.	1	l/s		75,000.00							\$75,000
111	Elevator, 1	1	l/s		250,000.00							\$250,000
112	Staircases, 2	1	l/s		30,000.00							\$30,000
113												
114	Building Lump Sum Allowances Sub-Total											\$355,000
115	Building Sub-Total			1,362.6								\$6,711,000
116	Gen Expenses, Overhead & Profit										17.50%	\$1,174,000
117	Phasing Allowance										0.00%	\$0
118	Building Design Contingency										20.00%	\$1,577,000
119												
120	ESTIMATED TOTAL - BUILDING											\$9,462,000
121	LOCATION FACTOR										0.00%	N/A
122												
123	ESTIMATED TOTAL - SITE											\$9,462,000
124	ON SITE (OFF SITE EXCLUDED)											
125	Allowance for Hard Landscaping/Roads/Parking	1	l/s		793,000.00							\$793,000
126	Demolition Allowance	1	l/s		103,000.00							\$103,000
127	Allowance for Soft Landscaping	1	l/s		50,000.00							\$50,000
128	Allowance for Incoming Services	1	l/s		659,000.00							\$659,000
129												
130	Site Sub-Total											\$1,605,000
131	Gen Expenses, Overhead & Profit										17.50%	\$281,000
132	Phasing Allowance										0.00%	\$0
133	Site Design Contingency										20.00%	\$377,000
134												
135	ESTIMATED TOTAL - SITE											\$2,263,000

OPTION A-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
136	LOCATION FACTOR										0.00%	N/A
137												
138	ESTIMATED TOTAL - SITE											\$2,263,000
139												
140	ESTIMATED TOTAL CONSTRUCTION COST - BUILDING AND SITE											\$11,725,000

BUDGET SUMMARY SHEET					
VALUES ROUNDED TO THE CLOSEST THOUSAND \$					
	\$	Reimbursables	Sub-Total	GST (Excl)	TOTAL
1 Construction (Current \$)	\$12,109,000		\$12,109,000	\$0	\$12,109,000
2 Construction Contingency 5%	\$605,000		\$605,000	\$0	\$605,000
3 Architect	\$763,000	\$38,000	\$801,000	\$0	\$801,000
4 Structural Engineer	\$76,000	\$4,000	\$80,000	\$0	\$80,000
5 Mechanical Engineer	\$223,000	\$11,000	\$234,000	\$0	\$234,000
6 Electrical Engineer	\$156,000	\$8,000	\$164,000	\$0	\$164,000
7 Quantity Surveyor	\$30,000	\$2,000	\$32,000	\$0	\$32,000
8 Facility Programmer	\$10,000	\$1,000	\$11,000	\$0	\$11,000
9 Landscape Consultant	\$25,000	\$1,000	\$26,000	\$0	\$26,000
10 Survey	\$15,000	\$1,000	\$16,000	\$0	\$16,000
11 Geotechnical	\$15,000	\$1,000	\$16,000	\$0	\$16,000
12 Civil Engineer	\$38,000	\$2,000	\$40,000	\$0	\$40,000
13 Other Consultants	\$50,000	\$3,000	\$53,000	\$0	\$53,000
14 Commissioning	\$50,000	\$3,000	\$53,000	\$0	\$53,000
15 Testing & Inspections	\$35,000	\$2,000	\$37,000	\$0	\$37,000
16 Legal Fees	\$85,000	\$4,000	\$89,000	\$0	\$89,000
17 Site Acquisition - EXCLUDED	EXCLUDED		\$0	\$0	\$0
18 Administrative Costs (ALLOWANCE 2% of Construction value, lines 1 and 2)	\$254,000		\$254,000	\$0	\$254,000
19 Insurance (ALLOWANCE \$12.00/thousand Construction value, lines 1 and 2)	\$153,000		\$153,000		\$153,000
20 Municipal Development Cost Charges	\$62,000		\$62,000		\$62,000
21 Metro Vancouver DCCS	\$39,000		\$39,000		\$39,000
22 Building Permit	\$127,000		\$127,000		\$127,000
23 Off-Site Services (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
24 IMIT, Radio, Comms, Security etc. Equipment Costs (CASH ALLOWANCE)	\$750,000		\$750,000	\$0	\$750,000
25 Furniture, Furnishings & Equipment (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
26 Escalation Contingency - EXCLUDED	EXCLUDED		\$0	\$0	\$0
27 General Project Reserve - EXCLUDED	EXCLUDED		\$0	\$0	\$0
28 SUB-TOTAL			\$16,751,000	\$0	\$16,751,000
29 GST REBATE		EXCLUDED			EXCLUDED
TOTAL PROJECT					\$16,751,000
Less Other Contributions					\$0
ADJUSTED TOTAL PROJECT COST					\$16,751,000

OPTION A-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$2,044,000
												\$9,000
												\$9,000
												\$3,000
												\$3,000
												\$3,000
												\$17,000
												\$14,000
												\$22,000
												\$16,000
												\$44,000
												\$22,000
												\$12,000
												\$11,000
												\$15,000
												\$5,000
												\$15,000

OPTION A-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$11,000
												\$7,000
												\$5,000
												\$15,000
												\$27,000
												\$9,000
												\$46,000
												\$8,000
												\$19,000
												\$9,000
												\$1,000
												\$15,000
												\$26,000
												\$6,000
												\$3,000
												\$15,000
												\$17,000
												\$6,000
												\$21,000
												\$31,000

OPTION A-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$10,000
												\$23,000
												\$19,000
												\$22,000
												\$8,000
												\$12,000
												\$19,000
												\$25,000
												\$3,000
												\$17,000
												\$20,000
												\$5,000
												\$1,000
												\$15,000
												\$20,000
												\$6,000
												\$7,000
												\$16,000
												\$19,000
												\$1,000
												\$2,000
												\$1,000
												\$48,000

OPTION A-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$19,000
												\$40,000
												\$11,000
												\$10,000
												\$38,000
												\$31,000
												\$31,000
												\$38,000
												\$7,000
												\$14,000
												\$4,000
												\$7,000
												\$30,000
												\$191,000
												\$44,000
												\$1,000
												\$2,000
												\$1,000
												\$457,000
101												
102	Sub-Total			1,362.6								\$3,856,000
103	SITE SPECIFIC ALLOWANCES											
104	Site Preparation	1	l/s		1,825,000.00							\$1,825,000
105	Add Unserved Crawlspace	1	l/s		750,000.00							\$750,000

OPTION A-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
106	Existing services diversions/removals	1	l/s		50,000.00							\$50,000
107												
108	Site Specific Allowances											\$2,625,000
109	BUILDING LUMP SUM ALLOWANCES											
110	Canopies, Ramp Approaches etc.	1	l/s		75,000.00							\$75,000
111	Elevator, 1	1	l/s		250,000.00							\$250,000
112	Staircases, 2	1	l/s		30,000.00							\$30,000
113												
114	Building Lump Sum Allowances Sub-Total											\$355,000
115	Building Sub-Total			1,362.6								\$6,836,000
116	Gen Expenses, Overhead & Profit										17.50%	\$1,196,000
117	Phasing Allowance										0.00%	\$0
118	Building Design Contingency										20.00%	\$1,606,000
119												
120	ESTIMATED TOTAL - BUILDING											\$9,638,000
121	LOCATION FACTOR										0.00%	N/A
122												
123	ESTIMATED TOTAL - SITE											\$9,638,000
124	ON SITE (OFF SITE EXCLUDED)											
125	Allowance for Hard Landscaping/Roads/Parking	1	l/s		828,000.00							\$828,000
126	Demolition Allowance	1	l/s		185,000.00							\$185,000
127	Allowance for Soft Landscaping	1	l/s		50,000.00							\$50,000
128	Allowance for Incoming Services	1	l/s		689,000.00							\$689,000
129												
130	Site Sub-Total											\$1,752,000
131	Gen Expenses, Overhead & Profit										17.50%	\$307,000
132	Phasing Allowance										0.00%	\$0
133	Site Design Contingency										20.00%	\$412,000
134												
135	ESTIMATED TOTAL - SITE											\$2,471,000
136	LOCATION FACTOR										0.00%	N/A

OPTION A-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
137												
138	ESTIMATED TOTAL - SITE											\$2,471,000
139												
140	ESTIMATED TOTAL CONSTRUCTION COST - BUILDING AND SITE											\$12,109,000

BUDGET SUMMARY SHEET					
VALUES ROUNDED TO THE CLOSEST THOUSAND \$					
	\$	Reimbursables	Sub-Total	GST (Excl)	TOTAL
1 Construction (Current \$)	\$12,147,000		\$12,147,000	\$0	\$12,147,000
2 Construction Contingency 5%	\$607,000		\$607,000	\$0	\$607,000
3 Architect	\$765,000	\$38,000	\$803,000	\$0	\$803,000
4 Structural Engineer	\$115,000	\$6,000	\$121,000	\$0	\$121,000
5 Mechanical Engineer	\$223,000	\$11,000	\$234,000	\$0	\$234,000
6 Electrical Engineer	\$156,000	\$8,000	\$164,000	\$0	\$164,000
7 Quantity Surveyor	\$30,000	\$2,000	\$32,000	\$0	\$32,000
8 Facility Programmer	\$10,000	\$1,000	\$11,000	\$0	\$11,000
9 Landscape Consultant	\$25,000	\$1,000	\$26,000	\$0	\$26,000
10 Survey	\$15,000	\$1,000	\$16,000	\$0	\$16,000
11 Geotechnical	\$15,000	\$1,000	\$16,000	\$0	\$16,000
12 Civil Engineer	\$38,000	\$2,000	\$40,000	\$0	\$40,000
13 Other Consultants	\$50,000	\$3,000	\$53,000	\$0	\$53,000
14 Commissioning	\$50,000	\$3,000	\$53,000	\$0	\$53,000
15 Testing & Inspections	\$35,000	\$2,000	\$37,000	\$0	\$37,000
16 Legal Fees	\$85,000	\$4,000	\$89,000	\$0	\$89,000
17 Site Acquisition - EXCLUDED	EXCLUDED		\$0	\$0	\$0
18 Administrative Costs (ALLOWANCE 2% of Construction value, lines 1 and 2)	\$255,000		\$255,000	\$0	\$255,000
19 Insurance (ALLOWANCE \$12.00/thousand Construction value, lines 1 and 2)	\$153,000		\$153,000		\$153,000
20 Municipal Development Cost Charges	\$41,000		\$41,000		\$41,000
21 Metro Vancouver DCCS	\$39,000		\$39,000		\$39,000
22 Building Permit	\$128,000		\$128,000		\$128,000
23 Off-Site Services (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
24 IMIT, Radio, Comms, Security etc. Equipment Costs (CASH ALLOWANCE)	\$750,000		\$750,000	\$0	\$750,000
25 Furniture, Furnishings & Equipment (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
26 Escalation Contingency - EXCLUDED	EXCLUDED		\$0	\$0	\$0
27 General Project Reserve - EXCLUDED	EXCLUDED		\$0	\$0	\$0
28 SUB-TOTAL			\$16,815,000	\$0	\$16,815,000
29 GST REBATE		EXCLUDED			EXCLUDED
TOTAL PROJECT					\$16,815,000
Less Other Contributions					\$0
ADJUSTED TOTAL PROJECT COST					\$16,815,000

OPTION B-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$2,044,000
												\$9,000
												\$9,000
												\$3,000
												\$3,000
												\$3,000
												\$17,000
												\$14,000
												\$22,000
												\$16,000
												\$44,000
												\$22,000
												\$12,000
												\$11,000
												\$15,000
												\$5,000
												\$15,000

OPTION B-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$11,000
												\$7,000
												\$5,000
												\$15,000
												\$27,000
												\$9,000
												\$46,000
												\$8,000
												\$19,000
												\$9,000
												\$1,000
												\$15,000
												\$26,000
												\$6,000
												\$3,000
												\$15,000
												\$17,000
												\$6,000
												\$21,000
												\$31,000

OPTION B-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$10,000
												\$23,000
												\$19,000
												\$22,000
												\$8,000
												\$12,000
												\$19,000
												\$25,000
												\$3,000
												\$17,000
												\$20,000
												\$5,000
												\$1,000
												\$15,000
												\$20,000
												\$6,000
												\$7,000
												\$16,000
												\$19,000
												\$1,000
												\$2,000
												\$1,000
												\$48,000

OPTION B-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$19,000
												\$40,000
												\$11,000
												\$10,000
												\$38,000
												\$31,000
												\$31,000
												\$38,000
												\$7,000
												\$14,000
												\$4,000
												\$7,000
												\$30,000
												\$191,000
												\$44,000
												\$1,000
												\$2,000
												\$1,000
												\$457,000
101												
102	Sub-Total			1,362.6								\$3,856,000
103	SITE SPECIFIC ALLOWANCES											
104	Site Preparation	1	l/s		500,000.00							\$500,000
105	Existing services diversions/removals	1	l/s		100,000.00							\$100,000

OPTION B-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
106	Parkade, single level, 2 exits 30 stalls	1	l/s		2,250,000.00							\$2,250,000
107	Vert access Parkade to program	1	l/s		280,000.00							\$280,000
108												
109	Site Specific Allowances											\$3,130,000
110	BUILDING LUMP SUM ALLOWANCES											
111	Canopies, Ramp Approaches etc.	1	l/s		75,000.00							\$75,000
112	Elevator, 1	1	l/s		250,000.00							\$250,000
113	Staircases, 2	1	l/s		30,000.00							\$30,000
114												
115	Building Lump Sum Allowances Sub-Total											\$355,000
116	Building Sub-Total			1,362.6								\$7,341,000
117	Gen Expenses, Overhead & Profit										20.00%	\$1,468,000
118	Phasing Allowance										0.00%	\$0
119	Building Design Contingency										20.00%	\$1,762,000
120												
121	ESTIMATED TOTAL - BUILDING											\$10,571,000
122	LOCATION FACTOR										0.00%	N/A
123												
124	ESTIMATED TOTAL - SITE											\$10,571,000
125	ON SITE (OFF SITE EXCLUDED)											
126	Allowance for Hard Landscaping/Roads/Parking	1	l/s		307,000.00							\$307,000
127	Demolition Allowance	1	l/s		363,000.00							\$363,000
128	Allowance for Soft Landscaping	1	l/s		50,000.00							\$50,000
129	Allowance for Incoming Services	1	l/s		374,000.00							\$374,000
130												
131	Site Sub-Total											\$1,094,000
132	Gen Expenses, Overhead & Profit										20.00%	\$219,000
133	Phasing Allowance										0.00%	\$0
134	Site Design Contingency										20.00%	\$263,000
135												
136	ESTIMATED TOTAL - SITE											\$1,576,000

OPTION B-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
137	LOCATION FACTOR										0.00%	N/A
138												
139	ESTIMATED TOTAL - SITE											\$1,576,000
140												
141	ESTIMATED TOTAL CONSTRUCTION COST - BUILDING AND SITE											\$12,147,000

BUDGET SUMMARY SHEET					
VALUES ROUNDED TO THE CLOSEST THOUSAND \$					
	\$	Reimbursables	Sub-Total	GST (Excl)	TOTAL
1 Construction (Current \$)	\$11,307,000		\$11,307,000	\$0	\$11,307,000
2 Construction Contingency 5%	\$565,000		\$565,000	\$0	\$565,000
3 Architect	\$712,000	\$36,000	\$748,000	\$0	\$748,000
4 Structural Engineer	\$71,000	\$4,000	\$75,000	\$0	\$75,000
5 Mechanical Engineer	\$208,000	\$10,000	\$218,000	\$0	\$218,000
6 Electrical Engineer	\$145,000	\$7,000	\$152,000	\$0	\$152,000
7 Quantity Surveyor	\$28,000	\$1,000	\$29,000	\$0	\$29,000
8 Facility Programmer	\$10,000	\$1,000	\$11,000	\$0	\$11,000
9 Landscape Consultant	\$25,000	\$1,000	\$26,000	\$0	\$26,000
10 Survey	\$15,000	\$1,000	\$16,000	\$0	\$16,000
11 Geotechnical	\$15,000	\$1,000	\$16,000	\$0	\$16,000
12 Civil Engineer	\$38,000	\$2,000	\$40,000	\$0	\$40,000
13 Other Consultants	\$50,000	\$3,000	\$53,000	\$0	\$53,000
14 Commissioning	\$50,000	\$3,000	\$53,000	\$0	\$53,000
15 Testing & Inspections	\$35,000	\$2,000	\$37,000	\$0	\$37,000
16 Legal Fees	\$85,000	\$4,000	\$89,000	\$0	\$89,000
17 Site Acquisition - EXCLUDED	EXCLUDED		\$0	\$0	\$0
18 Administrative Costs (ALLOWANCE 2% of Construction value, lines 1 and 2)	\$237,000		\$237,000	\$0	\$237,000
19 Insurance (ALLOWANCE \$12.00/thousand Construction value, lines 1 and 2)	\$142,000		\$142,000		\$142,000
20 Municipal Development Cost Charges	\$168,000		\$168,000		\$168,000
21 Metro Vancouver DCCS	\$39,000		\$39,000		\$39,000
22 Building Permit	\$119,000		\$119,000		\$119,000
23 Off-Site Services (CASH ALLOWANCE)	\$1,000,000		\$1,000,000	\$0	\$1,000,000
24 IMIT, Radio, Comms, Security etc. Equipment Costs (CASH ALLOWANCE)	\$750,000		\$750,000	\$0	\$750,000
25 Furniture, Furnishings & Equipment (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
26 Escalation Contingency - EXCLUDED	EXCLUDED		\$0	\$0	\$0
27 General Project Reserve - EXCLUDED	EXCLUDED		\$0	\$0	\$0
28 SUB-TOTAL			\$16,390,000	\$0	\$16,390,000
29 GST REBATE		EXCLUDED			EXCLUDED
TOTAL PROJECT					\$16,390,000
Less Other Contributions					\$0
ADJUSTED TOTAL PROJECT COST					\$16,390,000

OPTION C

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$2,044,000
												\$9,000
												\$9,000
												\$3,000
												\$3,000
												\$3,000
												\$17,000
												\$14,000
												\$22,000
												\$16,000
												\$44,000
												\$22,000
												\$12,000
												\$11,000
												\$15,000
												\$5,000
												\$15,000

OPTION C

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$11,000
												\$7,000
												\$5,000
												\$15,000
												\$27,000
												\$9,000
												\$46,000
												\$8,000
												\$19,000
												\$9,000
												\$1,000
												\$15,000
												\$26,000
												\$6,000
												\$3,000
												\$15,000
												\$17,000
												\$6,000
												\$21,000
												\$31,000

OPTION C

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$10,000
												\$23,000
												\$19,000
												\$22,000
												\$8,000
												\$12,000
												\$19,000
												\$25,000
												\$3,000
												\$17,000
												\$20,000
												\$5,000
												\$1,000
												\$15,000
												\$20,000
												\$6,000
												\$7,000
												\$16,000
												\$19,000
												\$1,000
												\$2,000
												\$1,000
												\$48,000

OPTION C

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$19,000
												\$40,000
												\$11,000
												\$10,000
												\$38,000
												\$31,000
												\$31,000
												\$38,000
												\$7,000
												\$14,000
												\$4,000
												\$7,000
												\$30,000
												\$191,000
												\$44,000
												\$1,000
												\$2,000
												\$1,000
												\$457,000
101												
102	Sub-Total			1,362.6								\$3,856,000
103	SITE SPECIFIC ALLOWANCES											
104	Site Preparation	1	l/s		1,775,000.00							\$1,775,000
105	Existing services diversions/removals	1	l/s		0.00							\$0

OPTION C

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
106												
107	Site Specific Allowances											\$1,775,000
108	BUILDING LUMP SUM ALLOWANCES											
109	Canopies, Ramp Approaches etc.	1	l/s		75,000.00							\$75,000
110	Elevator, 1	1	l/s		250,000.00							\$250,000
111	Staircases, 2	1	l/s		30,000.00							\$30,000
112												
113	Building Lump Sum Allowances Sub-Total											\$355,000
114	Building Sub-Total			1,362.6								\$5,986,000
115	Gen Expenses, Overhead & Profit										17.50%	\$1,048,000
116	Phasing Allowance										0.00%	\$0
117	Building Design Contingency										20.00%	\$1,407,000
118												
119	ESTIMATED TOTAL - BUILDING											\$8,441,000
120	LOCATION FACTOR										0.00%	N/A
121												
122	ESTIMATED TOTAL - SITE											\$8,441,000
123	ON SITE (OFF SITE EXCLUDED)											
124	Allowance for Hard Landscaping/Roads/Parking	1	l/s		883,000.00							\$883,000
125	Demolition Allowance	1	l/s		125,000.00							\$125,000
126	Allowance for Soft Landscaping	1	l/s		50,000.00							\$50,000
127	Allowance for Incoming Services	1	l/s		974,000.00							\$974,000
128												
129	Site Sub-Total											\$2,032,000
130	Gen Expenses, Overhead & Profit										17.50%	\$356,000
131	Phasing Allowance										0.00%	\$0
132	Site Design Contingency										20.00%	\$478,000
133												
134	ESTIMATED TOTAL - SITE											\$2,866,000
135	LOCATION FACTOR										0.00%	N/A

OPTION C

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
136												
137	ESTIMATED TOTAL - SITE											\$2,866,000
138												
139	ESTIMATED TOTAL CONSTRUCTION COST - BUILDING AND SITE											\$11,307,000

BUDGET SUMMARY SHEET					
VALUES ROUNDED TO THE CLOSEST THOUSAND \$					
	\$	Reimbursables	Sub-Total	GST (Excl)	TOTAL
1 Construction (Current \$)	\$8,626,000		\$8,626,000	\$0	\$8,626,000
2 Construction Contingency 5%	\$431,000		\$431,000	\$0	\$431,000
3 Architect	\$543,000	\$27,000	\$570,000	\$0	\$570,000
4 Structural Engineer	\$54,000	\$3,000	\$57,000	\$0	\$57,000
5 Mechanical Engineer	\$158,000	\$8,000	\$166,000	\$0	\$166,000
6 Electrical Engineer	\$111,000	\$6,000	\$117,000	\$0	\$117,000
7 Quantity Surveyor	\$22,000	\$1,000	\$23,000	\$0	\$23,000
8 Facility Programmer	\$10,000	\$1,000	\$11,000	\$0	\$11,000
9 Landscape Consultant	\$25,000	\$1,000	\$26,000	\$0	\$26,000
10 Survey	\$15,000	\$1,000	\$16,000	\$0	\$16,000
11 Geotechnical	\$15,000	\$1,000	\$16,000	\$0	\$16,000
12 Civil Engineer	\$38,000	\$2,000	\$40,000	\$0	\$40,000
13 Other Consultants	\$50,000	\$3,000	\$53,000	\$0	\$53,000
14 Commissioning	\$50,000	\$3,000	\$53,000	\$0	\$53,000
15 Testing & Inspections	\$35,000	\$2,000	\$37,000	\$0	\$37,000
16 Legal Fees	\$85,000	\$4,000	\$89,000	\$0	\$89,000
17 Site Acquisition - EXCLUDED	EXCLUDED		\$0	\$0	\$0
18 Administrative Costs (ALLOWANCE 2% of Construction value, lines 1 and 2)	\$181,000		\$181,000	\$0	\$181,000
19 Insurance (ALLOWANCE \$12.00/thousand Construction value, lines 1 and 2)	\$109,000		\$109,000		\$109,000
20 Municipal Development Cost Charges	\$138,000		\$138,000		\$138,000
21 Metro Vancouver DCCS	\$39,000		\$39,000		\$39,000
22 Building Permit	\$91,000		\$91,000		\$91,000
23 Off-Site Services (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
24 IMIT, Radio, Comms, Security etc. Equipment Costs (CASH ALLOWANCE)	\$750,000		\$750,000	\$0	\$750,000
25 Furniture, Furnishings & Equipment (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
26 Escalation Contingency - EXCLUDED	EXCLUDED		\$0	\$0	\$0
27 General Project Reserve - EXCLUDED	EXCLUDED		\$0	\$0	\$0
28 SUB-TOTAL			\$12,639,000	\$0	\$12,639,000
29 GST REBATE		EXCLUDED			EXCLUDED
TOTAL PROJECT					\$12,639,000
Less Other Contributions					\$0
ADJUSTED TOTAL PROJECT COST					\$12,639,000

OPTION E-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$2,044,000
												\$9,000
												\$9,000
												\$3,000
												\$3,000
												\$3,000
												\$17,000
												\$14,000
												\$22,000
												\$16,000
												\$44,000
												\$22,000
												\$12,000
												\$11,000
												\$15,000
												\$5,000
												\$15,000

OPTION E-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$11,000
												\$7,000
												\$5,000
												\$15,000
												\$27,000
												\$9,000
												\$46,000
												\$8,000
												\$19,000
												\$9,000
												\$1,000
												\$15,000
												\$26,000
												\$6,000
												\$3,000
												\$15,000
												\$17,000
												\$6,000
												\$21,000
												\$31,000

OPTION E-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$10,000
												\$23,000
												\$19,000
												\$22,000
												\$8,000
												\$12,000
												\$19,000
												\$25,000
												\$3,000
												\$17,000
												\$20,000
												\$5,000
												\$1,000
												\$15,000
												\$20,000
												\$6,000
												\$7,000
												\$16,000
												\$19,000
												\$1,000
												\$2,000
												\$1,000
												\$48,000

OPTION E-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$19,000
												\$40,000
												\$11,000
												\$10,000
												\$38,000
												\$31,000
												\$31,000
												\$38,000
												\$7,000
												\$14,000
												\$4,000
												\$7,000
												\$30,000
												\$191,000
												\$44,000
												\$1,000
												\$2,000
												\$1,000
												\$457,000
101												
102	Sub-Total			1,362.6								\$3,856,000
103	SITE SPECIFIC ALLOWANCES											
104	Site Preparation	1	l/s		500,000.00							\$500,000
105	Existing services diversions/removals	1	l/s		100,000.00							\$100,000

OPTION E-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
106												
107	Site Specific Allowances											\$600,000
108	BUILDING LUMP SUM ALLOWANCES											
109	Canopies, Ramp Approaches etc.	1	l/s		75,000.00							\$75,000
110	Elevator, 1	1	l/s		250,000.00							\$250,000
111	Staircases, 2	1	l/s		30,000.00							\$30,000
112												
113	Building Lump Sum Allowances Sub-Total											\$355,000
114	Building Sub-Total			1,362.6								\$4,811,000
115	Gen Expenses, Overhead & Profit										20.00%	\$962,000
116	Phasing Allowance										0.00%	\$0
117	Building Design Contingency										20.00%	\$1,155,000
118												
119	ESTIMATED TOTAL - BUILDING											\$6,928,000
120	LOCATION FACTOR										0.00%	N/A
121												
122	ESTIMATED TOTAL - SITE											\$6,928,000
123	ON SITE (OFF SITE EXCLUDED)											
124	Allowance for Hard Landscaping/Roads/Parking	1	l/s		520,500.00							\$520,500
125	Demolition Allowance	1	l/s		257,000.00							\$257,000
126	Allowance for Soft Landscaping	1	l/s		50,000.00							\$50,000
127	Allowance for Incoming Services	1	l/s		351,500.00							\$351,500
128												
129	Site Sub-Total											\$1,179,000
130	Gen Expenses, Overhead & Profit										20.00%	\$236,000
131	Phasing Allowance										0.00%	\$0
132	Site Design Contingency										20.00%	\$283,000
133												
134	ESTIMATED TOTAL - SITE											\$1,698,000
135	LOCATION FACTOR										0.00%	N/A
136												

OPTION E-2

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
137	ESTIMATED TOTAL - SITE											\$1,698,000
138												
139	ESTIMATED TOTAL CONSTRUCTION COST - BUILDING AND SITE											\$8,626,000

BUDGET SUMMARY SHEET						
	VALUES ROUNDED TO THE CLOSEST THOUSAND \$					
		\$	Reimbursables	Sub-Total	GST (Excl)	TOTAL
1	Construction (Current \$)	\$10,558,000		\$10,558,000	\$0	\$10,558,000
2	Construction Contingency 7.5%	\$792,000		\$792,000	\$0	\$792,000
3	Architect	\$795,000	\$40,000	\$835,000	\$0	\$835,000
4	Structural Engineer	\$119,000	\$6,000	\$125,000	\$0	\$125,000
5	Mechanical Engineer	\$227,000	\$11,000	\$238,000	\$0	\$238,000
6	Electrical Engineer	\$159,000	\$8,000	\$167,000	\$0	\$167,000
7	Quantity Surveyor	\$26,000	\$1,000	\$27,000	\$0	\$27,000
8	Facility Programmer	\$15,000	\$1,000	\$16,000	\$0	\$16,000
9	Landscape Consultant	\$25,000	\$1,000	\$26,000	\$0	\$26,000
10	Survey	\$30,000	\$2,000	\$32,000	\$0	\$32,000
11	Geotechnical	\$15,000	\$1,000	\$16,000	\$0	\$16,000
12	Civil Engineer	\$38,000	\$2,000	\$40,000	\$0	\$40,000
13	Other Consultants	\$50,000	\$3,000	\$53,000	\$0	\$53,000
14	Commissioning	\$70,000	\$4,000	\$74,000	\$0	\$74,000
15	Testing & Inspections	\$50,000	\$3,000	\$53,000	\$0	\$53,000
16	Legal Fees	\$85,000	\$4,000	\$89,000	\$0	\$89,000
17	Site Acquisition - EXCLUDED	EXCLUDED		\$0	\$0	\$0
18	Administrative Costs (ALLOWANCE 2.5% of Construction value, lines 1 and 2)	\$284,000		\$284,000	\$0	\$284,000
19	Insurance (ALLOWANCE \$12.00/thousand Construction value, lines 1 and 2)	\$136,000		\$136,000		\$136,000
20	Municipal Development Cost Charges	\$35,000		\$35,000		\$35,000
21	Metro Vancouver DCCS	\$21,000		\$21,000		\$21,000
22	Building Permit	\$114,000		\$114,000		\$114,000
23	Off-Site Services (CASH ALLOWANCE)	\$600,000		\$600,000	\$0	\$600,000
24	IMIT, Radio, Comms, Security etc. Equipment Costs (CASH ALLOWANCE)	\$750,000		\$750,000	\$0	\$750,000
25	Furniture, Furnishings & Equipment (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
26	Escalation Contingency - EXCLUDED	EXCLUDED		\$0	\$0	\$0
27	General Project Reserve - EXCLUDED	EXCLUDED		\$0	\$0	\$0
28	SUB-TOTAL			\$15,581,000	\$0	\$15,581,000
29	GST REBATE		EXCLUDED			EXCLUDED
	TOTAL PROJECT					\$15,581,000
	Less Other Contributions					\$0
	ADJUSTED TOTAL PROJECT COST					\$15,581,000

OPTION F-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$1,337,000
												\$9,000
												\$9,000
												\$3,000
												\$3,000
												\$3,000
												\$17,000
												\$14,000
												\$22,000
												\$16,000
												\$44,000
												\$22,000
												\$12,000
												\$11,000
												\$15,000
												\$5,000

OPTION F-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$15,000
												\$11,000
												\$7,000
												\$5,000
												\$15,000
												\$27,000
												\$9,000
												\$46,000
												\$8,000
												\$19,000
												\$9,000
												\$1,000
												\$15,000
												\$26,000
												\$6,000
												\$3,000
												\$15,000
												\$17,000
												\$6,000
												\$21,000

OPTION F-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$31,000
												\$10,000
												\$23,000
												\$19,000
												\$22,000
												\$8,000
												\$12,000
												\$19,000
												\$25,000
												\$3,000
												\$17,000
												\$20,000
												\$5,000
												\$1,000
												\$15,000
												\$20,000
												\$6,000
												\$7,000
												\$16,000
												\$19,000
												\$1,000
												\$2,000
												\$1,000

OPTION F-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$48,000
												\$19,000
												\$40,000
												\$11,000
												\$10,000
												\$38,000
												\$31,000
												\$31,000
												\$38,000
												\$7,000
												\$14,000
												\$4,000
												\$7,000
												\$30,000
												\$191,000
												\$44,000
												\$1,000
												\$2,000
												\$1,000
												\$457,000
101												
102	Sub-Total			1,362.6								\$3,149,000
103	SITE SPECIFIC ALLOWANCES											

OPTION F-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
104	Site Preparation	1	l/s		100,000.00							\$100,000
105	Renovation premium allowance for TI	1	l/s		310,000.00							\$310,000
106	Structural Premium for addition	1	l/s		372,000.00							\$372,000
107	Portables, 5No install/removal	1	l/s		1,250,000.00							\$1,250,000
108	Existing services diversions/removals	1	l/s		50,000.00							\$50,000
109												
110	Site Specific Allowances											\$2,082,000
111	BUILDING LUMP SUM ALLOWANCES											
112	Canopies, Ramp Approaches etc.	1	l/s		75,000.00							\$75,000
113	Elevator, 1	1	l/s		250,000.00							\$250,000
114	Staircases, 2	1	l/s		30,000.00							\$30,000
115												
116	Building Lump Sum Allowances Sub-Total											\$355,000
117	Building Sub-Total			1,362.6								\$5,586,000
118	Gen Expenses, Overhead & Profit										20.00%	\$1,117,000
119	Phasing Allowance										5.00%	\$335,000
120	Building Design Contingency										20.00%	\$1,408,000
121												
122	ESTIMATED TOTAL - BUILDING											\$8,446,000
123	LOCATION FACTOR										0.00%	N/A
124												
125	ESTIMATED TOTAL - SITE											\$8,446,000
126	ON SITE (OFF SITE EXCLUDED)											
127	Allowance for Hard Landscaping/Roads/Parking	1	l/s		717,000.00							\$717,000
128	Demolition Allowance	1	l/s		202,000.00							\$202,000
129	Allowance for Soft Landscaping	1	l/s		50,000.00							\$50,000
130	Allowance for Incoming Services	1	l/s		428,000.00							\$428,000
131												
132	Site Sub-Total											\$1,397,000
133	Gen Expenses, Overhead & Profit										20.00%	\$279,000
134	Phasing Allowance										5.00%	\$84,000

OPTION F-1

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
135	Site Design Contingency										20.00%	\$352,000
136												
137	ESTIMATED TOTAL - SITE											\$2,112,000
138	LOCATION FACTOR										0.00%	N/A
139												
140	ESTIMATED TOTAL - SITE											\$2,112,000
141												
142	ESTIMATED TOTAL CONSTRUCTION COST - BUILDING AND SITE											\$10,558,000

BUDGET SUMMARY SHEET						
	VALUES ROUNDED TO THE CLOSEST THOUSAND \$					
		\$	Reimbursables	Sub-Total	GST (Excl)	TOTAL
1	Construction (Current \$)	\$10,098,000		\$10,098,000	\$0	\$10,098,000
2	Construction Contingency 5%	\$505,000		\$505,000	\$0	\$505,000
3	Architect	\$636,000	\$32,000	\$668,000	\$0	\$668,000
4	Structural Engineer	\$111,000	\$6,000	\$117,000	\$0	\$117,000
5	Mechanical Engineer	\$186,000	\$9,000	\$195,000	\$0	\$195,000
6	Electrical Engineer	\$130,000	\$7,000	\$137,000	\$0	\$137,000
7	Quantity Surveyor	\$25,000	\$1,000	\$26,000	\$0	\$26,000
8	Facility Programmer	\$10,000	\$1,000	\$11,000	\$0	\$11,000
9	Landscape Consultant	\$25,000	\$1,000	\$26,000	\$0	\$26,000
10	Survey	\$15,000	\$1,000	\$16,000	\$0	\$16,000
11	Geotechnical	\$15,000	\$1,000	\$16,000	\$0	\$16,000
12	Civil Engineer	\$38,000	\$2,000	\$40,000	\$0	\$40,000
13	Other Consultants	\$50,000	\$3,000	\$53,000	\$0	\$53,000
14	Commissioning	\$50,000	\$3,000	\$53,000	\$0	\$53,000
15	Testing & Inspections	\$35,000	\$2,000	\$37,000	\$0	\$37,000
16	Legal Fees	\$85,000	\$4,000	\$89,000	\$0	\$89,000
17	Site Acquisition - EXCLUDED	EXCLUDED		\$0	\$0	\$0
18	Administrative Costs (ALLOWANCE 2% of Construction value, lines 1 and 2)	\$212,000		\$212,000	\$0	\$212,000
19	Insurance (ALLOWANCE \$12.00/thousand Construction value, lines 1 and 2)	\$127,000		\$127,000		\$127,000
20	Municipal Development Cost Charges	\$40,000		\$40,000		\$40,000
21	Metro Vancouver DCCS	\$39,000		\$39,000		\$39,000
22	Building Permit	\$106,000		\$106,000		\$106,000
23	Off-Site Services (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
24	IMIT, Radio, Comms, Security etc. Equipment Costs (CASH ALLOWANCE)	\$750,000		\$750,000	\$0	\$750,000
25	Furniture, Furnishings & Equipment (CASH ALLOWANCE)	\$500,000		\$500,000	\$0	\$500,000
26	Escalation Contingency - EXCLUDED	EXCLUDED		\$0	\$0	\$0
27	General Project Reserve - EXCLUDED	EXCLUDED		\$0	\$0	\$0
28	SUB-TOTAL			\$14,361,000	\$0	\$14,361,000
29	GST REBATE		EXCLUDED			EXCLUDED
	TOTAL PROJECT					\$14,361,000
	Less Other Contributions					\$0
	ADJUSTED TOTAL PROJECT COST					\$14,361,000

OPTION F-3b

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$2,044,000
												\$9,000
												\$9,000
												\$3,000
												\$3,000
												\$3,000
												\$17,000
												\$14,000
												\$22,000
												\$16,000
												\$44,000
												\$22,000
												\$12,000
												\$11,000
												\$15,000
												\$5,000
												\$15,000

OPTION F-3b

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$11,000
												\$7,000
												\$5,000
												\$15,000
												\$27,000
												\$9,000
												\$46,000
												\$8,000
												\$19,000
												\$9,000
												\$1,000
												\$15,000
												\$26,000
												\$6,000
												\$3,000
												\$15,000
												\$17,000
												\$6,000
												\$21,000
												\$31,000

OPTION F-3b

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$10,000
												\$23,000
												\$19,000
												\$22,000
												\$8,000
												\$12,000
												\$19,000
												\$25,000
												\$3,000
												\$17,000
												\$20,000
												\$5,000
												\$1,000
												\$15,000
												\$20,000
												\$6,000
												\$7,000
												\$16,000
												\$19,000
												\$1,000
												\$2,000
												\$1,000
												\$48,000

OPTION F-3b

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
												\$19,000
												\$40,000
												\$11,000
												\$10,000
												\$38,000
												\$31,000
												\$31,000
												\$38,000
												\$7,000
												\$14,000
												\$4,000
												\$7,000
												\$30,000
												\$191,000
												\$44,000
												\$1,000
												\$2,000
												\$1,000
												\$457,000
101												
102	Sub-Total			1,362.6								\$3,856,000
103	SITE SPECIFIC ALLOWANCES											
104	Site Preparation	1	l/s		250,000.00							\$250,000
105	Structural Premium bldg over parkade	1,010	m2		300.00							\$303,000

OPTION F-3b

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
106	Alter/adapt existing parkade, access/egress etc	1	l/s		750,000.00							\$750,000
107	Vert access Parkade to program	1	l/s		280,000.00							\$280,000
108	Existing services diversions/removals	1	l/s		50,000.00							\$50,000
109												
110	Site Specific Allowances											\$1,633,000
111	BUILDING LUMP SUM ALLOWANCES											
112	Canopies, Ramp Approaches etc.	1	l/s		75,000.00							\$75,000
113	Elevator, 1	1	l/s		250,000.00							\$250,000
114	Staircases, 2	1	l/s		30,000.00							\$30,000
115												
116	Building Lump Sum Allowances Sub-Total											\$355,000
117	Building Sub-Total			1,362.6								\$5,844,000
118	Gen Expenses, Overhead & Profit										20.00%	\$1,169,000
119	Phasing Allowance										0.00%	\$0
120	Building Design Contingency										20.00%	\$1,403,000
121												
122	ESTIMATED TOTAL - BUILDING											\$8,416,000
123	LOCATION FACTOR										0.00%	N/A
124												
125	ESTIMATED TOTAL - SITE											\$8,416,000
126	ON SITE (OFF SITE EXCLUDED)											
127	Allowance for Hard Landscaping/Roads/Parking	1	l/s		569,000.00							\$569,000
128	Demolition Allowance	1	l/s		60,000.00							\$60,000
129	Allowance for Soft Landscaping	1	l/s		50,000.00							\$50,000
130	Allowance for Incoming Services	1	l/s		489,000.00							\$489,000
131												
132	Site Sub-Total											\$1,168,000
133	Gen Expenses, Overhead & Profit										20.00%	\$234,000
134	Phasing Allowance										0.00%	\$0
135	Site Design Contingency										20.00%	\$280,000

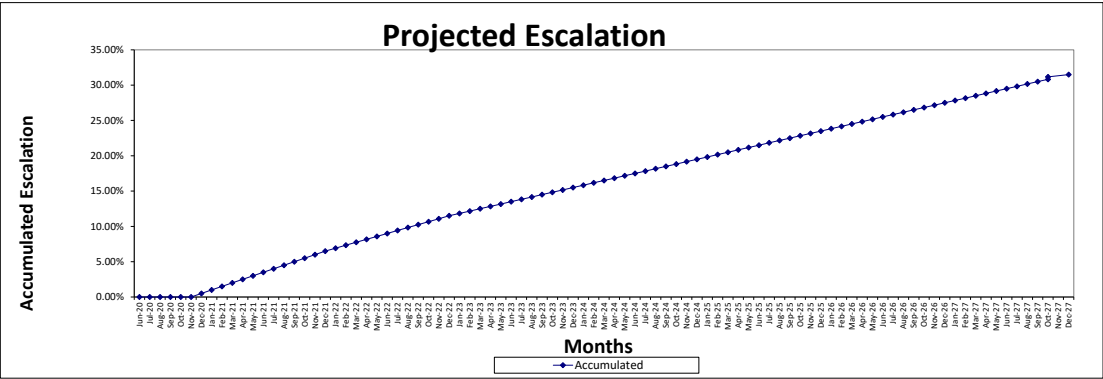
OPTION F-3b

BACKUP

Line Number	Description	Quantity	Unit	Area. BGSM for Building Shell. CGSM for Remainder	Lump Sum Allowance	Architectural Unit Rate	Demolition Allowance	Structural Unit Rate	Electrical Unit Rate	Mechanical Unit Rate	TOTAL Unit Rate EXCLUDING MARKUPS INCLUDING LOCATION FACTOR (rounded)	ESTIMATED VALUE EXCLUDING MARKUPS (rounded)
136												
137	ESTIMATED TOTAL - SITE											\$1,682,000
138	LOCATION FACTOR										0.00%	N/A
139												
140	ESTIMATED TOTAL - SITE											\$1,682,000
141												
142	ESTIMATED TOTAL CONSTRUCTION COST - BUILDING AND SITE											\$10,098,000

9. ESCALATION PROJECTION

Month	Monthly	Accumulated
Jun-20	0.00%	0.00%
Jul-20	0.00%	0.00%
Aug-20	0.00%	0.00%
Sep-20	0.00%	0.00%
Oct-20	0.00%	0.00%
Nov-20	0.00%	0.00%
Dec-20	0.50%	0.50%
Jan-21	0.50%	1.00%
Feb-21	0.50%	1.50%
Mar-21	0.50%	2.00%
Apr-21	0.50%	2.50%
May-21	0.50%	3.00%
Jun-21	0.50%	3.50%
Jul-21	0.50%	4.00%
Aug-21	0.50%	4.50%
Sep-21	0.50%	5.00%
Oct-21	0.50%	5.50%
Nov-21	0.50%	6.00%
Dec-21	0.50%	6.50%
Jan-22	0.42%	6.92%
Feb-22	0.42%	7.33%
Mar-22	0.42%	7.75%
Apr-22	0.42%	8.17%
May-22	0.42%	8.58%
Jun-22	0.42%	9.00%
Jul-22	0.42%	9.42%
Aug-22	0.42%	9.83%
Sep-22	0.42%	10.25%
Oct-22	0.42%	10.67%
Nov-22	0.42%	11.08%
Dec-22	0.42%	11.50%
Jan-23	0.33%	11.83%
Feb-23	0.33%	12.17%
Mar-23	0.33%	12.50%
Apr-23	0.33%	12.83%
May-23	0.33%	13.17%
Jun-23	0.33%	13.50%
Jul-23	0.33%	13.83%
Aug-23	0.33%	14.17%
Sep-23	0.33%	14.50%
Oct-23	0.33%	14.83%
Nov-23	0.33%	15.17%
Dec-23	0.33%	15.50%
Jan-24	0.33%	15.83%
Feb-24	0.33%	16.17%
Mar-24	0.33%	16.50%
Apr-24	0.33%	16.83%
May-24	0.33%	17.17%
Jun-24	0.33%	17.50%
Jul-24	0.33%	17.83%
Aug-24	0.33%	18.17%
Sep-24	0.33%	18.50%
Oct-24	0.33%	18.83%
Nov-24	0.33%	19.17%
Dec-24	0.33%	19.50%
Jan-25	0.33%	19.83%
Feb-25	0.33%	20.17%
Mar-25	0.33%	20.50%
Apr-25	0.33%	20.83%
May-25	0.33%	21.17%
Jun-25	0.33%	21.50%
Jul-25	0.33%	21.83%
Aug-25	0.33%	22.17%
Sep-25	0.33%	22.50%
Oct-25	0.33%	22.83%
Nov-25	0.33%	23.17%
Dec-25	0.33%	23.50%
Jan-26	0.33%	23.83%
Feb-26	0.33%	24.17%
Mar-26	0.33%	24.50%
Apr-26	0.33%	24.83%
May-26	0.33%	25.17%
Jun-26	0.33%	25.50%
Jul-26	0.33%	25.83%
Aug-26	0.33%	26.17%
Sep-26	0.33%	26.50%
Oct-26	0.33%	26.83%
Nov-26	0.33%	27.17%
Dec-26	0.33%	27.50%
Jan-27	0.33%	27.83%
Feb-27	0.33%	28.17%
Mar-27	0.33%	28.50%
Apr-27	0.33%	28.83%
May-27	0.33%	29.17%
Jun-27	0.33%	29.50%
Jul-27	0.33%	29.83%
Aug-27	0.33%	30.17%
Sep-27	0.33%	30.50%
Oct-27	0.33%	30.83%
Oct-27	0.33%	31.17%
Dec-27	0.33%	31.50%



Annual Rates (Projected):	2020	2021	2022	2023	2024	2025	2026	2027	Cumulative
%	0.50%	6.00%	5.00%	4.00%	4.00%	4.00%	4.00%	4.00%	31.50%

DESIGNING FOR COMMUNITY.



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