Development and Transaction Options Analysis

Saanich Operations Centre

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Infrastructure BC

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1 Executive Summary

1.1 Introduction

The Saanich Operations Centre (SOC) is located at 1040 McKenzie Avenue (the Site). The Site is 13 acres at the intersection of Quadra Street and McKenzie Avenue, a regional hub. As such, this area is designated as a centre in the Official Community Plan (OCP) and will be a focus of future development.

Infrastructure BC was engaged by the District of Saanich (the Owner) to recommend a development and transaction approach for the redevelopment of the SOC (the Project), and the development of the land on the Site not required for the new SOC (Residual Land).

The current SOC facilities deliver critical services to residents and are now more than 60 years old, requiring staff to spend increasingly more time maintaining them. To continue to effectively deliver services to residents, the Owner has determined that the SOC must be redeveloped.

It is anticipated that not the entire Site will be required for the new SOC, resulting in Residual Land for private development. As market and non-market housing supply is a priority for the Owner, the Residual Land will be repositioned primarily for residential uses with the potential for secondary commercial uses. The Residual Land will be transacted to a private partner through a land lease.

This report outlines the analysis conducted to assess development options and transaction options for the Project, including a procurement plan and funding analysis based on the recommended development and transaction options.

1.2 Development and Transaction Options

The following two development options were considered for the Project:

- A multi-counterparty approach where delivery of the new SOC and the Residual Land lease are with separate counterparties; and
- A single-counterparty approach where delivery of the new SOC and the Residual Land lease are with one counterparty.

To assess the development options qualitatively, they were evaluated against the following development objectives that were established for the Project:

- Positive Impact to the Contextual Urban Fabric;
- Environmental, Social, and Governance Objectives;
- Cost Certainty;

- Asset Performance;
- Optimizing Risk Allocation; and
- Market Interest and Capacity.

The qualitative analysis concluded that the single-counterparty option is more effective in responding to the development objectives.

To assess the options quantitatively, a highest and best use analysis was conducted to compare the net values of each development option. The quantitative analysis concluded that the single-counterparty option is preferred, as it includes more residential units and the difference in the net value of the development options is considered to be immaterial. Therefore, the single-counterparty development option is recommended for the Project.

The transaction options relate to the timing of the cash inflows (Residual Land proceeds) and cash outflows (construction of the new SOC), and the procurement model for the Project. The following three cash inflow options and three cash outflow options were considered for the Project:

- Inflow Option 1: single lump sum payment at transaction financial close;
- Inflow Option 2: lease payments over land lease term starting at transaction financial close;
- Inflow Option 3: lump sum payments as private developments achieve occupancy;
- Outflow Option 1: progress payments during construction of SOC;
- Outflow Option 2: lump sum payment at occupancy of SOC (with the option for partial progress payments during construction); and
- Outflow Option 3: leaseback payments over leaseback term starting at occupancy of SOC.

To assess the transaction cashflow options, they were evaluated against the following transaction objectives that were established for the Project:

- Schedule certainty;
- Price certainty; and
- Timeframe.

Based on the results of the evaluation, the recommended cashflow option involves a single lump sum payment at financial close for the Residual Land (Inflow Option 1) and either progress payments during construction (Outflow Option 1) or a lump sum payment at financial close with partial progress payments during construction (Outflow Option 2) to the private partner for the new SOC.

The following six procurement options were considered for the Project:

- Design-Bid-Build (DBB);
- Construction Management (CM);
- Design-Build (DB);
- Progressive Design-Build (ProgDB);
- Progressive Design-Build-Finance (ProgDBF); and
- Progressive Design-Build-Finance-Maintain (ProgDBFM).

From evaluating the procurement options against the transaction objectives, it was determined that both ProgDB and ProgDBF satisfied the transaction objectives.

A quantitative analysis was conducted to assess the ProgDB and ProgDBF procurement options. The results of the quantitative analysis show greater value for taxpayers' dollars in the ProgDB option, so it is recommended for the Project.

The recommended transaction option therefore includes cash Inflow Option 1 – single lump sum payment at financial close from the private partner to the Owner for the Residual Land, along with cash Outflow Option 1 – progress payments during construction of the new SOC, delivered through the ProgDB procurement option.

1.3 Procurement Plan

The recommended procurement option for the Project, the ProgDB, includes a Request For Qualifications (RFQ), Project Development Agreement Request For Proposal (PDA RFP), and Design-Build Agreement Request For Proposal (DBA RFP).

The RFQ process will result in a shortlist of up to three proponents based on an evaluation of respondent teams' experience, qualifications, capacity, and capability to undertake the Project.

The PDA RFP will invite shortlisted proponents to prepare and submit proposals to master plan the Site and design the new SOC under the Project Development Agreement. Following selection of a proponent and execution of the Project Development Agreement, the Owner will invite the single proponent to participate in the DBA RFP, which will result in the execution of the Design-Build Agreement.

1.3.1 Procurement and Implementation Schedule

The estimated Project schedule is as follows:

TABLE 1-1: PROJECT MILESTONE SCHEDULE

Milestone	Date
Issue RFQ	November 2024
Announce Shortlisted Respondents	March 2025
Issue PDA RFP	March 2025
Notify Preferred Proponent	August 2025
Execute Project Development Agreement and Issue DBA RFP	September 2025
First Technical Submission	January 2026
First Financial Submission	March 2026
Second Financial Submission	June 2026
Execute Design-Build Agreement	September 2026
Total Completion of Construction of New SOC	January 2029

Note: schedule is subject to change. This schedule assumes that the Design-Build Agreement is executed after the second financial submission.

1.4 Funding Analysis

The total estimated capital cost of the Project based on a ProgDB is provided in Table 1-2, below.

TABLE 1-2: TOTAL ASSET CAPITAL VALUES

($ Thousands)	Total Asset Value	Funding Sources	
		Owner	Residual Land Proceeds
Capital Budget			
DB Contract:			
Design and Construction	98,806	68,512	30,294
Escalation	27,377	27,377	
Transferred Risk	4,666	4,666	
Bid Response Costs	200	200	
Bonding Costs	1,018	1,018	
Sub-Total DB Contract	**132,066**	**101,772**	**30,294**
Owner's Capital Costs:			
Procurement and Implementation Costs	9,950	9,950	
Furnishings, Fittings, and Equipment	2,114	2,114	
Construction Insurance	2,040	2,040	
Owner's Risk Reserve	25,921	25,921	
Sub-Total Owner's Capital Cost	**40,026**	**40,026**	**-**
Total Project Capital Cost / Asset Value	**172,092**	**141,798**	**30,294**

Note: Totals may not add up due to rounding.

Additionally, a one-time operating cost of $200,000 for partial compensation payable to unsuccessful proponents is recommended for the Project.

1.5 Recommendation

The following are recommended for the Project:

(a) To proceed with the single-counterparty development option.

(b) To proceed with the following transaction option:

1) Cash Inflow Option 1 (single lump sum payment at financial close from the private partner to the Owner for the Residual Land).

2) Cash Outflow Option 2 (progress payments during construction of the SOC).

3) ProgDB procurement option.

(c) A total Project budget of $172.3 million (including the Owner's Risk Reserve of $25.9 million and a one-time operating cost of $200,000) or net cost to the Owner of $142.0 million after accounting for the Residual Land proceeds of $30.3 million.

2 Background

The Owner provides essential services to the residents of the District of Saanich to support a high quality of life. A significant portion of these services, particularly those related to Parks and Public Works, are managed out of the SOC located at 1040 McKenzie Avenue. The 13-acre Site is strategically positioned in the heart of the District of Saanich, at the intersection of two major thoroughfares, and in close proximity to Highway 17.

The Business Case for the Project, approved in June 2022 by District of Saanich council, confirmed that the capacity and condition of the current SOC demonstrates a need for a redevelopment of the Site, with an updated program to meet current and future needs. The Business Case also confirmed that the private sector can, and should, be engaged to optimize land for a more efficient new SOC in order to reduce the risk to the Owner for the development of the Site while meeting the Owner's objectives.

In 2023, Infrastructure BC was engaged by the Owner to support with the analysis of development and transaction options, including the role of the private sector in the Project and at the Site.

3 Development Options Analysis

This section compares the two development options, qualitatively and quantitatively, and recommends an option for the Project.

3.1 Development Objectives and Options

This section describes the development objectives and options for the Project.

3.1.1 Development Objectives

The development objectives outlined in Table 3-1 were identified to provide an analytical framework for evaluating options.

TABLE 3-1: DEVELOPMENT OBJECTIVES

Development Objective	Description
Positive Impact to the Contextual Urban Fabric	• Supports and advances the goals of the OCP and the local area plan and is consistent with the McKenzie Corridor guidelines.
Environmental, Social, and Governance Objectives	• Supports delivery of the Owner's community initiatives, such as housing supply, housing affordability, sustainability, climate change, accessibility, diversity, equity, and inclusion. • Allows collaboration between the private sector and the Owner to determine the optimal trade-off between the Owner's ESG goals and financial contribution.
Cost Certainty	• Ability to obtain a high level of cost certainty.
Asset Performance	• Allows for commercial terms that result in maximized operational performance and cost efficiency throughout the life cycle of the asset. • Enables innovative and creative solutions that deliver public services in the midst of one of the Owner's key growth areas and neighbourhood centres.

Development Objective	Description
Optimizing Risk Allocation	• Ensures that key risks are allocated in the most cost-effective way to the party that is best suited to manage them.
Market Interest and Capacity	• Ability to solicit and retain interest from the market and obtain a robust competition.

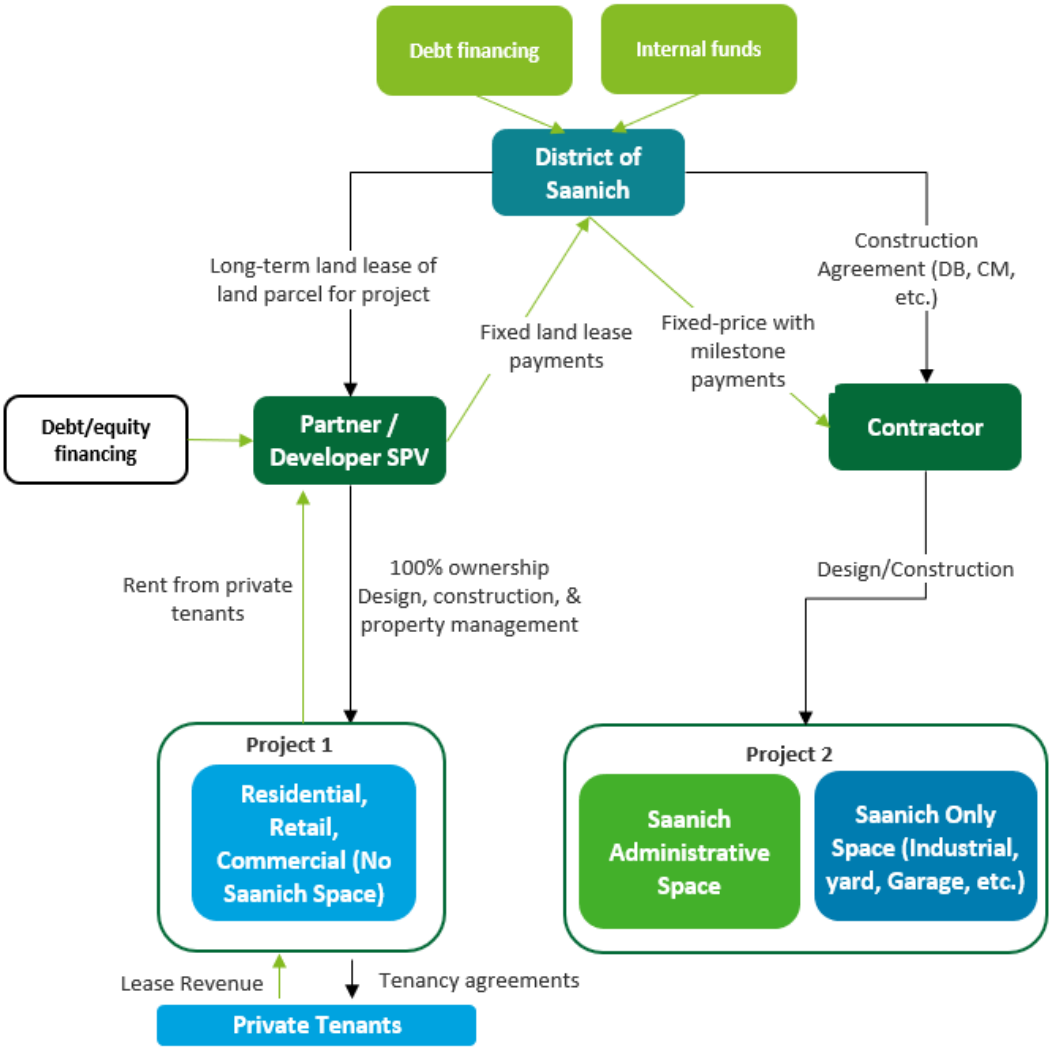
3.1.2 Development Options

There are two general development structures available for the Project that enable the private sector involvement necessary to achieve the Owner's goals: the multi-counterparty option and the single-counterparty option.

3.1.2.1 Multi-Counterparty Development Option

The multi-counterparty option involves the Owner contracting with two or more entities. The first counterparty, which would likely be a real estate developer, would lease specifically parcelled land from the Owner for exclusive private development use. The second counterparty, which would likely be a construction contractor, would be contracted to construct the new SOC on land parcelled for exclusive SOC use. Figure 1, below, illustrates a sample structure for this option.

FIGURE 1: MULTI-COUNTERPARTY DEVELOPMENT OPTION



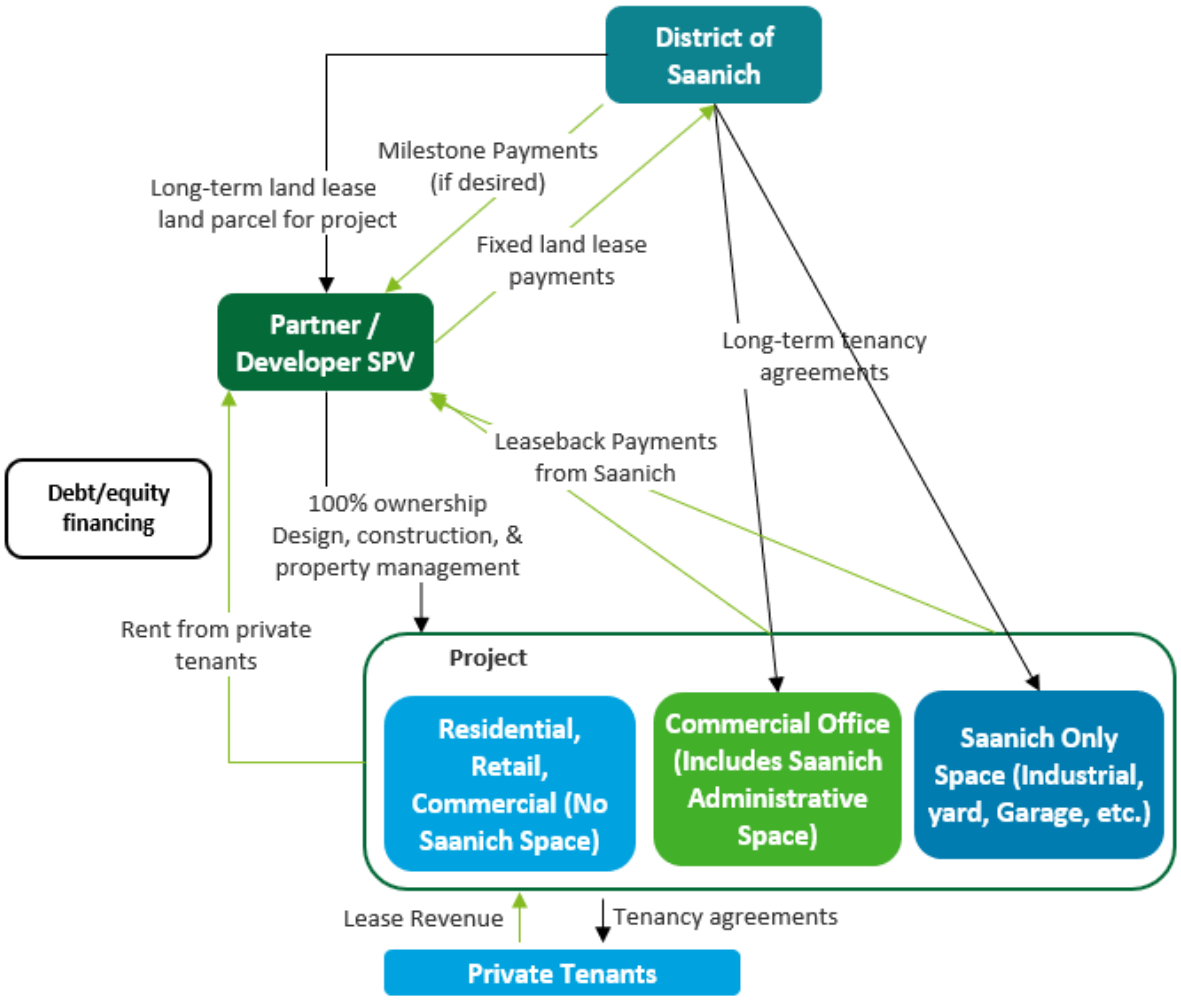
Note: SPV means Special Purpose Vehicle.

Note: Project 1 is the private development and Project 2 is the SOC.

3.1.2.2 Single-Counterparty Development Option

The single-counterparty option involves the Owner engaging with a single counterparty, such as a real estate developer or infrastructure investor, to masterplan the entire site and develop an integrated SOC and private development solution, collectively. Figure 2, below, illustrates a sample structure for this option.

FIGURE 2: SINGLE-COUNTERPARTY DEVELOPMENT OPTION



The single-counterparty development option is a proven contract model that has been utilized by many municipalities to maximize the utility of public land. Examples locally include the Capital Park development at 525 Superior Street which includes office space for the BC Ministry of Environment as well as residential space and the City of Victoria Fire Department Headquarters and firehall No. 1 which includes residential space at 1025 Johnson Street, both in Victoria, BC. These projects did not have the exact contractual structure to Figure 2, though they both represent a public entity, the Province and the City of Victoria respectively, working with a single counterparty to achieve both the public infrastructure and urban development

objectives. Internationally a similar approach has been displayed at two separate California projects: the Potrero Yard Modernization Project in San Francisco and the Long Beach Civic Centre City Hall and Port Headquarters, which both included delivery of large public infrastructure projects as well as significant contributions to local housing supply.

3.2 Qualitative Analysis

3.2.1 Multiple Criteria Assessment

Value for taxpayers is a fundamental goal of every public sector infrastructure project. Taxpayers want to know that their dollars are spent effectively and efficiently.

The multiple criteria assessment (MCA) process provides a framework for evaluating both quantitative and qualitative factors and presents the advantages and disadvantages of each option in a form that can easily be assimilated by decision-makers.

3.2.2 MCA Framework

The assessment framework of the qualitative criteria requires judgments to be made on the magnitude of the relative benefits, or impacts, of each option for a particular criterion. In order to discuss criteria and judge their values on a consistent basis, the assessment framework shown in Table 3-2 was used to assess how well each option achieves the stated objective.

TABLE 3-2: DEVELOPMENT OPTIONS MCA FRAMEWORK

X	✓	✓✓	✓✓✓	✓✓✓✓
Fails to satisfy the basic requirements of the Owner.	Partially effective in satisfying the requirements of the Owner.	Moderately effective in satisfying the requirements of the Owner.	Substantially effective in satisfying the requirements of the Owner.	Highly effective in satisfying the requirements of the Owner.

3.2.3 Criteria

The criteria considered for the MCA assessment are the same as the development stated in Section 3.1.1.

3.2.4 MCA Results

Table 3-3 summarizes the results of the MCA for the development options.

TABLE 3-3: SUMMARY OF PROCUREMENT OPTION MCA RESULTS

Criteria	Multi-Counterparty	Single-Counterparty
Positive Impact to the Contextual Urban Fabric	✓✓	✓✓✓✓
Environmental, Social, and Governance Objectives	✓✓	✓✓✓
Cost Certainty	✓✓✓	✓✓✓✓
Asset Performance	✓	✓✓
Optimizing Risk Allocation	✓✓	✓✓✓
Market Interest	✓✓✓✓	✓✓✓

3.2.5 Qualitative Analysis Conclusion

The development options MCA results conclude that the single-counterparty development option is preferred from a qualitative perspective. The full report with more detailed information can be found in Appendix A [Development Options MCA].

3.3 Market Sounding

Two rounds of market sounding interviews were undertaken by the Owner and Infrastructure BC. The following six organizations, which operate in the real estate and infrastructure development industry, participated in the market sounding:

- ARUP Group;
- Concert Properties / Concert Infrastructure;
- Fengate Asset Management;
- Jawl Properties;
- Omicron; and
- Plenary Group.

The objectives of the first market sounding exercise were to:

1. Provide information about the Project to the market and raise market awareness and interest in the Project; and

2. Obtain market and industry feedback on:
    a) Project timing, schedule, and phasing;
    b) Potential procurement models and processes;
    c) Transaction structure; and
    d) Perceived Project risks.

The responses to the market sounding were overall very positive and indicated significant interest in pursuing the Project. The following list presents the key recommendations to the Owner based on feedback from the market-sounding participants.

- Any procurement process should consider a development phase to allow the parties to work collaboratively through the rezoning and subdivision process. Financial close (when the Residual Land transacts) should be at the end of the development phase to avoid unnecessary risk premiums from the private partner.
- Affordable housing targets should be established in advance.
- Design should be a component of the evaluation process focusing on the existing OCP and what variances may be required to achieve the proposal.
- Based on the discussion with the market, the Owner should perform a multiple step procurement options analysis to determine which procurement option best meets the Owner's objectives:
    - The first consideration in the analysis should be whether the Project involves one counterparty or two (i.e., is the new SOC and private development rolled into a single transaction or procured separately).
    - The next step would be to consider transaction options against a set of Owner transaction objectives.

A second round of market sounding was held in December 2023 and January 2024 for the purpose of obtaining market feedback on the highest and best use assumptions, potential integrations of uses, and transaction structure. Specific feedback from the market that relates to the development options was as follows:

- Integration of the uses, enabled by a single-counterparty structure, is possible and can be used to achieve the Owner's objectives (as laid out in the OCP and strategic plan) over the entire site, versus over the limited area for private development in a multi-counterparty structure.
- A 'whole site' approach under a single-counterparty approach involving a collaborative master planning exercise can be undertaken to maximize the achievement of the Owner's objectives over the whole site.

More information regarding the market soundings can be found in Appendix B [Market Sounding Reports].

3.4 Quantitative Analysis

The quantitative analysis of the development options is predicated on the Project consisting of a dollar amount that a private partner will be willing to pay to the Owner for access to the Residual Land, referred to as the Residual Land value (RLV), and a quantifiable difference in cost between the development options to integrate the private development with the SOC, referred to as the relative integration cost (further detailed in Section 3.4.1.2). The net value of each development option to the Owner is then defined as:

Net value of development option = RLV – relative integration cost

The relative integration cost was estimated by Deloitte based on the Altus Canadian Construction Cost Guide. To define the RLV, the private partner's development profit was first defined as:

Development profit = development revenue - development cost - RLV

The RLV is then defined as:

RLV = development revenue - development cost - development profit

The quantitative analysis of the development options is the comparison of the net value of each option, as defined above.

3.4.1 Highest and Best Use Analysis

A highest and best use analysis was conducted by Deloitte to estimate the RLV of the single-counterparty and multi-counterparty development options. Six highest and best use options were developed in collaboration with the Owner, ranging from a multi-counterparty option with no integration between the new SOC and private development (lowest density), to a single-counterparty fully integrated option with the new SOC program, stacked to maximize the private development area (highest density). The highest and best use illustrations for each of the six options can be found in Appendix C [Highest and Best Use Illustrations]. The key assumptions used in the highest and best use model are included in Table 3-4, below. The market assumptions (unit size, rent, operating expense, interest rate and Cap Rate) are derived from market research conducted by Deloitte. The density assumptions are based on the current draft OCP (as of February 2024) and feedback from the Owner's staff. There is an understanding that the Owner will carry out a site-specific rezoning that may result in different density assumptions than used at this stage.

TABLE 3-4: HIGHEST AND BEST USE MODEL KEY ASSUMPTIONS

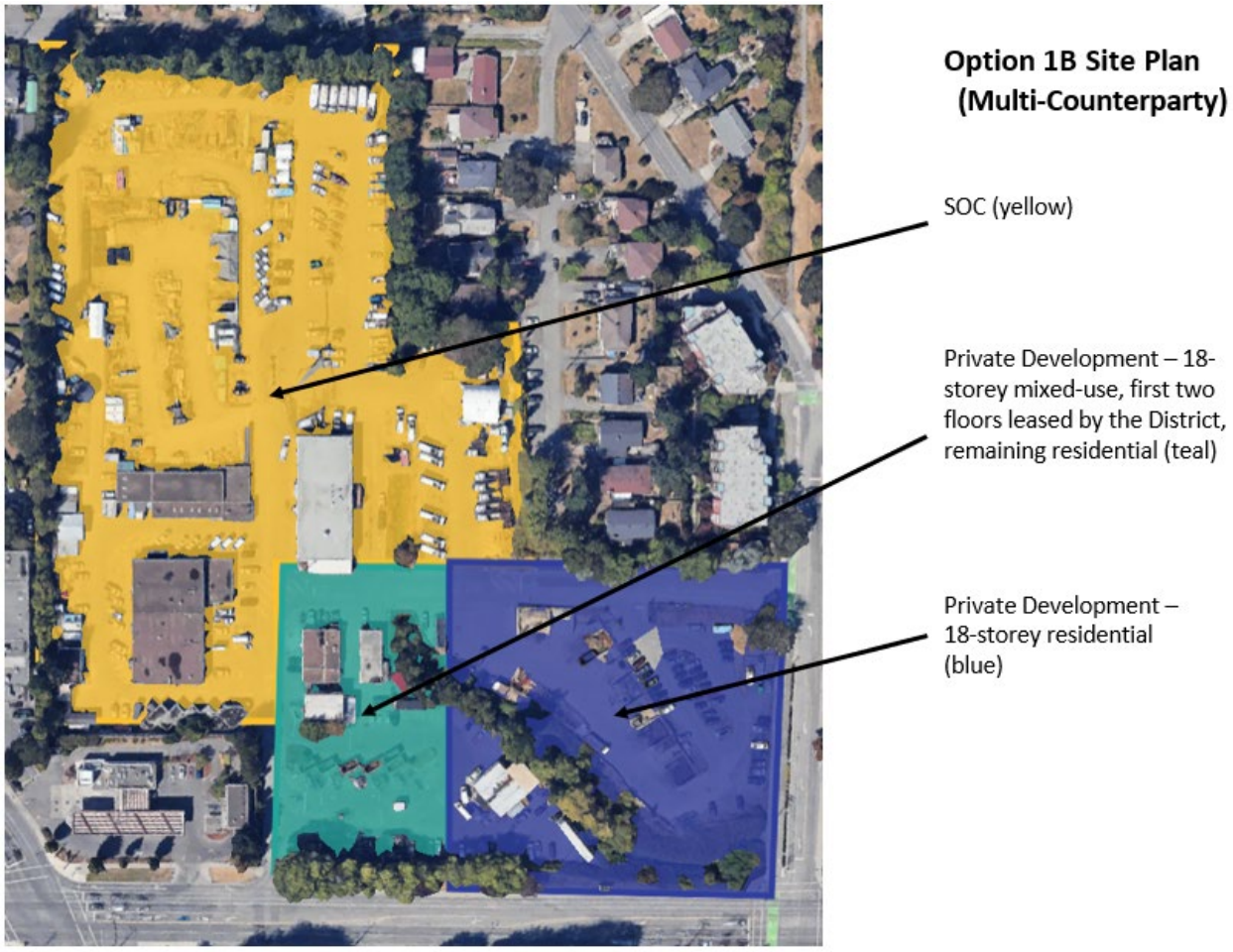
Assumptions	
Private development use	Residential (rental)
Concrete building height	18 storeys total
Concrete building site coverage	50%
Wood frame building height	4 storeys (atop 2 storeys of SOC use)
Average residential unit size	740 square feet
Proportion of affordable units	10%
Monthly market rent	$3.78 per square foot
Monthly affordable rent	$2.11 per square foot
Private development operating expense	$7,900 per unit per year
Private development interest rate	7.2%
Cap rate	4.25%

Based on the Owner's requirement to have public-facing space integrated with private development fronting McKenzie Avenue along the south side of the Project, the highest and best use options were limited to two, with one representing the multi-counterparty development option and the other representing the single-counterparty development option.

3.4.1.1 Multi-Counterparty Highest and Best Use

Option 1B of the highest and best use analysis forms the basis of the multi-counterparty development option. Figure 3, below, illustrates the site area allocation for this option.

FIGURE 3: MULTI-COUNTERPARTY DEVELOPMENT OPTION AREA ALLOCATION

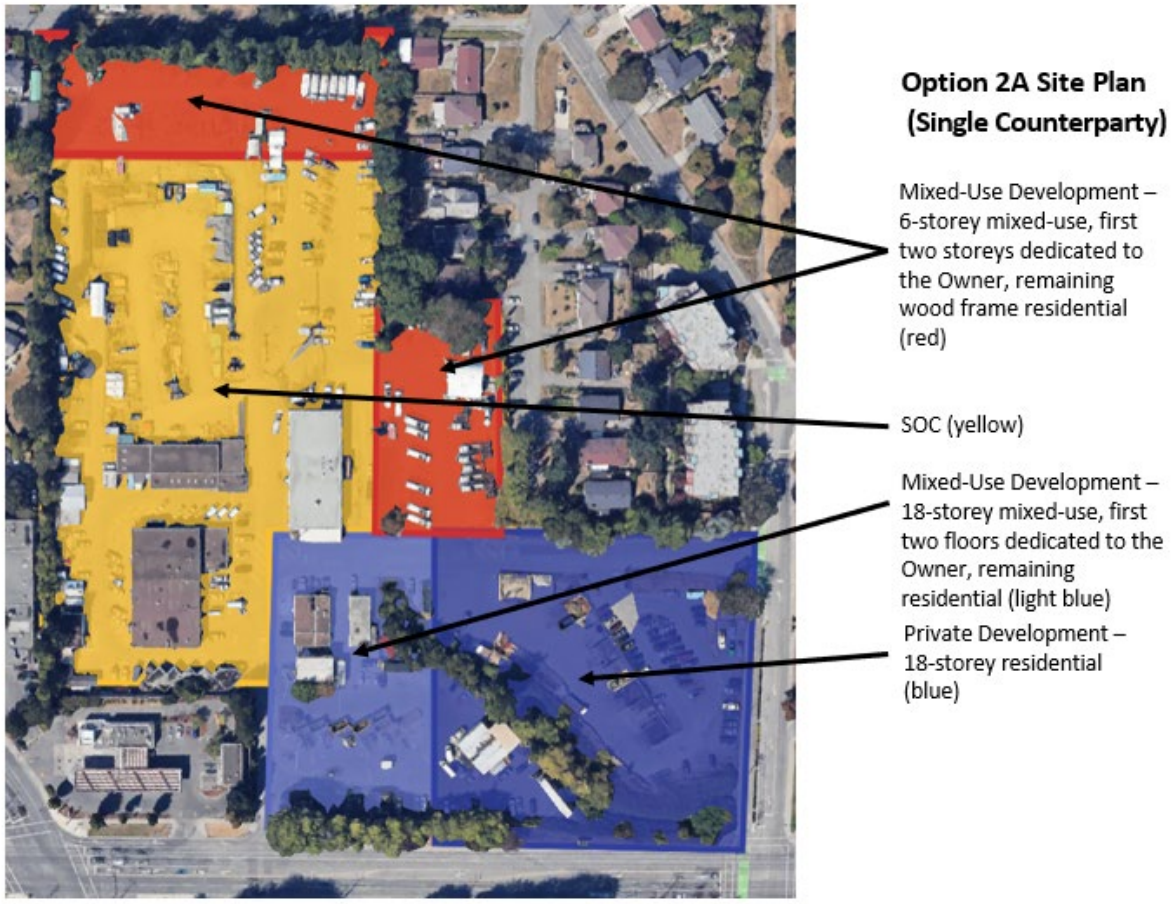


As illustrated in Figure 3, the new SOC would be constructed on land parcelled for exclusive SOC use (yellow) by the counterparty responsible for construction the SOC. The remaining lands would be leased to a real estate developer (second counterparty), for exclusive private development use, which is assumed to be 18-storey residential buildings in the area in blue and a 16-storey residential building atop a two-storey commercial podium (18 storeys total) in the area in teal. This option involves the Owner leasing the two-storey commercial podium from the second counterparty for uses such as engineering offices and common spaces.

3.4.1.2 Single-Counterparty Highest and Best Use

In the single-counterparty development option, the Owner would engage a single counterparty, such as a real estate developer or infrastructure investor, to masterplan and develop the entire Site, including the new SOC and the private development on the Residual Lands. As such, the area allocation of the single-counterparty option is far less prescribed and certain than the area allocation of the multi-counterparty option and allows for increased potential areas for private development. Option 2A of the highest and best use analysis was selected as the basis of the single-counterparty development option for the purpose of the analysis, based on the Owner's requirement to have public-facing space integrated with private development fronting McKenzie Avenue along the south side of the Project. Figure 4, below, illustrates the site area allocation for this option.

FIGURE 4: SINGLE-COUNTERPARTY DEVELOPMENT OPTION AREA ALLOCATION



As illustrated in Figure 4, most of the new SOC would be constructed on land exclusive to SOC use (yellow). The areas in red would include two storeys for Owner uses, such as the stores yard, material storage, and recycling, topped by private development use, which is assumed to be four-storey wood frame residential buildings. The areas in red in the multi-counterparty option are for exclusive SOC use, so the cost of integrating the new SOC and private development in these areas in the single-counterparty option is the relative integration cost described in Section 3.4. This is the cost to house the new SOC program uses in the area and structurally enable them to accommodate private development above. The cost of the private development itself is not included in this cost. The area in light blue would include private development use, which is assumed to be a 16-storey residential building atop a two-storey podium for Owner uses, such as engineering offices and common spaces (18 storeys total). The area in blue would be for exclusive private development use, which is assumed to be 18-storey residential buildings.

3.4.1.3 Highest and Best Use Comparison

The highest and best use analysis determined that the single-counterparty development option provides additional residential units through integration with the new SOC in the red areas in Figure 4.

TABLE 3-5: NET VALUE OF DEVELOPMENT OPTIONS

Project Cost ($000's)	Multi-Counterparty	Single-Counterparty
RLV (A)	$28,679	$46,294
Relative Integration Cost* (B)	0	$16,000
Net Value of Development Option = (A) - (B)	$28,679	$30,294
Difference		$1,615
		5.6%

** Rounded to the nearest million dollars.*

Table 3-5 illustrates that the single-counterparty option has an approximately $1.6 million (5.6%) higher net value than the multi-counterparty option. As mentioned in Section 3.4.1.2, the area allocation assumed for the analysis of the single-counterparty option is less certain than that of the multi-counterparty option, and therefore the associated integration cost, RLV, and net value of the development option have a large range of possible values. Due to the uncertainty of many of the assumptions made in the highest and best use analysis, the difference in the net value between the two options is considered to be immaterial.

3.4.2 Comparable Land Sales Analysis and Peer Review

TABLE 3-6: SUMMARY OF LAND VALUES

Summary of Land Values and Comparisons ($000's)			
Scenario	Option 1B (multi-counterparty)	Option 2A (single-counterparty)	Colliers Opinion
Net Value of Development Option	$28,679	$30,294	
Cap Rate	4.25%	4.25%	4.5% to 5.0%
Colliers Peer Review Net Value of Development Option	$31,622	$33,814*	

** The Colliers peer review did not estimate relative integration costs. Therefore, the same pro-rated relative integration cost was added to the Colliers single-counterparty analysis.*

Colliers was engaged to perform a peer review of the highest and best use analysis. The Colliers peer review analyzed the same options and found residual land values +/- 10% of the RLV from the foregoing analysis.

Additionally, Colliers prepared an opinion report related to capitalization rate (Cap Rate) on relevant apartment sales, in which recent relevant land sale Cap Rates were reviewed and compared to a potential transaction involving the residual land. Refer to Appendix D [Colliers Land Value Opinion] for more information.

Colliers arrived at the opinion that the estimated Cap Rate would be in the range of 4.5%-5.0%. The Cap Rate used in the Highest and Best Use is 4.25%. As the Cap Rate is inversely correlated to the Residual Land Value, the Colliers opinion is slightly more conservative than the Highest and Best Use Study.

The above opinions collectively conclude that the RLV derived from the highest and best use analysis is reasonable. The actual RLV for the Project will be determined at a later stage once the Site has been rezoned.

3.4.3 Quantitative Analysis Conclusion

As the comparable land sales analysis described in Section 3.4.2 indicates that the RLVs estimated in the highest and best use analysis are appropriately conservative at this stage of the Project, the quantitative analysis concludes that the single-counterparty development option is preferred from a quantitative perspective, as the single-counterparty option includes more

residential units than the multi-counterparty option and the difference in the net value of the development options is considered to be immaterial.

3.5 Recommended Development Option

The purpose of the development options analysis is to identify the development option that offers the best overall value to the Owner. It involved an evaluation of qualitative factors, such as market analysis and stakeholder feedback, as well as a quantitative analysis to assess the net value of each option. Based on the analysis, the single-counterparty development option is recommended for the Project.

The single-counterparty development option stands out due to its potential to better provide cost certainty and contribute positively to the urban realm. The integrated master planning approach of the option provides the opportunity to enhance the overall aesthetic appeal of the development and it improves the opportunities for amenities such as green spaces, public art installations, and improved infrastructure that benefit both residents and employees of the SOC. By prioritizing these elements, it showcases a commitment to community welfare and contributes positively to the overall livability and desirability of the District of Saanich.

TABLE 3-7: DEVELOPMENT OPTIONS ANALYSIS SUMMARY

Criteria	Multi-Counterparty	Single-Counterparty
Positive Impact to the Contextual Urban Fabric	✓✓	✓✓✓✓
Environmental, Social, and Governance Objectives	✓✓	✓✓✓
Cost Certainty	✓✓✓	✓✓✓✓
Asset Performance	✓	✓✓
Optimizing Risk Allocation	✓✓	✓✓✓
Market Interest	✓✓✓✓	✓✓✓
Net Value of Development Option ($000,000's)	~$29	~$30

4 Transaction Options Analysis

4.1 Transaction Objectives and Options

This section describes and analyzes the transaction objectives, cashflow options, and procurement options for delivery of the SOC.

4.1.1 Transaction Objectives

To establish the transaction objectives for the Project, Infrastructure BC held a workshop with the Owner in February 2024, with the transaction cashflow options, as described in Section 4.1.2, as the basis of discussion. The transaction objectives outlined in Table 4-1 were identified through the workshop to provide a framework for evaluating transaction options.

TABLE 4-1: TRANSACTION OBJECTIVES

Transaction Objective	Description
Schedule Certainty	Completion of the SOC within proposed schedule and dependable timelines for the Residual Land proceeds.
Price Certainty	Price certainty of SOC and minimizing risk of not receiving Residual Land proceeds in full.
Timeframe	Transaction should be completed in a limited timeframe to allow the Residual Land proceeds to be applied to the capital costs of the SOC.

4.1.2 Transaction Cashflow Options

The transaction cashflow options for the Project relate to the timing of cash inflows and cash outflows. Cash inflow refers to the payment from the private partner to the Owner for access to the Residual Land for the private development, which is assumed to be through a 99-year land lease. Cash outflow refers to the payment from the Owner to the private partner for the construction of the SOC. There is a spectrum of options for cash inflows and cash outflows, so three discrete options for each that span the spectrum were identified for the analysis.

Cash inflow options include the following:

- Inflow Option 1: single lump sum payment at transaction financial close;
- Inflow Option 2: lease payments over land lease term starting at transaction financial close; and

- Inflow Option 3: lump sum payments as private developments achieve occupancy.

Cash outflow options include the following:

- Outflow Option 1: progress payments during construction of SOC;
- Outflow Option 2: lump sum payment at occupancy of SOC (with the option for partial progress payments during construction); and
- Outflow Option 3: leaseback payments over leaseback term starting at occupancy of SOC.

Any of the three cash inflow options can be paired with any of the three cash outflow options, with the combination being a transaction cashflow option. For example, one possible transaction cashflow option involves the Owner receiving lease payments from the private partner over the term of the land lease (Inflow Option 2) and the Owner paying a single lump sum payment to the private partner for the new SOC at occupancy (Outflow Option 2).

Outflow Options 1 and 2 are possible under design-build type procurement models, while Outflow Option 3 requires the Owner to enter a lease for the new SOC and pay the private partner a lease payment. Due to the underlying land lease, and the Owner subsequently leasing back the SOC, this is referred to as a leaseback and leaseback payment. The term of the leaseback is a minimum of 20 years and could be a maximum of 99 years to match the land lease.

More information about each of the transaction cashflow options can be found in Appendix E [Transaction Cashflow Options].

4.2 Transaction Cashflow Options Screen

The MCA process described in Section 3.2 was used to evaluate the cash inflow and cash outflow options against the transaction objectives. The assessment framework shown in Table 4-2 was used to assess how well each option achieves the stated objective.

TABLE 4-2: TRANSACTION OPTIONS MCA FRAMEWORK

X	✓	✓✓
Fails to satisfy the basic requirements of the Owner.	Partially effective in satisfying the requirements of the Owner.	Highly effective in satisfying the requirements of the Owner.

Table 4-3 summarizes the results of the MCA for the transaction cashflow options.

TABLE 4-3: SUMMARY OF TRANSACTION CASHFLOW OPTION MCA RESULTS

Criteria	Cash Inflow Options			Cash Outflow Options		
	1	2	3	1	2	3
Schedule Certainty	✓✓	✓✓	X	✓✓	✓✓	✓✓
Price Certainty	✓✓	✓	✓✓	✓✓	✓✓	✓
Timeframe	✓✓	X	✓	✓✓	✓✓	X

4.2.1 Cash Inflow Options Assessment

The following is the analysis of the cash inflow options against the transaction objectives:

- **Inflow Option 1**: A single lump sum payment at transaction financial close meets all the transaction objectives as follows:
    - Schedule Certainty: this option includes a defined timeline for the Residual Land proceeds that is within the control of the Owner.
    - Price Certainty: this option allows the Owner to monetize the density and negotiate the Residual Land proceeds and reduce burden on the taxpayers.
    - Timeframe: this option limits the timeline of the transaction to be completed at the end of the transaction.
- **Inflow Option 2**: lease payments over the land lease term starting at transaction financial close does not satisfy all the transaction objectives as follows:
    - Schedule Certainty: this option meets the Schedule Certainty objective as it includes a defined timeline for the Residual Land proceeds.
    - Price Certainty: this option partially satisfies this objective. A lease payment over the term will be agreed to, but potential adjustments to the payment, based on interest rates or other external risks, may change based on the final lease agreement negotiated.
    - Timeframe: this option does not meet the timeframe objective as the payment will be over the land lease term, which is assumed to be 99 years.
- **Inflow Option 3**: lump sum payments as private developments achieve occupancy does not satisfy all the transaction objectives, as follows:
    - Schedule Certainty: this option does not satisfy this objective as it does not include a defined timeline for the private development payment, as it ties it to an

event (occupancy of the private development) that is outside the control of the Owner.

- Price Certainty: this option offers the opportunity to maximize the Residual Land proceeds to the Owner, as it significantly reduces the risks for the private partner. However, the final outcome of this option is also highly sensitive to the financial assumptions of the private partner, which could vary significantly.
- Timeframe: this option partially satisfies this objective as part of the Residual Land proceeds may be made to the Owner prior to the completion of the new SOC which can be applied to its capital cost.

4.2.2 Cash Outflow Options Assessment

The following is the analysis of the cash outflow options against the transaction objectives:

- **Outflow Option 1**: progress payments during construction of SOC satisfies all the transaction objectives, as follows:
  - Schedule Certainty: in this option, schedule risk will be transferred to the private partner through a fixed-schedule contract and the Project will be paid for by the Owner through progress payments.
  - Price Certainty: in this option, there will be a fixed-price contract between the Owner and private partner, so the outflow will be a known lump sum amount.
  - Timeframe: in this option, the cash outflows will be limited to the timeframe of the design and construction of the SOC.
- **Outflow Option 2**: single lump sum payment at occupancy of SOC satisfies all the transaction objectives as follows:
  - Schedule Certainty: same as Outflow Option 1, with the cash outflow happening at a specific time tied to a SOC construction milestone (occupancy of the new SOC).
  - Price Certainty: same as Outflow Option 1.
  - Timeframe: same as Outflow Option 1, with payment limited to substantial completion.
- **Outflow Option 3**: leaseback payments over leaseback term starting at occupancy of SOC does not satisfy all of the transaction objectives as follows:
  - Schedule Certainty: this option will have a defined timeline, the leaseback period, that will start at occupancy.

- Price Certainty: this option will have an agreed upon leaseback payment over the term of the tenancy agreement, but it exposes the Owner to a significantly longer payment period, reducing price certainty.
- Timeframe: this option does not limit the timeframe as the leaseback term will be a minimum of 20 years.

Based on the results of the MCA, the recommended cashflow option involves a single lump sum payment at financial close for the Residual Land (Inflow Option 1) and either progress payments during construction (Outflow Option 1) or a lump sum payment at financial close with partial progress payments during construction (Outflow Option 2) to the private partner for the new SOC.

4.2.3 Cashflow Considerations

Although Inflow Option 3 is not recommended due to the unknown timeframe of payments received from the private partner, a deferred and staggered Residual Land proceeds mechanism could significantly de-risk the Project for the private partner and increase the Residual Land proceeds available to the Owner. To illustrate this, the hypothetical example below compares the Residual Land proceeds of Inflow Option 1 and Inflow Option 3, with the following assumptions:

- RLV of $30 million;
- Inflow Option 1 involves a single upfront cash inflow of $30 million at financial close for a three-building development over six years;
- Inflow Option 3 involves a cash inflow as each of the three private development building achieves occupancy, assuming one building achieves occupancy every two years following financial close;
    - Private partner assumed return on equity of 10 percent to 15 percent for calculating future value of the cash inflows; and
    - Assumed discount rate of 5 percent.

The resulting Residual Land proceeds to the Owner are as follows:

- Inflow Option 1: present value of $30 million, made in a single payment at financial close; and
- Inflow Option 3: present value ranging from $33 million to $40 million, made in three payments over six years.

Because of its potential to increase the Residual Land proceeds, Inflow Option 3 may be explored during the development phase, as described in Section 6.1.3.

4.2.4 Cashflow Assessment Summary

Based on the cashflow assessments conducted above, the procurement options screen and quantitative analysis of procurement options described in the following sections further assess the combination of Inflow Option 1 coupled with Outflow Options 1 and 2.

4.3 Procurement Options Screen

In addition to determining a transaction cashflow option for the Project, a procurement option must be determined for the delivery of the SOC. The following procurement options were considered:

- DBB;
- CM;
- DB;
- ProgDB;
- ProgDBF; and
- ProgDBFM.

See Appendix F [Procurement Model Descriptions].

The MCA process described in Section 3.2 was used to evaluate the procurement options against the transaction objectives. The assessment framework shown in Table 4-4 was used to assess how well each option achieves the stated objective.

TABLE 4-4: PROCUREMENT OPTIONS MCA FRAMEWORK

X	✓	✓✓
Fails to satisfy the basic requirements of the Owner.	Partially effective in satisfying the requirements of the Owner.	Highly effective in satisfying the requirements of the Owner.

Table 4-5 summarizes the results of the MCA for the procurement options.

TABLE 4-5: SUMMARY OF PROCUREMENT OPTION MCA RESULTS

Criteria	DBB	CM	DB	ProgDB	ProgDBF	ProgDBFM
Schedule Certainty	✓	✓	✓✓	✓✓	✓✓	✓✓
Price Certainty	X	X	✓	✓✓	✓✓	✓✓
Timeframe	✓✓	✓✓	✓✓	✓✓	✓✓	X

The following procurement options did not pass the screen:

- **DBB:** Design risk, which can be a major cost driver, is retained by the Owner in DBB, so the Price Certainty objective is not met.
- **CM**: Design risk and construction risk, which can be major cost drivers, are retained by the Owner in CM, so the Price Certainty objective is not met.
- **DB:** This option does not meet the Price Certainty objective, as having a procurement without a development phase would increase the likelihood of not receiving the RLV payment in full. The market sounding in Section 3.3 indicated that without a collaborative process with the Owner to resolve entitlements and permitting the private partner would discount the RLV due to increased risk.
- **ProgDBFM:** This option does not meet the Timeframe objective as the payments for the new SOC are spread over a long period of time. Additionally, this option involves the private partner providing long-term maintenance services for the new SOC which the Owner intends to provide with its own staff.

The following procurement options passed the screen:

- **ProgDB**: This option fulfills all the transaction objectives. The Owner and private partner would sign a Design-Build Agreement that includes a fixed timeline and schedule. The typical cash outflow of this procurement option involves progress payments during construction, which is one of the recommended transaction cash outflow options.
- **ProgDBF**: This option fulfills all the transaction objectives. The Owner and private partner would sign a Project Agreement that includes a fixed timeline and schedule. The typical cash outflow of this procurement option involves progress payments during construction and a lump sum payment at substantial completion, which is a combination of the two recommended transaction cash outflow options.

Both ProgDB and ProgDBF involve the procurement process described in Section 6.1, with an RFQ that shortlists up to three proponents to participate in a PDA RFP, which results in the execution of a Project Development Agreement with a single proponent, along with an invitation to the proponent to participate in the RFP during the development phase. During the development phase, the proponent will masterplan the site and design the new SOC up to 100% design. The development phase will end with the execution of a Design-Build Agreement or Project Agreement to complete the design of the new SOC and build it at a fixed price and within a fixed schedule. The difference between the two procurement options is that under the ProgDBF, the private partner partially finances the cost of the new SOC, and the Owner pays the privately financed amount plus interest to the private partner at Project completion. The inclusion of partial private financing incentivises the private partner to meet its obligations under the agreement and it applies additional oversight on the private partner by the lenders. The ProgDB option does not include any private financing and the Owner pays for the new SOC through progress payments during construction.

4.4 Quantitative Analysis of Procurement Options

4.4.1 Methodology

The quantitative assessment is established by calculating the estimated nominal cost of the procurement options to provide a comparison between them, assuming the same performance specifications for each. This approach takes into account the different amounts and timing of all relevant cash flows for each procurement option. This assessment calculates the Project's estimated nominal cost for the ProgDB and ProgDBF procurement options that passed the screen in Section 4.3. Refer to Appendix G [Financial Model Report] for more information.

4.4.2 Key Financial Assumptions

TABLE 4-6: KEY FINANCIAL ASSUMPTIONS

Assumptions	ProgDB	ProgDBF
Project Term*	55 months	55 months
Length of Construction	26 months	26 months
Start of Design and Construction	Sept 2025	Sept 2025
Base Design and Construction Cost	$91,244,795	$91,244,795
Owner's Procurement and Implementation Costs	$9,949,803	$10,199,803
Equipment Costs	$1,563,080	$1,563,080

Assumptions	ProgDB	ProgDBF
Insurance Cost	$1,563,080	$1,563,080
Bonding Cost	$781,540	$781,540
Partial Compensation	$200,000	$250,000

** Project Term starts at the start of RFQ development and finishes at the completion of construction of the new SOC.*

4.4.3 Level of Private Finance

Under the ProgDB delivery option, the Owner will pay the full construction costs for the Project as they are incurred. Under the ProgDBF delivery option, the Project will be financed using a combination of public funding and private short-term construction financing with the possibility of up to a 100% privately financed solution during design and construction. Regardless of size, the privately financed portion of the Project is paid in full via a lump sum payment by the Owner at completion.

In the ProgDBF financial model, the level of private financing has been set at approximately 76% percent, with the remaining balance of 24% percent being publicly funded. This level of private financing will help to ensure appropriate risk transfer during the term of the contract.

4.4.4 Procurement and Implementation

The procurement and implementation budget captures Owner's team costs incurred during the procurement and implementation phase of the Project, which starts with the Owner's direction to proceed with preparing the procurement documents and finishes with the total completion of construction of the SOC.

The total procurement and implementation budget is approximately $9.9 million for the ProgDB and approximately $10.1 million for the ProgDBF.

4.4.5 Risk Analysis and Quantification

Every successful project must consider and manage risk. Risk management is defined as the actions, or planned actions, that impact the probability and consequences of a risk event to ensure that the level of risk assumed falls within an acceptable limit for the Project team. The goal of any form of partnership arrangement is to allocate project risks to the party best able to manage them at a reasonable cost to the project. An efficient allocation of risk between the public and private sector participants will ultimately lead to an optimal project price and optimal value for taxpayers' dollars.

4.4.5.1 Risk Methodology

The Project team undertook a comprehensive analysis of Project-specific risks. This analysis was conducted in accordance with Infrastructure BC's risk management guidance. It incorporates both qualitative and quantitative elements, as discussed throughout this section.

The Project's risk matrices will continue to be updated throughout the procurement and implementation phases.

4.4.5.2 Risk Assessment

A number of risk categories associated with the Project that could have an impact on the overall cost of the Project were assessed in detail. Risks within each category (e.g., approval, procurement, design, and construction) were identified and then described in terms of cause and consequence. Wherever possible, existing controls and mitigating strategies were identified for the Project risks under consideration. Table 4-7 outlines the allocation of risks between the Owner and the private partner under the ProgDB and ProgDBF procurement options.

TABLE 4-7: SUMMARY OF RISK ALLOCATION MATRIX

Risk	ProgDB		ProgDBF	
	Private Partner	Owner	Private Partner	Owner
Approval		✓		✓
Permitting	✓		✓	
Design	✓		✓	
Construction	✓		✓	
Site Geotechnical	✓		✓	
Owner Scope Changes		✓		✓
Financing		✓	✓	✓
Contractor Default		✓	✓	✓

4.4.5.3 Risk Quantification

Those Project risks that were deemed to be readily quantifiable were assigned an expected dollar value according to Infrastructure BC's risk management guidance. In total, 15 Project risks were quantified and incorporated into the financial model.

4.4.5.4 Incorporation into the Financial Analysis

For each procurement option, an amount of transferred and retained risk was added to the financial model. In this analysis, the 67th percentile of total risk was added to the model.

4.4.5.5 Monte Carlo Analysis

To test the robustness of the quantification work conducted on the Project risks described above, a Monte Carlo analysis was conducted on the quantified risks, both those expected to be transferred to the private sector, and those risks expected to be retained by the Owner, under each procurement method. A Monte Carlo analysis is essentially an elaborate sensitivity analysis that tests the impacts of different inputs on the values of the Project risks. The analysis was performed on the total capital risks of the Project. The analysis was then split into two sections: transferred risks and retained risks.

4.4.5.6 Monte Carlo Results

The results of the Monte Carlo risk analysis are provided in Table 4-8 .

TABLE 4-8: SUMMARY OF NOMINAL RISK VALUES (AT 67TH PERCENTILE)

Financial Model Risk ($000's)	ProgDB	ProgDBF
Transferred to Private Sector	4,666	4,937
Retained by the Owner	25,921	24,936
Total	**30,588**	**29,872**

Note: Totals may not add up due to rounding.

Refer to Appendix H [Risk Report] for more information on the methodology used consider the Project's risk, risk process, and quantification results.

4.4.6 Nominal Risk-Adjusted Project Costs

Table 4-9 presents the all-in nominal risk-adjusted costs for the ProgDB and ProgDBF procurement options.

TABLE 4-9: TOTAL RISK-ADJUSTED COST OF PROJECT

Project Cost ($000's)	ProgDB	ProgDBF
Contractor Costs:		
Base Design and Construction	90,504	90,754
Design and Construction Escalation	27,377	27,377
Risks Transferred to Design-Builder	4,666	4,937
Incremental Cost of Private Financing	-	3,463
Payments To Contractor During Development	8,302	8,552
Bid Development Costs	200	250
Bonding	1,018	1,018
Total Design-Build Contractor Costs	**132,066**	**136,350**
Owner's Costs:		
Procurement and Implementation Costs	9,950	10,200
Construction Insurance	2,040	2,040
Furnishings, Fittings, and Equipment	2,114	2,114
Risk Retained by Owner	25,921	24,936
Partial Compensation	200	250
Total Risk-Adjusted Nominal Construction Period Costs	**172,292**	**175,890**
Value for taxpayers' dollars		(3,598)
(ProgDB as base)		-2.09%

Note: Totals may not add up due to rounding.

The results of the quantitative analysis show greater value for taxpayers' dollars in the ProgDB procurement option than in the ProgDBF procurement option. Due to the relatively low estimated cost of the Project, the private financing in the ProgDBF option is inefficient, with the

private financing cost and other procurement model-specific costs outweighing the benefits of the risk transfer.

4.5 Recommended Transaction Option

Based on the transaction options screen, procurement options screen, and quantitative assessment, the recommended transaction option includes cash Inflow Option 1 – single lump sum payment at financial close from the private partner to the Owner for the Residual Land, along with cash Outflow Option 1 – progress payments during construction of the new SOC, delivered through the ProgDB procurement option. Further market sounding will be undertaken prior to procurement to ensure sufficient market interest in the ProgDB procurement model. Should market interest deteriorate, the Owner could consider alternative commercial terms or procurement models.

Changes to the transaction structure, such as changing the cash inflow to a deferred payment in exchange for increasing the value of the Residual Land, may be considered during the development phase.

5 Contractual Structure Options For The New SOC

This section outlines various possible contractual structures that involve lease agreements and air space parcels that could form the basis of the transaction between the Owner and the private partner. The specific contract structure for the Project will be determined during the development phase, as described in Section 6.1.3.

5.1 Air Space Parcels

This contractual structure involves the Owner leasing the Residual Land to the private partner for private development. The Owner would retain ownership of the remainder of the Site and would contract with the private partner to design and construct the SOC. The air space above the new SOC could be subdivided into separate legal lots and leased to the private partner for private development use. This would physically integrate the new SOC with private development uses, but the private partner would only be legally entitled to the air space above the SOC. Easements could be used to provide the private partner with access to the air space above the SOC.

5.2 Lease/Lease Back

This contractual structure involves the Owner leasing the entire Site to the private partner. The Owner would set out certain design requirements for the Project through the land lease agreement and the private partner would design and construct the new SOC and develop the private development. The Owner would enter into a long-term tenancy agreement for the SOC, which would set out obligations of the Owner as lessee and the private partner as lessor. A lease renewal option could be included in the long-term tenancy agreement that would allow the Owner to renew the lease of the new SOC at the end of the lease term. At the end of the land lease term, the entire Site would return to the Owner.

6 Procurement Plan

6.1 Recommended Procurement Process

The recommended procurement option for the Project, the ProgDB, includes an RFQ, PDA RFP, and DBA RFP.

6.1.1 Request for Qualifications

The RFQ is the first stage in the procurement process. The RFQ includes a description of the Project, the proposed contractual arrangement, and the Project cost range and schedule.

The Owner, with the Project team, will evaluate the responses and based on the respondent teams' experience, qualifications, capacity, and capability to undertake the Project, will shortlist up to three proponents to be invited to submit proposals for the Project.

6.1.2 Project Development Agreement Request for Proposals

The PDA RFP will invite proponents to prepare and submit proposals to master plan the Site and design the new SOC under the Project Development Agreement. In their submissions, proponents may also propose that the Residual Land proceeds be made later than at financial close in exchange for its value being increased, as with cash Inflow Option 3 described in Section 4.1.2. The purpose of the PDA RFP is to select a single proponent that the Owner will enter the Project Development Agreement with.

Under the PDA RFP, the Owner anticipates holding collaborative meetings with each proponent. The collaborative meetings will provide an opportunity for each proponent to provide comments on technical and commercial matters relating to the Project Development Agreement.

Following execution of the Project Development Agreement, the Owner will invite the preferred proponent to participate in the DBA RFP.

6.1.3 Design-Build Agreement Request for Proposals (Development Phase)

The development phase is the period between the execution of the Project Development Agreement and either the execution of the Design-Build Agreement at financial close or cancellation of the DBA RFP.

The DBA RFP will outline a process under which the proponent and the Owner finalize and execute the Design-Build Agreement. The terms of the lease agreement for the Residual Land, the final RLV, and the contractual structure for access to the new SOC will also be established

during the development phase, and the lease agreement will be executed along with the Design-Build Agreement at financial close.

The Proponent will participate in collaborative meetings to discuss and finalize the commercial terms of the Design-Build Agreement. Proposals submitted under the DBA RFP will include a technical submission and a financial submission. The proposals will be evaluated on the basis of compliance with the requirements of the Design-Build Agreement and the DBA RFP as well as value for taxpayers' dollars.

The ProgDB process accommodates multiple proposals, if required, for the Owner and the proponent to reach an agreement on the commercial terms to complete the Project.

The Project's master plan and design will be developed in accordance with the Project Development Agreement in parallel with the DBA RFP.

If the DBA RFP is cancelled, then, in accordance with the Project Development Agreement, the contract with the private partner's design team and the ownership of the design will be assigned to the Owner, at the Owner's discretion.

6.2 Procurement and Implementation Schedule

Table 6-1 provides the Project's milestone schedule, based on a ProgDB approach. This schedule assumes that the Design-Build Agreement is executed after the second financial submission.

TABLE 6-1: PROJECT MILESTONE SCHEDULE

Milestone	Date
Issue RFQ	November 2024
Announce Shortlisted Respondents	March 2025
Issue PDA RFP	March 2025
Notify Preferred Proponent	August 2025
Execute Project Development Agreement and Issue DBA RFP	September 2025
First Technical Submission	January 2026
First Financial Submission	March 2026
Second Financial Submission	June 2026
Execute Design-Build Agreement	September 2026
Total Completion of Construction of New SOC	January 2029

Note: schedule is subject to change.

6.3 Project Governance

A critical factor for the success of any project is a clear and effective governance structure. Governance is the set of structures, systems, and processes around the Project that assure the effective delivery of the Project through to operations.

The main governance body for the Project is the Project Steering Committee, which is comprised of senior District of Saanich staff. The Project Steering Committee has approval authority for key aspects of the procurement and implementation phases. The Project Steering Committee is responsible for providing overall direction and key decision-making for the Project, particularly with respect to scope, budget, schedule, and communications. During the procurement and implementation phases, the Program Manager is responsible for executing the Project Steering Committee's directions.

The Program Manager oversees the Project team in the management of the Project, including its planning, coordination, procurement, and implementation. The Project team is comprised of Colliers Project Leaders, Infrastructure BC, and specialty consultants for technical, financial, legal, and planning aspects of the Project.

Colliers Project Leaders, as Project Manager, is responsible for project management throughout the planning, procurement, and implementation phases of the Project.

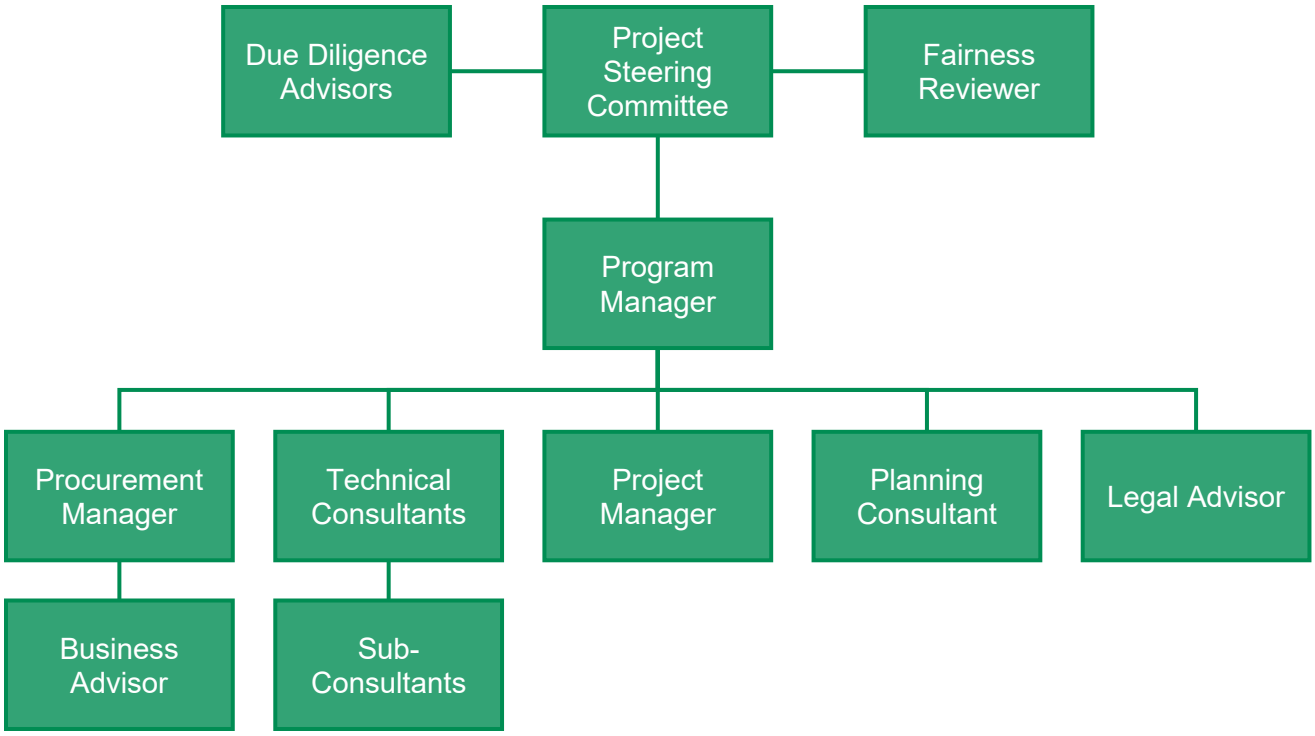
Infrastructure BC, as Procurement Manager, is responsible for the Project's procurement process and all related documentation, including the RFQ, PDA RFP, DBA RFP, relevant evaluation manuals and reports, and contracts. During implementation, Infrastructure BC will support the Owner through design and construction.

A Fairness Reviewer will be retained by Infrastructure BC for the Project's procurement process. The Fairness Reviewer works closely with the procurement team and reports directly to the Project Steering Committee. The Fairness Reviewer provides assurance to respondents/proponents that the procurement processes described in the procurement documents are applied fairly according to the terms described therein. The Fairness Reviewer will prepare fairness reports for the Project Steering Committee for the RFQ and PDA RFP phases. The reports will be made public.

Due Diligence Advisors will provide due diligence reviews at key Project milestones and report their findings to the Project Steering Committee. In reporting to the Project Steering Committee, the Due Diligence Advisors will indicate whether, in their opinions, the evaluation teams followed the process, applied the criteria diligently and consistently, reached consensus in their decisions, demonstrated a comprehensive understanding of the submissions, and exercised reasonable judgement.

Figure 5, below, illustrates the organizational structure of the Project during procurement.

FIGURE 5: PROCUREMENT ORGANIZATIONAL STRUCTURE



7 Funding Analysis

The funding analysis determines the total funding requirement for the Project.

This section of the document:

- Summarizes the scope of the analysis;
- Identifies all the cost elements comprising the total funding requirement for the Project; and
- Summarize the estimated annual cashflows of the Project.

The identified funding requirement includes:

- Capital Cost Elements: To be funded by the Owner and Residual Land proceeds; and
- One-time Cost Elements: Start-up costs and partial compensation.

7.1 Capital Cost Estimates

The total estimated capital cost of the Project based on a ProgDB is $172.1 million, of which, the net capital cost to the Owner is $141.8 million after accounting for $30.3 million in Residual Land proceeds. The breakdown for each capital component is presented in Table 7-1 below.

TABLE 7-1: TOTAL CAPITAL ASSET VALUES

($ Thousands)	Total Asset Value	Funding Sources	
		Owner	Residual Land Proceeds
Capital Budget			
DB Contract:			
Design and Construction	98,806	68,512	30,294
Escalation	27,377	27,377	
Transferred Risk	4,666	4,666	
Bid Response Costs	200	200	
Bonding Costs	1,018	1,018	
Sub-Total DB Contract	**132,066**	**101,772**	**30,294**
Owner's Capital Costs:			
Procurement and Implementation Costs	9,950	9,950	
Furnishings, Fittings, and Equipment	2,114	2,114	
Construction Insurance	2,040	2,040	
Owner's Risk Reserve	25,921	25,921	
Sub-Total Owner's Capital Cost	**40,026**	**40,026**	**-**
Total Project Capital Cost / Asset Value	**172,092**	**141,798**	**30,294**

Note: Totals may not add up due to rounding.

7.2 One-Time Operating Costs

One-time operating costs refer to expenses incurred by the owner for a specific project that are not expected to recur frequently. However, these costs do not add to the capital value of the project and as a result are not part of the capital cost and not capitalized.

7.2.1 Partial Compensation

Payable to unsuccessful proponents, partial compensation is estimated at $200,000 or $100,000 per unsuccessful proponent at the RFP stage in as-spent dollars under a ProgDB.

7.3 Key Drivers and Associated Risks

Key cost drivers fall into two main categories:

- Factors outside of the control of the Project:
    - Changes in RLV at time of contract execution; and
    - Construction Escalation.
- Project-related cost drivers:
    - Project Scope.

For each cost driver, the most realistic current assumption has been made for the purposes of the financial and where applicable, the risk analysis. Changes in these assumptions and risks beyond what was included in the risk reserve will impact the cost of the Project; areas of potential change are highlighted below.

7.3.1 Residual Land Value (Outside of the Control of the Project)

The current RLV is estimated to $30.3 million. Although the analysis was carefully conducted and independently peer reviewed, various assumptions were utilized in the calculation of the values. Any changes to those assumptions and general market conditions could have a significant impact on the RLV.

7.3.2 Escalation (Outside of the Control of the Project)

Construction escalation for the Project has been estimated at 10 percent for 2023, 8 percent for 2024, 7 percent for 2025, 5 percent for 2026, 4.5 percent for 2027 and 2028, and 4 percent for 2029 onward. Further, the risk associated with construction escalation was quantified and, as a result, approximately $1.5 million was added to the Owner's risk reserve. However, sustained increases in construction escalation beyond this would have an impact on the overall budget of the Project.

7.3.3 Project Scope (Project Related Cost Driver)

If the Project's scope differs from the current programming used for the quantity surveyors cost estimate there would be a corresponding impact to the Project's budget. Owner initiated scope changes are common in large infrastructure projects and as such this risk was quantified and approximately $2 million was added to the Owner's risk reserve. However, any changes beyond this amount could have an impact on the overall budget of the Project.

7.4 Overall Project Budget

The overall budget and net funding requirements for the Project are estimated at $172.3 million and $142.0 million respectively, using $30.3 million as Residual Land proceeds.

8 Recommendation

The following are recommended for the Project:

(d) To proceed with the single-counterparty development option.

(e) To proceed with the following transaction option:

1) Cash Inflow Option 1 (single lump sum payment at financial close from the private partner to the Owner for the Residual Land).

2) Cash Outflow Option 2 (progress payments during construction of the SOC).

3) ProgDB procurement option.

(f) A total Project budget of $172.3 million (including the Owner's Risk Reserve of $25.9 million and a one-time operating cost of $200,000) or net cost to the Owner of $142.0 million after accounting for the Residual Land proceeds of $30.3 million.

Appendices

Appendix A	Development Options MCA
Appendix B	Market Sounding Reports
Appendix C	Highest and Best Use Illustrations
Appendix D	Colliers Land Value Opinion
Appendix E	Transaction Cashflow Options
Appendix F	Procurement Model Descriptions
Appendix G	Financial Model Report
Appendix H	Risk Report

Appendix A – Development Options MCA

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Infrastructure BC

Table 1: MCA Scoring

X	✓	✓✓	✓✓✓	✓✓✓✓
Fails to satisfy the basic requirements of the Owner.	Partially effective in satisfying the requirements of the Owner.	Moderately effective in satisfying the requirements of the Owner.	Substantially effective in satisfying the requirements of the Owner.	Highly effective in satisfying the requirements of the Owner.

Table 2: MCA Summary Table

	Multi-Counterparty	Single-Counterparty
Positive Impact to the Contextual Urban Fabric	✓✓	✓✓✓✓
Environmental, Social, and Governance Objectives	✓✓	✓✓✓
Cost Certainty	✓✓✓	✓✓✓✓
Asset Performance	✓	✓✓
Optimizing Risk Allocation	✓✓	✓✓✓
Market Interest	✓✓✓✓	✓✓✓

	Multi-Counterparty Development Option	Single-Counterparty Development Option
Positive Impact to the Contextual Urban Fabric		
Scoring	✓✓	✓✓✓✓
• Supports and advances the goals of the OCP and the local area plan and is concurrent to the McKenzie Corridor guidelines.	• The RFQ submission requirements can emphasize the importance of advancing the goals of the OCP, the local area plan, and the McKenzie Corridor guidelines, and can require Proponents to demonstrate their experience and capability with similar plans on previous projects. This benefit is only applicable to the SOC (not the private development). • Similarly, the RFP evaluation criteria can align with the goals of the OCP, the local area plan, and the McKenzie Corridor guidelines. This benefit is only applicable to the SOC (not the private development). • The private development's conformance to objectives will be controlled via zoning, and certain OCP objectives can be difficult to translate into zoning requirements. The full potential of the site contemplated in the zoning may or may not be achieved as it is dependent on the developer's capabilities and market outlook. • The Owner would develop a functional program and set of design requirements for the SOC that are built upon by up to three competing design teams during the procurement. This process brings intense competitive pressure that encourages design innovation and creativity as proponents compete to differentiate their designs and respond to the RFP criteria, which could include responding to the OCP goals. This benefit is only applicable to the SOC (not the private development).	• The RFQ submission requirements can emphasize the importance of advancing the goals of the OCP, the local area plan, and the McKenzie Corridor guidelines, and can require Proponents to demonstrate their experience and capability with similar plans on previous projects. This benefit is applicable to the entire site. • Similarly, the RFP evaluation criteria can align with the goals of the OCP, the local area plan, and the McKenzie Corridor guidelines. This benefit is applicable to the entire site. • Having a single counterparty responsible for master planning the entire site allows for a holistic approach to design that opens up further opportunities to meet the OCP goals across the entire site. Some potential examples include: creation of sitewide design guidelines, optimizing creation of green space, stacking uses, combining uses, thoughtful full site public realm design and innovative approaches to parking the site. • The Owner would develop a functional program and set of design requirements for the SOC and a list of objectives for the private development section of the site that are built upon by up to three competing design teams during the procurement. This process brings intense competitive pressure that encourages design innovation and creativity as proponents compete to differentiate their designs and respond to the RFP criteria, which could include responding to the OCP goals. This benefit is applicable to the whole site as design teams consider

	Multi-Counterparty Development Option	Single-Counterparty Development Option
	• Pursuing a multi-counterparty approach would prevent the site from having a single masterplan approach, which would prevent a site wide approach to planning and achieving OCP goals. E.g. incorporating different uses (commercial/retail) that may serve adjacent future high-density sites.	the site. Additionally, there are opportunities for collaboration with District of Saanich planners.
Environmental, Social, and Governance Objectives		
Scoring	✓✓	✓✓✓
• Allows the private sector to support delivery of the Owner's community initiatives, such as housing supply, housing affordability, sustainability, climate change, accessibility, diversity, equity, and inclusion. • Allows collaboration between the private sector and the Owner to determine the optimal trade-off between the Owner's ESG goals and financial contribution.	• The final build out of the private development, once the land lease is executed and rezoning complete, will be entirely up to developer; the developer may make decisions that are counter to the Owner's objectives – such as lowering the amount of housing ultimately built on the site. • In a multi-counterparty transaction, assuming the private development is transacted through a land lease, minimum ESG targets will be obligated to the development through development agreements and zoning requirements, to which there is no ability to contribute collaboratively to the design (urban or architectural), ESG targets, or other Owner objectives (housing affordability and supply) of the private development portion once the land lease is signed. • The Owner will take no financial risk on the private development from changing market conditions. • The Owner will retain liability for operations sustainability targets and the private development developer will retain the liability for setting and meeting operations sustainability targets for the private development site.	• A competitive procurement for a single-counterparty solution will introduce innovative solutions to advancing the Owner's objectives. • The procurement of the single-counterparty allows for collaboration and feedback on the terms of the agreement allowing for the Project to respond to changing market conditions, potential changes to the objectives, and to optimize the trade-off between Owner's ESG goals and financial contribution. • The single-counterparty solution allows for the building of unique partnerships to meet ESG goals – for example potential outcomes include: "Smart City" approaches where technology is incorporate to meet ESG goals, unique approaches to affordable housing and opportunities for community placemaking through partnership with local businesses. • A long-term and collaborative contract can be structured (which could last up to 30 years) to allow for the Owner's objectives to be achieved through the development's lifecycle, as opposed to just the construction term.

	Multi-Counterparty Development Option	Single-Counterparty Development Option
		• A site wide masterplan approach with a single counterparty allows for collaboration between the Owner and proponent on the appropriate trade-off between financial contribution and Owner's ESG goals. • A single contract can offer the Owner greater collaborative contributions to the design (urban or architectural), ESG targets, or other Owner objectives of the private development portion during a development phase.
Cost Certainty		
Scoring	✓✓✓	✓✓✓✓
• Ability to obtain a high level of cost certainty. • Provides opportunity for long-term operating cost efficiency.	• Under a DB for the SOC, the Owner would negotiate terms of the DBA, which includes provisions for the transfer of risks associated with schedule and cost certainty for the SOC. • The procurement process of a DB includes two steps – an RFQ and RFP, that allow for collaboration with the bidders. • The Owner would undertake the subdivision and rezoning in advance of the Project, reducing collaborative opportunities on the private development side of the Project. • The Owner would receive a set amount for the land lease of the private development that is not at risk. • A typical DB provides a two-year warranty wherein the design-builder maintains responsibility for performance of the building systems. Extended warranty terms for building systems can be specified in the Design-Build Agreement (DBA).	• Under a single-counterparty approach, the Owner would negotiate the terms of the agreement, which include provisions for the transfer of risks associated with schedule and cost certainty for the SOC. • Collaborative "development phases" can be utilized to allow for collaborative time with the Owner to determine design and cost impact on both the SOC and the private development side of the Project. • The operations and maintenance of the entire site can be combined for economies of scale, which could be structured to add long term (as long as 30 years) certainty to lifecycle costs as well as capital costs. • Alternative payment mechanisms can be explored under a single-counterparty approach that reduce that overall financial

	Multi-Counterparty Development Option	Single-Counterparty Development Option
		burden on the Owner and ensure a predictable impact to taxpayers.
Asset Performance		
Scoring	✓	✓✓
• Allows for commercial terms that result in maximized asset performance throughout its life cycle. • Enables innovative and creative solutions that deliver public services in the midst of one of the District of Saanich's key growth areas and neighbourhood centres.	• Under a DB for the SOC, the Owner is responsible for the ongoing maintenance and life cycle obligations. The design-builder is only responsible for the asset performance at Substantial Completion. • Under a DB for the Operations Center, there is a risk of reduced asset performance as a result of deferred maintenance not being funded or addressed (e.g. limited funds applied elsewhere). • With a long-term land lease on the private development portion, it would be difficult to obligate hand back requirements or maintenance and quality standards of the building assets to an expected standard.	• An entire site masterplan can allow for an approach to the development of the site that considers continued operation of the SOC. • The operations and maintenance of the entire site can be combined for economies of scale, which could be structured to add long term (as long as 30 years) certainty to lifecycle costs as well as capital costs.
Optimizing Risk Allocation		
Scoring	✓✓	✓✓✓
• Ensures that key risks are allocated in the most cost-effective way to the party that is best suited to manage them.	• In a DB contract for the SOC, contractual provisions and technical specifications define the allocation of risk using performance-based requirements, through the design and construction periods.	• Contractual provisions and technical specifications define the allocation of risk using performance-based requirements, through the design, construction and operating periods.

	Multi-Counterparty Development Option	Single-Counterparty Development Option
	• The design-builder would assume accountability for design errors and omissions, all implications of their design choices, and constructability issues including schedule risk. • The Owner would retain full accountability for the day-to-day facility performance beyond the two-year warranty period. • The Owner would become a landlord for non-core revenue generating assets (e.g. commercial, residential and retail real estate), and would have to allocate additional resources which may add complexity to the Owner's operations. • A land lease would transfer all design, construction, asset management, maintenance, and revenue risk for the private development to the counterparty leasing the land.	• The transfer of design and construction activities and corresponding risks to the single counterparty protects the Owner from any unanticipated financial implications associated with errors in design and construction. • The single counterparty could be paid on a progress payment regime to ensure delivery of services in a manner that is consistent with the expectations of the Owner. • The single counterparty would take on all of the real estate development risk, who will have the in-house ability and resources to manage that risk the most effectively, while also optimizing potential real estate development. • The Owner would transfer the management of non-core revenue generating assets (e.g. commercial, residential and retail real restate) to the single counterparty. The Owner would not need to hire dedicated resources to manage those assets. • Potential to take advantage of the economies of scale on the entire site and have maintenance transferred to the single counterparty for the SOC, which would transfer ongoing maintenance risk.
Market Interest and Capacity		
Scoring	✓✓✓✓	✓✓✓
• Ability to solicit and retain interest from the market and obtain a robust competition.	• A multi-counterparty approach would involve two separate projects: a DB (or similar) SOC project that would appeal to both local and national contractors, and a real estate transaction that would be solicited to potential leasers, both	• A single-counterparty approach would limit the Project to large teams that can manage the complexity of an integrated public infrastructure and private real estate project.

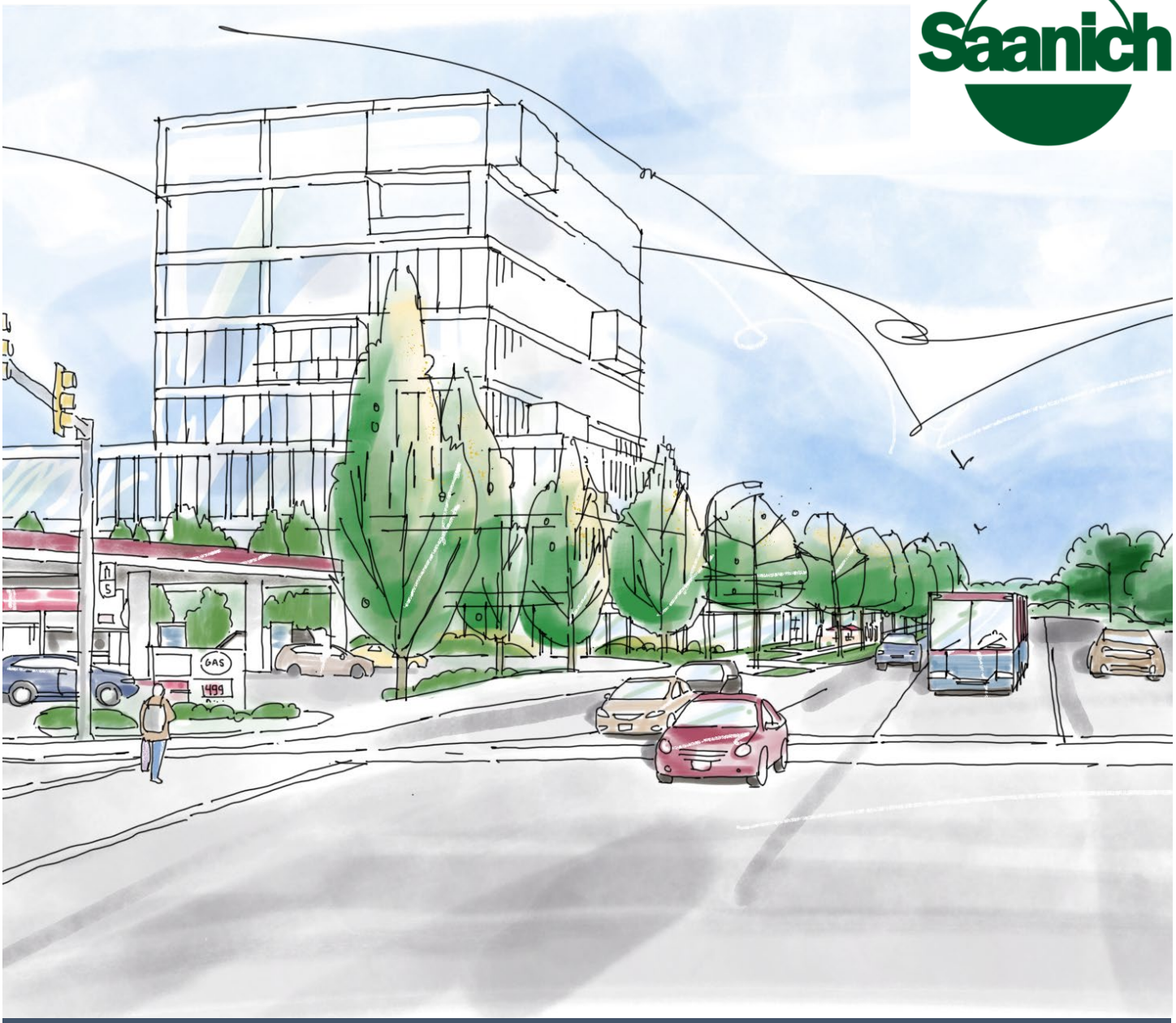
	Multi-Counterparty Development Option	Single-Counterparty Development Option
• Ability to deliver the Project without exceeding the capacity of the Owner's team.	locally and nationally. This transaction type is familiar in the market and would have broad interest. • A multi-counterparty approach would involve two separate procurements which would put a strain on the Owner's team and its resources.	• The market sounding demonstrated strong interest for this type of project indicating that a robust competition would be achievable. • A single-counterparty approach would involve a single procurement, which would be less resource-intensive for the Owner than running two procurements.

Appendix B – Market Sounding Reports

Development and Transaction Options Analysis | Saanich Operations Centre

Final - As Issued | August 23, 2024

Infrastructure BC



Saanich Operations Centre Redevelopment

Market Sounding Report

2023

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1 PURPOSE

The District of Saanich (the "District") collaborated with Infrastructure BC (collectively the "Project Team") to conduct a series of market sounding sessions for the Saanich Operations Centre Redevelopment Project (the Project). The objective of the market sounding exercise was to validate market interest and examine the primary elements of the Project, particularly to determine the feasibility of private sector investment prospects (e.g. scope and transaction structure) to accomplish the most beneficial utilization of the site while meeting the objectives of the District's Strategic Plan.

The objectives of the market sounding sessions were to:

1. Provide information about the Project to the market and raise market awareness and interest in the Project; and
2. Obtain market and industry feedback on:
    a) Project timing, schedule and phasing;
    b) Potential procurement models and processes;
    c) Transaction structure; and
    d) Perceived Project risks.

This report documents the findings of these sessions.

2 PROCESS AND PARTICIPANTS

The Project Team identified a variety of organizations, including traditional residential and commercial real estate developers, infrastructure developers, advisory firms and owners, who have been actively engaged in the development community across British Columbia, Canada, and internationally. Furthermore, those who have participated in similar projects and transactions were consulted.

18 organizations were originally invited with the six listed below (the “Participants”) electing to participate:

- Concert Properties/Infrastructure.
- Jawl Properties
- Omicron
- Plenary Group
- ARUP Group
- Fengate Asset Management

A market sounding package (see Attachment A) was distributed to each participant in anticipation of the sessions. One hour market sounding sessions were held including representatives from Infrastructure BC and the District. Notes were taken in each session and are summarized in this report.

3 KEY FINDINGS

3.1 MARKET INTEREST AND DEMAND

3.1.1 Market Interest

The response to the Project was overwhelmingly positive; it was clear that the market would be highly interested in such an attractive opportunity. Not only is the site very appealing, but the timing of the project is optimal as investors currently seek out opportunities that are positive and interesting in the context of economic and inflationary uncertainty.

3.1.2 Site and Neighbourhood Specific Market Demand

a) Commercial

One of the Participants owns the building at 3960 Quadra and they have observed that there is a limited demand for commercial office space being occupied by traditional office tenants such as consulting firms, and a higher demand for service commercial, like healthcare and dentists. The tenant mix has changed in recent years to reflect this. The pandemic has also contributed to the decline in demand for commercial office space. Feedback received was that the development along McKenzie should have ground floor tenants to add to the neighbourhood mix, but it should not replicate the anchor tenants that are already present in the Saanich Centre across the street.

b) Residential

There is a great potential for multi-unit residential and townhouses, but not high-end market. The District's request of the development community should ask what can be fit within the OCP and if they can comply with the OCP and the District's maximized expectations. They should also ask what can be achieved by exceeding the District's expectations and what variances would be required.

3.2 COMMERCIAL, TRANSACTION AND RISK CONSIDERATIONS

3.2.1 Transaction/Commercial

It was clear from all Participants that for the transaction to be successful the District must identify its ultimate objective with the Project. They questioned whether this is a real estate transaction/development leveraged to fund the District’s operations centre, or whether the redevelopment project is creating an opportunity to leverage the value of the public asset. The Participants strongly felt that the District should be straight forward and transparent about its goals to ensure that all the proponents understand the objectives and have the same interests in mind. Therefore, it is important for the District to be clear about its intentions to ensure a successful outcome for all parties involved.

Other recommendations from the Participants include:

- Though it is possible to develop investments on leasehold land, it is not always as attractive an option as fee simple. This is not due to a diminished return on investment, but rather to the lack of incentive for developers build a quality development with long-term benefits. When working on leasehold land, developers are often not incentivized to invest in high quality standards, resulting in a poorer quality development.
- Keep it simple – avoid air rights transactions as they can be overly complicated whereas a land lease may generated the same control for the lessee.
- If the District maintains commitment to ownership, it must be prepared to require additional time for the investment market to be educated to understand its risks.
- Purely residential use for a developer on lease land is more problematic/ less attractive/ de-incentivizes quality than mixed use.
- The developer in making an offer to property purchase should disclose as much detail what they are going to do with the property.

3.2.2 Procurement

Based on their relevant experiences, each Participant brought an interesting perspective to the potential procurement options they felt should be considered, ranging from a traditional land lease to a complex public private partnership (PPP) transaction. The most popular form of transactions other public sector entities have used in the marketplace included a lease-leaseback or an availability payment based public private partnership such as a design-build-finance-maintain (DBFM).

- A lease-leaseback is a type of real estate transaction in which a property owner leases a property to a tenant, and then the tenant leases the built infrastructure and facilities back to the owner. This type of transaction is often used to generate income from a property without having to sell it. The tenant pays rent to the owner, and the owner pays rent to the tenant for the use of the facilities
- A DBFM contract is a type of PPP agreement that involves the private sector taking on the responsibility of designing, building, financing, and maintaining a public infrastructure project. The private sector partner is typically responsible for the entire life cycle of the project, from design and construction to financing, maintenance and life cycle of building equipment and systems. The private sector partner is typically compensated through a combination of construction period payments as well as availability-based payments during the maintenance period.

The following recommendations regarding the procurement process were also made:

- The District should take a transparent and prescriptive approach to what it needs and wants from the marketplace. Being clear and requiring that a developer meets certain criteria, such as density, height, uses, mix and volume, will result in a more responsive marketplace. Additionally, it is important that Council strategic priorities are embedded in the District's request, as this will ensure that the project being undertaken aligns with the District's desired outcomes. By making sure the District is clear and transparent with their requests, they will be rewarded with a higher level of responsiveness from the marketplace.
- The selection of the developer proponent should be done through a competitive process that involves design. This process should demonstrate that the proponent has spent time thoughtfully developing their plans, taking into account all relevant factors such as heights, density, envelope build-out, public amenities, areas, and general infrastructure scope. The design should be conceptualized through input from architectural, engineering, and landscape architecture consultants. Honorariums should be used strategically to support the development of comprehensive proposals and only provided to those proponents that submit qualified proposals at the Request for Proposals phase.
- The process should not have a fulsome or fixed financial proposal as part of the competitive selection process as the time required to finalize zoning and other requirements should be leveraged through a development phase, where the District and the preferred proponent are working collaboratively together to finalize the comprehensive proposal to be submitted to Council.
- The timing of zoning, subdivision if required, permitting, committed financing and contract execution should be subject conditions to each other for closing of the transaction.
- Request for Qualification and Request for Proposal documentation and processes are essential to a successful procurement. However, it is important not to underestimate the time and financial resources required during the development phase. For instance, on similar projects such as the Potrero Yards project in San Francisco, it is expected to take anywhere between 18-24 months. Similarly, the Long Beach Civic Centre project necessitated an extended environmental and zoning process. As the project owner, it is essential to plan and budget for the development phase process adequately in order to meet the project timeline and financial goals.
- It was strongly encouraged that contractors should be onboarded during the development phase to provide accurate pricing and constructability reviews Therefore, we strongly encourage having them included in the Request for Qualifications (RFQ) process, should there be one. This will allow them to provide valuable insights into the project from the very beginning, and could

potentially prevent major changes from being made at a later stage, when it is more costly and time consuming. Ultimately, the involvement of contractors during the development phase will result in a more efficient, cost-effective, and successful project.

- It is important to note that the development phase of a project of this magnitude can be extremely costly, ranging from $5 million to $10 million. To reduce the risk for the developer and the overall cost of the project, compensation should be provided at milestones, either when phases are completed or when deliverables are provided. This eliminates the need for the developer to finance and carry the costs associated with the development phase.
- When it comes to an RFQ or Request for Proposal (RFP), it is recommended to set a minimum of 12 months for the entire process. Of that time, the public posting and evaluation should take up no more than one-third of the effort; the majority of the time should be spent on pre-planning and drafting of the necessary legal documents. Proper pre-planning is essential for a successful RFQ or RFP, as it ensures that all stakeholders have a clear understanding of their respective roles and responsibilities. Furthermore, legal documents must be drafted that clearly outline the requirements and obligations of each party. In this way, the RFQ or RFP process can be executed efficiently and accurately.

3.2.3 Risk Considerations

3.2.3.1 Property Sale

The risks for the District are increased should the decision to sell the property ever be made. Not only would the District lose control over the land, but also, should the land change hands again, the District could be dealing with a very difficult owner whose interests do not align with the District's. It is imperative that the District forms a strong partnership with the counterparty in order to guarantee benefits for both parties. However, if the District decides to sell its key parcel of land for residential development, it could potentially become a difficult situation to manage. The District should be aware of the risks and make sure to always act in its best interest in order to protect its rights.

3.2.3.2 Market Capacity

All Participants noted that market capacity is major risk that is perceived by all constructors currently active in the Victoria market. In the B.C. market, labour is in high demand, and finding enough labour to do a project of this magnitude in Victoria is a major challenge. Trades are in unprecedented demand and the ability to complete the project on time is paramount to ensure capacity and quality of work. During the planning and procurement phase, the Project Team should also consider potential supply chain disruption

and uncertainty, and the impact of cost escalation. These are key risks that must be weighed carefully before moving forward.

3.2.3.3 Re-Zoning

All Participants were excited at the prospect of working collaboratively with the District to finalize a comprehensive development zone. As this is traditionally the highest risk area for a project, the District's commitment to Participants to be clear on the re-zoning and subdivision opportunities and the maximum heights, densities and uses permitted was seen as very encouraging.

3.3 SCOPE

All Participants were comfortable with the overall scope and size of the Project. There was however a distinct preference between the infrastructure developers and the traditional real estate developers. The infrastructure developers were more flexible in considering the entirety of the Project in a single transaction, i.e., the new operations centre and a fully built out private sector development under one agreement. This would allow them to have control over both aspects of the project, as well as provide an opportunity to optimize cost and time efficiencies.

On the other hand, the traditional real estate developers were more interested in two transactions where they could focus on their strength of residential and commercial development, and take advantage of their existing networks and resources. Meanwhile, the District would undertake the design and construction of the Operations Centre next door, allowing them to leverage their existing knowledge base and contacts within the local infrastructure sector. Both approaches had their own benefits, however all participants agreed that a collaborative approach between both parties would be beneficial for all involved.

3.4 HOUSING

All Participants were unanimous in their agreement to collaborate with a non-market housing partner to ensure the delivery of affordable housing is included in the residential component of the project. Not only did they want to focus on issues of affordability, diversity, and supply, but also to use the project as a platform for the District to display their leadership and innovation in housing affordability in the region. Moreover, the Participants requested that a target be set before the release of procurement documents to give them ample time to select an ideal team or submit their qualifications or proposals accordingly.

4 SUMMARY

The responses to the market sounding were overall very positive and indicated significant interest by the market in pursuing the Project. The following presents the key recommendations to the District based on feedback from the market sounding participants.

- Any procurement process should consider a development phase to allow the parties to work collaboratively through the rezoning and subdivision process.
- Affordable housing targets should be established in advance.
- Design should be a component of the evaluation process focuses on the existing OCP and what variances may be required to achieve the proposal.
- Based on the discussion with the market, the District should perform a multiple step procurement options analysis to determine which procurement option best meets the District's objectives:
    - The first consideration in the analysis should be is the Project one transaction or two (i.e., is the Operations Centre and real estate rolled into a single transaction or procured separately.)
    - The next step would be to consider assessing the following procurement options against a set of District procurement objectives:
    - Lease-Leaseback
    - Design-Build-Finance
    - Design-Build-Finance-Maintain
    - Design-Build-Finance-Lifecycle Replacement
- The purpose of the procurement options analysis would be to identify the procurement model offering the best overall value to taxpayers and should include both qualitative and quantitative elements.
    - An analytical framework for considering the relative merits of the procurement options can be based on an Multi Criteria Analysis approach. The assessment framework of the qualitative criteria would require judgments to be made on the magnitude of the relative benefits, or impacts, of each option for a particular criterion or objective.
    - For the Project, a value for money analysis could be carried out to compare the procurement options by calculating and comparing the total nominal costs of the Project under the procurement models. Quantitative value for taxpayers' dollars is achieved when a particular procurement method is best able to support the objectives of a project within established affordability or funding constraints.

ATTACHMENT A - MARKET SOUNDING PACKAGE

Saanich Operations Centre Redevelopment

Market Sounding Package

December 2022

1 PURPOSE

The purpose of this market sounding exercise is to solicit market input into the overall development strategy for the District of Saanich (the District) Operations Centre Redevelopment Project (the Project). In particular, the District is seeking input to determine the viability of private sector investment opportunities (e.g. scope and transaction structure) in order to achieve best use of the site while serving the District's Strategic Plan goals .

The redevelopment of the Saanich Operations Centre site represents an unprecedented opportunity to enhance public services and deliver a range of community benefits within a key growth centre in Saanich. Specifically, the operations Centre redevelopment provides the opportunity to address each of the District's Strategic Plan goal areas which will be assessed in depth during the upcoming schematic design planning phase of the Project.

The redevelopment of the Saanich Operations Centre site has the opportunity to address each of these goal areas in various capacities and these will be assessed in depth during the upcoming schematic design planning phase of the Project.

2 BACKGROUND

The District of Saanich provides many and varied key and critical services to residents and businesses that support and greatly contribute to the high quality of life that all rely on, and through taxation, pay for and expect. The current facilities of the Parks and Public Works operations located on 13-acres at 1040 McKenzie that substantively provides and contributes to these critical services and infrastructure are the district's top priority to see redeveloped in order that these services can be delivered with greatly mitigated risk long into the future.

The District's business case confirmed their physical and financial requirements and the viability and benefits of involving the private sector in the Project. The business case, however, did not determine the full redevelopment potential of the site and this market sounding exercise is the next step in considering the private sector's interest and capacity to participate in the Project.

The District's business case can be found here: Saanich Operations Centre Business Case.

The District's Project website can be found here: Saanich Operations Centre Redevelopment | District of Saanich[1]

[1] It is worthwhile to view the project video as it provides an excellent overview of both the District's services and project justification. The video is within the website link, about halfway down the site.

3 VISION

The redevelopment project's vision is two-fold focusing on the services as well as the specific property.

The services and infrastructure that the district provides through the Parks and Public Works operations require facilities and infrastructure that reflect the districts commitment to residents to be deliver services dependably and sustainably. These facilities accordingly should be built and designed to high standards and in a manner that enables staff to readily perform their duties in a healthy and safe environment. Given the district's commitment to energy performance and environmental sustainability and resiliency, the buildings and infrastructure should be innovative, well-constructed and reflect the industrial uses and dynamic nature of this important workplace. The project architecturally, has the opportunity to be 'a significant jewel' of the District, demonstrating the importance of public works and its place in the community. The project shall strive to make a strong aesthetic contribution to the community and the Quadra-McKenzie neighbourhood in particular.

The district's 13-acre parcel that is bordered by Quadra, McKenzie and Borden plays a key role in being at the centre of one of the Districts designated 'Neighbourhood Centres'. Any development on this property should aim to support the Official Community Plan (OCP) vision of environmental integrity, social well-being and economic vibrancy and help to implement key objectives of focusing new housing, employment, public services and community amenities within Centres in higher density building forms. This is supported by the District's initial analysis, that demonstrates in the current market, the Quadra-McKenzie neighbourhood could readily absorb up to 140 residential units as well as 18,000 square feet of retail and 20,000 square feet of office space, however given the long-term nature of the Project there is consideration that the uses may evolve and demand may expand as the site is developed.

As the District and region continue to grow and prosper, this valuable public asset should be a showcase demonstrating the districts three primary goals of environmental integrity, social well-being and economic vibrancy. To demonstrate their partnership and commitment to the Project, the District anticipates undertaking the re-zoning necessary to achieve a comprehensive master plan. Feedback from this market sounding will support the District in determining how best to collaborate on re-zoning and other municipal approvals with Project proponents.

Further information on the District's analysis can be found here: Saanich Operations Centre Strategic Real Estate Analysis

4 EXISTING SAANICH OPERATIONS CENTRE

The 13-acre Saanich Operations Centre (the Facility), previously known as the Parks and Public Works Yard has been located in the North Quadra neighbourhood (1040 McKenzie Avenue on the north side of McKenzie between Borden Street and Quadra Street) since the 1960's. The neighbourhood supports a diverse range of land uses including commercial, office, institutional and residential. The Operations Centre yard to the north of the site is flanked on three sides by single family and multi-family residential development, while a commercial hub and a high school are located to the south and east across McKenzie Avenue.

The Facility employs 300 people providing daily support and delivery of essential services to the District, including:

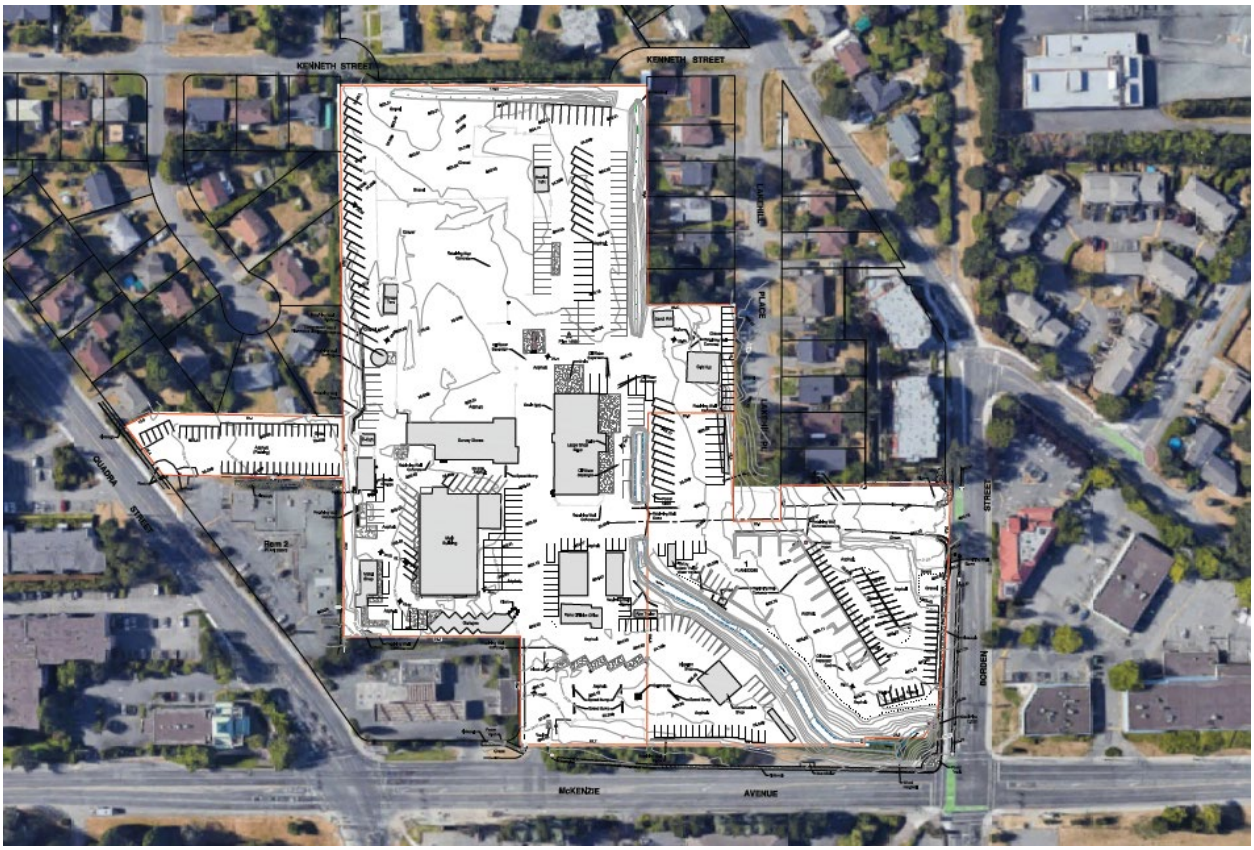
- Management of Parks and Green spaces;
- Maintenance of municipal fleet vehicles and equipment;
- Stormwater management;
- Operations, maintenance and construction of municipal utilities, water and sewer; and
- Collection of refuse and green waste.

In addition to these essential services, the Facility provides a site for Garden Waste drop-off for use by community residents.

Figure 1 below illustrates the location while Figure 2 provides the current layout of the Facility.

Figure 1: Facility Location

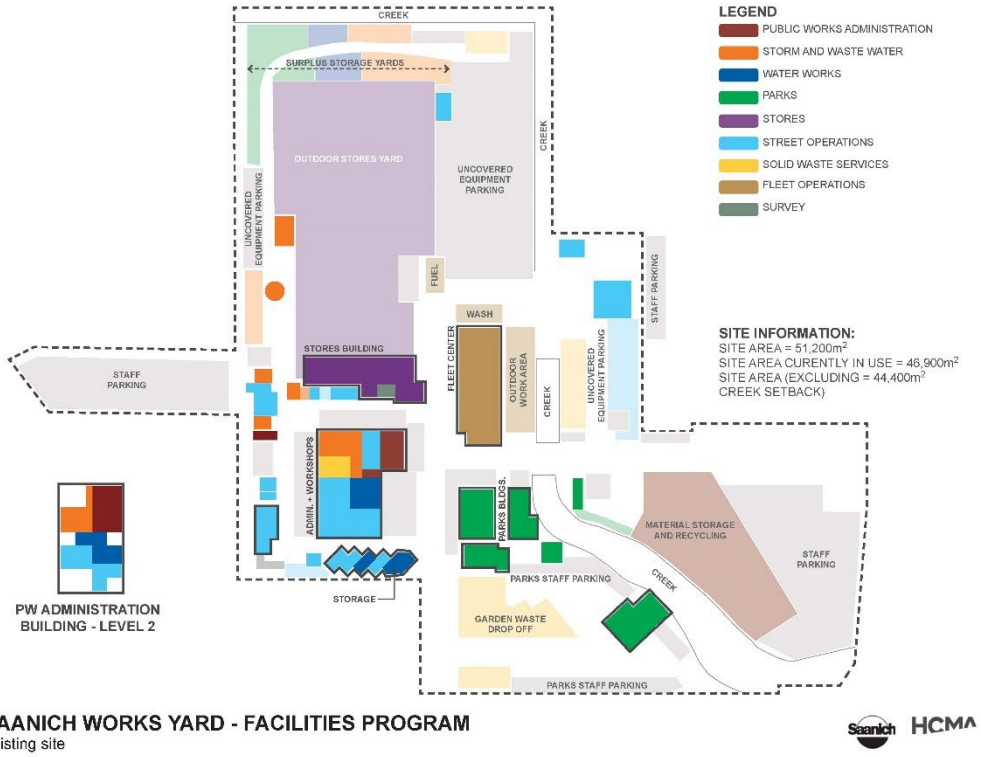
Figure 2: Facility Layout



The permanent buildings of the Facility dates to the 1960's with construction of the Fleet Maintenance building, Stores warehouse and Public Works shops and offices. In the early 1980's, Parks Administration offices and shops were added in portable building structures. As the requirement for interior space outgrew these original buildings, numerous trailers, container storage and temporary structures have been added over the years to meet specific needs, and this ad hoc approach to site planning and development has contributed to significant operational inefficiencies. In addition to the programmatic and spatial challenges, the building assets on the site are aging and in very poor condition, deficient or lacking in building code compliance, seismic resistance, fire protection and separation, thermal and moisture protection, air quality and conditioning and barrier free accessibility.

Figure 3 below illustrates the current spatial allocation on the site.

Figure 3: Spatial Allocation



4.1 CAPACITY CONSTRAINTS

The District has used this Facility as a critical services hub since the 1960's. The existing buildings were designed and constructed at that time to support a workforce between 100 and 200. Today with more than 350 staff and an estimated workforce of up to 500 staff to be accommodated over the next 20 years. The current space capacity is woefully inadequate and greatly negatively impacts the delivery of critical services to residents.

The capacity constraints noted above were further amplified during the COVID-19 pandemic where safety protocols and social distancing were required in an already crowded setting.

4.2 POOR PHYSICAL CONDITION

The existing physical condition of the various buildings in the Facility are very poor and despite diligent stewardship of these buildings over the years, the lifecycle of the building has been greatly exceeded. Maintenance efforts have thus far mitigated water ingress as much as possible through new roofs,

exterior flashing and paint, however the time has come where the economics of continuous maintenance starts to not make sense versus that of a new build.

Concerns related to conformance to Building Code also exists for the facility, these could be categorised into the following: Classification, Fire and Life Safety, and Accessibility.

The limited capacity and poor condition of the Facility has translated into unacceptable high risk to the District, specifically when linked to the delivery of critical services. Results of the business case submitted to Saanich Council in June of 2022 are summarized below:

- The proposed functional program for a new operations centre does not require full use of the site area and results in low building height and density, which may not align with the density anticipated in the OCP.
- There is a strong expectation from stakeholders that at minimum, the development should deliver outcomes better aligned with the OCP (greater variety and density of uses and building up to 8 stories in height).
- The District would be interested in exploring opportunities with the neighbourhood to increase height and density, beyond what is currently permitted in the OCP, as a way to deliver enhanced social, economic and environmental outcomes. *(Note: A Strategic OCP Update and McKenzie Quadra Area Planning Study are currently underway and could aid in advancing discussions around potential increased height and density)*
- Leveraging the private sector's expertise and capital to achieve the highest and best use of the site through increased building height and density will better serve the community's interests and reduce the District's risk.
- Inviting Private Sector investment is strongly recommended if the District aims to realize improved community outcomes through increased height and density on the site. Additionally, it is speculated that private sector investment could help to offset the total financial burden on the District.

To support private sector involvement, the District anticipates pre-zoning the site as necessary to support a successful proponent's comprehensive master site plan development documentation and application.

5 PROJECT DESCRIPTION

The Operations Centre redevelopment aims to advance key Saanich strategic objectives, while delivering key operational requirements in a fiscally responsible manner. The following section highlights objectives articulated in Saanich's Strategic Plan and Official Community Plan, outlines program requirements for operations and an initial concept plan that provides examples of a future site layout.

5.1 PROJECT OBJECTIVES AND OPPORTUNITIES

As a development site surrounded by a mature and thriving community, the Saanich Operations Centre site represents an attractive and viable location for a multi-use development accommodating commercial office, retail and residential components. The District expects that with such a desirable site, leveraging the redevelopment of the Saanich Operations Centre will support achieving the objectives in the Strategic Plan, provide the location for district facilities and support funding those services by monetizing the underutilized land and surplus density on the site.

5.1.1 Strategic Plan Goal Areas

The District's 2019 – 2023 Strategic Plan introduced the following goal areas corresponding with initiatives and actions that align with the District's Official Community Plan, mission and values.

- Community well-being;
- Affordable housing, land use and infrastructure management;
- Organizational excellence;
- Economic diversification; and
- Climate action and environmental leadership.

5.1.2 Sustainability and Resiliency

The services and infrastructure that the district provides through the Parks and Public Works operations require facilities and infrastructure that reflect the district's commitment to residents to deliver services dependably and sustainably. The District has declared a Climate Emergency and has committed to ambitious actions and targets through the 2020 Climate Plan. These commitments include rapidly cutting greenhouse gas (GHG) emissions and investing in adaptation measures that will lower the risk and consequences of climate change impacts. This begins with corporate leadership and innovation to achieve net zero emissions in municipal operations by 2040 and ensuring Saanich-owned assets, including facilities, infrastructure and natural assets, are adapted and resilient to climate projections and impacts. Given these commitments, it is essential that the entire site be designed wholistically to meet the strategic plan and OCP goals in a way that showcases innovation and climate leadership including enhancement and preservation of natural assets, appropriate uses and density, efficient use of land (e.g. multi-storey parkades vs. open air parking), and integration of the site with the neighbouring community.

Public Works Creek flows through the site, currently in a straight ditch like channel. There is potential to create public greenspace, enhance wildlife habitat and ecosystem services of the Creek through restoration efforts. Restoration could include creek channel re-contouring along with stream bank

restoration, which would require lands to be dedicated for this use. There are many co-benefits to restoring the creek which include supporting adaptation to climate change, improving water flows and water quality, along with providing wildlife habitat and enjoyable green space for people. The level of restoration and enhancement has not yet been determined and will be defined alongside operations and other site needs.

5.1.3 Opportunities to Showcase Housing Affordability

Like many communities throughout BC, the District has identified housing as a priority, focusing on issues of housing affordability, diversity, and supply. The District adopted a *Housing Strategy* in 2021 which identifies key housing goals and actions. The *Housing Needs Report* (2020) identifies the District's projected housing needs. This District-owned site provides a unique opportunity to showcase affordable housing outcomes and partnerships to help address these needs.

The District welcomes creative partnerships, innovations, and housing initiatives incorporated into the Project that will:

- Facilitate the creation of both non-market and below-market housing;
- Encourage the development of a variety of housing options to serve a range of housing needs based on price, unit mix, tenures, and target groups along the housing spectrum;
- Stimulate non-market housing typologies that are difficult to attain and under-provided in Saanich's (e.g., three bedroom + units, short-term displacement housing, affordable home ownership, and co-op housing);
- Integrate sustainability goals within housing projects; and
- Demonstrate innovation in meeting Saanich's housing needs.

The District anticipates that the development will help the District demonstrate leadership and innovation in housing affordability within the region through the Project.

5.1.4 Improved Financial Sustainability

The size and location of the site provides unique opportunities to partner with the development industry to incorporate uses that meet OCP goal of focusing housing and employment in Centres and Villages. By making surplus land available, community benefits can be enhanced and overall project costs for the District can be offset. Additionally, Saanich's role as the land owner could enable creative partnership arrangements to be explored that could help to optimize benefits and minimize risks.

5.1.5 Land Use, Community Benefit and Placemaking Opportunities

The project architecturally, has the opportunity to be ‘a significant jewel’ of the District, demonstrating the importance of public works and its place in the life of the community. It is anticipated that the Project will strive to make a strong aesthetic contribution to the community and the Quadra-McKenzie neighbourhood in particular.

A master plan would enable for creative consideration of housing, employment and community benefit opportunities for this 13-acre site located in a key Saanich growth centre. The District is open to ideas that enable operational requirements to be met while delivering a range of uses that advance complete community objectives and intensify this key Saanich Centre.

5.2 DISTRICT PROGRAM REQUIREMENTS FOR THE SITE

Program requirements developed through the current masterplan calls for a total gross area space requirement of 11,422 square meters for the new operations centre with the following breakdown:

Table 1: Total Space Requirements

Program	Gross Area (Square Metre)
Administration	5,590
Fleet	1,972
Stores	805
Warehouse	1,399
Workshops	1,656
Total	**11,422**

Figure 4 below is a graphical illustration of how the current program of the Facility compares to the future spatial requirements identified in a consultant’s report.

Figure 4: Current vs. Future Requirements

The most current exercise predicts higher growth in some areas, particularly when planning for 15-to-30 year time frames. Parks, Fleet and Solid Waste specifically will see substantive growth. Another area of growth, but one that is currently very substandard in size and amenity, is common areas. The programming exercise forecasts that these areas will double in size, quite understandably when plans call for centralized staff lunch room and break areas, change rooms and lockers, and meeting spaces.

5.3 DISTRICT CONCEPTUAL SITE PLAN

5.3.1 Redevelopment of the Project on the Current Site

Given the current site being redeveloped to accommodate the program envisioned in the masterplan, there will be opportunities to designate multiple portions of the site for use by the private sector for development opportunities, with ultimately the entire site being redeveloped and sees the District relocate the Garden Waste Drop Off.

The two illustrations below completed for the Business Case documentation begin to suggest the plan and spatial opportunities and illustrate that the District does not require the entire site. The blue layout area not only is what the District requires, but provides a concept of an operational layout that would meet the District's requirements. These images are provided as examples only from the business case and are not anticipated to be the actual solution.

Figure 5: Conceptual Layout

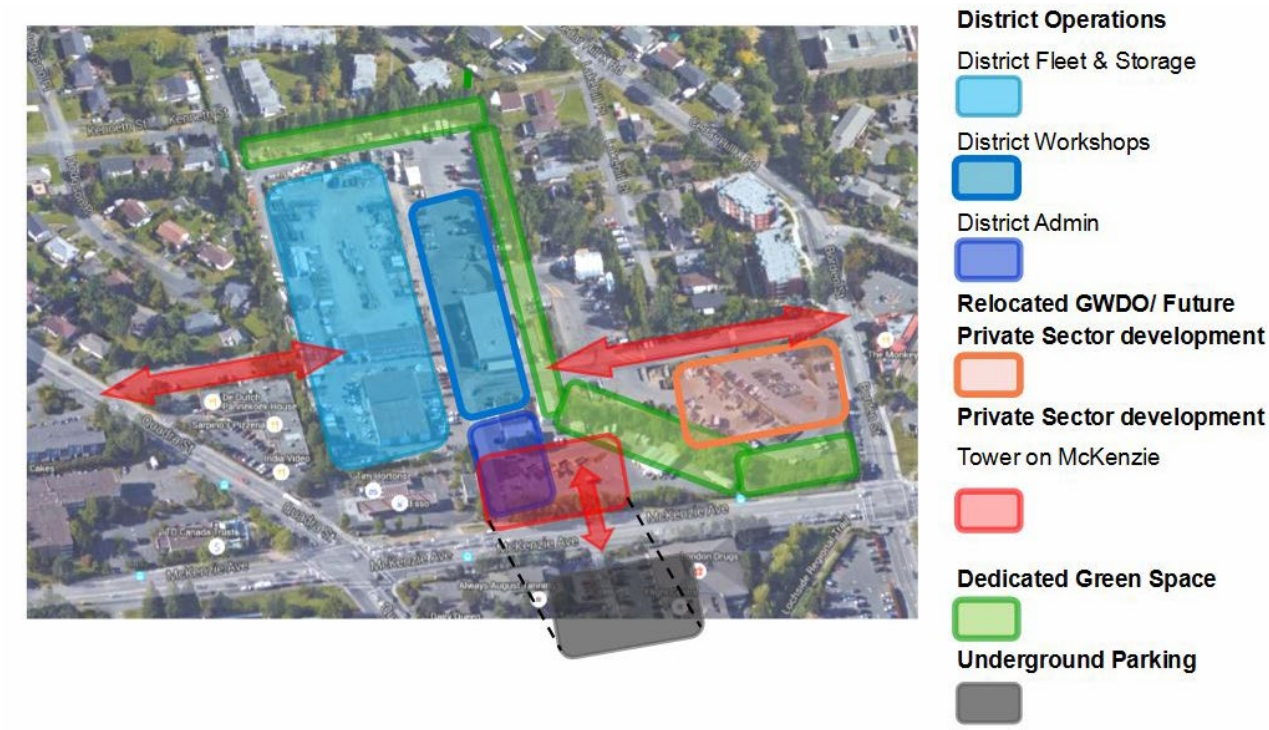


Figure 6: Master site development concept; tenancy and uses

Figure 6 above demonstrates conceptual/ additional use/ non-District areas noted in yellow. Note building height of eight floors reflect current OCP guidelines, however the District is supportive of increased height and density should the market demand dictate it.

In demonstration of support of advancing the Project, the District has begun conceptual design and programming for an interim accommodation strategy including:

1. An interim accommodation plan with temporary trailers that may allow the private sector to start a more immediate development on McKenzie where Parks and the Garden Waste Drop off (GWDO) are currently located.
2. To support advancing development along McKenzie, the GWDO will move to the Borden hill development site, as an interim solution. The ultimate relocation off this site will require the District together with Council and service users to find another suitable location. The District anticipates private sector interest in this location to be strong, however expectations of possible tenancy must be tempered with District requirements and timing.
3. The District is keen to provide the private sector with as significant an opportunity as possible and is willing to discuss all suggestions of site use, bearing in mind the noted operational requirements, the GWDO service and the possible long term relocation of the operations centre off this site, should the private sector, or the District in it's ongoing search, be able to source a suitable location(s) with reasonable timing.

5.3.2 Long Term Considerations

Over the years, and as recent as 2018 and 2019, staff have sought alternate locations for the Operations Centre. At its September 30, 2019 Council meeting, the District committed to conducting its operations from the current location into the foreseeable future, however, should a suitable solution be available in the near-term, it is an option the District would consider pursuing.

Currently, the decision to maintain existing service levels and operations on the site has been reinforced by the following:

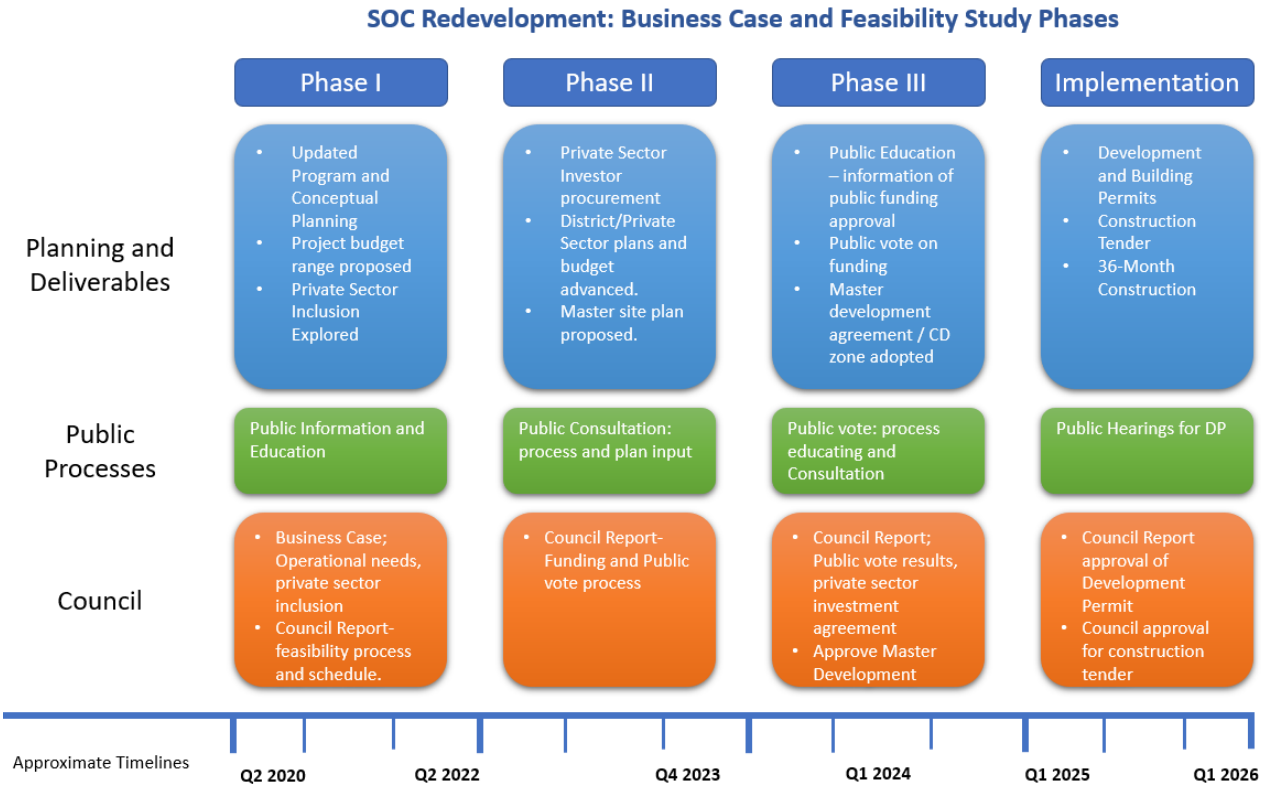
- Reinstating a search for an alternate location has the potential to push out the project's realization by several years with no certainty of a location being found. This delay would expose the District to unacceptably higher levels of risk; and
- The risks to service delivery performance resulting from facility failure, natural disasters and emergencies in the future, and poor staff morale.

While District staff and Council have an expectation that short and medium term plans would consider District operations being redeveloped on this site, the Business Case suggested long term considerations should include the District's openness to relocate operations and allow the site to densify and further develop in ways that respond to the marketplace. This may provide the District additional value should it move the new operations centre elsewhere and leave the current site in its entirety for development opportunities by the private sector. Additional challenges related to this solution centers around finding another suitable site to house the new operations centre where several operational and services delivery considerations need to be factored. Understanding that the Project offers the District the opportunity to leverage the private sector's development expertise, the District also acknowledges that the private sector may be better able to find and, or, propose a suitable replacement site as part of the procurement process that could meet the District's operational requirements and be realized within the necessary project timelines.

6 PROJECT SCHEDULE

The District of Saanich has proposed the following schedule outline that illustrates the three phases of the project, implementation with construction not included but suggested to be a 30 to 36 month duration after the project approvals are realized up to the second quarter of 2026. Occupancy is speculated to begin in phases during 2028 and 2029, however, the District anticipates considering schedule in the procurement process and is prepared to consider an open-ended schedule for the Project to allow the market to effectively bid a schedule that best accomplishes the design and construction requirements in the most effective manner possible.

Figure 7: Business Case and Feasibility Study Phases and Estimated Timeline



7 QUESTIONS

Market Interest

- As a development site surrounded by a mature and thriving community, the District believes the site represents an attractive and viable location for a multi-use development accommodating commercial office, retail and residential components. Do you see this as a viable multi-use site, or is the market in the local area suggesting a more focused opportunity e.g., just commercial office or just retail or just residential?
- Considering your knowledge of the market and the Project's timelines, what would you see as the optimal development opportunity to begin with, and how would you anticipate phasing the Project?
- As the District may operate on the site for a number of years, is there any concerns with the compatibility of market based real estate with the industrial uses?

- What should the Project Team consider in their planning to make the development opportunities viable?

Commercial

- As an alternate site has not been identified for the Operations Centre, are you interested in constructing the District's requirements as part of the Project?
- The District is open to considering alternative sites, would you consider providing an alternate site for broader access to the entire site at an earlier date? Or does the provision of real estate as part of the transaction overly complicate it?
- A form of license or long-term land lease is the most likely scenario for the District. Knowing that, what would be the minimum term required to achieve the private sector's necessary return? What would realistic options for extension be?
- Construction, land and interest costs have all increased, creating a viability challenge, .What solutions could the District consider do to address these challenges?
- Is there anything you would suggest we include in a procurement strategy that could best support achieving the District's objectives?

Risk

- To support private sector involvement and allocating risk to the party best able to manage it, as noted in the District's business case in Section 5.1, the District anticipates undertaking the pre-zoning necessary, informed by both the District's and the successful proponent's requirements, to support a comprehensive master site plan documentation and application. Considering this, is there other opportunities that the District might engage in that may reduce the overall Project risk or provide a more efficient or cost effective transaction?
- How might local construction market conditions affect the delivery and implementation of the Project? Are there any significant competing projects that we should be aware of?
- The District desires that the entire scope of the Project be included in a single transaction or agreement, what risks do you perceive in combining the development opportunity into a single agreement/transaction?

Transaction/Commercial

- The District is interested in having one counter party responsible for the overall site development and delivery of District requirements and infrastructure, would there be interest in constructing District's required accommodations and yard areas as part of the Project?
- The District has been approved to borrow for the Project and anticipates contributing in some manner, while optimizing their contributions with private sector financing.
    - The District is currently considering that their funding contributions may be direct capital to reduce overall capital costs or through signing a leaseback for their required area, which of these provides the most efficient use of public sector funds?
    - If the District provided borrowing rates, could a financial model be developed that demonstrated the economic benefit of the Project covered the borrowing costs?
    - With the expected size of the overall build-out of the Project to exceed $200 million, the District expects that any counter-party will have the financial capacity to undertake the Project and will need to demonstrate this through provision of parent company financial statements and a parent company guarantee, is there any concerns with providing access to the financial information for analysis or providing the parent company guarantee?
- The District expects that the following insurance policies will be required, Professional Liability, Builders Risk, Wrap-up Liability and Commercial General Liability, what's the best method to procure these policies, proponent provided or District provided?
- In the interests of achieving the best outcomes and generating market interest in the Project, the District is prepared to consider an open-ended schedule in the design and construction of the Project to allow the market to effectively propose a schedule that best accomplishes the design and construction requirements in the most effective manner possible. Do you see value in this approach and, if so, what constraints would you suggest putting around this criteria to ensure fairness in the competition?
- Would your expectations of the District's procurement opportunity include a submission that has scope commitment; relayed both in text and graphic plans (aka; concept site design documentation) or do you assume or recommend that engagement criteria be limited to a vendor's experience and financial capacity only?
    - Do you feel that an honorarium is necessary for participating in this type of process and if so, what would you recommend as an appropriate amount?

- Considering the long-term vision for the site, would it be reasonable to include a masterplan for the full build-out of the site?

Scope

- The District is committed to lead the public engagement/ consultation activity. It's the District's experience to offer meaningful engagement by offering input into various details of a proposed project. Current thinking suggests that the ground plane, the public realm could be places where community amenities combined with the naturalized park areas and McKenzie street side improvements could be opportunities for the public to comment and provide suggestion. How realistic and comfortable would the private sector be in seeing these incorporated into the master plan?
- The District envisions that the Project may have aspirational sustainability and resiliency targets such as zero-carbon; high standards in the BC Energy Step Code; consider embodied emissions; designed for future climate projections; electric vehicle charging infrastructure for District fleet and other parking; incorporate standards for active transportation and end of trip facilities; address accessibility, equity and inclusion; and consider modular/adaptable design for efficient maintenance and future modifications. How can the District best consider these both in procurement and balancing the desire to showcase housing affordability?
- Given the District's interim solution of relocating the GWDO, how can the interim solution be accommodated in a phasing strategy?
- The District wants to ensure minimal impact on phasing and temporary locations of staff, what should the Project Team consider in structuring the payment mechanism to ensure a marketable schedule risk transfer?

Housing

- What are your experiences working collaboratively with a municipality or non-market housing partner on the inclusion and development of affordable housing within developments?
- In your experiences, what has worked well and what should be avoided?
- Given the District's desire to include an affordable housing component within the Project, how do you recommend that it be undertaken?

Other:

- What significant risks do you perceive with this Project? What is the best way to manage these risks?

- What other recommendations or comments do you have on the deal structure, and what terms and conditions do you consider essential or very desirable?
- Are there any successful examples of this type of development you have encountered at other jurisdictions?
- What did those jurisdictions consider that made the investment opportunity viable?
- Any further comments?

8 CONTACTS

Jason French
Infrastructure BC Inc.
Ph: (250) 475-4682
jason.french@infrastructurebc.com

Keith Sun
Infrastructure BC Inc.
Ph: (250) 475-4677
keith.sun@infrastructurebc.com

9 DISCLAIMER

The information contained in this package is preliminary and for the purposes of the market sounding only. The project described herein has not received government approval to proceed and, if approved, may not proceed on the scope, schedule and/or budget

Saanich Operations Centre Redevelopment

Market Sounding Report

2024

TABLE OF CONTENTS

1 PURPOSE

The District of Saanich (the District) collaborated with Infrastructure BC (collectively The Project Team) to conduct a second series of Market Sounding sessions for the Saanich Operations Centre Redevelopment Project (The Project). The purpose of this market sounding exercise was to solicit further market feedback on the Project.

The objectives of the second market sounding were to:

1. obtain market feedback on:
    a) highest and best-use assumptions, including density, the affordable housing component, absorption, and timing;
    b) potential integration of uses; and
    c) transaction structure.

2 PROCESS AND PARTICIPANTS

The Project Team identified several organizations from the first market sounding exercise that were best positioned to provide the feedback required.

The following organizations (the Participants) were re-engaged and elected to participate:

- Concert properties/Infrastructure
- Jawl Properties

A market sounding package (see Attachment A) was distributed to each participant in anticipation of the sessions in which the development options were provided to the Participants. One hour market sounding sessions were held including representatives from Infrastructure BC and the District. Notes were taken in each session and are summarized in this report.

3 KEY FINDINGS

3.1 HIGHEST AND BEST USE ASSUMPTIONS

Generally, the Participants agreed that the assumptions included in the market sounding package appeared reasonable, with the following specific feedback:

- Financing and Cap Rate are major drivers of the highest and best use model and require further due diligence to ensure appropriate assumptions.
    - One Participant felt that the Cap Rate may have been too high, while the other Participant felt it was likely in the correct range.
- A phased approach to the private will need to be utilized to meet the densities in the market sounding package, one Participant noted the ideal size for a single building in Victoria has historically been 90-140 units, and buildings of 400 units haven't been attempted in the market.
- Both Participants acknowledged that the affordable housing contribution would lower the financial contribution from the private development but has become a requirement in all developments.

3.2 POTENTIAL INTEGRATION

When considering the potential integration of the different uses (Operations Centre Uses, Saanich Administrative uses and residential uses) both Participants felt integration of some form of the different uses is possible. Industrial uses are more difficult to combine with residential uses, due to more divergent design requirements, but those issues can be overcome through a thoughtful approach.

Both Participants noted that an entire site master planning exercise, in collaboration between the final counterparty and the District, is crucial to achieving the District's goals and making a cohesive development. Furthermore, through a master planning exercise, integration of the uses (residential/operations centre) is necessary to achieve the stated objectives in the market sounding package.

3.3 TRANSACTION STRUCTURE

Based on their experience both Participants had feedback on a potential transaction structure. Both Participants noted that a land lease would need a long term in order to not lower the financial contribution of the private development. Also, both Participants noted the importance of collaboration between the District and Project Co through a development phase, to determine zoning, design guidelines, transaction structure and final site planning. One of the Participants gave specific feedback about the transaction structure as follows:

- Allow for Proponents to provide alternative transaction and financial structures;

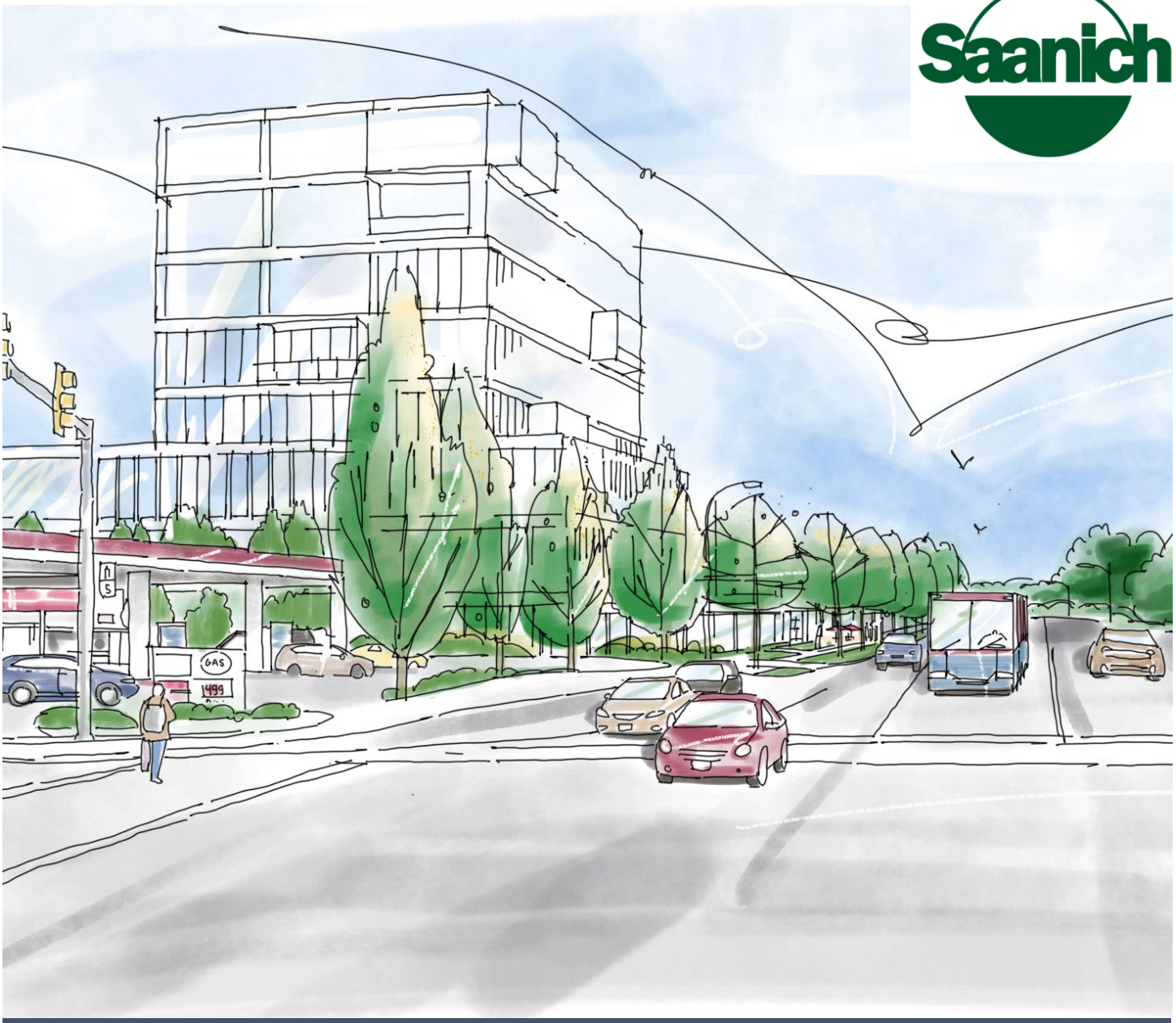
- District will need to prioritize their objectives and can work with the Proponents collaboratively to build a transaction to suite (e.g. does the District want to maximize financial contribution from the private development, or maximize amount of affordable housing);
- Lease-Lease-back structure can be used effectively to create housing on public land, where the operations, maintenance and revenue risk sit with the Project Co; and
- One of the Participants has experience in pursuing an open book approach that may work for this Project, thought that may also limit competition as real estate companies are less willing to pursue open book projects.

4 SUMMARY

The responses to the market sounding were positive and reflect ongoing interest in the Project. The following presents the key recommendations to the District based on feedback from the market sounding participants:

- Ensure inclusion of master planning benefits for single counterparty in evaluation of single vs multi counterparty approach;
- Additional due diligence on the highest and best use assumptions should be completed (note that consultants Deloitte and Colliers are already being tasked with this);
- Re-evaluate the District's expectations of the private development phasing to reflect real world feedback;
- Establish affordable housing target, along with other Saanich targets, which should be considered in the procurement options analysis;
- Consider procurement options that allow for collaboration between District and Proponents, including a development, alternative financial submissions and other.

ATTACHMENT A - MARKET SOUNDING PACKAGE



Saanich Operations Centre Redevelopment

Market Sounding Report

December 2023

TABLE OF CONTENTS

1 PURPOSE

The purpose of this market sounding exercise is to solicit further market feedback on the development strategy for the District of Saanich (the District) Operations Centre Redevelopment Project (the Project).

Since the last market sounding the District has progressed the planning of the Project and identified two development scenarios and is seeking input to determine the viability of private sector investment opportunities (e.g. scope and transaction structure) on each of those in order to achieve best use of the site while serving the District's Strategic Plan goals.

2 PROJECT BACKGROUND AND OTHER INFORMATION

The previous market sounding package dated December 2022 is appended to this document for reference and context as Appendix A [December 2022 Market Sounding Package]. Any new or updated information superseding Appendix A has been incorporated in the following sections of this revised market sounding package.

3 PROJECT UPDATES

Saanich has further developed their Project Objectives in context of the 2023-2027 Strategic Plan as follows:

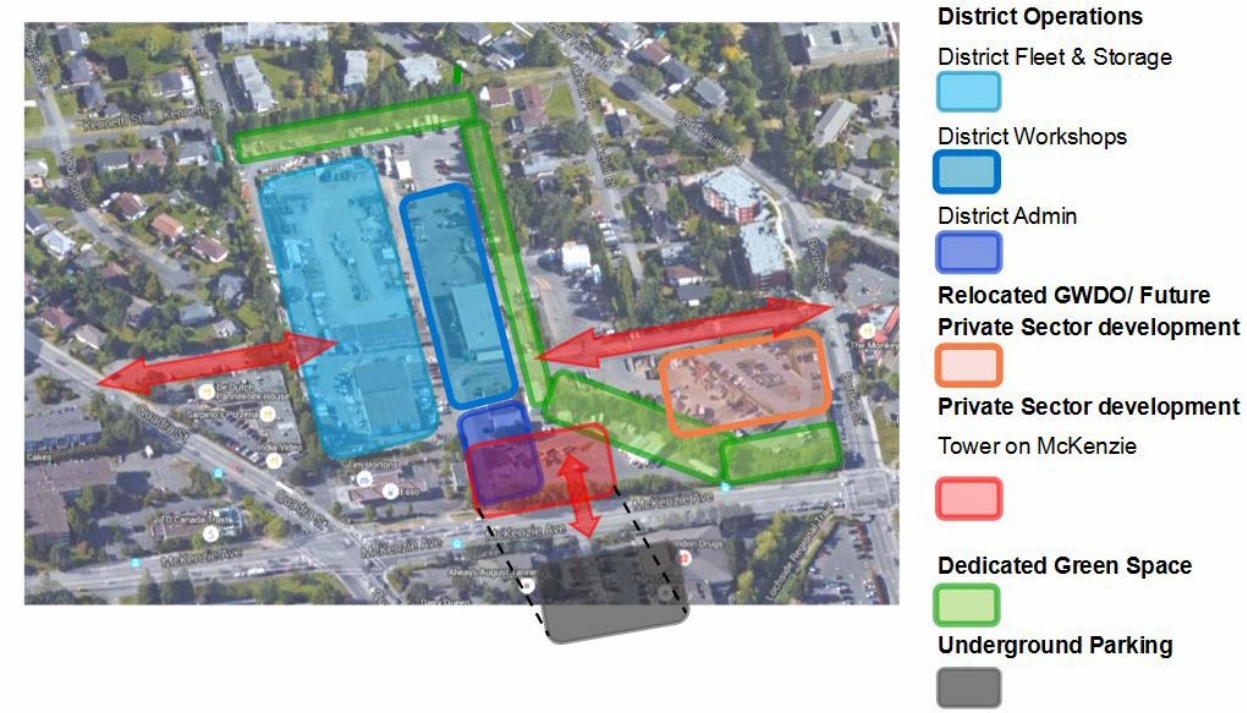
- Meet the objectives of the current and draft Official Community Plan, including the sustainability approach of three sustainable pillars, One Planet Living and 15 minute community;
- Achieving District's ESG goals including Housing Affordability, Sustainability & Climate Change, Accessibility and Diversity, Equity & Inclusion;
- Cost certainty for the District and District tax-payers including opportunities to minimize costs to tax-payers and life cycle cost efficiencies; and
- Achieve asset performance of the Saanich Operations Centre, including efficient operations and green building objectives.

In order to achieve these objectives, the District has determined that private market participation in the Project is necessary. The District has undertaken further investigation of the potential private market participation and developed two potential redevelopment scenarios for the Project under two potential transaction structures. The redevelopment scenarios and transaction structures are described in the following sections.

3.1 REDEVELOPMENT SCENARIOS

Figure 1 is the conceptual site plan that was introduced in the December 2022 market sounding.

Figure 1 Conceptual Site Plan



In all scenarios the site is planned to be bisected by a green space that is an existing maintenance creek, that the District has targeted for restoration.

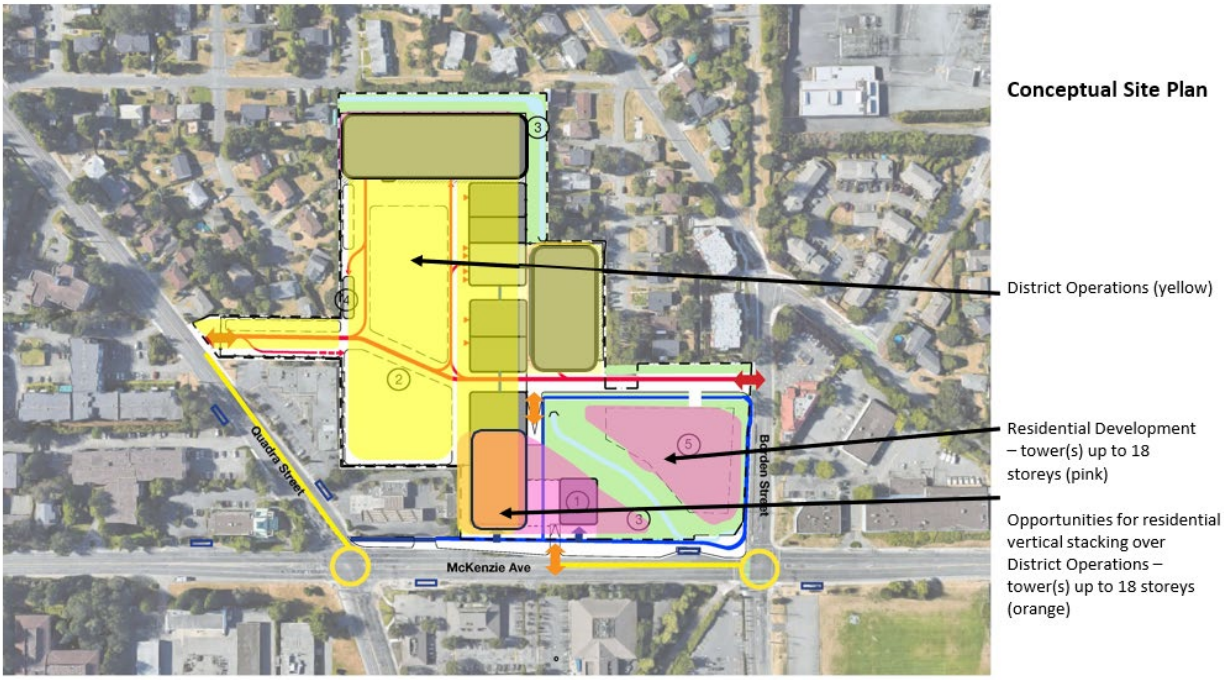
3.1.1 Redevelopment Scenario One

To the east of the creek, the site would be dedicated to residential uses of heights up to 18 storeys.

To the west of the creek south of the through road, there would be both operations centre and residential uses. See Appendix A for additional information on the indicative design for the operations centre. The District anticipates a tower up to 18 storeys fronting McKenzie avenue, which would include at least two floors of District administrative uses, likely in the form of a podium accessible to the public. The remainder of the site would be operations centre uses.

A conceptual plan is below in Figure 2.

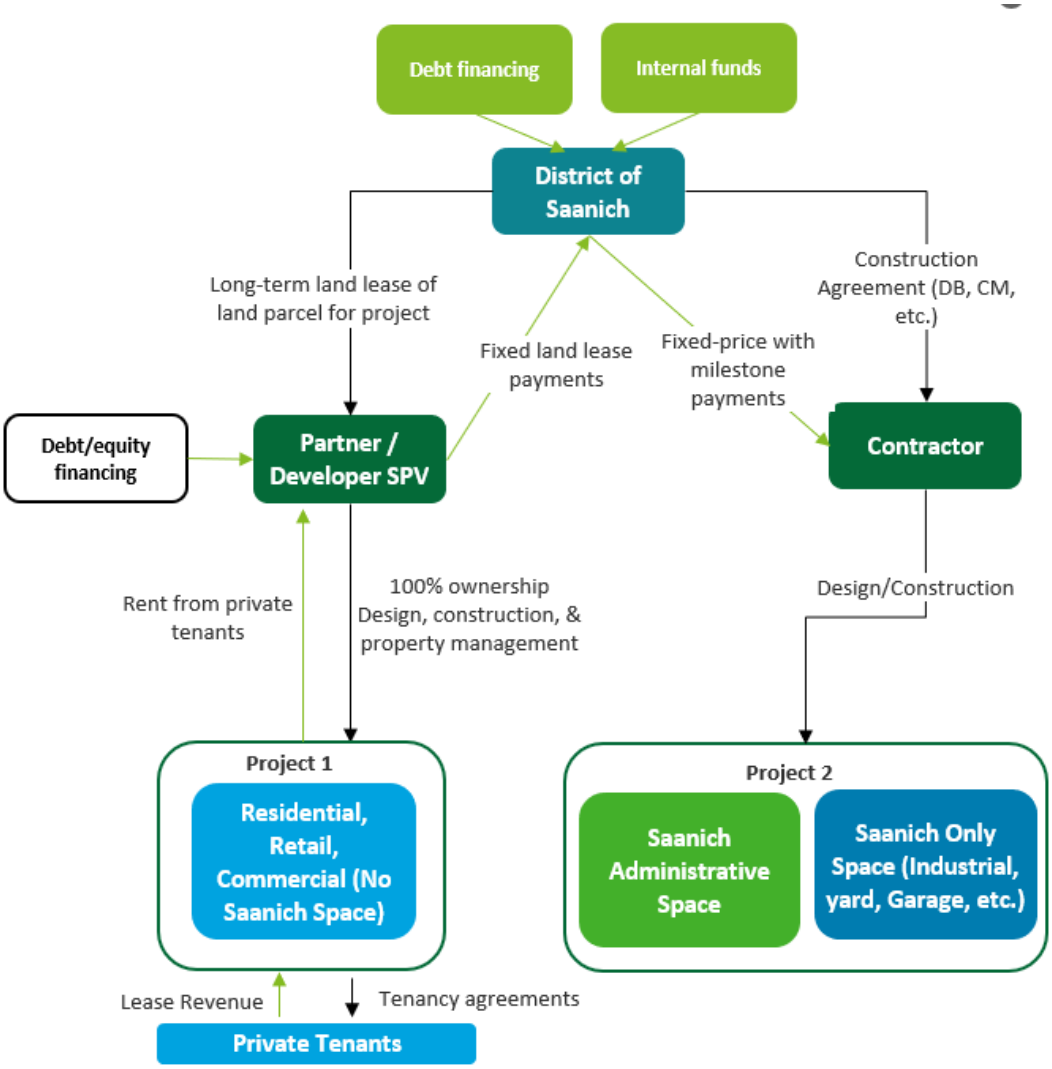
Figure 2 Redevelopment Scenario One



3.1.1.1 Contract Structure – Multi Counterparty

For this redevelopment scenario, the District would enter into a contract (form of contract yet to be determined) with a party to build the operations centre and a separate contract with another party to develop the residential uses as well as the District administrative podium space to be leased back (with the development land likely transacted through a land lease). Additionally in this scenario the site area that is residential uses will be subdivided from the operations centre uses, to create two distinct parcels. The residential use site is anticipated to be approximately four acres. The transaction structure is shown in Figure 3.

Figure 3 Multi Counterparty Structure

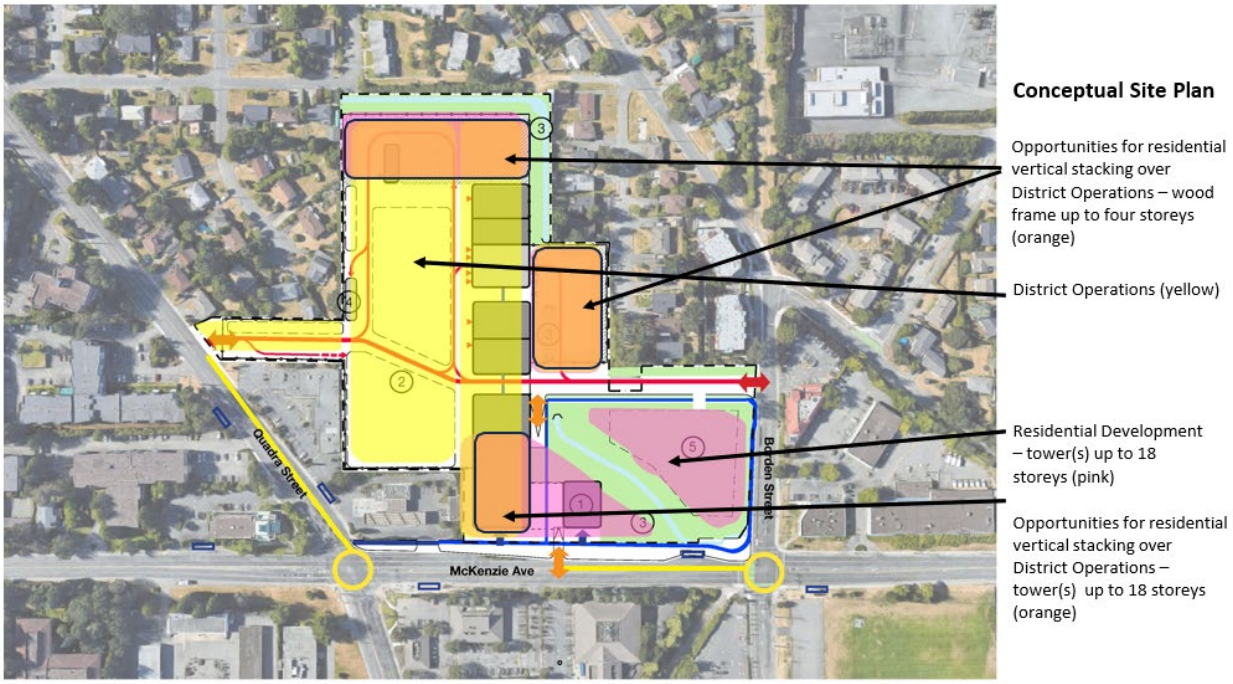


3.1.2 Redevelopment Scenario Two

The second redevelopment scenario builds upon the first scenario by adding the opportunity for wood frame residential development on top of the north and east sides of the operations centre uses. The wood frame residential would be built on top of the the stores yard and the material storage and recycling yard, both of which were contemplated to be outdoors in the original concept.

A conceptual plan is below in Figure 4.

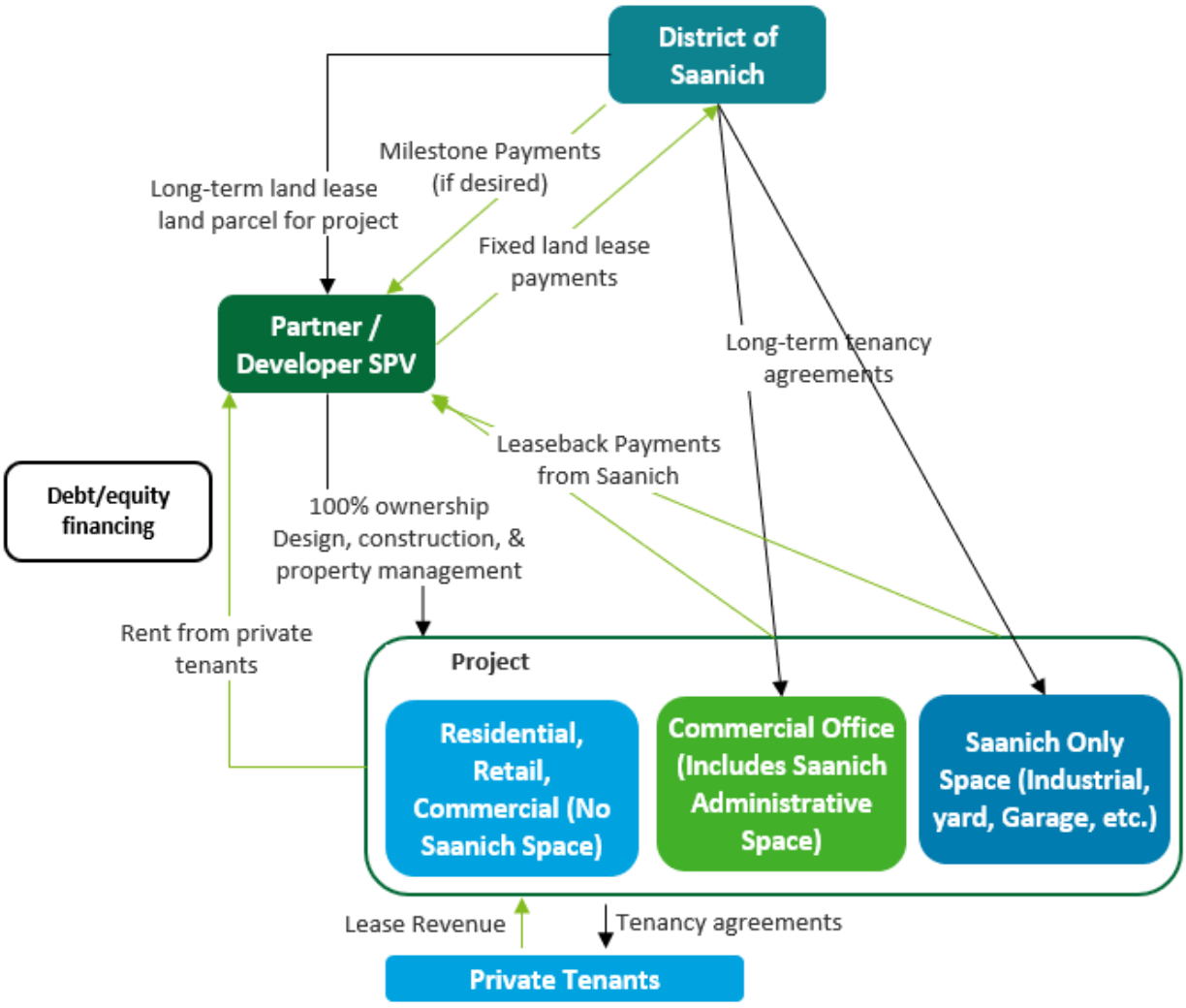
Figure 4 Redevelopment Scenario Two



3.1.2.1 Contract Structure – Single Counterparty

The District will enter into a contract with a single party to build the operations center and develop the residential uses. The site will not be subdivided. Details on the transaction are yet to be finalized, however it is anticipated the District will remain the owner of the land with a land-lease to the single counter-party. This is shown in Figure 5.

Figure 5 Single Counterparty Structure



3.1.3 Additional Redevelopment Scenarios

Additional redevelopment scenarios were considered, but not pursued. The basis for these scenarios are shown below in Figure 6. The administrative uses of the operations centre would be stacked on top of the workshops, shown in orange in the figure, which would free up the area west of the creek, shown in red in the figure, for residential-exclusive development. Scenarios with this basis were not pursued further, as the District has identified a street front presence on McKenzie Avenue as a functional requirement of the operations centre.

Figure 6 Administrative Uses Stacked on Workshop

The District has also explored a stacked operations centre, where all of the operations center program would be stacked into a single structure, minimizing its footprint as to maximize the area available for residential development. This has not been explored in depth as the District anticipates the additional costs to the operations centre to be higher than the benefit of additional residential development.

The results of preliminary modelling for the two scenarios are summarized in Table 3-1.

Table 3-1 Redevelopment Scenario Statistics

Project Components	Scenario One	Scenario Two
Total Site Area (Before Subdivision)	549,600 sf	549,600 sf
Subdivided Site for Residential Use Development (approximate)	4 acres or 174,240 sf	N/A
Site Area of Tower Development Site (east of Creek) Net of Creek and Property Line Setbacks	63,000 sf	63,000 sf
Site Area of Tower Development Site (west of Creek) Net of Creek and Property Line Setbacks	36,635 sf	36,635 sf
Tower Gross Floor Area / Net Floor Area (east and west of creek not including operations centre podium) – Towers at 18 Storeys	846,898 sf / 677,518 sf	846,898 sf / 677,518 sf

Project Components	Scenario One	Scenario Two
Residential Units in Tower Sites	916	916
Wood Frame Development Site	0 sf	51,500 sf
Wood Frame Gross Floor Area / Net Floor Area	0 sf	206,000 sf / 164,800 sf
Residential Units in Wood Rame Development Site	0	222
Total Residential Units	916	1,138
Affordable Ulnits (10%)	92	114
Parking Ratios	0.5 stalls/unit	0.5 stalls/unit
Site Coverage	50%	50%
FSR (Full Site – Residential Use Only)		1.92
FSR (4 acres Subdivided Development Site)	4.86	
Residual Land Value ($millions)	~25 to 30	~40 to 50*

**In this scenario, for the wood frame components, the developer is responsible for the cost of the top of residential L1 slab and up, while the District is responsible for the cost of the top of residential L1 slab and down.*

3.2 ASSUMPTIONS

Table 3-2 describes the financial assumptions used in the preliminary modelling for both scenarios.

Table 3-2

Item	Assumption
Construction Cost (Concrete Residential / Wood Frame Residential / Underground Parking) ($/sf)	373 / 300 / 189
Construction Financing Interest Rate	7.2%
Construction Financing Covenants	75% Loan-to-Value
Rental Rate (Market / Affordable) ($/sf/month)	3.78 / 2.11

Item	Assumption
Amount of Affordable Housing	10% of all units
Cap Rate	4.25%
Annual Rental Operation Expense ($/unit/year)	7,900

4 ADDITIONAL AND REVISED QUESTIONS

Construction and Development:

- Are the District's assumptions for number of units and density for each scenario reasonable? Please elaborate if the assumptions are too conservative or aggressive.
- How would the Project be phased to respond to both the District needs and market factors such as absorption?
    - What do you anticipate for the duration of planning and permitting, design, and construction?
- Is the proposed integration of wood framed buildings in the second redevelopment scenario feasible?
- What are the advantages and disadvantages of integrating the uses for design, construction, and site planning/master-planning?
    - On a percentage basis, what is a reasonable assumption for increased residual residential/commercial development potential if the site was integrated via a single masterplan versus a segregated subdivide and long-term lease approach?
- Are the construction cost assumptions reasonable for the residential uses?
- Are there any other integration options that may be investigated (either by the District or by private market participants during a development phase)?

Transaction/Commercial

- Is the affordable housing requirement (10%) reasonable? How might affordable housing be optimized and best integrated into the site development?
- Do you prefer either transaction structure over the other (multi counterparty or single counterparty)?

- Are the market assumptions (financing rate and covenants, rental rate, and cap rate) reasonable?
- In the scenario that the District leases back space for administrative uses (the podium to the west of the creek), what would be an anticipated per square foot lease rate?

Other:

- Any further comments?

5 CONTACTS

Jason French
Infrastructure BC Inc.
Ph: (250) 475-4682
jason.french@infrastructurebc.com

Keith Sun
Infrastructure BC Inc.
Ph: (250) 475-4677
keith.sun@infrastructurebc.com

6 DISCLAIMER

The information contained in this package is preliminary and for the purposes of the market sounding only. The project described herein has not received government approval to proceed and, if approved, may not proceed on the scope, schedule and/or budget.

Appendix C – Highest and Best Use Illustrations

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Option 1A Site Plan

SOC (yellow)

Private Development – 18-storey residential (blue)

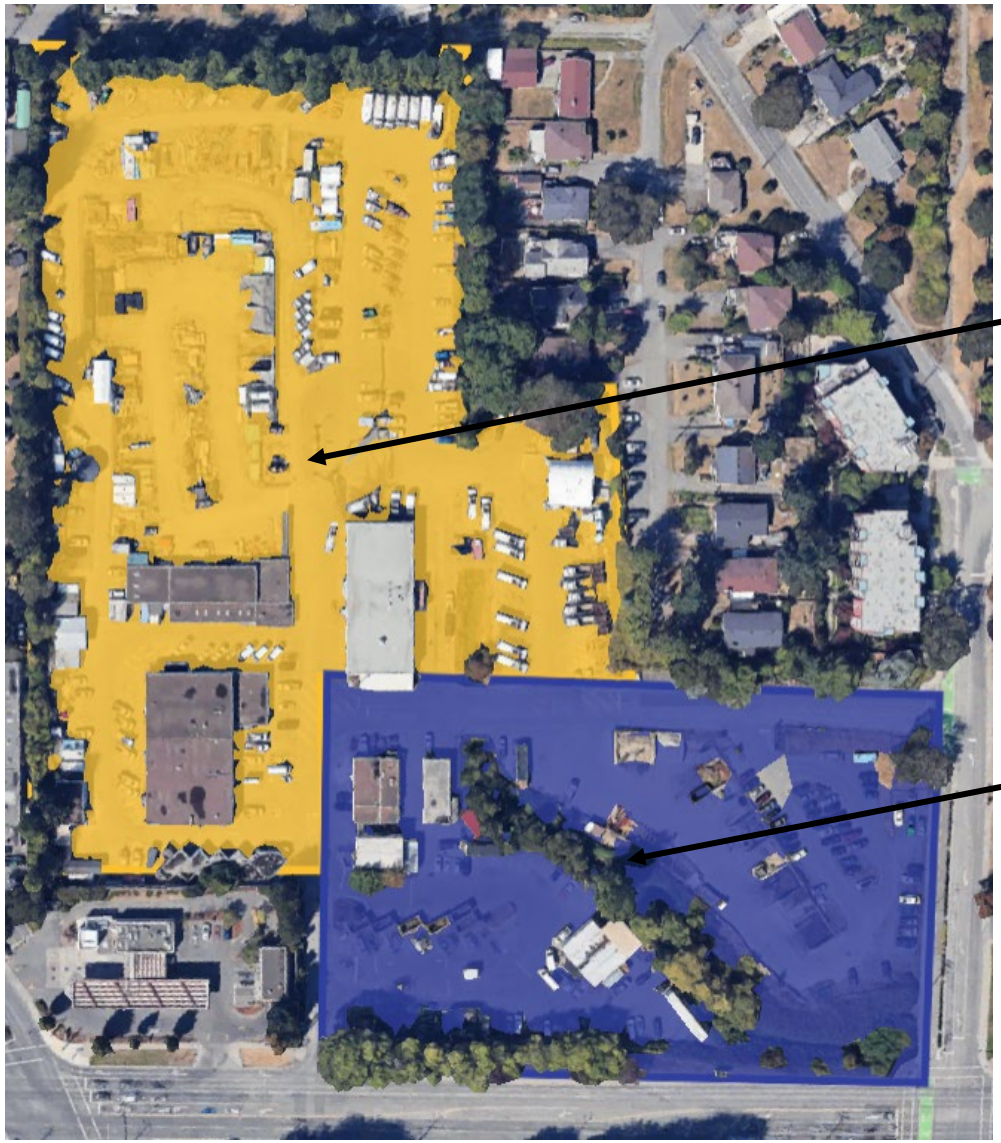
Option 1B Site Plan (Multi-Counterparty)

SOC (yellow)

Private Development – 18-storey mixed-use, first two floors leased by the District, remaining residential (teal)

Private Development – 18-storey residential (blue)

Option 1C Site Plan



SOC (yellow)

Private Development – 18-storey residential (blue)

Option 2A Site Plan (Single Counterparty)

Mixed-Use Development – 6-storey mixed-use, first two storeys dedicated to the District, remaining wood frame residential (red)

SOC (yellow)

Mixed-Use Development – 18-storey mixed-use, first two floors dedicated to the District, remaining residential (light blue)

Private Development – 18-storey residential (blue)

Option 2B Site Plan

Mixed-Use Development – 6-storey mixed-use, first two floors dedicated to the District, remaining wood frame residential (red)

SOC (yellow)

Private Development – 18-storey residential (blue)

Option 3 Site Plan

SOC – stacked to reduce footprint (yellow)

Private Development – 18-storey residential (blue)

Appendix D – Colliers Land Value Opinion

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Comparable Development Land Transactions

Colliers Opinion ***(High density development in concrete)***	**$ 60 - 70 per buildable SF**
Comment: - Based on the most recent transactions (available) and feedback from Colliers' brokerage team, the property value is estimated to be in the range of $60 - 65 per buildable SF - There have been limited transactions in the market for the scale of density proposed on the site.	

Colliers Opinion (Medium density development in woodframe)	**$ 70 - 80 per buildable SF**
Comment: - Based on the most recent transactions (available) and feedback from Colliers' brokerage team, we believe that the land value for a woodframe development would be in the range of $70 - 80 per buildable SF	

Select Multi Residential Land Sales: Victoria & Saanich

	Address	Sale Date	Sale Price	Property Area (SF)	Price per SF on Land	FSR	Buildable Area (SF)	Price per Buildable (SF)	Comments/Insights
1	4734-4754 Elk Lake Drive	8/21/2021	$22,000,000	134,924	$163.05	1.91	258,331	$85.16	- Concrete construction comparable - Though acquired in 2021, the buyer of this land parcel is expected to list the property back at a discount on the acquisition value. Brokers expect the land to transact at a value in the range of $60 - 70 per buildable square feet.
2	854-880 Pandora Avenue	12/13/2022	$10,000,000	23,387	$427.59	6.12	143,208	$69.83	- Concrete construction comparable
3	938 Fort Street	10/31/2022	$2,615,000	6,781	$385.64	5.50	37,296	$70.12	- Concrete construction comparable - Per market inputs received, we understand that the buyer paid a marginal premium as a strategic purchase
4	1050 Yates Street	11/18/2022	$44,850,000	50,913	$880.91	7.39	374,221	$119.85	- Concrete construction comparable - The buyer is expected to develop a rental development on the site. - *However, the per buildable rate is an outlier considering the current market dynamics*
5	710 Caledonia Avenue and 1961 Douglas Street	7/14/2021	$29,550,000	72,358	$408.39	6.80	492,034	$60.06	- Concrete construction comparable - The buyer is expected to develop affordable residential component as part of the product mix on the site
6	1544 Christmas Avenue	12/21/2021	$1,600,000	10,701	$149.52	1.80	19,262	$83.07	- Woodframe construction comparable

Below transactions were marked non-relevant to be compared to the subject site. ***Shared for reference only***

	Address	Sale Date	Sale Price	Property Area (SF)	Price per SF on Land	FSR	Buildable Area (SF)	Price per Buildable (SF)	Comments/Insights
1	1963 Fort Street	7/4/2023	$2,750,000	9,641	$285.24	2.74	26,444	$103.99	- Woodframe construction comparable
2	904 Yates Street	5/29/2023	$4,250,000	7,377	$576.11	5.50	40,574	$104.75	- Concrete construction comparable
3	50 Government Street	5/15/2022	$1,650,000	6,305	$261.70	2.34	14,754	$111.83	- Woodframe construction comparable
4	480-492 Esquimalt Road	11/2/2022	$5,420,000	23,573	$229.92	3.00	70,719	$76.64	- Woodframe construction comparable
5	1342-1358 Pandora Avenue	4/29/2022	$6,450,000	40,438	$159.50	1.70	68,745	$93.83	- Woodframe construction comparable
6	1101 Yates Street	5/2/2022	$16,300,000	44,690	$364.73	3.22	143,928	$113.25	- Concrete construction comparable
7	475 Kingston Street	1/10/2022	$8,000,000	21,170	$377.89	3.33	70,557	$113.38	- Concrete construction comparable
8	131-139 Menzies Street	1/26/2022	$3,600,000	14,868	$242.13	2.50	37,170	$96.85	- Woodframe construction comparable
9	1039-1043 Meares Street	1/27/2022	$4,000,000	14,400	$277.78	2.50	36,000	$111.11	- Woodframe construction comparable
10	1317 Quadra Street	11/1/2021	$5,180,000	7,368	$703.04	5.50	40,524	$127.83	- Concrete construction comparable
11	2657 & 2695 Quadra Street	2/3/2022	$4,310,000	14,989	$287.54	2.50	37,473	$115.02	- Woodframe construction comparable
12	1963 Fort Street	9/28/2021	$1,675,000	9,641	$173.74	2.74	26,416	$63.41	- Woodframe construction comparable
13	507 Montreal St, 210-224 Kingston Street and 205 Quebec Street	6/11/2021	$13,788,000	43,187	$319.26	3.00	129,561	$106.42	- Concrete construction comparable
14	1030 Fort Street	2/24/2021	$1,925,000	6,767	$284.47	2.50	16,918	$113.79	- Woodframe construction comparable
15	43-55 Gorge Road E and 2827-2831 Irma Street	2/1/2021	$8,632,130	51,774	$166.73	2.43	125,812	$68.61	- Woodframe construction comparable
16	131-139 Menzies Street	1/29/2021	$2,399,979	14,868	$161.42	2.50	37,170	$64.57	- Woodframe construction comparable
17	5166 Cordova Bay Road	4/29/2023	$4,125,000	23,087	$178.67	1.50	34,631	$119.11	- Woodframe construction comparable
18	4240-4244 Quadra Street	4/29/2022	$2,500,000	33,899	$73.75				- Woodframe construction comparable
19	3921-3933 Quadra Street	4/1/2022	$3,655,000	31,345	$116.61				- Woodframe construction comparable
20	3400 Tillicum Road	3/31/2022	$18,500,000	84,070	$220.05	2.43	204,000	$90.69	- Woodframe construction comparable
21	1 & 21 Obed Avenue	8/15/2022	$2,800,000	19,358	$144.64	1.45	28,069	$99.75	- Woodframe construction comparable
22	975-985 McKenzie Ave, 982 Annie Street 986-988 Annie	1/31/2022	$5,644,000	44,451	$126.97				- Woodframe construction comparable
23	3570-3584 Quadra Street	09/1/2021	$5,049,998	18,530	$272.53				- Woodframe construction comparable
24	988-992 Gorge Road W and 2808-2814 Rockwell Avenue	Multiple	$7,183,500	76,114	$94.38				- Woodframe construction comparable
25	3347 & 3351 Glasgow Avenue	10/12/2021	$2,460,000	18,528	$132.77				- Woodframe construction comparable
26	3656 Raymond Street South	10/19/2021	$2,200,000	16,868	$130.42				- Woodframe construction comparable
27	Tillicum Assembly	9/29/2021	$12,347,202	103,427	$119.38	1.94	200,648	$61.54	- Woodframe construction comparable
28	911-901 Cloverdale Avenue, 3271-3293 Alder Street	Dec 29, 2020 to August 31, 2021	$9,409,000	63,809	$147.46	3.51	223,969	$42.01	- Woodframe construction comparable
29	3319 Douglas Street	6/11/2021	$9,500,000	29,260	$324.68	3.99	116,815	$81.33	- Woodframe construction comparable
30	524 Culduthel Road	5/27/2021	$9,800,000	60,984	$160.70				- Concrete construction comparable
31	46 & 48 Crease Avenue	4/8/2021	$3,400,000	11,125	$305.62				- Concrete construction comparable

Appendix E – Transaction Cashflow Options

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Timing of Cash Inflows (Partner to Owner for residual land)	Description	Strengths	Weaknesses
Single lump sum payment at financial close	The land lease is paid for in full at financial close (end of development phase) as a pre-paid lease.	• The Owner will not be exposed to the risks associated with the private development as the entire payment for the residual land will be received at financial close. • Simplifies the payment to a single transaction.	• The payment for the residual land will be discounted when compared to options that involve the private partner paying later in the development.
Lease payments over land lease term starting at financial close	The land lease is paid for its term like with a typical lease. Payments begin at financial close (end of development phase).	• A consistent long-term cashflow indexed to inflation to the Owner will be locked in at financial close.	• The payments for the residual land to the Owner are spread over a long term, increasing the risk of the Owner facing challenges receiving the full value.
Lump sum payments as private developments achieve occupancy	The land lease is paid for in installments linked to the completion and occupancy of the buildings in the private development.	• The value of the residual land will carry a premium as the private partner will not need to pay for the residual land of each development until it achieves occupancy.	• Highest risk to the Owner as the timing of payments will be outside of the Owner's control. This can be mitigated by agreeing to and fixing the timing of payments at financial close.

Timing of Cash Outflows (Owner to Partner for SOC)	Description	Strengths	Weaknesses
Progress payments during construction of SOC	The SOC is paid for in full during construction like with a typical construction project. If the SOC is being leased from the private partner, the progress payments represent the pre-paying of the lease.	• The Owner will use municipal financing, which is less expensive than private financing, to make progress payments for the construction of the SOC.	• The Owner will be required to use municipal financing to make progress payments for the construction of the SOC. Potential implications for use of municipal financing include an alternative approvals process and lower debt capacity.
Single lump sum payment at occupancy of SOC	The SOC is paid for in full at occupancy, meaning that the private partner finances construction. If the SOC is being leased from the private partner, the lump sum payment represents the pre-paying of the lease.	• Private financing of SOC will incentivize the private partner to complete the project on schedule. • The Owner doesn't pay anything until occupancy of the SOC. • Simplifies the payment to a single transaction.	• The private partner will use private financing, which is more expensive than municipal financing, to construct the SOC. Private financing will be paid in whole at occupancy. This will result in a higher nominal cost of the SOC than in the option involving progress payments. • The Owner will be required to use municipal financing to make the payment at occupancy of the SOC. Potential implications for use of municipal financing include an alternative approvals process and lower debt capacity.
Leaseback payments over leaseback term starting at occupancy of SOC	The SOC is paid for through leaseback payments over the leaseback term.	• Minimal amount of municipal debt required as payments are distributed over the term of the lease.	• The private partner will use private financing, which is more expensive than municipal financing, to construct the SOC. Private financing will not be paid off until the final leaseback payment. This will result in a higher nominal cost of the SOC than in the other options.

Cumulative Cash Flows (Nominal)

DP = development phase

FC = financial close

OCC = occupancy of SOC

PDC = private developments complete

SOC = Saanich operations centre

RLV = residual land value

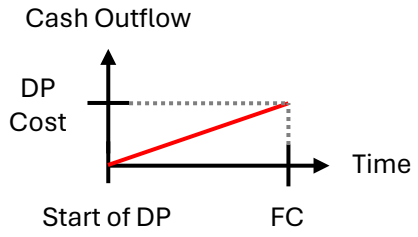
= cash inflow

= cash outflow

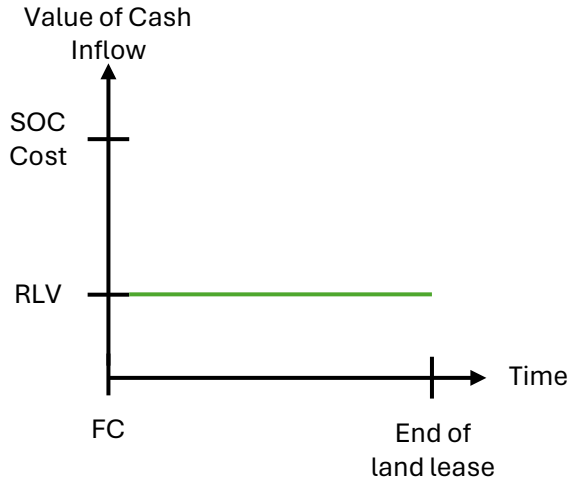
Note: The RLV is anticipated to vary based on timing of cash inflows (i.e., earlier payments will be discounted compared to later payments). The series of graphs are conceptual in nature, not reflecting expected or actual values.

Note: All options involve a development phase where the private partner will work with the Owner to master plan the site and design the SOC up to FC. The payments to the private partner for this work are illustrated in the figure below.

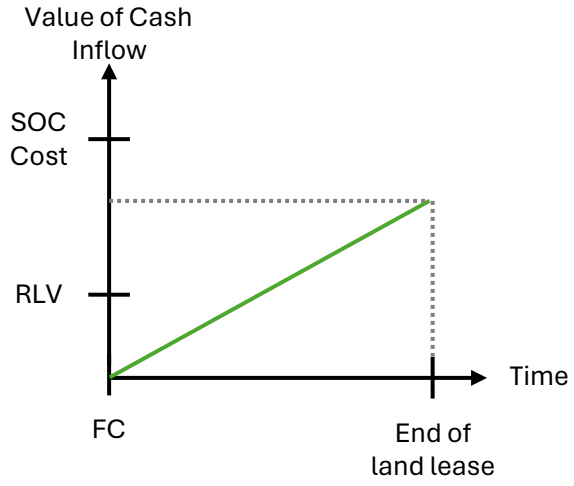
Progress payments during development phase (all options)



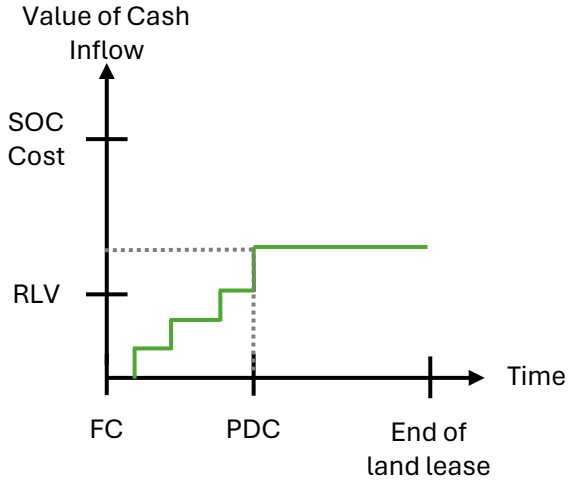
Single lump sum payment at financial close



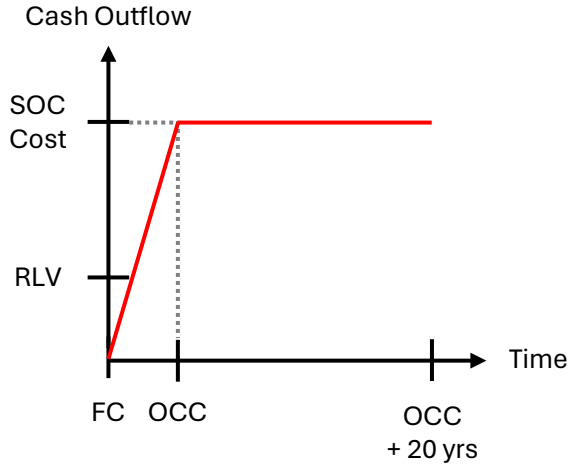
Payments over land lease term starting at financial close



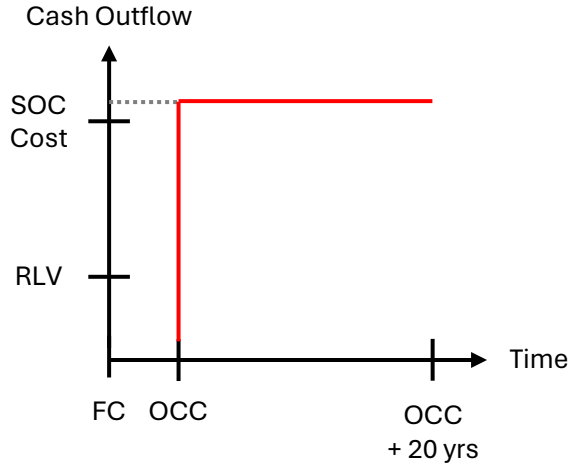
Lump sum payments as private developments finish



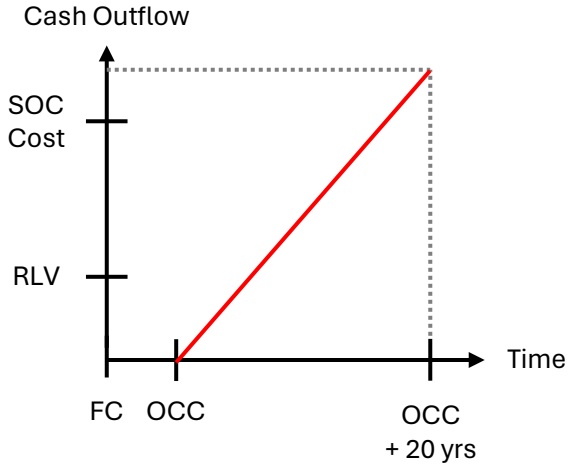
Progress payments during construction of SOC



Single lump sum payment at occupancy of SOC



Leaseback payments over 20-year term



Appendix F – Procurement Model Descriptions

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1 Procurement Model - Descriptions

1.1 Design Bid Build

Design Bid Build (DBB) is a traditional project delivery model, prevalent throughout the construction industry, and used extensively within the public sector. Under a DBB, the Owner retains significant responsibilities and risks related to design and construction period activities, and all responsibilities and risks related to operating period activities.

A DBB process includes a series of consecutive tasks for the Owner (e.g., detailed design, tendering and construction). Detailed design is completed and approved before the construction tendering process. The DBB option can also include a two-stage competitive selection process to pre-qualify construction firms. In a DBB, the Owner would engage a design team (architect and engineers) to develop a detailed design (working drawings) for the facility. Once the working drawings are complete, a tender call for construction pricing would be issued. The lowest qualified price must be selected, and an industry standard fixed-price construction contract would be used. The construction contract may include supplementary conditions typically used by the Owner for this type of contract. The construction contractor would take responsibility for constructing the facility to the specifications detailed in the working drawings developed for the Owner by the design team. The Owner and its design team would be responsible for any design errors and omissions and the Owner would make monthly progress payments to the contractor. Once the facility is completed, the Owner would take possession and be responsible for operations, maintenance and life cycle.

While the DBB contract is a fixed price, fixed schedule contract, the amount of related risk retained by the Owner would affect the ability to ensure that price and schedule risk are effectively transferred. The Owner retains key risks related to design, construction, life cycle and maintenance (e.g., design, permitting, commissioning, and life cycle and maintenance costs). Given that separate parties design, build and maintain the facility, collaboration between the Owner, consultants and contractors could present integration challenges, and the advantages of truly integrated design and construction may be hard to achieve.

1.2 Construction Management

In a Construction Management (CM) delivery model, the Owner would procure separately a design team and a construction manager (with a firm whose primary expertise is construction). The construction manager, in most cases a general contractor, would be contracted early in the design phase. This enables the construction manager to provide significant input to the Owner on cost, schedule, constructability and serviceability of the design as it develops. The

construction manager would have no contractual relationship with the owner's design team and would receive a fee for their service.

Under a CM model, trade contracts may be entered into sequentially. As soon as a specific part of the design is complete, bids for that trade package can be solicited and construction can commence. This overlapping of design and construction is known as 'fast-tracking', a process with which CM is often associated. The construction manager would be responsible for managing the tender work packages on behalf the Owner.

The Owner and its design team would remain responsible for design errors and omissions, and the Owner would make monthly progress payments to the construction contractors and the construction manager during the construction period. Upon completion of the contract, the Owner would continue to be responsible for operations, maintenance and life cycle.

1.3 Progressive Design-Build

A Progressive Design-Build (ProgDB) is a variant of the Design-Build (DB) approach with a few key differences. The key elements of the ProgDB procurement process are detailed below. The Request for Qualification (RFQ) stage is the same as the typical Design-Build process and is used to shortlist up to three qualified respondents based on the teams' qualifications and demonstrated experience.

The RFQ would allow the Owner to move forward with the shortlisted proponents to a Project Development Phase (PDA) RFP. The PDA RFP requires proponents to submit competitive pricing for their design costs, contractor profits, overheads and a site masterplan. From the market's perspective, the time and effort invested in responding to the PDA RFP is less than a typical Design-Build RFP. As is typical at the RFP stage, the Owner will need to share the statement of requirements and initial draft Design-Build Agreement with shortlisted proponents as they prepare their proposals. A preferred proponent would be selected following evaluation of the proponents' PDA RFP proposals. The PDA RFP completes with the execution of the Project Development Agreement with the preferred proponent.

The Design-Build Agreement RFP (DBA RFP) would then be issued to only the preferred proponent. This RFP requires the preferred proponent to submit technical and financial proposals, at defined times throughout the design development process. The Owner would evaluate each proposal and either:

- Accept the proposal and execute the Design-Build Agreement; or
- Reject the proposal and continue working with the preferred proponent toward the next proposal; or
- Reject the proposal and continue the design under the PDA.

If the Owner determines, in its discretion, that it will not be able to execute the Design-Build Agreement, it may terminate the process and take assignment of the design contracts and complete the design. The Owner would then have the ability to complete the work using an alternative procurement option.

As with the Design-Build approach, upon completion of construction, the design-builder turns over the facility to the Owner, who is responsible for operations, maintenance, and life cycle. Infrastructure BC has procured several projects under a ProgDB or a modified RFP process which is similar to the ProgDB (listed alphabetically below):

- Cariboo Memorial Hospital Redevelopment Project;
- Dawson Creek and District Hospital Redevelopment Project;
- Mills Memorial Hospital Redevelopment Project;
- Nanaimo Correctional Centre Replacement Project;
- Royal Columbian Hospital Redevelopment Project – Phases Two and Three; and
- Stuart Lake Hospital Redevelopment Project.

1.4 Progressive Design Build Finance

A Progressive Design-Build-Finance (ProgDBF) consists of the same characteristics of a ProgDB, with a RFQ, PDA RFP and DBA RFP, leading to the successful design build team entering into a fixed price contract. The Owner will provide partial construction payments and the balance of the construction payments would be made through partial short-term financing provided by the design builder. This partial short-term financing in the ProgDBF model provides the owner with liquid security to better ensure design builder performance in its obligations. This security warrants that the design builder has enough “skin in the game” to provide appropriate incentive to effectively and appropriately meet its obligations. An added benefit of ProgDBF is the due diligence and oversight applied by construction finance lenders during the design and construction phase to ensure that the design builder’s deliverables and obligations are being met, and/or that appropriate remedial actions are taken if progress falls behind schedule.

1.5 Progressive Design Build Finance Maintain

A Progressive Design-Build-Finance-Maintain (ProgDBFM) consists of the same approach consists as a ProgDBF, however the Owner would be seeking proposals to maintain the facility, as well as to design, build and finance the facility.

Under a DBFM structure, the Owner would enter into an agreement with a single private sector entity who would be required to design, build, partially finance and maintain the facility over the

specified term of the agreement. The facility maintenance scope assumed to be included in the DBFM model would be modified to include prevailing labour requirements of the owner, and consistent with other PPP projects recently implemented in the province. Risks during the construction and operating periods are generally explicitly allocated to either the public sector or the private sector; a few risks are shared. There tends to be a high degree of risk transfer to the private sector.

Performance payments would be made monthly to the private partner over the life of the agreement at a fixed rate determined at contract close, with escalation allowed on operating related costs. These payments consist of progress payments during construction, and annual service payments, which only commence once the asset is completed to the owner's satisfaction. To ensure that the private partner receives full payment, it must meet defined and measurable performance and availability standards on a continuous basis. The inclusion of private sector equity and external financiers as required in a performance-based contract provides greater assurance of a long-term commitment and due diligence to the project that results in a degree of owner-type behaviour from the private sector.

Appendix G – Financial Model Report

Development and Transaction Options Analysis | Saanich Operations Centre

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Infrastructure BC

Deloitte.

District of Saanich Operations Centre Redevelopment Project

Appendix G: Financial Model and Level of Private Finance Report

August 14, 2024

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FIGURES

LIMITATIONS

This report was prepared for the use of the District of Saanich (the "Owner"), and is not intended for general circulation or publication, nor is it to be reproduced or used without written permission of Deloitte. It relies on certain information provided by third parties, none of which Deloitte has performed an independent review of. No third party is entitled to rely, in any manner or for any purpose, on this report or any portion thereof. Deloitte's services may include advice or recommendations, but all decisions in connection with the implementation of such advice and recommendations shall be the responsibility of and be made by the Owner.

1 Introduction

The purpose of this report is to document the financial model used to evaluate the procurement options examined for the District of Saanich Operations Centre Redevelopment Project (the “Project".) This report is intended to be read in conjunction with the *Development and Transaction Options Analysis for the Saanich Operations Centre* and is an Appendix to that report. This report is not intended to act as a standalone document.

2 Objectives

The financial model was created to analyze the two different procurement options shortlisted for the Project:

(a) Progressive Design Build (“ProgDB”)

(b) Progressive Design Build Finance (“ProgDBF”)

2.1 Option One: Progressive Design Build

Option One evaluates the Project if it is to be delivered by a single ProgDB contract combining both design and construction scope of work. The result is an estimate of the risk-adjusted Total Net Cost (“TNC”) of a project over the procurement, design and construction phases including expected cost escalation over this period. The ProgDB involves the successful proponent being invited to a development phase, where the proponent will work with the Owner to masterplan the site and progress the design of the Project. At completion of the development phase, a fixed price and schedule are determined. Progress payments are made by the Owner during the design and construction period.

2.2 Option Two: Progressive Design Build Finance

Option Two evaluates the Project if it is to be delivered by a single ProgDBF contract. The TNC of the Project is evaluated for the same scope and process as that of the ProgDB with the difference being that only partial progress payments are made by the Owner during the design and construction period. The design-builder will be required to provide non-recourse private financing for a portion of the Project costs and that private financing is repaid in a lumpsum payment at substantial completion.

2.3 Use of the Option One and Option Two Procurement Options

ProgDB and ProgDBF were compared against each other to determine the quantitative Value for Taxpayers’ Dollars (“VFM”) outcome expected for the Project. It should be noted that the quantitative aspect of the VFM model is not the only decision driver; consideration must be given to the qualitative assessment of the procurement options as well. These qualitative aspects are beyond the scope of this report and are included in the Development and Transaction Options Analysis report.

Where possible, the Project has third-party expert advisors providing credible estimates for the financial model inputs. For example, capital cost estimates for both procurement options are based on a Class D cost estimate by a third-party cost estimator. Other costs are estimated based on a combination of available market data and previous experience with other similar projects in B.C. and other jurisdictions.

3 Results of Comparison

Table 1 below summarizes the VFM proposition of the ProgDBF and ProgDB procurement approaches. The nominal risk-adjusted cost for each model is shown side-by-side. The ProgDB has a VFM of $3.6 million or 2.09 percent compared to the ProgDBF in TNC terms.

Table 1: VFM Comparison ($Nominal, Thousands)

Project Capital Costs	ProgDB	ProgDBF
Contractor Costs (No Financing)	**132,066**	**132,887**
Design and Construction (No Escalation)	90,504	90,754
Design and Construction Escalation	27,377	27,377
Risks Transferred to Design-Builder	4,666	4,937
Payments To Contractor During Development Phase	8,302	8,552
Bid Development Costs	200	250
Bonding (bid, performance, and payment)	1,018	1,018
Owner's Costs	**40,167**	**42,944**
Owner's Procurement and Implementation Costs	9,950	10,200
Incremental Cost of Private Financing		3,463
Construction Insurance	2,040	2,040
Furnishing, Fittings, Equipment	2,114	2,114
Risks Retained by Owner	25,921	24,936
Patrial Compensation	200	250
Total Risk-Adjusted Nominal Project Costs	**172,292**	**175,890**
Value for Taxpayer's Dollars (VFM) vs ProgDB		(3,598)
Value for Taxpayer's Dollars (VFM) Percentage		-2.09%

4 Methodology

The financial models have been constructed in accordance with Infrastructure BC's quantitative analysis guidance methodology.

5 Schedule and Key Dates

The Project schedules for the ProgDB and ProgDBF procurement approaches were developed by Infrastructure BC and are shown in Table 2 below. The key dates and durations were approximated to the dates used in the financial model.

Table 2: Project Schedule

Task	Start	End	Duration
Pre-Procurement	September 2024	November 2024	~8 weeks
RFQ	November 2024	March 2025	~14 weeks
Announce Shortlisted Respondents	March 2025	March 2025	~1 week
Project Development Agreement RFP	March 2025	September 2025	~26 weeks
Execute Project Development Agreement	September 2025	September 2025	~1 week
Project Agreement RFP (includes Project Development Phase)	September 2025	September 2026	~56 weeks
Construction	September 2026	December 2028	~112 weeks
Substantial Completion	January 2029	January 2029	~1 week

6 Planning, Procurement and Construction Costs

6.1 Design and Construction Cost Estimate

Table 3 reflects design and construction cost estimates provided by Advicas Groups Consultants Inc. ("Advicas") on August 13, 2024. The estimate reflects Advicas' opinion of current construction industry market conditions for the size and type of project, unit factors, and contingency. Estimated costs were developed in September 2023 dollars, escalation to the expected future spend date is determined in the financial model.

Table 3: Construction Cost Estimate ($Real, Thousands)

Description	ProgDB	ProgDBF
Design and Management	13,091	13,091
Base Building Construction	78,154	78,154
Correlated Costs (Excluding legal and insurances)	1,508	1,508
Construction Insurance	1,563	1,563
Contingency Reserves	4,640	4,640
Bonding (bid, performance, and payment)	782	782
Furnishings, Fittings and Equipment	1,563	1,563

6.2 Additional Cost Estimates

Table 4 below details additional anticipated costs incurred under the procurement approaches. The estimates in Table 4 were provided by Infrastructure BC and developed in conjunction with the Owner and Advicas.

Table 4: Additional Cost Estimates ($Nominal, Thousands)

Additional Cost Estimates	ProgDB	ProgDBF
Owner's Project Management Office ("PMO")	9,950	9,950
Partial Compensation	200	250
Bid Development Cost	200	250
Financial Advisor	-	250
Special Purpose Vehicle Costs	-	250
ProgDBF Incremental Contractor Costs During Development Phase		250

6.3 Risk Estimate

The risk register was developed by Infrastructure BC in conjunction with the Owner. For more information refer to Appendix H [Risk Report] of *the Development and Transaction Options Analysis for the Saanich Operations Centre* report. The output of the Monte Carlo analysis is in Table 5. The 67th percentile is used as an input to the financial model and the VFM calculation. The 90th, 67th and 10th percentile of transferred risk is used to assess the level of private finance as described in Section 7.3.

Table 5: Risk Estimates ($Nominal, Thousands)

67th Percentile	**ProgDB**	**ProgDBF**
Transferred Risk at 90th Percentile	Not Used	6,335
Transferred Risk at 10th Percentile	Not Used	1,371
Retained Risk at 67th Percentile	25,921	24,936
Transferred Risk at 67th Percentile	4,666	4,937
Total Risk at 67th Percentile	**30,588**	**29,872**

7 Economic and other Assumptions

7.1 Escalation Applied to Construction Costs

Table 6 details the annual construction escalation assumptions provided by Advicas. Construction cost escalation is converted from an annual rate to a monthly equivalent and applied to all aspects of the Construction Cost Estimate in Table 4.

Table 6: Construction Cost Escalation

Year	Value
2023	10.00%
2024	8.00%
2025	7.00%
2026	5.00%
2027	4.50%
2028	4.50%
2029	4.00%

7.2 Financial Assumptions

Under the ProgDBF procurement approach, a portion of the Project is financed by private debt finance during construction. The remainder of the capital cost is paid through milestone payments during construction. A substantial completion payment at the completion of construction repays the private finance debt and any remaining costs.

The ProgDBF contract is signed following the development period and all costs under the design-builder's contract per Table 1 incurred before this time are not included in the financed amount, while all subsequent design-builder costs are. Table 7 outlines the assumptions used for the financing.

Table 7: Financing Assumptions

Financing Assumptions	
Repayment Term	At Substantial Completion of Construction
Debt Type	Bank Financing
Base Rate	3.65%
Credit Spread	1.50%
Arrangement Fee	1.10%
Commitment Fee	0.45%
All-in Rate	4.48%
Owners Cost of Borrowing	3.46%

- **Financing type -** Bank Financing was selected over Bond financing due to the reduced cost to the Project in current financial markets.
- **Base Rate** - is the Government of Canada 5-year benchmark bond yield as August 13, 2024.
- **Credit Spread** - represents the high end of recent submissions for DBF projects in the region and was provided by Infrastructure BC on April 23, 2024.
- **Arrangement Fee and Commitment Fee -** are based on comparable projects and current market rates.
- **Owners Cost of Borrowing -** is the 5-year Municipal Finance Authority of BC ("MFA") borrowing rate as of August 13, 2024.

7.3 Level of Private Finance

The ProgDBF model is assumed to include approximately $100 million of private debt finance that will be repaid at substantial completion of construction. This represents approximately 76% of the funding required for design and construction. The $100 million level is the minimum amount of private finance needed to attract sufficient market interest in a ProgDBF project. At 76%, this level of private financing is considerably higher than recent Canadian DBFs, reflecting the small overall capital size of the Project. The small size of the Project results in a less efficient ProgDBF compared to a larger sized transaction as more private finance is required to meet market minimum debt sizing than is needed to support the optimal risk transfer.

Table 8: Levels of Private Finance ($Nominal, Thousands)

Levels of Private Finance	ProgDBF
Maximum debt draw	100,446
Level of private finance	76%

To assess the ability of private finance to cover downside scenarios the Project team considers three failure scenarios where the design-builder has severely underestimated the cost or requirements of the Project and realizes challenges during construction. Tests are conducted at 8 months, 16 months, and 22 months into the construction phase of the Project. For each of the failure scenarios considered the following assumptions (in Table 9 and 5) are used to quantify a sever downside outcomes.

Table 9: Failure Scenario Assumptions

Cost Item	Description	Calculation Methodology
Retender Premium	This is the additional premium that a private sector bidder would include into their bid due to a retender. A premium occurs since the bidder would have to spend additional funds to remedy any existing issues and also to provide an additional contingency for taking over a project which may now have a higher perceived risk.	Percentage of the remaining costs to complete the project as of the date of the assumed default:
		• Low 10%
		• Medium 15%
		• High 25%
Delay Cost	A retender process can take many months to complete and as a result there is a delay in the completion of the project and an associated cost for this delay.	2% of the remaining costs to complete the project as of the date of the assumed default.

Retender Cost	This is to account for Owner costs associated with the retender process (project management, advisory, legal, etc.).	Fixed dollar amount of $4 million.
Risk Value	The likely cost to rectify any or a number of significant risk events.	Total – after financial close - transferred risk values:
		• Low (50% of 10th percentile)
		• Medium (50% of 67th percentile)
		• High (50% of 90th percentile)

Table 10 provides a summary of the estimated incremental cost to the Owner at the point of default and retender, considering the four cost categories identified in Table 9 above. The total incremental costs are shown for each cost scenario – low cost, medium cost, high cost.

Table 10: Failure Scenario Results ($Nominal, Thousands)

Scenario	8 months	16 months	22 months
Low	19,404	18,841	18,683
Med	27,319	26,522	26,298
High	40,284	39,018	38,661

Figure 1 illustrates how the investment of private financing causes the “Unfunded Value in the Ground” (shaded in green) to grow steadily over time. This is the amount that is financed with private capital and increases at 90% of the total construction cash flows (under the 90:10 split) until it reaches the cap of the private financing currently set at approximately $100 million or roughly 76% of the design-builder’s total cost remaining after the development phase. The Owner’s contribution comes after significant accumulation of private capital at risk in the early part of the construction period. Note that the likelihood of an early termination is also higher during the early phases of construction and thus, deferring significant Owner contribution until well into the construction period enhances the Owner’s security against such risks. Accordingly, the analysis assumes that the Owner would commence making regular monthly payments to fully cover the design-builder’s costs after the design-builder has financed the first 76% of project costs (under the 90:10 split). The Owner at substantial completion then makes a milestone contribution that is equal to the final value of the design-builder’s outstanding debt.

The other forms of anticipated security are shaded in blue and includes a parent company guarantee and a letter of credit. This represents the “Unspent Proponent Security”, i.e., security that could be available to the Owner following lender claims. It is inversely related to the amount of private debt outstanding because, as private financing increases, so does the likely claim lenders will have against the security.

The “Unfunded Value in the Ground” is a high quality security. The “Unspent Proponent Security” is a much lower quality security as the quantum is uncertain due to the Owner’s claims being subordinate lender claims making it more difficult for the Owner to achieve recoveries.

Figure 1: Project Security vs Level of Private Finance

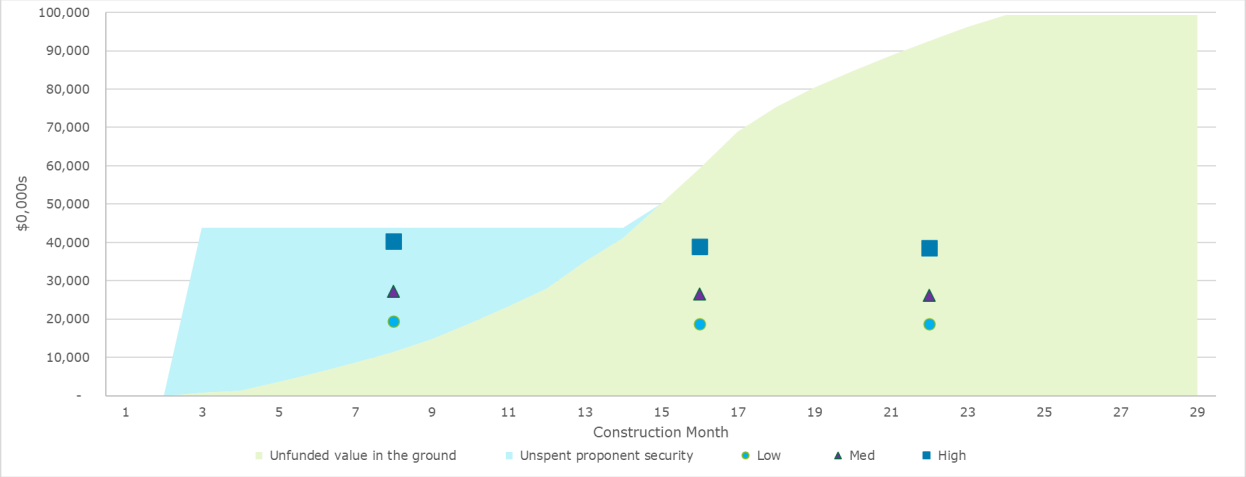

Figure 1 suggests that ~$40 million of private finance is adequate to cover the risks being considered in months 16 and 22. The ~$100 million being considered, due to minimum debt sizing in the financial market, covers all the risk scenarios being considered. The construction cashflows dictate the slope of the unfunded value in the ground curve, a more front loaded cashflow would potentially benefit the risk scenarios considered in month 8.

7.4 Owner's Interest During Construction

The Owner is expected to finance the cost of the Project through its own borrowing. The interest during construction is representative of the cost of this borrowing until substantial completion of the Project. If the Owner were to fund this particular project though otherwise available funds, then the interest during construction remains representative of the opportunity cost of the Project cash flows since the funds could otherwise be used to pay down existing debt elsewhere in the Owner's portfolio.

The Owner's interest rate is outlined in Table 7 and is the 5-year rate for the Municipal Finance Authority (MFA) of BC as of August 13, 2024. The Owner typically finances projects through long-term borrowing. To enable a fair and neutral comparison, between the ProgDB and the ProgDBF, the 5-year MFA rate is used. This corresponds with the Government of Canada 5-year benchmark bond yield used for the private finance portion of the ProgDBF.

The analysis focuses on isolating the incremental costs incurred by the Owner as result of utilizing partial private financing during the design and construction phase in the ProgDBF procurement option. The ProgDBF has less Owner's interest during construction compared to the ProgDB since the private finance loan reduces the cost to the Owner during the early months of the project, however that is replaced by more costly private financing. At substantial completion, the private finance loan (including capitalized interest) is paid back through the substantial completion payment, and at which point it would then be financed by the Owner.

For this Project the incremental financing cost to the Owner for approximate $100 million private financing during the construction phase is estimated at approximately $3.5 million per Table 1.

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Appendix H – Risk Report

Development and Transaction Options Analysis | Saanich Operations Centre

Final - As Issued | August 23, 2024

Infrastructure BC

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1 Introduction

1.1 Project Background

The Saanich Operations Centre (SOC), located on approximately 13 acres of municipally owned land at 1040 McKenzie Avenue (the Site), has reached the end of its useful life and needs to be redeveloped for the District of Saanich (the Owner) to continue to provide its critical services to Saanich taxpayers. The redevelopment of the SOC (the Project) business case was approved by the District of Saanich council in 2022. The Project will include the design and construction of the new SOC on the same Site with a more efficient floorplan and a private development on the excess lands (Residual Land) resulting from the smaller footprint of the new SOC. The Owner will engage a single counterparty to masterplan the entire Site, design and build the new SOC, and develop the Residual Lands. The Owner will take possession of the new SOC at the conclusion of its construction and perform the maintenance and operation. The single counterparty will take possession of the Residual Land through a long-term land lease (assumed to be 99-years) and will take all development, design, construction, revenue, and operational risk on the Residual Land development. The Owner will pay the single counterparty for the design and construction of the new SOC and will receive payment for the single counterparty to access the Residual Land, referred to as the Residual Land payment. The private development on the Residual Land is anticipated to be primarily a residential development with secondary commercial or retail uses. The Owner will commence a rezoning process to determine final uses and densities that will be allowed on the Residual Land. The SOC use is already permitted in the zoning and will not be affected by the rezoning.

The Project is the largest capital project ever undertaken by the Owner and will be under scrutiny from the public to ensure value for taxpayers and the highest and best use on the Residual Land.

Additionally, there are multiple complexities on the Site, such as complex geotechnical conditions, adjacencies to an area of archaeological high potential, and a buried public works creek that bisects portions of the Site adjacent to the planned SOC site. Geotechnical and soil site investigations have been conducted and those results considered in the pricing, however investigations are ongoing as there is risk that in-situ conditions may differ.

1.2 Purpose and Context

The purpose of this report is to document the risk analysis process for the new SOC in the Development and Transactions Options Analysis report (the Report). This report deals only with the delivery of the new SOC and not the Residual Land payment or delivery of the private development on the Residual Lands. Key areas covered by this report include:

- An overview of Infrastructure BC's project risk management approach and guidance from the planning stages through to implementation;
- The methodology by which risks were assessed, quantified, and incorporated into the financial analysis of the business plan; and
- The results of the risk analysis conducted.

The process has primarily focused on identifying specific Project risks, allocating those risks between the Owner and the private partner (also referred to as the Contractor) for the selected procurement options, developing potential risk management strategies and incorporating quantified risks into the financial analysis of the Report.

As detailed in the SOC Development and Transactions Report, the two procurement options are Progressive Design-Build (ProgDB) and Progressive Design-Build Finance (ProgDBF).

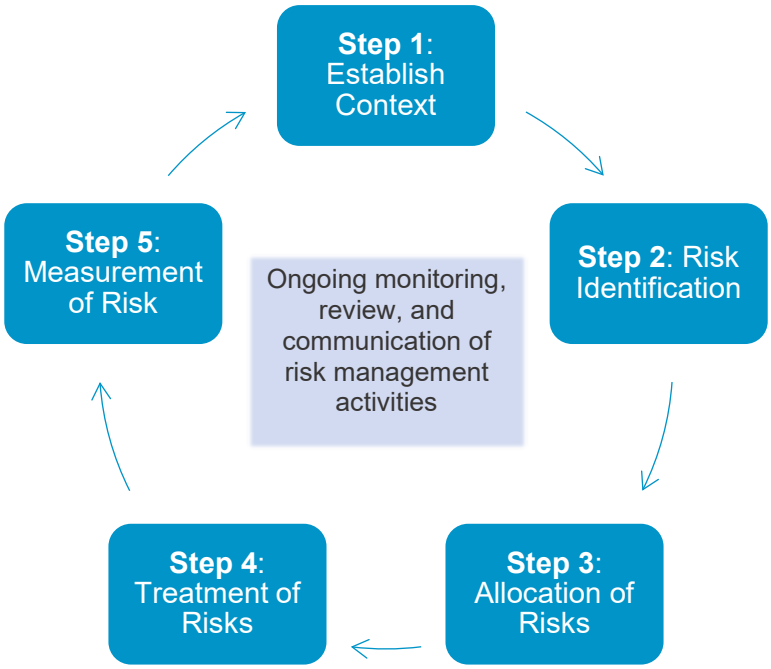
2 Risk Management Methodology

2.1 Provincial Guidance

Project risk is defined as the chance of an event or condition happening which could cause the actual project circumstances to differ from those assumed when forecasting project outcomes or objectives. Risk is an inherent part of any project, and to ensure a successful project outcome, risk must be effectively managed. Depending on the amount of information available, risk can be measured both qualitatively and, in some instances, quantitatively.

Risk management includes the actions or planned actions that impact the probability and consequences of a risk event in order to ensure that the level of risk assumed falls within an acceptable limit for the project team. Every project must consider and manage risk in order to be successful. A project's risk exposure is fluid and adjustments will need to be made as the project moves through its various stages. Careful risk management allows project teams to anticipate key vulnerabilities and develop proactive strategies on how to best deal with them. The following figure provides an overview of the risk management process.

FIGURE 1: RISK MANAGEMENT OVERVIEW



Risk management in the context of large capital infrastructure projects does not simply involve transferring all project-related risks to the private sector. The goal of an effective contractual arrangement is to allocate project risks to the party best able to manage them at the lowest cost. This can be further enhanced when assigned risks are supported by appropriate incentives and penalties through the use of performance-based contracts. For example, under any procurement option, the Contractor is better suited than the Owner to manage the physical construction activities, so construction risk is transferred to the Contractor.

An efficient or optimal allocation of risk between the public and private sector participants will ultimately maximize value for taxpayers' money.

The Government of British Columbia (the Province), through Infrastructure BC and in conjunction with the Risk Management Branch (RMB) of the Ministry of Finance, has established a guideline with respect to risk management for large capital infrastructure projects through the stages of planning, procurement, and implementation. Notwithstanding differences in terminology, the Province's guideline is generally consistent with the principles, framework and process described in the ISO 31000 Risk Management Principles and Guidelines.

A failure to fully take account of risk is one of the key factors when public projects are not delivered on time, on budget or to specification. Infrastructure BC's guidance on risk management takes a systematic approach to risk, estimating the range of potential impacts of risk on a risk-by-risk basis through the project's planning, procurement, design and construction and operating phases, if applicable.

This systematic approach to risk considers:

- An extensive risk matrix to ensure a comprehensive assessment;
- The range of possible outcomes or consequences;
- The risks associated with capital; and
- Specific characteristics of unique risks.

Infrastructure BC uses a standardized risk matrix (also referred to as a risk register) template to consolidate risk information (refer to section 2.2.4 for additional information about the risk matrix).

Risk analysis is dynamic and should be revisited throughout the life of a project. A project team should plan regular updates to the risk matrix as part of ongoing risk management efforts. As a project moves through the planning phase and into procurement, and more information emerges, new risks not previously recognized will be identified (especially through development of the legal documents or "Contract"[1] and associated payment mechanism). These risks should

[1] The term Contract in this context refers to a Design Build Agreement.

be added to the risk matrix, allocated appropriately and quantified where possible. Similarly, some risks previously identified may no longer exist and should be reclassified.

During negotiations and Contract execution, the main subject for negotiations becomes the Contract. The risk matrix allows for the identification and allocation of risks at a high level, but the detailed risk allocation will be reflected in the Contract wording.

2.2 Risk Assessment

Risk assessment is the overall process of risk identification, risk analysis, and risk evaluation. It allows the project team to better understand how risk can affect achievement of the project objectives and ensure that effective treatment strategies and project controls are developed.

During the business plan phase of the project, risk assessment can be broken down into the following steps:

- Identifying and clearly describing the major potential risk events for a project;
- Analyzing the range of possible consequences of the risks identified;
- Evaluating the likelihood and potential impact of those consequences;
- Quantifying, where possible, the dollar value of these outcomes to the project;
- Developing prevention and mitigation strategies for identified risks; and
- Recording the results of this process in a risk matrix.

2.2.1 Risk Identification and Description

The first step in the risk assessment process involves identifying and describing the potential risks (from both technical and financial perspectives), the causes, and potential consequences. The aim of this step is to generate a comprehensive list of risks based on those events that might create, enhance, prevent, degrade, accelerate, or delay the achievement of project objectives.

For ease of tracking, risks are organized by the stage of the project life cycle in which they are expected to occur including planning, procurement, design and construction and transition/commissioning of the project leading up to operations (herein referred to as Capital Risks).

Prior to procurement, the project is in the planning stage. Technical and financial information about the project is gathered, analyzed, and compiled into a comprehensive document that becomes the business plan. The information is subject to intense due diligence at this stage,

however there can be further refinement and modification throughout the project's life cycle. It is important at this stage to specify sufficient detail about each risk event, as a comprehensive description can help inform the risk quantification and the development of potential scenarios.

When preparing documentation in anticipation of the procurement stage, the risk matrix can be used to guide or confirm the risk allocation contained in the project's Contract.

2.2.2 Risk Allocation

Once the risks have been identified, each one is evaluated to determine which party, in this case the Owner or the private sector, is exposed under each procurement option and which party is best able to manage the risk at the lowest cost. From the perspective of the Owner, a risk can be transferred to the private sector, shared with the private sector, or retained. One of the key differences between procurement options is how risk is allocated between the parties and subsequently managed by the responsible party.

As the project progresses during the procurement process, it may become apparent that the initial risk allocation does not provide the best value for money for Owner, in which case the allocation may be amended as appropriate. For example, a geotechnical risk may initially be classified as transferred during the business plan stage. Further geotechnical studies completed after the business plan may reveal unexpected ground conditions. Rather than fully transfer the risk, it may be more cost-efficient at that point to share the risk exposure with the Contractor. This example illustrates the importance of keeping a risk management plan up to date throughout a project's development.

The transferred risks, together with the portion of the shared risks expected to be transferred to the private sector, are incorporated into the draft Contract.

The risks retained by the Owner are used in part to assess the size of the owner's reserve necessary to protect against the risk exposure.

Project teams will typically not quantify risks that may be high impact but have a very small probability of occurring. These include natural disasters and other "high impact, very low probability" events. Typically speaking, broader provincial emergency plans (which are beyond the scope of this analysis) would come into play under such circumstances.

2.2.3 Risk Treatment: Prevention and Mitigation

The risk allocation described above is part of an ongoing risk management process that enables parties to reduce the probability of a risk occurring as well as mitigating the consequences of a risk should it occur. A primary objective of risk management is to reduce potential negative outcomes by identifying risks, analyzing them, and implementing strategies to deal with them on an ongoing basis.

While risks are often thought of as events with only negative consequences, proactive risk management can create value. For example, a comprehensive investigative testing program carried out in advance of procurement may provide project teams with more complete information and less uncertainty. New information may reduce the probability of a risk materializing or may provide the project team with an opportunity to proactively deal with the issue at a lower cost.

The treatment strategies developed should be clear and realistic and involve the necessary project team resources. The risk management process should form an integral part of the project team's broader project management.

2.2.4 Risk Matrix

A risk matrix is the key document produced in the risk management process. Developed through risk workshops, it consolidates and provides a record of the following information:

- The identification and description of all relevant risks;
- Risk allocation between Owner and the private sector;
- Identification of high-level prevention and mitigation strategies; and
- Where possible, quantification of the risks based on the best available information at the time.

Infrastructure BC's risk process is one component of a broader enterprise risk management program that should be administered by the Owner. This risk process focuses specifically on the risks associated with the project's planning and implementation, but it does not address the effective delivery of government services, which should form part of a broader risk management program.

Attachment 1 illustrates how the risk matrix is organized and describes the information captured in the various columns. The risk matrix is a living document that informs the risk management strategies developed by the project team. It should serve as a key project management tool and be updated at key project milestones (e.g., before the release of the RFP, just after Contract execution, and regularly during design and construction).

2.3 Risk Quantification

A comprehensive quantitative evaluation of risk presents a range of likely cost outcomes and provides a reliable means of testing value for taxpayer money between procurement options. It also encourages bidding competition during procurement by creating confidence in the financial rigour of the Owner's risk-adjusted project cost estimate that will be used to set the publicly

announced project budget and in the case of a ProgDB or ProgDBF procurement the affordability ceiling to which a proponent must bid.

Risk quantification occurs once the risk identification, description, allocation, and categorization activities have been completed to a sufficient degree. Selected risks are quantified to ensure sufficient money in the all-in project budget to successfully deliver the project. The risk adjustment included in the project budget must account for both transferred risks (which the Contractor will include in its bid) and retained risks (which will form part of the owner's reserve).

If a risk is transferred, it is quantified from the perspective of the Contractor and what the project team estimates would be included in a reasonable and competitive financial proposal. If a risk is retained, it is quantified from the perspective of the Owner and the cost impact the risk would have on the project.

Risk quantification can be a time-consuming exercise and should focus on the most material risks to the project. Typically, only 10 to 20 of the potentially hundreds of risks are quantified. In some cases, a single quantified risk can capture the potential impact of multiple risks. While risks are quantified individually, the total quantified risk values should be viewed from a portfolio perspective. It is expected that some risks will materialize, some will not and, of those that do occur, the impact may be greater or lower than expected. The expectation is that, by quantifying the key material risks, the project team will have a sufficient reserve in place to adequately address risk events within the project budget. The impact of individual risks on the total risk value is illustrated and described in section 3.3.2.

Project teams consider several factors in determining which risks to quantify. These may include:

- Materiality - If the risk were to materialize, would it have a significant impact (financial, schedule, public perception, program delivery)?
- Estimable – Can the risk impact be reasonably and accurately estimated?
- Risk Ranking - How high is the risk ranking (low / medium / high / extreme)?

The decision on which risks are to be quantified involves examining past precedent projects, as well as considering unique project-specific risks that warrant further attention.

Most risks are quantified using a triangular distribution which involves inputting three key variables: low/best case (5th percentile), most likely (50th percentile), and high/worst case (95th percentile). Using a triangular distribution is often regarded as a good proxy for a normal distribution but is much more straightforward in terms of obtaining the appropriate inputs. Refer to section 2.3.2 for additional information.

2.3.1 Risk Quantification and the Project Contingency

The contingency is a critically important item in the project budget and should not be removed and replaced with the quantified risk value.

In traditional cost estimating, large design and construction contingencies are often added to the expected cost, reflecting the fact that unforeseen circumstances may arise that could result in additional costs or delays. These contingencies represent an initial estimate, based on the quantity surveyor (QS)'s experience, of the expected additional costs that may be attributed to risks usually associated with the level of uncertainty in design and construction at the time of the QS's estimate and often changes or unanticipated events.

Contingencies are not dealt with consistently across all QS estimates. The QS examines how developed the project planning is and bases the contingency on previous experience. When the QS creates the contingency for a project's indicative design/reference concept estimate, the QS assumes the contingency will be spent, which means the contingency cannot be regarded as a substitute for risk costing.

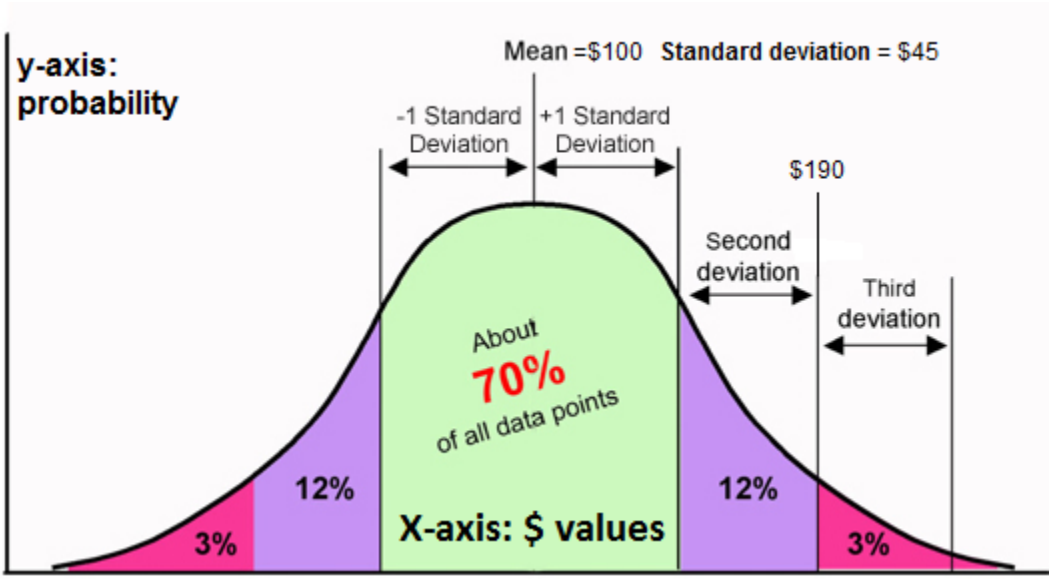
2.3.2 Monte Carlo Analysis and Risk Distributions

The expected value of each quantified risk is calculated based on the assumed distribution and the estimated probabilities and scenario outcomes for each risk. To quantify the overall risks and develop aggregated distributions, Infrastructure BC uses statistical software, called @Risk, to perform a Monte Carlo analysis[2]. Monte Carlo analysis provides a means of evaluating the effect of uncertainty using a large number of scenarios. It is a tool used to estimate the total variation of project risk resulting from the individual quantified risks. The Monte Carlo analysis takes the assumptions for each risk, aggregates them, and then runs thousands of simulations to produce a distribution of the total value of quantified risks.

The Monte Carlo analysis produces distributions that often approximate a normal distribution curve, also known as a bell curve, as illustrated in the figure below.

[2] Monte Carlo analysis involves a series of computational algorithms that rely on repeated random sampling to compute their results.

FIGURE 2: EXAMPLE NORMAL DISTRIBUTION CURVE



To help understand the distribution, the mean of $100 refers to the average data point and the standard deviation of $45 refers to the amount of variability. Generally, most risks are expected to fall close to the mean as illustrated by the green section. Approximately 70 percent of the risk outcomes are expected to fall between $55 and $145. If one refers to the three percent indicated by the pink area on the far right (also referred to as the 97th percentile), one can say that there is an estimated 97 percent chance that the risk values will be at or below $190. This is equivalent to saying there is an estimated three percent chance that the risk values will exceed $190.

When developing the project budget, the percentile point selected on the risk distribution curve will depend on the level and quality of information available and the project team's level of risk aversion. This is discussed further in section 3.2.1

3 Project Risk Process

3.1 Risk Workshops

Two risk workshop sessions, facilitated by Infrastructure BC, were held. The first workshop was held on April 17, 2024 and the second on August 12, 2024. The risks that were identified and quantified were all classified as Capital Risks (e.g., approval, permitting, procurement, planning, design, and construction). Financial and commercial risks were captured in the Capital Risks as appropriate.

A variety of professionals from the private and public sectors participated in the risk identification and quantification exercise. These participants are subject matter experts in one or more of the following areas: procurement, engineering, cost estimating, design and construction, and project management.

Participants included representatives from: Colliers Project Leaders, the Owner, Advicas Group Consultants, and Infrastructure BC. A list of participants can be found in Attachment 2.

The Project's Quantity Surveyor attended the quantification risk workshops to ensure that risks being quantified were not already included in the Project's contingency estimates.

During the workshops, participants thoroughly reviewed a pre-populated list of Project risks, based on Infrastructure BC's relevant precedent projects, and updated it as appropriate for the Project, including adding or removing risks as appropriate. Attachment 3 to this report contains the Project's complete risk matrix.

Following the qualitative risk assessment, various Project team members were engaged to quantify certain risks to assess the initial cost implications to the Project under both procurement options in the event the risks materialize. The risk values are calculated on the base costs before contingencies. Furthermore, risk estimates assume that prudent and reasonable mitigation, before and after risk events, has been or will be completed.

Infrastructure BC reviewed the estimates with the Project team and provided feedback to ensure the estimates included sufficient justification, and that the assumptions were reasonable and consistent with the Project scope and risk description. This feedback resulted in further adjustments to the initial assumptions. The completed risk quantification results and worksheets are also included in Attachment 3.

3.2 Risk Results Analysis

The Project team quantified a total of 15 Capital Risks. Table 1 presents these risks and the anticipated allocation under both models.

TABLE 1: QUANTIFIED RISK ALLOCATION

ID#	Capital Risk Name	ProgDB	ProgDBF
AR1	Project Approval Delay	Retained	Retained
PER5	Off-Site Services	Retained	Retained
PER6	Creek Work Approval Delay	Retained	Retained
P1	Procurement Delays	Retained	Retained
P2	Quantity Estimating Risk	Retained	Retained
P3	Development Phase Delays	Retained	Retained
DC1	Design Errors or Omissions	Transferred	Transferred
DC2	Design, Construction, and Commissioning Delays	Transferred	Transferred
DC6	Archaeological Discovery	Retained	Retained
DC10	Geotechnical Risk	Transferred	Transferred
DC11	Owner-Initiated Scope Changes	Retained	Retained
DC12	Design, Construction and Commissioning Delays Impact on Owner	Retained	Retained
F1	D&C Insurance Premiums	Retained	Retained
F2	Incorrect Escalation Assumptions	Retained	Retained
F4	Single-Proponent Premium	Transferred	Transferred

The risks below were not quantified individually but were rather considered in the quantification of the risks in Table 1.

PER2 Development Permit Delay has been quantified with P2 Development Phase Delay given that the development phase completing is contingent on development permit. It is unlikely the development phase can be completed prior to the Development Permit being largely or completely completed.

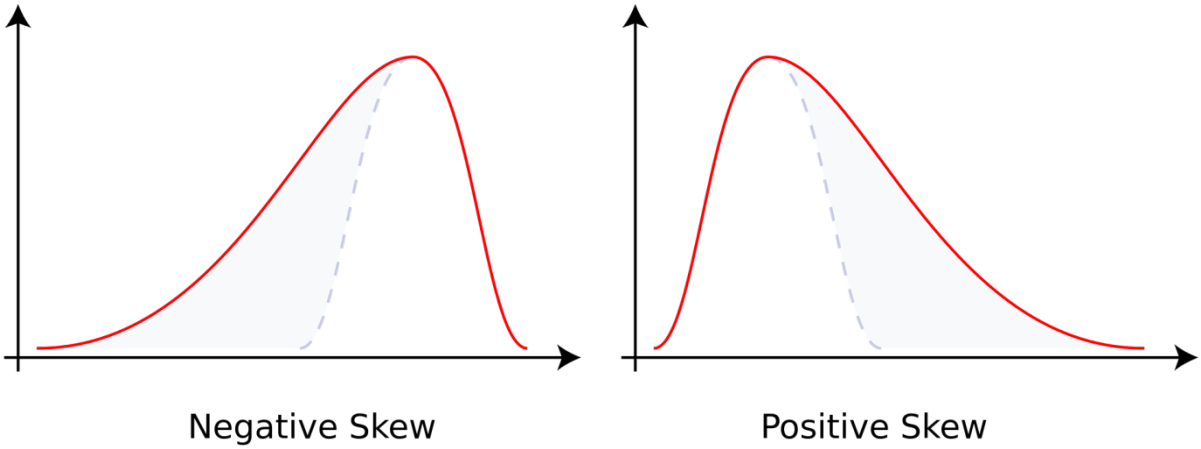
3.2.1 Selected Risk Percentile

The 67th percentile of the risk distributions was selected to reflect a prudent level of risk aversion given the stage of Project planning and the large number of unknowns related to the Project. Selecting the 67th percentile is equivalent to saying that the Project has sufficient budget to manage risks approximately two of out every three times. As the Project is further developed, the quantified risks and the risk percentile will be revisited as the level of uncertainty decreases.

3.2.2 Skewness Effect

Skewness is a statistic that measures the asymmetry in a distribution. Figure 3 illustrates the effect of negative and positive skew on a normal bell curve. Skewness causes a curve to appear distorted or skewed either to the left or the right and is common in quantified risks.

FIGURE 3: SKEWNESS EFFECT



Skewness effect precludes simply adding together the retained and transferred distribution curves to get an accurate total risk value. Care was taken when determining the values of the risks entered in the financial model to account for the skewness effect and ensure the selected values summed to the 67th percentile of the total risk curve and not the 67th percentile of the individual retained and transferred risk curves.

3.2.3 Correlation

Correlation is a measure of the extent of interdependence between two or more variables. A positive correlation means that as one value increases, the other value increases as well. A negative correlation means that as one value increases, the other value decreases. Correlation

does not imply causation. While certain quantified risks are likely to be correlated, this risk analysis has not included any correlation assumptions. This is a conservative assumption and tends to understate the aggregate risk value.

3.3 Quantified Capital Risk Results

3.3.1 Quantified Capital Risk Results

Figure 4 overlays the overall Capital Risk distribution (which approximates a normal distribution) for the ProgDB and ProgDBF options. The graph indicates the relative level of risk between the two procurement options but does not differentiate between the risks retained by the Owner and those transferred to the Contractor. The 67th percentile values were incorporated into the financial model and are summarized in Section 3.5.

As Figure 4 illustrates, the total Capital Risk value under a ProgDBF option is $29.9 million while under a ProgDB option, the total Capital Risk value is expected to be $30.6 million. The figure also illustrates that there is a 33.0 percent chance that Capital Risks will exceed $29.9 million in the ProgDBF option compared to an approximately 34.3 percent chance under the ProgDB option.

FIGURE 4: TOTAL CAPITAL RISK OVERLAY GRAPH – PROGDBF VS PROGDB (NOMINAL $000S)

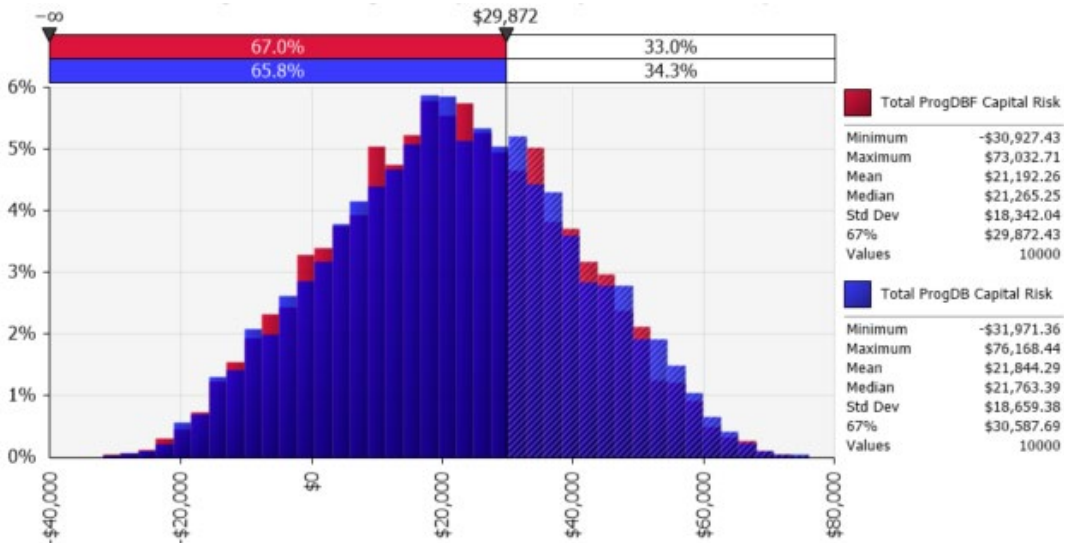
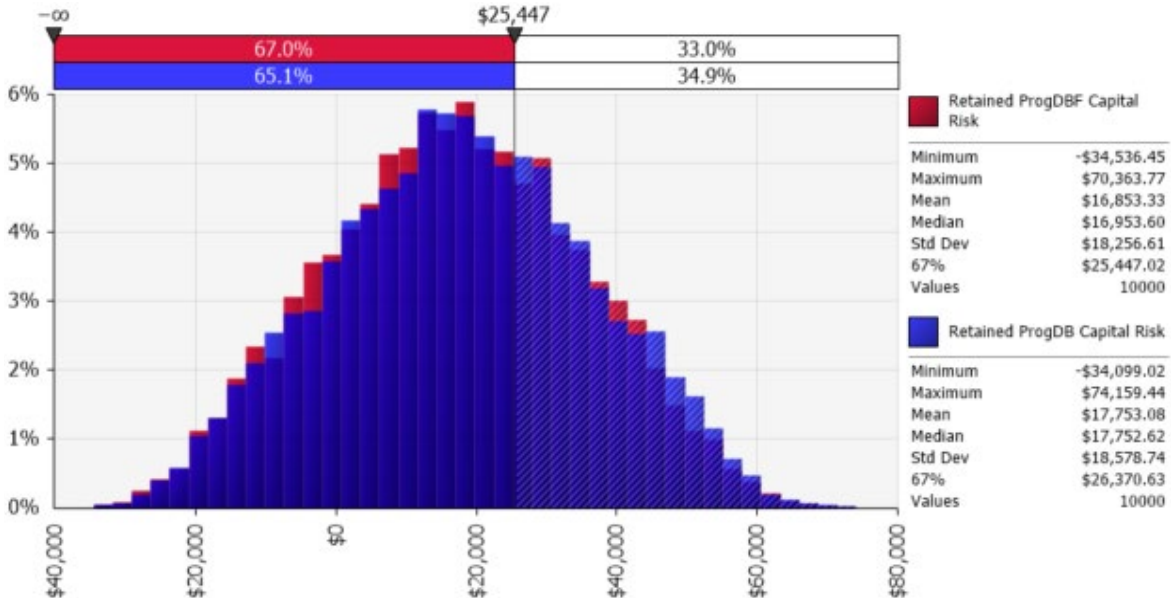


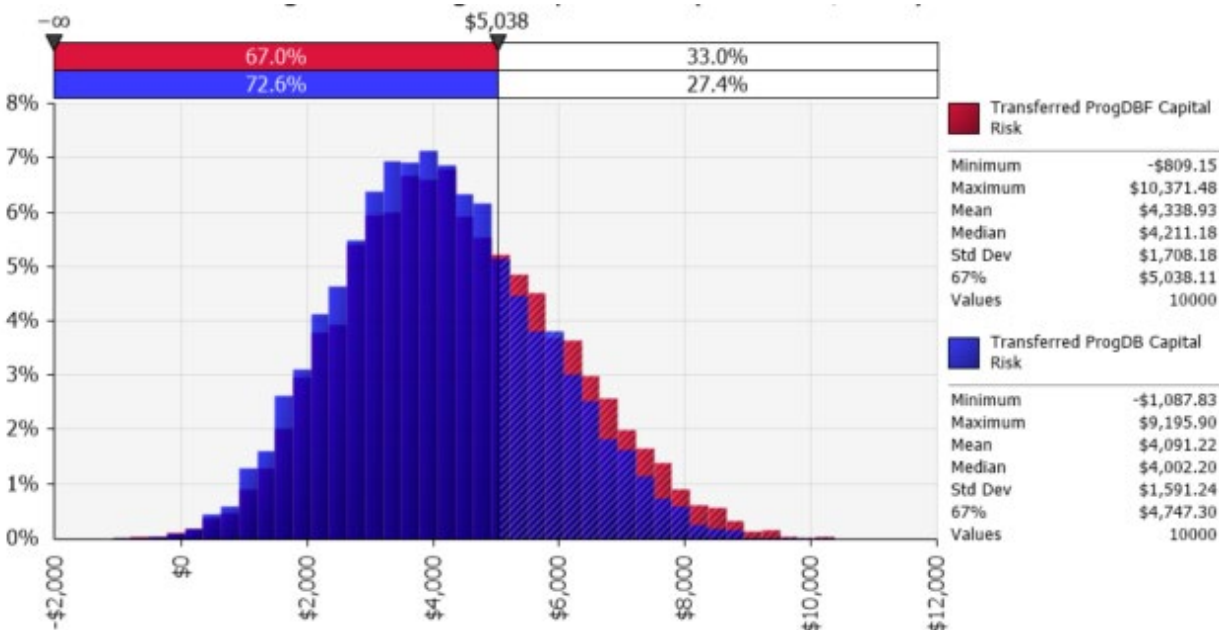
Figure 5 below presents an overlay of the retained Capital Risk distribution. It illustrates that there is a 33.0 percent that the retained Capital Risk will exceed $25.4 million under the ProgDBF compared to an approximately 34.9 percent chance under the ProgDB option.

FIGURE 5: TOTAL RETAINED CAPITAL RISK OVERLAY GRAPH – PROGDBF VS PROGDB (NOMINAL $000S)



Finally, Figure 6 presents an overlay of the transferred Capital Risk distribution. It illustrates that there is a 33.0 percent chance that the transferred risks under the ProgDBF option will exceed $5.0 million compared to an approximately 27.4 percent chance under the ProgDB option.

FIGURE 6: TOTAL TRANSFERRED CAPITAL RISK OVERLAY GRAPH – PROGDBF VS PROGDB (NOMINAL $000S)



3.3.2 Capital Risk Sensitivity Analysis

Figure 7 illustrates the individual quantified risks that have the most significant impact on the total ProgDBF Capital Risks. The most significant risk, in this case Quantity Estimating Risk, is at the top, with other risks following in descending order of impact. The baseline value at the bottom represents the 67th percentile of the total ProgDBF Capital Risk. The top risk can be interpreted as saying that the risk can cause the total Capital Risk value to change from the $29.9 million carried to anywhere from approximately -$6.0 million to a total of $54.1 million, depending on whether the risk materializes and its impact if it does, the range of this particular risk is large due to the Class D estimate, which is +/- 25%. The figure illustrates the wide impact that risk can have on a project budget and can inform the decision to allocate project resources to the most material risks. The figure also demonstrates the importance of viewing the quantified risk from a portfolio perspective, recognizing that there is a wide range of potential outcomes for any particular risk.

FIGURE 7: TORNADO GRAPH: TOTAL PROGDBF CAPITAL RISK (NOMINAL $000 AT THE 67TH PERCENTILE)

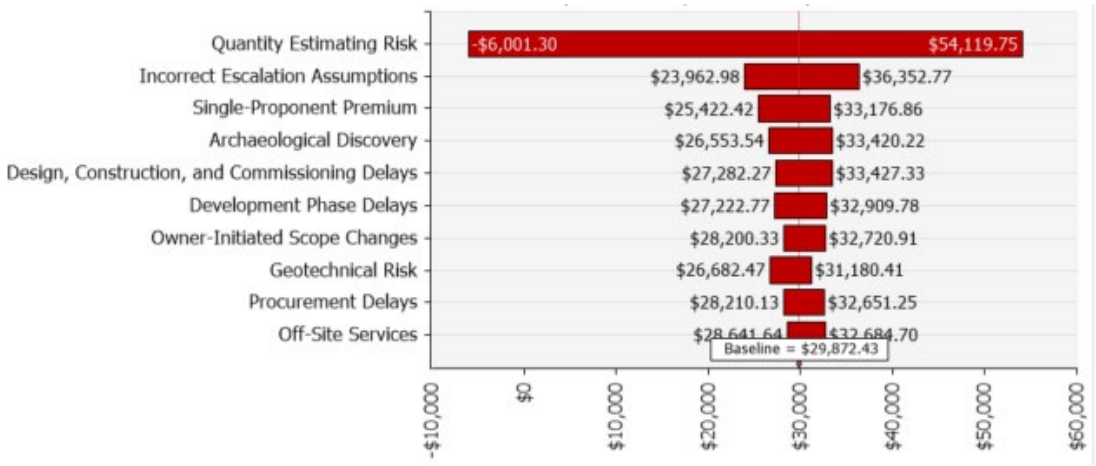
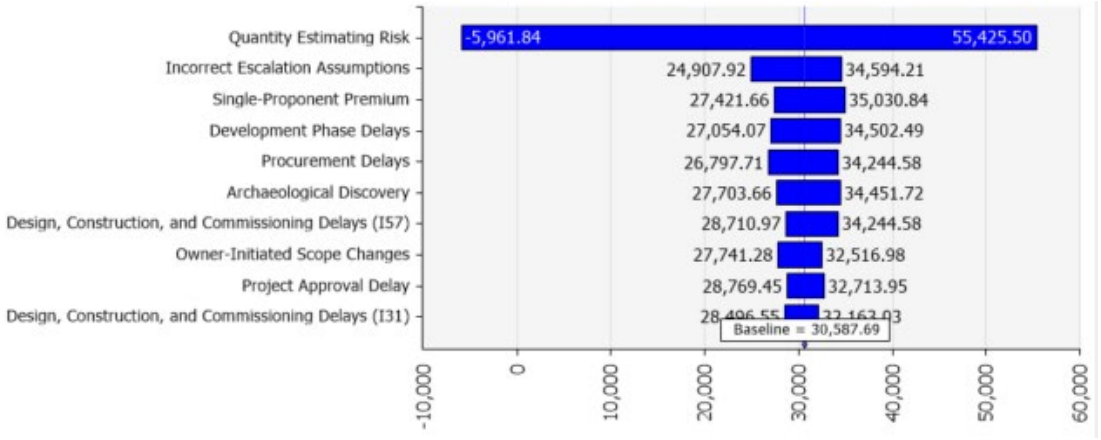


Figure 8 presents the tornado graph for the total ProgDB Capital Risks. The risk exposure for the ProgDB is very similar to the ProgDBF as reflected by the order of risks and similar sized bars. The top ranked risk, Quantity Estimating Risk, has the potential to change the ProgDB Capital Risk value from the $30.6 million carried to anywhere from approximately -$6.0 million to $55.4 million, depending on whether the risk materializes and its impact if it does. These tornado graphs visually demonstrate the differences or similarities in the model options' risk exposures.

FIGURE 8: TORNADO GRAPH: TOTAL PROGDB CAPITAL RISK (NOMINAL $000S AT THE 67TH PERCENTILE)



3.4 Unquantified Risks

In addition to the quantified risks, there are several Project risks that have not been quantified or included in the contingency but should nonetheless be closely managed by the Project team as the Project progresses.

The Project team is aware of the risk mitigation strategies in the risk matrix and will be actively working to manage the risks to minimize the probability of occurrence and the impact if these risks do materialize.

3.5 Risk Quantification Summary

Table 2 summarizes the risk quantification amounts included in the financial analysis.

TABLE 2: RISK QUANTIFICATION SUMMARY (NOMINAL, $ MILLION)

Financial Model Risk	ProgDBF	ProgDB
Capital Risk		
Risks retained by the Owner	24.9	25.9
Transferred risk added to the Contract by the Contractor.	4.9	4.7
Total	29.9	30.6

3.5.1 Owner's Reserve

To support the Project team's effective implementation of risk management strategies and to help the team deal with the consequences of retained risks that materialize, a reserve should be established.

Infrastructure BC recommends that the risk values be incorporated into the overall Project capital budget. The retained risk should be included as a reserve outside of the Contract value, while the transferred risk values should be included in the Contract value.

3.6 Conclusion

Moving forward, the Project team should actively track the Project's risk exposure and update the risk matrix at the following key milestones:

- Prior to the release of the RFP. At this stage, the Project team should create a transferred risk memo that examines whether the transferred risks identified in the risk matrix have been reflected in the proposed draft Contract; and
- Upon reaching Contract execution in anticipation of the design and construction implementation activities. This would include an update of the transferred risk memo to confirm that the final Contract does in fact transfer the expected risks.

Attachment 1: Risk Matrix Section Descriptions

The following attachment explains the different sections of the template risk matrix. It is organized into categories, each of which is explained in the figures below.

FIGURE 9: FIRST PORTION OF RISK MATRIX

Category	ID#	Risk Name	Quantify (Y/N)	Description	Cause	Effect	L	C	Inherent Risk (Risk Rating)

Category: This categorizes the risks into sub-groups for ease of reference.

ID#: This is the number column for tracking the risks. The convention is to group related risks and assign a letter/number combination.

Risk Name: This column captures the assigned name for the risk.

Quantify (Y/N): There are a large number of risks in the matrix, many of which can't be quantified or, if quantified, the cost impact would be immaterial. The two possible letters for this column are "Y" for quantified and "N" for not quantified.

Description: This column is where the detailed description of the risk is inserted. It is important to specify sufficient detail about each risk event to develop appropriate and effective risk management and allocation strategies. A comprehensive description can help inform the risk quantification and the development of potential scenarios and outcomes.

Cause: Events that could cause the risk to materialize.

Effect: Potential impacts if the risk does materialize.

Risk Assessment: The last three columns in Figure 9 are described below in the tables.

TABLE 3: LIKELIHOOD AND SEVERITY OF CONSEQUENCE

Column	Description
L	Likelihood of occurrence
C	Severity of consequence

Inherent Risk (Risk Rating)	Inherent risk ranking and is a product of L X C. The possible outcomes are low, medium, high or extreme.

TABLE 4: LIKELIHOOD OF OCCURRENCE DESCRIPTION

LIKELIHOOD			
Descriptor		Approximate Probability (range / single value)	Frequency (for example, in a 30-year context)
5	Almost Certain	.90 - 1.00 [1]	e.g. Once a year or more
4	Likely	.70 - .89 [.80]	e.g. Once every three years
3	Possible	.30 - .69 [.50]	e.g. Once every ten years
2	Unlikely	.10 - .29 [.20]	e.g. Once every thirty years
1	Rare	.00 - .09 [.05]	e.g. Once every hundred years

TABLE 5: SEVERITY OF CONSEQUENCE DESCRIPTION

CONSEQUENCE		
	Descriptor	Effect
5	Catastrophic	Project or program irrevocably finished
4	Major	Program or project re-design, re-approval; i.e. fundamental re-work
3	Significant	Delay in accomplishing program or project objectives
2	Minor	Normal administrative difficulties
1	Insignificant	Negligible effects

TABLE 6: INHERENT RISK RANKING DESCRIPTION

RISK RANKING					
5	LOW	MED	HIGH	EXT	EXT
4	LOW	MED	HIGH	HIGH	EXT
3	LOW	MED	MED	HIGH	HIGH
2	LOW	LOW	MED	MED	MED
1	LOW	LOW	LOW	LOW	LOW
LIKELIHOOD	1	2	3	4	5
	CONSEQUENCE				

LIKELIHOOD (L) x CONSEQUENCE (C)

Score	0 - 5 =	LOW
Score	6 - 10 =	MED
Score	12 -16 =	HIGH
Score	20 - 25 =	EXT

Figure 10 shows the next columns of the risk matrix. Each of them is explained in further detail below.

FIGURE 10: NEXT PORTION OF RISK MATRIX

Initial Allocation under [Insert Procurement Model]	Initial Allocation under [Insert Procurement Model]	Treatment Description			Status
		Completed	Ongoing	Future or Optional	

Initial Allocation: This refers to the initial allocation of the risk under the specific procurement options being analyzed. The possibilities are transferred, retained or shared.

Treatment Description: This is the field where potential management and mitigation strategies are described under 'Completed', 'Ongoing', or 'Future or Optional' subcategories. These strategies are determined based on experience and knowledge pertaining to the risk event and relate to the Initial Allocation field. Even when a risk is transferred, this field needs to be completed as there still may be actions required in order to successfully transfer the risk at a reasonable price.

Status: This refers to the current status of the mitigation action. A risk can either be identified, active or treated, as described below.

TABLE 7: STATUS OPTION DESCRIPTIONS

Options	Description
Identified	Risk that are known to exist but are expected to occur well into the future. The project has not yet moved forward into a phase where it makes sense to actively manage the risk.
Active	Risks that continue to exist and are being actively managed.
Treated	Risks that have been mitigated. Take a geotechnical risk, for example, where the mitigation strategy was to drill bore holes and distribute the data to proponents. Once this is done, the risk should be considered 'treated'.

In addition to the columns described above, project teams have the option of including additional information as they see fit to help make the risk matrix a more useful project management tool. For example, the following columns can be added at the Project team's discretion:

- a 'Risk Owner' column to assign people to manage specific risks;
- a 'Project Agreement' column that can describe during the procurement where in the Contract a particular risk is addressed; and
- a 'Treatment Option' column with three separate possibilities:
    - Accept and Influence: Refers to a risk that is best managed by the Owner but is not under its direct control.
    - Accept and Control: Refers to a risk that cannot be transferred to the private sector or that is best managed and mitigated by the Owner.
    - Transfer: Refers to a risk that can be transferred effectively to the private sector.

Attachment 2: Risk Analysis Participants

Stacy McGhee, Manager Strategic Facilities Planning

District of Saanich

Stacy McGhee is a registered architect in the province of British Columbia. His work experience spans a wide range of building types, project sizes and procurements. Stacy's work in both public and private sectors has given him a unique perspective of consultant and owner viewpoints enabling him to manage projects with a clearer mandate and sound contractual understanding. Stacy's private sector work includes luxury hotels, commercial offices, historic renovation and healthcare. Since 2009, Stacy's public sector work includes six years with the Province of BC working with BC Corrections to modernize facilities and to undertake large, multi-year P3 projects building $200M+ facilities in Surrey and the Okanagan near Oliver. Since joining the District of Saanich in 2015, Stacy has led the District's Strategic Facilities Planning program which first produced the District's first Strategic Facilities Master Plan followed by the recommended and prioritized implementations of a replacement for Fire Station #2 and the redevelopment of the Saanich Operations Centre. Stacy is a Fellow of the Royal Architectural Institute of Canada and a LEED registered professional.

Tobin Hwang, Senior Project Manager

Colliers Project Leaders

Tobin Hwang is a Professional Engineer and Project Management Professional. Tobin brings over 15 years of developing and delivering multi-disciplinary capital projects. He has completed work in a range of capacities across construction and this perspective allows him to earn trust and lead with empathy. Tobin's past experience includes VP Capital Projects at BZAM Management, among other project management roles. Tobin has a Bachelor of Applied Science (Mechanical Engineering) from Queen's University.

Francis Yong, Quantity Surveyor

Advicas Group Consultants

Francis has over 30 years of experience in the construction industry as a Professional Quantity Surveyor and Cost Engineer. His work on a broad range of cost planning projects throughout British Columbia has armed him with a wealth of knowledge and skill – and a reputation for maintaining positive financial control over projects. From the inception of design to project construction, Francis has overseen the cost planning on a range of projects including custom homes, hotels, fish hatcheries, hospitals, museums, military facilities, and airports. He develops

realistic estimates by extensively researching the local market and developing a program of general contractors and subtrades who will likely bid the project.

Dave Roy, Project Manager

Colliers Project Leaders

Dave Roy is a Professional Engineer and Project Management Professional. Dave is a highly motivated and experienced Project Manager with a Mechanical Engineering background. He possesses over 10 years of experience estimating and managing projects in construction and manufacturing. Dave's experience includes project management and estimating roles at multiple construction companies throughout British Columbia. Dave has a Bachelor of Mechanical Engineering from McGill University.

Jason French, Assistant Vice President

Infrastructure BC

Jason French is an Assistant Vice President at Infrastructure BC responsible for implementation at Infrastructure BC. Jason has experience participating and leading projects in the health, accommodation, and transportation sectors from concept plan, business plan through procurement and implementation. Prior to joining Infrastructure BC, Jason held roles at Citizen Services with the Provincial government and in real estate development. Jason has degrees from University of Victoria and Royal Roads University.

Keith Sun, Project Director

Infrastructure BC

Keith Sun is a Director at Infrastructure BC and is responsible for leading project teams in the development of concept plans and business plans for major infrastructure projects at Infrastructure BC. Keith has experience participating on health and accommodation as well as transportation and wastewater projects at Infrastructure BC. Prior to joining Infrastructure BC, Keith held roles in Treasury and Corporate Finance at one of the largest ferry companies in the world. Keith has a Bachelor's Degree in Economics from the University of Calgary and is a Chartered Financial Analyst (CFA) charter holder.

Landon Corcoran, Project Director

Infrastructure BC

Landon Corcoran is a Project Director at Infrastructure BC and is responsible for supporting project teams in the planning, procurement, and implementation of major infrastructure projects. Landon has experience in various sectors including healthcare, education, housing, transportation, food processing, and wastewater treatment. Prior to joining Infrastructure BC, Landon held roles in project management with major Canadian construction companies. Landon holds a Bachelor of Applied Science in Civil Engineering from the University of Waterloo and a Master of Supply Chain Management from the Schulich School of Business.

Jordan Royer, Senior Associate

Infrastructure BC

Jordan Royer is a Senior Associate at Infrastructure BC and is responsible for supporting project teams in the planning, procurement, and implementation of major infrastructure projects. Prior to joining Infrastructure BC, Jordan held roles in development management with real estate development companies in British Columbia and Alberta. Jordan holds a Bachelor of Engineering Science from Western University and Honors Business Administration from the Richard Ivey School of Business.

Attachment 3: Project Risk Matrix and Quantification Worksheets

RISK MATRIX

Project Name: ***Saanich Operations Centre***

Revision Date: ***16-Aug***

Abbreviations:
Contract = Design-Build Agreement Contractor = Design-Builder CRD = Capital Regional District ProgDB = Progressive Design-Build ProgDBF = Progressive Design-Build Finance Owner = District of Saanich SOC = Saanich Operations Centre RFQ = Request for Qualifications PDA RFP = Project Development Agreement Request for Proposal DBA RFP = Design-Build Agreement Request for Proposal AAP = Alternative Approval Process

IDENTIFICATION							ASSESSMENT					TREATMENT
Category	ID#	Risk Name	Quantify (Y/N)	Description	Cause	Effect	L	C	Inherent Risk (Risk Rating)	Initial Allocation under ProgDBF	Initial Allocation under ProgDB	Risk Treatment/Mitigation Description
Approval	AR1	Project Approval Delay	Y	Project approval by the Owner is delayed.	Final budget approval and debt financing requires public ascent which has legislative requirements including an Alternative Approval Process (AAP) which includes a public notification period and a potential referendum if a petition gets enough signatures.	Project would not proceed or would experience delays.	Unlikely	Significant	MED	Retained	Retained	Project budget and property tax incremental lift to fund Project have been brought forward to council and passed. There has been ongoing communication about this Project to the public. Continue to plan the Project with the involvement of key stakeholders. Monitor Project budget and perform potential scope reduction or value engineering to ensure Project remains within approved funding umbrella.
Permitting / Regulatory	PER1	Subdivision Delay	N	Subdivision approval is delayed.	Subdivision could be delayed through Owner staffing issues, or Owner related delays as subdivision process is navigated. Additionally assumptions could be incorrect.	Potential delays and / or additional costs.	Rare	Significant	LOW	Retained	Retained	Current understanding is subdivision is not needed and can happen before or after development and will be a lot line change that doesn't require a municipal process. This base assumption should remain on risk register and in project discussions to ensure continuity of understanding. Engage approving officer (Owner staff responsible for subdivision) to ensure assumptions on subvision are accurate.
Permitting / Regulatory	PER2	Development Permit Delay	Y with P3	Development permit for new SOC is delayed.	Permit requirements not met or longer than anticipated process. Currently the development permit schedule is planned to be 10 months from application to approval.	Potential delays and / or additional costs.	Possible	Minor	MED	Transferred	Transferred	Work with the Owner to understand their requirements and proactively address issues. Consider the application timing to ensure resources are available. Ensure that Owner considers this a priority project and take advantage of ongoing Owner process improvement intiatives, where Owner projects are prioritized. Include a master plan submission and high level design package at the PDA RFP stage. Engage appropriate Owner planning department staff with regular updates and clear deadlines to ensure they are up to date on project particulars and providing feedback on design-builder submissions and questions. During collaboration during Development Phase, aim to set up a Development Permit specific workstream where planners can engage directly with preferred proponent.
Permitting / Regulatory	PER3	Building Permit Delay	N	Building permit for new SOC is delayed.	Permit requirements not met or longer than anticipated process. Currently the Project is planning to phase permitting, where building permits are submitted as design progresses.	Potential delays and / or additional costs.	Unlikely	Significant	MED	Transferred	Transferred	Work with the Owner to understand their requirements and proactively address issues. Consider the application timing to ensure resources are available. Clearly lay out the process and protocols for proponent interaction with the Owner during the procurement, including setting a clear expectation for Owner and Proponent on review timelines. Take advantage of ongoing process improvement intiatives, where Owner projects are prioritized. Engage appropriate building department staff during design development as part of project team to ensure they are up to date on project particulars.
Permitting / Regulatory	PER4	Occupancy Permit Delay	N	Occupancy permit is delayed.	Permit requirements not met or longer than scheduled Owner process. The consultants (through their letters of assurance) may be unable to sign off.	Delay in occupancy permit and potential delays in preparing asset for users.	Unlikely	Minor	LOW	Transferred	Transferred	Continued communication with the Owner and consultants, well drafted statement of requirements for procurement documents, diligent contract management and communication with the Contractor.

IDENTIFICATION							ASSESSMENT					TREATMENT
Category	ID#	Risk Name	Quantify (Y/N)	Description	Cause	Effect	L	C	Inherent Risk (Risk Rating)	Initial Allocation under ProgDBF	Initial Allocation under ProgDB	Risk Treatment/Mitigation Description
Permitting / Regulatory	PER5	Off-Site Services	Y	The Owner's engineering staff, and other authorities, may determine that off-site service upgrades are required beyond existing allowances.	Off-site service upgrades beyond anticipated allowances are deemed to be required by the Owner, or other authorities. Potential examples include vehicular ingress and egress into and out of SOC changing.	Potential delays and / or additional costs.	Possible	Minor	MED	Retained	Retained	Engage relevant authorities, including Owner's engineering staff and CRD, to determine need for off-site service updates as early in the Project as possible. Conduct studies as necessary to confirm assumption that SOC redevelopment will not trigger any upgrades and confirm ingress and egress assumptions. Ensure clear delination between costs of new SOC and private development, by private development paying for any servicing overages above needs for new SOC. Engineering consultant will provide cost estimate for new SOC needs.
Permitting / Regulatory	PER6	Creek Work Approval Delay	Y	Creek work approvals are delayed.	Approval of authorities having jurisdiction is delayed.	Potential delays and / or additional costs.	Possible	Minor	MED	Retained	Retained	Engage qualified professionals early in process to develop understanding of permitting and timelines. Engage authorities having jurisdiction to understand permit requirements and level of design detail required for application submissions.
Project Management	PM1	Change in Key Staff	N	Owner staff changes.	Long Project timeframe, possible retirements, change of employment, etc.	Possible knowledge loss and/or gaps. Failure to timely address Project issues.	Unlikely	Minor	LOW	Retained	Retained	Mitigate through succession planning and organizational structure. Develop a well staffed Owner's team.
Project Management	PM2	Project Team Availability	N	Lack of availability of project management staff to support Project planning and secure pre-construction permits and approvals. Additionally, availability of Owner staff during development phase to support expedited review times is not met.	Competing priorities take Owner's staff of of Project.	Delays to Project.	Unlikely	Minor	LOW	Retained	Retained	Early identification and confirmation of anticipated resources, priority setting, and scheduling and monitoring.
Project Management	PM3	Inefficient Project Management During Construction	N	Inadequate project controls, staff, and processes in place to drive Project.	Construction contractors or issues require more management than anticipated.	Management cost increase.	Unlikely	Minor	LOW	Retained	Retained	Early identification of required resources, priority setting, and scheduling and monitoring.
Procurement	P1	Procurement Delays	Y	Procurement process is longer than expected. This includes delays to the RFQ, PDA RFP and not the DBA RFP.	There are a large number of possible delays, including: - failure to have key documents ready in time; - insufficient competition or a lack of qualified teams participating in the procurement; and - development of procurement documents delayed.	Potential delays.	Possible	Significant	MED	Retained	Retained	Use existing and recent documentation from comparable projects that have been successfully delivered and incorporate lessons learned, where appropriate. Establish a reasonable procurement schedule based on past experience and the size / complexity of the Project. Market sound with industry to confirm interest. Proceed with an interactive procurement process affording proponents opportunities for early and ongoing input.
Procurement	P2	Quantity Estimating Risk	Y	Cost estimate has a confidence interval of +/- 25% and may vary from the financial submissions received.	Scope and quantities are based on high level concept designs, which may differ from actuals. Market conditions change.	Higher or lower costs. Potential scope refinement.	Possible	Major	HIGH	Retained	Retained	A Project cost estimate has been developed including appropriate contingencies. Benchmark against past projects as applicable. Cost refresh exercise once statement of requirements are drafted, prior to issuance of DBA RFP.
Procurement	P3	Development Phase Delays	Y	Development Phase Delay	Development phase could be delayed due to disagreement in masterplan, commercial terms or delays in Owner review.	Potential delays and / or additional costs.	Possible	Significant	MED	Retained	Retained	Ensure planning group and building department are included in development phase and there is ongoing, real time feedback and collaboration between Owner and proponent. Communicate milestone dates and expectations of review timelines.
Planning / Engineering	PE1	Engineering Standards Change	N	Changes in engineering standards relating to design and construction	New technologies and normal evolution of design and construction standards.	Potential delays and / or additional costs.	Likely	Minor	MED	Retained	Retained	Variances addressed on a case-by-case basis. Contract will include provisions for reconciliation of updated standards.
Planning / Engineering	PE2	Contract Specifications / Intended Design Requirements	N	Contract specifications do not adequately reflect the intended design requirements.	Insufficient development of contract specifications. Scope refinements not fairly reflected in the specifications.	Inappropriate contract specifications. Additional cost to rectify issues.	Rare	Significant	LOW	Retained	Retained	Comprehensive multidisciplinary and due diligence reviews.
Planning / Engineering	PE3	BC Hydro Requirements	N	Changes in BC Hydro requirements for site, or delays in BC Hydro design	BC Hydro does not complete design within anticipated time period (to be developed in detailed schedule) and/or expected electrical load on site requires more BC Hydro infrastructure than budgeted.	Potential delays and / or additional costs.	Unlikely	Significant	MED	Retained	Retained	Engage BC Hydro as soon as possible. Have electrical engineer perform load calculations based on indicative design to understand potential implications. Confirm nearby substation requires little additional infrastructure.

IDENTIFICATION							ASSESSMENT					TREATMENT
Category	ID#	Risk Name	Quantify (Y/N)	Description	Cause	Effect	L	C	Inherent Risk (Risk Rating)	Initial Allocation under ProgDBF	Initial Allocation under ProgDB	Risk Treatment/Mitigation Description
Design and Construction	DC1	Design Errors or Omissions	Y	Incomplete or errors in design requiring additional work to be performed at a cost that is beyond anticipated construction contingency.	Incomplete information, human error and/or insufficient communication/ coordination.	Potential delays and / or additional costs. Potential need for additional design / engineering.	Likely	Minor	MED	Transferred	Transferred	Ongoing review of design work and technical submissions to assure compliance. Precise Contract terms to reduce ambiguity. Contractor will be required to have comprehensive design and quality management plans. Project to include specific errors and omissions insurance for design consultants. Project team to closely monitor construction progress to ensure that the facility meets the requirements (supported by the Payment Certifier).
Design and Construction	DC2	Design, Construction, and Commissioning Delays	Y	Total Project completion not achieved within the prescribed timeline.	Delays during design development, construction, and commissioning.	Potential delays and / or additional costs.	Possible	Significant	MED	Transferred	Transferred	Interactive procurement process affords opportunities for early identification of critical path issues. Diligent contract management, on-going and often communication between Owner and Contractor, early planning for facilities/equipment needs and adherence to equipment/program schedule.
Design and Construction	DC3	Construction Impact on Existing Utilities	N	Construction adversely and unexpectedly impacts utilities (gas, water, sewer, internet, etc.)	Protection of existing infrastructure is inadequate. Insufficient locating of existing utilities.	Potential delays and / or additional costs to repair utilities. Disruption of service to customers.	Unlikely	Minor	LOW	Transferred	Transferred	Early and ongoing engagement with affected entities. Provide proponents with available utility information. Work plan and diligent monitoring of activities by Contractor. Existing utilities are well understood and there are few conflicts with utilities on site anticipated.
Design and Construction	DC4	Job Action	N	Contractor staff initiate job action during construction.	Contract issues.	Potential delays and / or additional costs.	Unlikely	Minor	LOW	Transferred	Transferred	Follow labour developments and develop contingency plans as appropriate.
Design and Construction	DC5	Hazardous Materials / Unexpected Contamination	N	Presence of unexpected contamination impacting construction.	Discovery of unidentified hazardous materials or unexpected contamination levels of contaminated sites.	Potential delays and / or additional costs.	Unlikely	Minor	LOW	Retained	Retained	Provide proponents with relevant hazmat and environmental studies. Owner has carried out significant number of studies and Hazardous materials is well understood to a level where a cost estimate can be provided to remediate the material and has been included with P2.
Design and Construction	DC6	Archaeological Discovery	Y	Discovery of archaeological artifacts that pose a design or construction constraint.	Discovery of archaeological artifacts.	Potential delays and / or additional costs for design modifications and First Nations engagement.	Possible	Significant	MED	Retained	Retained	Investigations already conducted show that Borden Hill, which is adjacent to the SOC, is an area of high archeological potential. The area under existing buildings has not been investigated, but is expected to be of lower archeological potential. Continue with in-situ investigations in available areas during development and design phases and create a chance find procedure, that will clarify process and expectations, in the event of any discoveries.
Design and Construction	DC7	Construction Impacts on Residents	N	Local resident concerns about construction impacts (noise, dust, light, traffic).	Construction's proximity to residential areas. Contractor not adhering to traffic management / communication obligations.	Possible additional costs for mitigation strategies.	Likely	Insignificant	LOW	Transferred	Transferred	Early engagement and ongoing dialogue with residents. Contract specifications assuring conformance to best practices / regulatory requirements with respect to construction impacts. Consider Contractor community relation requirements in Contract.
Design and Construction	DC8	Construction Safety Event	N	Significant safety event.	Construction incident: accident, human error, insufficient health and safety program.	Lost time, fatality, serious personal injury.	Rare	Significant	LOW	Transferred	Transferred	Effective Project specific environmental, health and safety program. Contractor compliance with applicable occupational health and safety / work safe requirements. Include review of Contractor's work plans and communication coordination in Contract.
Design and Construction	DC10	Geotechnical Risk	Y	Unexpected geotechnical/ground conditions. Poor sub-surface conditions are encountered during construction.	Unexpected soil conditions.	Potential delays and / or additional costs.	Possible	Significant	MED	Transferred	Transferred	The Project has undertaken geotechnical investigations and structural engineering reviews of the reports, which demonstrate the site has concerns with areas of low bearing capacity. Continue development of geotechnical report and share with proponents.

IDENTIFICATION							ASSESSMENT					TREATMENT
Category	ID#	Risk Name	Quantify (Y/N)	Description	Cause	Effect	L	C	Inherent Risk (Risk Rating)	Initial Allocation under ProgDBF	Initial Allocation under ProgDB	Risk Treatment/Mitigation Description
Design and Construction	DC11	Owner-Initiated Scope Changes	Y	Owner-initiated scope changes.	Change in Owner's needs or Project objectives. Different Owner departments or other regional authorities have needs arise during procurement that change Project objectives or scope. Statement of requirements does not accurately capturing the Owner's requirements.	Potential delays and / or additional costs.	Almost Certain	Significant	HIGH	Retained	Retained	Use standardized documents and past project precedents. Apply lessons learned from other projects in the market and hold interactive meetings with proponents during the RFP phase to discuss the scope. Frequently confirm the Owner's need and objectives during procurement process. Allocate sufficient time to engage with users during statement of requirements drafting exercise. Manage users expectations during design development. Create a puts and takes list
Design and Construction	DC12	Design, Construction, and Commissioning Delays Impact on Owner	Y	Total Project completion not achieved within the prescribed timeline.	Delays during design development, construction, and commissioning.	Potential delays and / or additional costs.	Possible	Significant	MED	Retained	Retained	Interactive procurement process affords opportunities for early identification of critical path issues. Diligent contract management, on-going and often communication between Owner and Contractor, early planning for facilities/equipment needs and adherence to equipment/program schedule.
Supervening Events	SE1	Force Majeure	N	Asset becomes unusable due to a major catastrophic event (earthquake, extraordinary flooding, etc.).	Unanticipated disastrous event.	Major Project disruption.	Rare	Catastrophic	LOW	Retained	Retained	Project response will be aligned with emergency management protocols.
Supervening Events	SE2	Compensation Events	N	A Compensation Event is one for which the Contractor is prevented from meeting its obligations under the Contract through no fault of its own. The Contractor will not be subject to deductions under the payment mechanism and will be relieved of its obligations to the extent the compensation event is defined in contractual clauses.	Defined in the Contract. The Owner or a specified 3rd party not meeting their obligations, adversely impacting the Contractor's schedule or deliverables.	Contractor compensated with time and / or money.	Unlikely	Minor	LOW	Retained	Retained	Situations under which these issues would arise are governed by terms of the Contract. Scheduling and monitoring of influencing activities to assure conformance.
Supervening Events	SE3	Relief Events	N	Relief events include events for which insurance can be obtained (fire, explosion, accidental loss or damage, etc.), together with events which are beyond the reasonable control of the Contractor.	Defined in the Contract.	Contractor entitled to time allowance. Project delay.	Unlikely	Minor	LOW	Retained	Retained	Situations under which these issues would arise are governed by terms of the Contract.
Commercial / Finance	F1	D&C Insurance Premiums	Y	Insurance premiums escalate higher than anticipated.	Changing market conditions.	Increased insurance cost. Modify insurance approach if required.	Likely	Minor	MED	Retained	Retained	Consider a potential risk sharing mechanism if proponent feedback suggests it would provide good value for money. Owner to determine how they will procure insurance (either themselves, or through the Contractor).
Commercial / Finance	F2	Incorrect Escalation Assumptions	Y	Escalation is different than assumption (2023: 10%; 2024: 8%; 2025: 7%; 2026: 5%; 2027: 4.5%; 2028: 4.5%; 2029 onward: 4%).	Changing market conditions.	Higher or lower costs.	Likely	Significant	HIGH	Retained	Retained	Up to date cost and inflation estimates.
Commercial / Finance	F3	Contractor default	N	Contractor default and/or insolvency.	Default: Failure to meet obligations of the subcontract. Insolvency: Poor financial capacity, financial losses on other projects, etc.	Additional costs and delay to engage another contractor.	Rare	Catastrophic	LOW	Retained	Retained	Financial capacity review of Contractors during the procurement process. Ensure adequate security provisions in the Contract.
Commercial / Finance	F4	Single-Proponent Premium	Y	Financial submissions from Contractor during DBA RFP have a higher than anticipated overhead and profit margin (contractor fee).	Lack of competition tension during pricing (including risk pricing) causes proponent to either add additional overhead and profit margin (fee) or not effectively negotiation for the lowest price with sub-contractors. Limited design options and creativity due to the lack of competitive tension during the first 30%.	Increased costs.	Unlikely	Significant	MED	Retained	Retained	If it is determined that costs aren't reasonable or within expectations of a competitively priced project, and there is no improvement to affordability over multiple financial submissions, the DBA RFP can be terminated and off-ramp commenced. Ensure open book process with private partner and that quantity surveyor creates shadow estimate and validates financial submission.
Commercial / Finance	F5	Interest Rate Risk	N	The interest rate on the private financing are subject to change until financial close, higher interest rates result in a higher financing cost.	The credit spread, between the 5-year Bank of Canada bond (or bond price used in Project) and the available financing is higher than budgeted.	Increased costs.	Likely	Minor	MED	Retained		Monitor financing rates and engage a rate advisor during procurement to advise on how to best mitigate this risk.

Risk Owner			
8/16/2024			
Risk	**Project Approval Delay**	**Additional risks covered**	
Risk Register Number	**AR1**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	Project approval by the Owner is delayed.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
Risk Distribution	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N/A		AAP proceeds as planned (3 months).
Most likely outcome	1 month delay	Construction Escalation - Monthly Cost Driver	$ 438	Minor delay in AAP process, pens down (no work during delay, so no additional cost from re-work).
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	6 month delay	Construction Escalation - Monthly Cost Driver Cost of Referendum - Lump Sum	$ 2,825	AAP is unsuccessful, resulting in a referendum.
		Expected Value	$ 1,088	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N/A		AAP proceeds as planned (3 months).
Most likely outcome	1 month delay	Construction Escalation - Monthly Cost Driver	$ 438	Minor delay in AAP process, pens down (no work during delay, so no additional cost from re-work).
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	6 month delay	Construction Escalation - Monthly Cost Driver Cost of Referendum - Lump Sum	$ 2,825	AAP is unsuccessful, resulting in a referendum.
		Expected Value	$ 1,088	

Risk Owner			
8/16/2024			
Risk	**Off-Site Services**	**Additional risks covered**	
Risk Register Number	**PER5**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	The Owner's engineering staff, and other authorities, may determine that off-site service upgrades are required beyond existing allowances.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
Risk Distribution	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No increase to off-site works allowance	N/A		Additional off-site work is required, however costs are offset by reductions in development cost charges or additional costs are able to be shared with private development.
Most likely outcome	25% increase to off-site works allowance	Off-Site Works Allowance	$ 436	Additional off-site work is required.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	50% increase to off-site works allowance	Off-Site Works Allowance	$ 872	Significant additional off-site work required.
		Expected Value	$ 436	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No increase to off-site works allowance	N/A		Additional off-site work is required, however costs are offset by reductions in development cost charges or additional costs are able to be shared with private development.
Most likely outcome	25% increase to off-site works allowance	Off-Site Works Allowance	$ 436	Additional off-site work is required.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	50% increase to off-site works allowance	Off-Site Works Allowance	$ 872	Significant additional off-site work required.
		Expected Value	$ 436	

Risk Owner			
8/16/2024			
Risk	**Creek Work Approval Delay**	**Additional risks covered**	
Risk Register Number	**PER6**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	Creek work approvals are delayed.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
Risk Distribution	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N/A		Approvals are delayed, however activity is removed from the critical path by phasing the SOC in a manner where creek work is not required until later in the construction schedule.
Most likely outcome	1 month delay	Construction Escalation - Monthly Owner's PMO Cost - Monthly (25%)	$ 485	Minor modification of site plans required if Ministry of Environment does not approve covering of the creek. Delay resulting from time for modifications. Risk is anticipated to be early in the conceptual design and within costs budgeted. It is assumed they will be pens down during the delay.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	3 month delay	Construction Escalation - Monthly Owner's PMO Cost - Monthly (25%)	$ 1,454	Significant modification of site plans required if Ministry of Environment does not approve covering of the creek. Delay resulting from time for modifications. Risk is anticipated to be early in the conceptual design and within costs budgeted. It is assumed they will be pens down during the delay.
		Expected Value	$ 646	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N/A		Approvals are delayed, however activity is removed from the critical path by phasing the SOC in a manner where creek work is not required until later in the construction schedule.
Most likely outcome	1 month delay	Construction Escalation - Monthly Owner's PMO Cost - Monthly (25%)	$ 485	Minor modification of site plans required if Ministry of Environment does not approve covering of the creek. Delay resulting from time for modifications. Risk is anticipated to be early in the conceptual design and within costs budgeted. It is assumed they will be pens down during the delay.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	3 month delay	Construction Escalation - Monthly Owner's PMO Cost - Monthly (25%)	$ 1,454	Significant modification of site plans required if Ministry of Environment does not approve covering of the creek. Delay resulting from time for modifications. Risk is anticipated to be early in the conceptual design and within costs budgeted. It is assumed they will be pens down during the delay.
		Expected Value	$ 646	

Risk Owner			
8/16/2024			
Risk	**Procurement Delays**	**Additional risks covered**	
Risk Register Number	**P1**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	Procurement process is longer than expected. This includes delays to the RFQ, PDA RFP and not the DBA RFP.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
	Risk Distribution		
	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N/A		There is a delay in putting together SOR causing a delay in the procurement, however time is made up by a shorter development period.
Most likely outcome	4 month delay	Owner's PMO - Monthly Cost Driver Construction Cost Escalation - Monthly Cost Driver	$ 2,501	Lack of bidders requires change to multi-counter party approach or development of statement of requirements is delayed. Repositioning will not require entire Owner's team to partake in both contracts.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	10 month delay	Owner's PMO - Monthly Cost Driver Construction Cost Escalation - Monthly Cost Driver	$ 6,253	No bidder under multi-counter party approach requiring change to procurement model or reprocurement of compliance team is required due to non-performance.
		Expected Value	$ 2,918	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N//A		There is a delay in putting together SOR causing a delay in the procurement, however time is made up by a shorter development period.
Most likely outcome	4 month delay	Owner's PMO - Monthly Cost Driver Construction Cost Escalation - Monthly Cost Driver	$ 2,501	Lack of bidders requires change to multi-counter party approach or development of statement of requirements is delayed. Repositioning will not require entire Owner's team to partake in both contracts.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	10 month delay	Owner's PMO - Monthly Cost Driver Construction Cost Escalation - Monthly Cost Driver	$ 6,253	No bidder under multi-counter party approach requiring change to procurement model or reprocurement of compliance team is required due to non-performance.
		Expected Value	$ 2,918	

Risk Owner			
8/16/2024			
Risk	**Quantity Estimating Risk**	**Additional risks covered**	
Risk Register Number	**P2**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	Cost estimate has a confidence interval of +/-25% and may vary from the financial submissions received.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
	Risk Distribution		
	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	25% less than QS estimate	% of Construction Cost - Total	$ (29,850)	The Class D cost estimate was based on an indicative design and functional program. The actual requirements (e.g. amount of construction materials) will likely differ when the project is actually delivered. In this case, the costs are significantly lower than estimated but within the variability range identified by the QS.
Most likely outcome	QS estimate is accurate	% of Construction Cost - Total	$ -	The costs come in as estimated in the base case.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	25% more than QS estimate	% of Construction Cost - Total	$ 29,850	The costs are significantly higher than estimated but within the variability range identified by the QS.
		Expected Value	$ -	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	25% less than QS estimate	% of Construction Cost - Total	$ (29,775)	The Class D cost estimate was based on an indicative design and functional program. The actual requirements (e.g. amount of construction materials) will likely differ when the project is actually delivered. In this case, the costs are significantly lower than estimated but within the variability range identified by the QS.
Most likely outcome	QS estimate is accurate	% of Construction Cost - Total	$ -	The costs come in as estimated in the base case.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	25% more than QS estimate	% of Construction Cost - Total	$ 29,775	The costs are significantly higher than estimated but within the variability range identified by the QS.
		Expected Value	$ -	

Risk Owner			
8/16/2024			
Risk	**Development Phase Delays**	**Additional risks covered**	PER2 Development Permit Risk
Risk Register Number	**P3**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	Development Phase Delay		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
Risk Distribution	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No Delay	N/A		Slight delay in negotiations, however the impact on the overall schedule is minimal as key commercial terms were identified early on and discussions started early.
Most likely outcome	2 month delay	Construction Escalation - monthly Owner's PMO Costs - monthly	$ 1,251	Negotiations have a minor delay in the development phase and execution of Contract. Delays in Development Permit from large workload and additional requirements.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	6 month delay	Construction Escalation - monthly Owner's PMO Costs - monthly	$ 3,752	Negotiations have a major delay on devleopment phase and execution of Contract. Can't reach agreement on budget, requires a third submission. Potential difficulties with SOC integration with private development complicate Development Permit approval.
		Expected Value	$ 1,667	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No Delay	N/A		Slight delay in negotiations, however the impact on the overall schedule is minimal as key commercial terms were identified early on and discussions started early.
Most likely outcome	2 month delay	Construction Escalation - monthly Owner's PMO Costs - monthly	$ 1,251	Negotiations have a minor delay in the development phase and execution of Contract. Delays in Development Permit from large workload and additional requirements.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	6 month delay	Construction Escalation - monthly Owner's PMO Costs - monthly	$ 3,752	Negotiations have a major delay on devleopment phase and execution of Contract. Can't reach agreement on budget, requires a third submission. Potential difficulties with SOC integration with private development complicate Development Permit approval.
		Expected Value	$ 1,667	

Risk Owner			
8/16/2024			
Risk	**Design Errors or Omissions**	**Additional risks covered**	
Risk Register Number	**DC1**		
Allocation under ProgDBF	Transferred		
Allocation under ProgDB	Transferred		
Description:	Incomplete or errors in design requiring additional work to be performed at a cost that is beyond anticipated construction contingency.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
	Risk Distribution		
	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No change in construction and fitout contingency	Construction and fitout contingency	$ -	Construction drawings and specifications are not challenged by the contractor to the extent anticipated.
Most likely outcome	25% increase in construction and fitout contingency	Construction and fitout contingency	$ 1,298	Construction drawings and specifications are somewhat challenged.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	35% increase in construction and fitout contingency	Construction and fitout contingency	$ 1,817	Construction drawings and specifications are significantly challenged by the contractor to the extent anticipated.
		Expected Value	$ 1,039	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No change in construction and fitout contingency	Construction and fitout contingency	$ -	Construction drawings and specifications are not challenged by the contractor to the extent anticipated.
Most likely outcome	25% increase in construction and fitout contingency	Construction and fitout contingency	$ 1,298	Construction drawings and specifications are somewhat challenged.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	35% increase in construction and fitout contingency	Construction and fitout contingency	$ 1,817	Construction drawings and specifications are significantly challenged by the contractor to the extent anticipated.
		Expected Value	$ 1,039	

Risk Owner			
8/16/2024			
Risk	**Design, Construction, and Commissioning Delays**	**Additional risks covered**	
Risk Register Number	**DC2**		
Allocation under ProgDBF	Transferred		
Allocation under ProgDB	Transferred		
Description:	Total Project completion not achieved within the prescribed timeline.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
	Risk Distribution		
	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N/A	$ -	Private finance provides incentive for Contractor to achieve substantial completion ahead of time, so resources are added to reach miltestone prior to the scheduled date.
Most likely outcome	1 month delay	Construction Cost Escalation - Monthly Contractor General Conditions - Monthly (2x) Contractor Interest During Construction - Monthly	$ 1,205	Weather and general construction related delays during construction. Private finance provides incentive for Contractor to minimize delay impacts. Contractor general conditions are doubled accordingly.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	4 month delay	Construction Cost Escalation - Monthly Contractor General Conditions - Monthly (2x) Contractor Interest During Construction - Monthly	$ 4,820	Significant weather delays in addition to labour and materials shortage. Revisions to design that has modifications to construction (e.g. ducting) and commissioning. Private finance provides incentive for Contractor to add resources and achieve substantial completion in a timely fashion. Contractor general conditions are doubled accordingly.
		Expected Value	$ 2,008	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N/A	$ -	While some delays are experienced, they are managed by re-organizing the work and occupancy and substantial completion is at the expected time.
Most likely outcome	1.5 month delay	Construction Cost Escalation - Monthly Contractor General Conditions - Monthly	$ 1,067	Weather and general construction related delays during construction.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	6 month delay	Construction Cost Escalation - Monthly Contractor General Conditions - Monthly	$ 4,268	Significant weather delays in addition to labour and materials shortage. Revisions to design that has modifications to construction (e.g. ducting) and commissioning.
		Expected Value	$ 1,779	

Risk Owner			
8/16/2024			
Risk	**Archaeological Discovery**	**Additional risks covered**	
Risk Register Number	**DC6**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	Discovery of archaeological artifacts that pose a design or construction constraint.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
	Risk Distribution		
	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N/A		No archaeological find on new SOC site.
Most likely outcome	No delay	N/A		There is a find on site, however work is re-sequenced to not be on affected area and remove from critical path.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	12 month delay	Construction Cost Escalation - Monthly Cost Driver Contractor General Conditions - Monthly Cost Driver (25%) Owner's PMO - Monthly Cost Driver (25%)	$ 6,636	There is an archeologically significant finding that requires heritage permits in certain areas. While waiting for permit, owner involvement would be significantly less, as design and construction can't continue. Contractor would re-organize resources to have a minimal presence on sit.
		Expected Value	$ 2,212	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N/A		No archaeological find on new SOC site.
Most likely outcome	No delay	N/A		There is a find on site, however work is re-sequenced to not be on affected area and remove from critical path.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	12 month delay	Construction Cost Escalation - Monthly Cost Driver Contractor General Conditions - Monthly Cost Driver (25%) Owner's PMO - Monthly Cost Driver (25%)	$ 6,636	There is an archeologically significant finding that requires heritage permits in certain areas. While waiting for permit, owner involvement would be significantly less, as design and construction can't continue. Contractor would re-organize resources to have a minimal presence on sit.
		Expected Value	$ 2,212	

Risk Owner			
8/16/2024			
Risk	**Geotechnical Risk**	**Additional risks covered**	
Risk Register Number	**DC10**		
Allocation under ProgDBF	Transferred		
Allocation under ProgDB	Transferred		
Description:	Unexpected geotechnical/ground conditions. Poor sub-surface conditions are encountered during construction.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
	Risk Distribution		
	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No Impact	NA		Geotechnical conditions match expectations of existing reports and cost estimate or slight deviations that are managed within contingency budget.
Most likely outcome	1% to construction costs	Construction Costs - Total	$ 1,194	There are discrepancies from geotechnical report that require minor additional work.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	2% to construction costs	Construction Costs - Total	$ 2,388	There are significant discrepancies from geotechnical report that require a design delay and additional work.
		Expected Value	$ 1,194	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No Impact	N/A		Geotechnical conditions match expectations of existing reports and cost estimate or slight deviations that are managed within contingency budget.
Most likely outcome	1% to construction costs	Construction Costs - Total	$ 1,191	There are discrepancies from geotechnical report that require minor additional work.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	2% to construction costs	Construction Costs - Total Construction escalation - monthly Owner's PMO Costs	$ 2,382	There are significant discrepancies from geotechnical report that require a design delay and additional work.
		Expected Value	$ 1,191	

Risk Owner			
8/16/2024			
Risk	**Owner-Initiated Scope Changes**	**Additional risks covered**	
Risk Register Number	**DC11**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	Owner-initiated scope changes.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
	Risk Distribution		
	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No Impact	N/A	$ -	Owner has minor changes to the SOR, work with design-builder (or proponents) to keep costs netutral.
Most likely outcome	1% increase to construction cost	% of Construction Cost - Total	$ 1,194	Owner adds scope to SOR through engagement with different user groups.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	3% increase to construction cost	% of Construction Cost - Total	$ 3,582	Owner adds other scope to SOR through engagement with different user groups. Additional scope includes maintenance of fire trucks.
		Expected Value	$ 1,592	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No Impact	N/A	$ -	Owner has minor changes to the SOR, work with design-builder (or proponents) to keep costs netutral.
Most likely outcome	1% increase to construction cost	% of Construction Cost - Total	$ 1,191	Owner adds scope to SOR through engagement with different user groups.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	3% increase to construction cost	% of Construction Cost - Total	$ 3,573	Owner adds other scope to SOR through engagement with different user groups. Additional scope includes maintenance of fire trucks.
		Expected Value	$ 1,588	

Risk Owner			
8/16/2024			
Risk	**Design, Construction, and Commissioning Delays Impact on Owner**	**Additional risks covered**	
Risk Register Number	**DC12**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	Total Project completion not achieved within the prescribed timeline.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
Risk Distribution	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N/A	$ -	Private finance provides incentive for Contractor to achieve substantial completion ahead of time, so resources are added to reach miltestone prior to the scheduled date.
Most likely outcome	1 month delay	Owner's PMO Cost - Monthly Owner Interest During Construction - Monthly	$ 326	Weather and general construction related delays during construction. Private finance provides incentive for Contractor to minimize delay impacts.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	4 month delay	Owner's PMO Cost - Monthly Owner Interest During Construction - Monthly	$ 1,302	Significant weather delays in addition to labour and materials shortage. Revisions to design that has modifications to construction (e.g. ducting) and commissioning. Private finance provides incentive for Contractor to add resources and achieve substantial completion in a timely fashion.
		Expected Value	$ 543	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No delay	N/A		While some delays are experienced, they are managed by re-organizing the work and occupancy and substantial completion is at the expected time.
Most likely outcome	1.5 month delay	Owner's PMO Cost - Monthly Owner Interest During Construction - Monthly	$ 720	Weather and general construction related delays during construction.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	6 month delay	Owner's PMO Cost - Monthly Owner Interest During Construction - Monthly	$ 2,880	Significant weather delays in addition to labour and materials shortage. Revisions to design that has modifications to construction (e.g. ducting) and commissioning.
		Expected Value	$ 1,200	

Risk Owner			
8/16/2024			
Risk	**D&C Insurance Premiums**	**Additional risks covered**	
Risk Register Number	**F1**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	Insurance premiums escalate higher than anticipated.		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
Risk Distribution	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	25% decrease to Insurance Cost	Insurance Cost	$ (510)	Market pricing at time of contract execution is less than estimated.
Most likely outcome	25% increase to Insurance Cost	Insurance Cost	$ 510	Market pricing at time of contract execution is more than estimated.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	50% increase to Insurance Cost	Insurance Cost	$ 1,020	Market pricing at time of contract execution is significantly more than estimated.
		Expected Value	$ 340	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	25% decrease to Insurance Cost	Insurance Cost	$ (510)	Market pricing at time of contract execution is less than estimated.
Most likely outcome	25% increase to Insurance Cost	Insurance Cost	$ 510	Market pricing at time of contract execution is more than estimated.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	50% increase to Insurance Cost	Insurance Cost	$ 1,020	Market pricing at time of contract execution is significantly more than estimated.
		Expected Value	$ 340	

Risk Owner			
8/16/2024			
Risk	**Incorrect Escalation Assumptions**	**Additional risks covered**	
Risk Register Number	**F2**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	Escalation is different than assumption (2023: 10%; 2024: 8%; 2025: 7%; 2026: 5%; 2027: 4.5%; 2028: 4.5%; 2029 onward: 4%).		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
	Risk Distribution		
	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	10% decrease to construction escalation	Construction Escalation - Total	$ (2,761)	Escalation slows as a result of increased interest rates.
Most likely outcome	No Impact	N/A	0	Escalation estimate is correct
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	25% increase to construction escalation	Construction Escalation - Total	$ 6,903	Global event causes a spike in construction commodity prices.
		Expected Value	$ 1,381	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	10% decrease to construction escalation	Construction Escalation - Total	$ (2,761)	Escalation slows as a result of increased interest rates.
Most likely outcome	No Impact	N/A	0	Escalation estimate is correct
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	25% increase to construction escalation	Construction Escalation - Total	$ 6,903	Global event causes a spike in construction commodity prices.
		Expected Value	$ 1,381	

Risk Owner			
8/16/2024			
Risk	**Single-Proponent Premium**	**Additional risks covered**	
Risk Register Number	**F4**		
Allocation under ProgDBF	Retained		
Allocation under ProgDB	Retained		
Description:	Financial submissions from Contractor during DBA RFP have a higher than anticipated overhead and profit margin (contractor fee).		
Probability Risk Event Occurs ProgDBF	100%		
Probability Risk Event Occurs ProgDB	100%		
Risk Distribution	Triangular		

ProgDBF Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No Impact	N/A	$ -	Quantity surveyor finds there is no significant difference between estimated contractor fee and actual contractor fee.
Most likely outcome	25% increase to Contractor's Fee	Contractor's Fee	$1,687	The lack of multiple proponents pricing the SOC construction results in an increase to the Contractor fee.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	100% increase to Contractor's Fee	Contractor's Fee	$ 6,748	Significant increase in costs in financial submissions, mostly in overhead profit, or other areas that quantity surveyor considers above current market comparables.
		Expected Value	$ 2,812	

ProgDB Scenario

Cost Impact	Assumptions	Cost Drivers	Risk Value Nominal ($000's)	Justification
Best Case: 95% certain if risk event occurs, cost will not be less than (1)	No Impact	N/A	$ -	Quantity surveyor finds there is no significant difference between estimated contractor fee and actual contractor fee.
Most likely outcome	25% increase to Contractor's Fee	Contractor's Fee	$1,687	The lack of multiple proponents pricing the SOC construction results in an increase to the Contractor fee.
Worst Case: 95% certain if risk event occurs, cost will not exceed (1)	100% increase to Contractor's Fee	Contractor's Fee	$ 6,748	Significant increase in costs in financial submissions, mostly in overhead profit, or other areas that quantity surveyor considers above current market comparables.
		Expected Value	$ 2,812	