

Royal BC Museum Modernization

Royal British Columbia Museum Modernization - Museum Project

Appendix S – Childcare Space Assessment

December 2021

Appendix: Child Care Rationale and Cost Estimate

As per the Treasury Board direction provided in the Decision Letter dated July 9, 2021, options to incorporate child care space as part of the Royal BC Museum Modernization – Museum Project (the Project) have been explored. Due to site constraints and the indoor/outdoor space requirements of child care facilities, only viable option for recommendation for adding child care to the Project is to locate the shell child care space on the top (or roof) floor. The current indicative design includes two separate roof top areas, each with approximately 2,300 m² of available space, which would allow for the proposed child care space to be added to either. These roof top areas would be further defined through design development and may also consider commercial opportunities such as a restaurant.

Due to the nature of child care programming, the Project is proposing to provide a shell space including mechanical, electrical and plumbing services that would be fitted out by the future child care operator to suit their specific programming needs. The future operator would be encouraged to work with the Ministry of Children and Family Development (MCFD) to secure funding through the existing New Spaces Fund grant program to assist with fit out costs at the time of the tenant improvements. To ensure that the space meets licensing requirements, the design team will work with the Vancouver Island Health Authority through the design phase. The team will also consult with an experienced child care provider as necessary to ensure the design optimally meets the needs of a future provider.

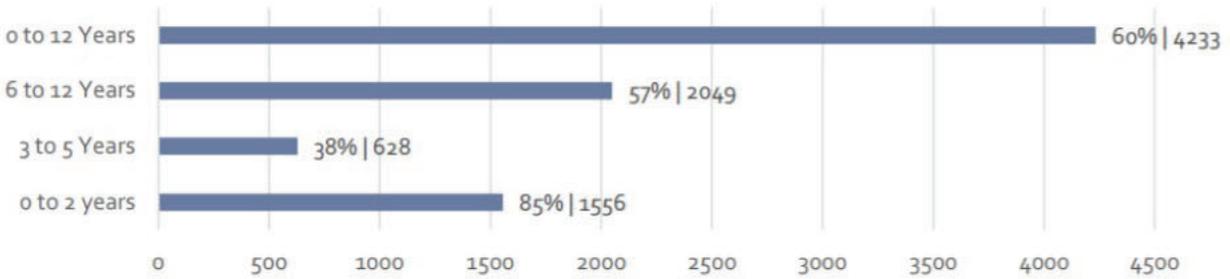
In the absence of MCFD prescribed area standards for new child care spaces, the proposed model has been based on the City of Vancouver Design Guidelines as the only comprehensive area guidelines within the province. This is a rough area model used for estimating purposes only, space reductions and synergies will be further explored through the design process to ensure as efficient of a space as possible in an effort to reduce costs.

Current Child Care Space Utilization and Needs Projections

As directed by MCFD, the project team referenced the City of Victoria's 2020 Child Care in Victoria Report to understand the child care need in the City of Victoria (City) and rationalize the proposed child care space in the Museum Project.

Based on engagement with a number of stakeholder groups, the report identified a current gap of approximately 2,184 child care spaces (ages 0 to 5) across the City, with a need far outweighing the current supply (see Figure 1). The report also indicated a minimum child care waitlist time of 1-2 years. The report also identified the City of Victoria as a "commuter city", meaning the gap identified for Victoria residents in need of child care may be actually be much higher when considering 56% of the workforce consists of people who live outside of the City.

Figure 1: City of Victoria Child Care Spaces Gap



MCFD has also analyzed the current and future needs for childcare spaces based on School District #61 (SD 61), which covers Victoria, Esquimalt, Oak Bay, View Royal and a portion of Saanich and Highlands and includes approximately 20,000 students. Based on population projections, MCFD’s needs assessment projects that in 2028, SD 61 would require 1,097 spaces for ages 0-2 (see Table 1).

While the current School District #61 forecast does not project a need for additional spaces for ages 3-5 years in 2028, the City of Vancouver Design Guidelines – the only known guidelines in B.C. – recommends a mix of spaces for ages 0-5 to create a holistic before-school-age child care delivery model allowing space sharing and continuity of care.

Table 1: Greater Victoria School District Projected Space Needs by Age Group to 2028

School District Name	Projected child population 2028		Estimated spaces required in 2028		Spaces available in 2020/2021		New Spaces Needed	
	Age 0 - 2	Age 3 - 5	Age 0 - 2	Age 3 - 5	Age 0 - 2	Age 3 - 5	Age 0 - 2	Age 3 - 5
Greater Victoria	5,111	3,440	2,198	1,961	1,101	2,713	1,097	-

The elementary school within closest proximity to the museum is South Park Elementary. This school has a small population and currently has an out-of-school child care operator onsite that confirmed it provides care to all students who require it before and after school hours. This business case does not explore the incorporation of before and after school age care within the proposed child care program.

The above needs analysis and projections were provided by MCFD based on both the City of Victoria and the Greater Victoria School District utilization data. This overall data is not location specific to the Museum or Downtown Victoria neighbourhood, but both Figure 1 and Table 1 highlight the projected need for child care spaces throughout the Greater Victoria area. Understanding the “commuter city” nature of Victoria and that many parents commute to the Downtown Victoria area for work further accentuates the child care space need at in the Museum Project.

Program Configuration

MCFD does not currently have design guidelines for child care spaces. However, the City of Vancouver has recently published guidelines for new facilities. Based on the City of Vancouver Childcare Design Guidelines and the City's staff recommendations, the project team analyzed an optimal space count ratio that can be delivered in a cost and area efficient manner. As finding adequate staffing for child care programs can be a concern, the team also selected a child care program size and has been stated to staffed more easily. Due to the location (e.g., not adjacent to an elementary school site) and reduced demand of out-of-school care in the area, the child care space model explored focused on ages 0-5. This model will accommodate the projected needs for 0-2 spaces, and will create a holistic child care delivery model allowing space sharing and continuity of care from 0 to 5 years. Further, due to a continually increasing demand for full-day care and currently low utilization rates (65%) of pre-school space within Greater Victoria,¹ part-day preschool space was not considered as part of the proposed child care program.

An up to 56-space child care program that would include ages 0-5 full-day care is proposed. The breakdown of proposed child care spaces may include two 12-space programs of ages 0-3 and two 16-space programs of ages 3-5. Note that the space allocations are based on the City of Vancouver Design Guidelines that define infant care as age 0-3, while MCFD defines infant care as age 0-2. This program has been developed as a scope and costing exercise and would be confirmed and further refined through design development if approved. The proposed program size is appropriate for the Project for the following reasons:

- It is a suitable size for the available roof space in the indicative design;
- It is a program size option prescribed by the City of Vancouver Childcare Design Guidelines as being an efficient use of shared facilities and cross-childcare contact opportunities; and
- It is a program size confirmed to be less difficult to staff.

¹ Data provided by MCFD.

Scope

Based on the City of Vancouver Childcare Design Guidelines, the proposed 56-space child care program would require approximately 738m² of dedicated indoor area (364m² total for the two programs for the age 0-3, and 374m² for the age 3-5 program), to be built as a shell space and fitted out by the future operator to suit their specific program needs. The space would also require approximately 703m² of dedicated outdoor area (including both covered and uncovered outdoor area) for a total of approximately 1,441m² of roof area. Table 2 summarizes the space allocations.

The City of Victoria Zoning Bylaw requires eight parking spaces to be provided for a child care program of this size (one space per 100m²). Further, additional costs associated with drop off, dedicated egress/building circulation and roof loads have been considered as part of this scope and costing exercise.

Table 2: Estimated Space Breakdown*

Ages 0-3 (for two 12 space programs)		Ages 3-5 (for two 16 space programs)	
Indoor Activity Rooms and Settings	(m²)	Indoor Activity Rooms and Settings	(m²)
Art Area	18	Dedicated Art Area (wet messy)	14
Table Area	22	Table Area	18
Area for Other Activity Settings	41	Area for other Activity Settings	78
Gross Motor/Nap Room	56	Gross Motor/Nap Room	58
Storage for Mats & Equipment	9	Storage with Large Motor/Nap Room	8
Quiet Room	18		
Net Activity Area	164	Net Activity Area	176
Support Spaces		Support Spaces	
Cubby	24	Cubby	20
Kitchen	19	Kitchen	19
Storage	14	Storage	15
Child W/C & Diapering Area	16	Child W/C & Diapering Area	14
Parent's Room	12	Parent's Room	12
Staff Office	14	Staff Office	14
Accessible Staff W/C	9	Accessible Staff W/C	9
Laundry/Janitorial	8	Laundry/Janitorial	8
Net Support Area	116	Net Support Area	111
Total Indoor Area	280	Total Indoor Area	287
Gross Total (including mechanical, electrical, circulation) 1.3 for planning	364	Gross Total Indoor (including mechanical, electrical, circulation) 1.3 for planning	374

Outdoor Area (m²)	
Covered	105
Open	598
Total Outdoor Area	703

* Space allocation is estimate for costing purposes and may not be reflective of final design.

Cost Estimate

In the absence of MCFD prescribed area standards for new child care spaces, the proposed model has been based on the City of Vancouver Design Guidelines as the only comprehensive area guidelines within the province. These guidelines were used for estimating purposes only, space reductions and synergies will be further explored through the design process to reduce redundancies, ensure an efficient use of space, and reduce construction costs wherever possible. These efficiencies may include reducing outdoor area by using nearby available outdoor space, reduction of interior space based on provider activity needs, etc.

It is important to note that the below cost estimate is based on unit rates that include important government initiatives such as LEED Gold, mass timber, additional energy efficiency and carbon reduction strategies, etc. Further, the base standard of the proposed RBCM design vision of an “iconic” nature, which continues into the child care space design and has an impact on the overall cost factor for the child care space construction estimate. With space on site being limited and at a premium, the child care can only be proposed on the roof top (including required elevator, outdoor play space, etc.) which also has a cost premium over placing a portable or modular structure onsite.

If the project is approved to include a Community Benefits Agreement, the total cost of the child care space identified below will be required to apply an approximate [REDACTED] cost premium, equating the proposed child care space to approximately [REDACTED].

PROJECT BUDGET SHEET - DESIGN BUILD (DB)				
	ESTIMATED VALUE (Values rounded to closest thousand \$)	REIMBURSABLE EXPENSES	GST	TOTALS
1	Land			
2	Construction			
3	Contingency for Construction (5%)			
4	Architect			
5	Structural Engineer			
6	Mechanical Engineer			
7	Electrical Engineer			
8	Quantity Surveyor			
9	Facility Programmer			
10	IMIT Consultant			
11	Landscape Consultant			
12	Security Consultant			
13	Environmental Consultant			
14	Other Consultants			
15	Surveys			
16	Civil Engineer			
17	Commissioning			
18	Testing & Inspections			
19	Legal (Contractor)			
20	Fire Safety Plan			
21	Owner's Administrative Costs (5% of Line 2)			
22	Insurance (Assumed \$22.00 per thousand \$)			
23	Development Cost Charges (Victoria By-Law 20-013)			
24	Building Permit (Victoria By-Law 17-113)			
25	Off-Site Services - Allowance only			
26	Furniture, Furnishings and Equipment			
27	Escalation Contingency			
28	General Project Contingency			
29	SUB-TOTAL			
30	GST Rebate			
31	TOTAL			\$11,617,000

Attachments

Attachment 1: Museum Plans – Child Care Facility REDACTED

Attachment 2: Museum Elevations – Child Care Facility REDACTED

Attachment 3: Child Care Class D Cost Estimate

**ROYAL BRITISH COLUMBIA MUSEUM
REDEVELOPMENT PROJECT**

CHILD CARE

**INCREMENTAL CLASS D ESTIMATE REPORT (Revision 1)
(OPINION OF PROBABLE COST)**

September 14, 2021



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

**ROYAL BRITISH COLUMBIA MUSEUM REDEVELOPMENT PROJECT – CHILD CARE
INCREMENTAL CLASS D ESTIMATE REPORT (Revision 1)
(OPINION OF PROBABLE COST)
September 14, 2021**

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**ROYAL BRITISH COLUMBIA MUSEUM REDEVELOPMENT PROJECT – CHILD CARE
INCREMENTAL CLASS D ESTIMATE REPORT (Revision 1)
(OPINION OF PROBABLE COST)
September 14, 2021**

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**ROYAL BRITISH COLUMBIA MUSEUM REDEVELOPMENT PROJECT – CHILD CARE
INCREMENTAL CLASS D ESTIMATE REPORT (Revision 1)
(OPINION OF PROBABLE COST)
September 14, 2021**

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**ROYAL BRITISH COLUMBIA MUSEUM REDEVELOPMENT PROJECT – CHILD CARE
INCREMENTAL CLASS D ESTIMATE REPORT (Revision 1)
(OPINION OF PROBABLE COST)
September 14, 2021**

1. INTRODUCTION

The Royal British Columbia Museum (RBCM) together with and the Ministry of Tourism Arts, Culture and Sport (TACS) are preparing a Business Case for the replacement of the RBCM in Victoria.

The RBCM and TACS are being assisted by the Transportation Investment Corporation (TIC) and Infrastructure BC (IBC) in developing the Business Case. SSA Quantity Surveyors Ltd. (SSAQS) has been hired by IBC to provide the Cost Consulting and Quantity Surveying work for the project.

Subsequent to the development of the Indicative Design prepared for the project by HDR with an assembled team of engineers and specialist consultants a concept design has been prepared by HDR for the addition of a Child Care in the building. The design provided for the Child Care is dated August 11, 2021. Based upon this information we have prepared this Class D Estimate (Opinion of Probable Costs) for the Child Care as an incremental additional cost to the RBCM Project.

The Indicative Design has not been updated. For the Child Care we have been provided a general scope and location and based upon this information we have prepared this estimate using measured quantities where possible, but relying mostly on parametric quantities and assumptions from recent similar projects where a child care has been included in a larger building, at the top of the building.

The cost of the requirement for 8 parking stalls has been included in this Incremental Estimate using a pro-rated value based upon the parking cost included in the RBCM Project Budget.

2. GENERAL DESCRIPTION:

The incremental cost generally consists of the addition of the Child Care as shown on the provided drawings. We have assumed that it will be an integral part of the RBCM Project and will be designed and constructed as part of the RBCM Project.

The cost of fitting out the Child Care has been excluded as we have been advised that a selected operator will be responsible for those costs. We have therefore excluded:

- Furniture, Furnishings and Equipment;
- General Fixtures, Fittings and Millwork;
- Signage;
- Sound attenuating barriers and absorptive room surfaces;
- Playground equipment;
- External Signage.

This Report includes an estimate that assumes a Design Build (DB) form of construction procurement.

There are no adjustment nor premiums included for an Alliance form of project procurement nor for the Community Benefits Alliance (CBA) application to the project.

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General Notes:

This is a Class D Estimate based upon the Concept Design. The quantities measured have been based upon the Concept Design Drawings and where information is not available, we have made what we consider to be reasonable assumptions. This is not a detailed Schedule of Quantities. It is an opinion of probable cost and must be viewed as such.

This estimate should be read in conjunction with the Main RBCM Class C Estimate (Revision 5)

- The cost of the requirement for 8 parking stalls has been included in this Incremental Estimate.
- We have used pricing based upon current information and our benchmarked assumptions and allowances for a project of this size and type.
- We have had limited discussions with design consultants regarding the building architecture.
- We have had no discussions with design consultants regarding building structure, systems, civil and site.
- We have not included any allowances for providing the ability for systems in the facility to expand in the future.
- We have included allowances for Municipal Building Permit Costs, Development Cost Charges and other Municipal costs as published by the City of Victoria.
- We have included an allowance for Legal Fees that may be required by a Contractor associated with the project.
- We have included an allowance for loose Furniture, Furnishings and Equipment (FF&E) that we believe is reasonable for the project.
- We have included an allowance for IMIT that we believe is reasonable for the project.
- We have included an allowance for insurance as provided by IBC. This is calculated on the assumption that the building structure will be a hybrid of mass timber and structural steel. It is critical that this insurance value be verified by an expert in the field of construction insurance.
- We have excluded any forward escalation allowances. We have, however, in our RBCM Estimate (Revision 5) included our opinion of escalation projected forward to 2029.
- We have excluded any allowances for a general project reserve.

3. EXECUTIVE SUMMARY:

The Estimated Project Budget for a DB Form of Procurement for the Child Care is as an Incremental addition to the RBCM Budget is **\$11,617,000**. Please refer to the detailed Summary contained in this report. Also, please note the exclusions detailed in this report.

The included cost for the 8 Parking Stalls is **±\$1,325,000**.

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4. NOTES:

This Class D Estimate (Opinion of Probable Costs) which carries a risk of $\pm 25\%$, 18 times out of 20, is based upon the information described above. Our knowledge of the project is limited to the information provided to us.

Pricing is based upon **early 3rd Quarter 2021** pricing that we consider reasonable, but competitive, for the size, type and complexity of project, and its location in Victoria.

The estimated construction costs reflect our opinion of the current construction industry market conditions for the size and type of project. It has been assumed that the Work will be tendered on a Design Build (DB) basis as an integral part of the New Museum Building, competitively tendered to a minimum of 3 contractors, where each trade contract is bid on a competitive stipulated price basis. The pricing in this estimate is predicated upon a minimum of three qualified trade contractors for each significant trade, bidding for the work on a competitive basis and there will be no sole source non-competitive trade contracts.

It is also predicated upon the assumption that the project will be bid with normal and reasonable market conditions and that any unforeseen, aberrant or abnormal market conditions are not contemplated in the estimate.

Pricing also reflects our opinion of the current labour market situation in BC and does not take into account any form of restriction(s) that may be imposed through government mandated labour agreements or requirements that may be imposed that have the potential to curtail labour competitiveness, labour availability and the potential for these imposed agreements to add cost and/or extend the project construction time schedule.

Provincial Sales Tax is included.

The Goods and Services Tax (GST) has been included at the full value of 5%.

The estimate is our opinion of fair market value for the construction of the project, and is not an attempt to predict a low bid value.

Design-Build Efficiency Factor: It is our opinion that for a project of this size and type, a DB Efficiency Factor is appropriate in the current market. This factor is included in this estimate.

5. GROSS FLOOR AREA

The Gross Floor Area of the Child Care has been measured as 769m².

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6. LEVEL OF RISK

It is our opinion that the risk associated with this Opinion of Probable Costs is $\pm 25\%$, 18 times out of 20.

7. ESCALATION

Escalation has been excluded.

8. BASIS OF THE ESTIMATE

8.1. Cost Base

Pricing shown reflects our opinion of probable construction costs obtainable in the **early 3rd Quarter of 2021** on the effective date of this report.

8.2. Contingencies

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

8.2.2. Escalation Contingency – No allowances have been included. This allowance, when included, is a reserve of funds to cover possible price increases from the time that the estimate is prepared to the time that the project is tendered.

8.2.3. Phasing Allowance – No allowances have been included. This allowance, when included, is for any work required to maintain the operation of the facility while construction proceeds.

8.2.4. Construction Contingency – An Allowance of 5% has been included. The construction contingency is a reserve of funds which is allocated to cover change orders that are required during the course of construction, and is not intended to be a scope change contingency.

8.2.5. General Project Contingency – No allowances have been included. This is a general project reserve.

9. EXCLUSIONS

The following items are specifically excluded from this estimate:

9.1. Forward Escalation.

9.2. General Project Contingency.

9.3. Unknown adverse environmental conditions.

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- 9.4. Unknown adverse archaeological conditions.
- 9.5. Adverse soil and/or subsoil conditions.
- 9.6. Project Procurement Costs and Compliance Team Costs.
- 9.7. Land Acquisition Costs.
- 9.8. Project Financing Costs.
- 9.9. Major Utility Upgrades.
- 9.10. Furniture, Furnishings and Equipment.
- 9.11. General Fixtures, Fittings and Millwork.
- 9.12. Signage
- 9.13. Sound attenuating barriers and absorptive room surfaces.
- 9.14. Playground equipment.
- 9.15. External Signage.

10. EXPLANATION OF TERMS

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

11. STATEMENT OF PROBABLE COSTS

Estimates of construction costs prepared by SSA Quantity Surveyors Ltd. represent our best judgement as Professional Cost Consultants/Quantity Surveyors familiar with the construction industry. It is recognised, however, that we do not have control over the cost of labour, materials or equipment, over architect/engineering design, over

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a contractor's method of determining prices, or over market or negotiating conditions. Accordingly, we cannot and do not warrant or represent that bids or negotiated prices will not vary from this nor any subsequent estimate of design/construction cost or evaluation prepared by or agreed to by us.

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12. MAIN SUMMARY DESIGN-BUILD

PROJECT BUDGET SHEET - DESIGN BUILD (DB)					
		ESTIMATED VALUE (Values rounded to closest thousand \$)	REIMBURSABLE EXPENSES	GST	TOTALS
1	Land				
2	Construction				
3	Contingency for Construction (5%)				
4	Architect				
5	Structural Engineer				
6	Mechanical Engineer				
7	Electrical Engineer				
8	Quantity Surveyor				
9	Facility Programmer				
10	IMIT Consultant				
11	Landscape Consultant				
12	Security Consultant				
13	Environmental Consultant				
14	Other Consultants				
15	Surveys				
16	Civil Engineer				
17	Commissioning				
18	Testing & Inspections				
19	Legal (Contractor)				
20	Fire Safety Plan				
21	Owner's Administrative Costs (5% of Line 2)				
22	Insurance (Assumed \$22.00 per thousand \$)				
23	Development Cost Charges (Victoria By-Law 20-013)				
24	Building Permit (Victoria By-Law 17-113)				
25	Off-Site Services - Allowance only				
26	Furniture, Furnishings and Equipment				
27	Escalation Contingency				
28	General Project Contingency				
29	SUB-TOTAL				
30	GST Rebate				
31	TOTAL				\$11,617,000

Note:

This sheet is subject to limiting conditions contained in the accompanying report.

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13. CONSTRUCTION COST ESTIMATE

ELEMENTAL SUMMARY SHEET - CONSTRUCTION COSTS - DESIGN BID BUILD						GFA = 769.0 m2	
ELEMENT/SUB-ELEMENT	Quantity	Unit Rate	Sub-Element	Element	\$/m2	\$/m2	%
01 SUBSTRUCTURE							
011 Normal Foundations							
012 Site Clearance							
013 Special Conditions							
02 STRUCTURE							
021 Lowest Floor Construction							
022 Upper Floor Construction							
023 Roof Construction							
03 EXTERIOR CLADDING							
031 Roof Finish							
032 Walls Below Ground Floor							
033 Walls Above Ground Floor							
034 Windows							
035 Exterior Doors and Screens							
036 Balconies & Projections							
04 INTERIOR PARTITIONS							
041 Permanent Partitions							
042 Movable Partitions							
043 Doors							
05 VERTICAL MOVEMENT							
051 Stairs							
052 Elevators & Escalators							
06 INTERIOR FINISHES							
061 Floor Finishes							
062 Ceiling Finishes							
063 Wall Finishes							
07 FITTINGS AND EQUIPMENT							
071 Fittings & Fixtures							
072 Equipment							
08 ELECTRICAL							
081 Service & Distribution							
082 Lighting & Power							
083 Systems							
09 MECHANICAL							
091 Plumbing and Drainage							
092 Fire Protection							
093 HVAC							
10 OVERHEAD AND PROFIT							
Sub-Total							
Design Contingency - Building							
Escalation Contingency - Building							
Construction Contingency - Building							
Sub-Total							
GST on Building							
ESTIMATED NET BUILDING COST							
11 SITE DEVELOPMENT							
111 General							
112 M & E Site Services							
113 Alterations							
114 Demolition							
115 Overhead and Profit							
116 Design Contingency - Site							
117 Escalation Contingency - Site							
118 Construction Contingency - Site							
Sub-Total							
GST on Site Development							
ESTIMATED SITE DEVELOPMENT							
TOTAL ESTIMATED CONSTRUCTION COST							

Description	Quantity	Rate	Amount
<u>ELEMENT 01 - SUBSTRUCTURE</u>			
<u>SUB-ELEMENT 011 - NORMAL FOUNDATIONS</u>			
<p>Strip foundation size 460mm wide x 305mm deep comprising: Excavation Concrete - supply and place Formwork to sides Reinforcement Backfill with imported material Disposal</p> <p>Foundation walls comprising: Concrete - supply and place Formwork Reinforcement Insulation Waterproofing</p> <p>Foundation sundries comprising: Elevator pads and pits Perimeter footing drainage</p>			
<u>TOTAL SUB-ELEMENT 011 - NORMAL FOUNDATIONS</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 01 - SUBSTRUCTURE</u>			
<u>SUB-ELEMENT 012 - SITE CLEARANCE</u>			
Allowance for general site clearance (Footprint Area plus 10%)			
<u>TOTAL SUB-ELEMENT 012 - SITE CLEARANCE</u>			

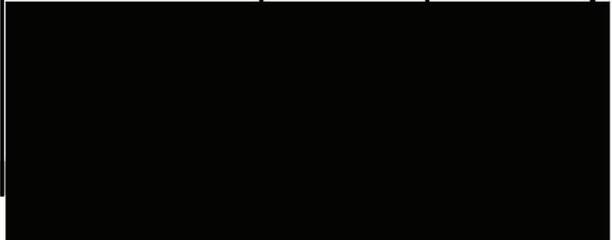
Description	Quantity	Rate	Amount
<u>ELEMENT 01 - SUBSTRUCTURE</u>			
<u>SUB-ELEMENT 013 - SPECIAL CONDITIONS</u>			
Allowance for 8 Parking Stalls			
Bulk Excavation, backfill and dewatering Allowance only			
<u>TOTAL SUB-ELEMENT 013 - SPECIAL CONDITIONS</u>			



Description	Quantity	Rate	Amount
<u>ELEMENT 02 - STRUCTURE</u>			
<u>SUB-ELEMENT 021 - LOWEST FLOOR CONSTRUCTION</u>			
150mm Thick slab on grade comprising: Concrete - supply and place Formwork to edges Reinforcement Granular fill layer, compacted Vapour barrier Insulation			
<u>TOTAL SUB-ELEMENT 021 - LOWEST FLOOR CONSTRUCTION</u>			

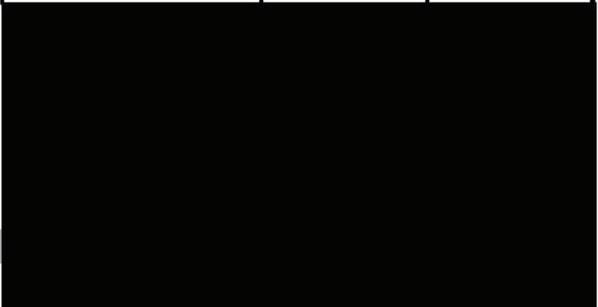
Description	Quantity	Rate	Amount
<u>ELEMENT 02 - STRUCTURE</u>			
<u>SUB-ELEMENT 022 - UPPER FLOOR CONSTRUCTION</u>			
Nil			\$0
<u>TOTAL SUB-ELEMENT 022 - UPPER FLOOR CONSTRUCTION</u>			\$0

Description	Quantity	Rate	Amount
<u>ELEMENT 02 - STRUCTURE</u>			
<u>SUB-ELEMENT 023 - ROOF CONSTRUCTION</u>			
<p>Upper Roof Structure Comprising: Glulam columns, beams, CLT shear walls and upper roof slabs</p> <p>Allowance for miscellaneous items</p>			
<u>TOTAL SUB-ELEMENT 023 - ROOF CONSTRUCTION</u>			



Description	Quantity	Rate	Amount
<u>ELEMENT 03 - EXTERIOR CLADDING</u>			
<u>SUB-ELEMENT 031 - ROOF FINISHES</u>			
<p>Roof - Adhered system comprising: 2-Ply SBS roofing membrane 12mm Overlay protection 229mm Fully adhered insulation Sloped insulation Self-adhered air/vapour barrier</p> <p>Roof - Exterior Roof Deck comprising: Unit pavers with pedestals Drainage mat with filter fabric 204mm XPS Insulation Self-adhered air/vapour barrier Concrete topping, 75mm</p> <p>Allowance for miscellaneous roofing items</p>			
<u>TOTAL SUB-ELEMENT 031 - ROOF FINISHES</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 03 - EXTERIOR CLADDING</u>			
<u>SUB-ELEMENT 032 - WALLS BELOW GROUND FLOOR</u>			
Basement concrete retaining walls comprising: Concrete - supply and place Formwork to sides Reinforcement 204mm Rigid Insulation Waterproofing			
<u>TOTAL SUB-ELEMENT 032 - WALLS BELOW GROUND FLOOR</u>			



Description	Quantity	Rate	Amount
<u>ELEMENT 03 - EXTERIOR CLADDING</u>			
<u>SUB-ELEMENT 033 - WALLS ABOVE GROUND FLOOR</u>			
<p>Exterior wall with metal studs comprising: 16mm Gypsum board Interior vapour barrier 102mm Metal studs @ 400 O.C. 89mm Semi-Rigid mineral wool batt insulation 152mm Metal studs @ 400 O.C. 152mm Semi-Rigid mineral wool batt insulation 16mm Exterior sheathing Self-adhered air/vapour barrier 204mm Semi-Rigid mineral fiber insulation board 204mm Thermally Broken Clip System with 25mm Vertical Girts Phenolic Cladding Panels</p> <p>Exterior wall with CLT structure comprising: CLT panel 191 walls (5-ply - engineer, supply, transport, crane, install and connections) Self-adhered air/vapour barrier 204mm Semi-Rigid mineral fiber insulation board 204mm Thermally Broken Clip System with 25mm Vertical Girts Phenolic Cladding Panels</p>			
<u>TOTAL SUB-ELEMENT 033 - WALLS ABOVE GROUND FLOOR</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 03 - EXTERIOR CLADDING</u>			
<u>SUB-ELEMENT 034 - WINDOWS</u>			
Triple glazed, low e, argon filled, black-anodized aluminium Therm system			
<u>TOTAL SUB-ELEMENT 034 - WINDOWS</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 03 - EXTERIOR CLADDING</u>			
<u>SUB-ELEMENT 035 - EXTERIOR DOORS AND SCREENS</u>			
Exterior doors comprising: Exterior door allowance			
<u>TOTAL SUB-ELEMENT 035 - EXTERIOR DOORS AND SCREENS</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 03 - EXTERIOR CLADDING</u>			
<u>SUB-ELEMENT 036 - BALCONIES AND PROJECTIONS</u>			
Exterior glass guard			
<u>TOTAL SUB-ELEMENT 036 - BALCONIES AND PROJECTIONS</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 04 - INTERIOR PARTITIONS</u>			
<u>SUB-ELEMENT 041 - PERMANENT PARTITIONS</u>			
Interior Partitions comprising:			
Interior partitions comprising gypsum board, studs and batt insulation			
Allowance for Glazed internal partitions			
<u>TOTAL SUB-ELEMENT 041 - PERMANENT PARTITIONS</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 04 - INTERIOR PARTITIONS</u>			
<u>SUB-ELEMENT 042 - MOVABLE PARTITIONS</u>			
Nil			\$0
<u>TOTAL SUB-ELEMENT 042 - MOVABLE PARTITIONS</u>			\$0

Description	Quantity	Rate	Amount
<u>ELEMENT 04 - INTERIOR PARTITIONS</u>			
<u>SUB-ELEMENT 043 - DOORS</u>			
Interior doors comprising: Interior doors including frames, hardware and finish			
<u>TOTAL SUB-ELEMENT 043 - DOORS</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 05 - VERTICAL MOVEMENT</u>			
<u>SUB-ELEMENT 051 - STAIRS</u>			
Building vertical movement comprising: Concrete stairs complete, including finish, handrails, etc.			
<u>TOTAL SUB-ELEMENT 051 - STAIRS</u>			



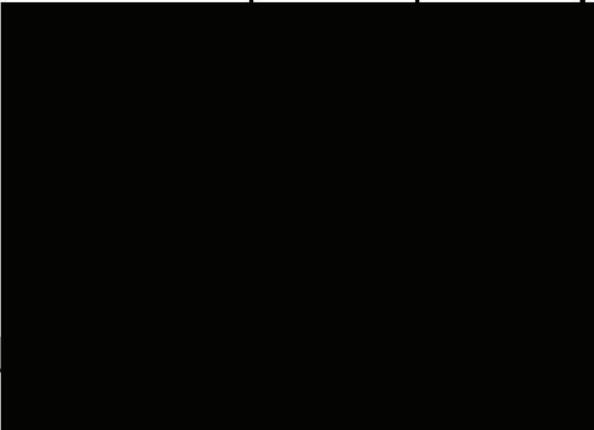
Description	Quantity	Rate	Amount
<u>ELEMENT 05 - VERTICAL MOVEMENT</u>			
<u>SUB-ELEMENT 052 - ELEVATORS AND ESCALATORS</u>			
Elevator			
<u>TOTAL SUB-ELEMENT 052 - ELEVATORS AND ESCALATORS</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 06 - INTERIOR FINISHES</u>			
<u>SUB-ELEMENT 061 - FLOOR FINISHES</u>			
Floor finishes comprising: Floor Finishes generally including base			
<u>TOTAL SUB-ELEMENT 061 - FLOOR FINISHES</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 06 - INTERIOR FINISHES</u>			
<u>SUB-ELEMENT 062 - CEILING FINISHES</u>			
Building ceiling finishes comprising: Ceiling Finishes - generally Special Ceiling Finishes and Bulkheads -Allowance			
<u>TOTAL SUB-ELEMENT 062 - CEILING FINISHES</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 06 - INTERIOR FINISHES</u>			
<u>SUB-ELEMENT 063 - WALL FINISHES</u>			
Building wall finishes comprising: Wall Finishes generally Special Wall Finishes including acoustics - Allowance			
<u>TOTAL SUB-ELEMENT 063 - WALL FINISHES</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 07 - FITTINGS AND EQUIPMENT</u>			
<u>SUB-ELEMENT 071 - FITTINGS AND FIXTURES</u>			
Millwork and general fixture allowance comprising: General Fixtures, Fittings and Millwork - EXCLUDED Miscellaneous Metals Allowance Miscellaneous Rough Carpentry Allowance Signage Allowance - EXCLUDED Sound attenuating barriers and absorptive room surfaces - general allowance 25% of GFA - EXCLUDED Builders Work associated with Mechanical and Electrical installations including coring, fireproofing etc.			
<u>TOTAL SUB-ELEMENT 071 - FITTINGS AND FIXTURES</u>			

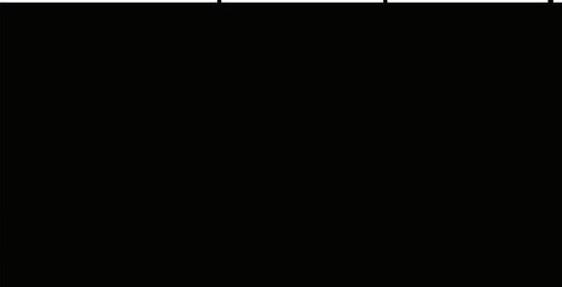


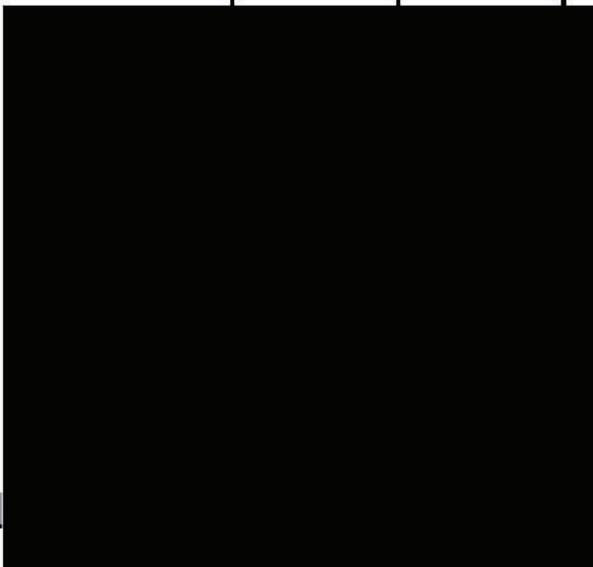
Description	Quantity	Rate	Amount
<u>ELEMENT 07 - FITTINGS AND EQUIPMENT</u>			
<u>SUB-ELEMENT 072 - EQUIPMENT</u>			
Excluded			\$0
<u>TOTAL SUB-ELEMENT 072 - EQUIPMENT</u>			\$0

Description	Quantity	Rate	Amount
<u>ELEMENT 08 - ELECTRICAL</u>			
<u>SUB-ELEMENT 081 - SERVICE & DISTRIBUTION</u>			
Service and distribution comprising: Service and distribution			
<u>TOTAL SUB-ELEMENT 081 - SERVICE & DISTRIBUTION</u>			



Description	Quantity	Rate	Amount
<u>ELEMENT 08 - ELECTRICAL</u>			
<u>SUB-ELEMENT 082 - LIGHTING & POWER</u>			
Lighting comprising: Lighting			
Power comprising: Power Allowance for power to mechanical equipment			
<u>TOTAL SUB-ELEMENT 082 - LIGHTING & POWER</u>			

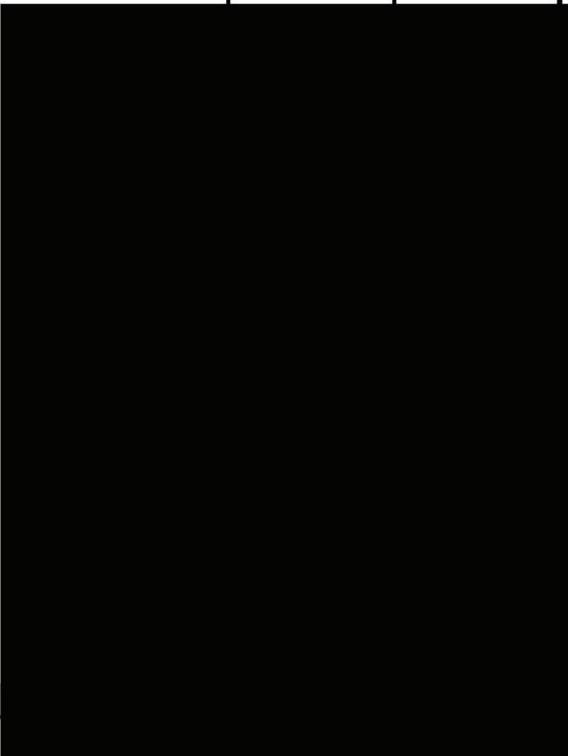


Description	Quantity	Rate	Amount
<p><u>ELEMENT 08 - ELECTRICAL</u></p> <p><u>SUB-ELEMENT 083 - SYSTEMS</u></p> <p>Fire alarm comprising: Provide addressable (fully supervised fire alarm system & devices, etc.)</p> <p>Telephone & Data comprising: Telephone & data systems / communication racks, servers, patch-panel, horizontal cabling connections, etc.</p> <p>Security comprising: Conduit rough-in, back-boxes, cable & basket tray systems (for CCTV, card-access & security systems, etc.) including security system</p> <p>Public address comprising: Conduit rough-in, back-boxes, cable & basket tray systems (for public address systems, etc.) including PA System</p>			
<p><u>TOTAL SUB-ELEMENT 083 - SYSTEMS</u></p>			

Description	Quantity	Rate	Amount
<u>ELEMENT 09 - MECHANICAL</u>			
<u>SUB-ELEMENT 091 - PLUMBING AND DRAINAGE</u>			
Equipment comprising: Equipment			
Piping comprising: Piping			
Fixtures comprising: Fixtures			
<u>TOTAL SUB-ELEMENT 091 - PLUMBING AND DRAINAGE</u>			

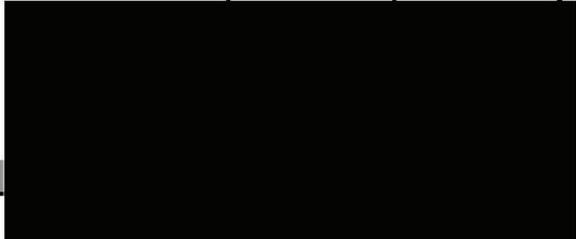
Description	Quantity	Rate	Amount
<u>ELEMENT 09 - MECHANICAL</u>			
<u>SUB-ELEMENT 092 - FIRE PROTECTION</u>			
Sprinklers & Fire Protection comprising: Fire protection			
<u>TOTAL SUB-ELEMENT 092 - FIRE PROTECTION</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 09 - MECHANICAL</u>			
<u>SUB-ELEMENT 093 - HVAC</u>			
Air Handling comprising:			
Air handling			
Heating & Cooling Plant comprising:			
Heating & cooling			
Piping comprising:			
Piping			
Ductwork comprising:			
Ductwork			
Heating comprising:			
Zone heating			
Miscellaneous:			
Set-up/test & commission/balancing, manuals, etc. - allowance			
Controls comprising:			
Controls			
<u>TOTAL SUB-ELEMENT 093 - HVAC</u>			



Description	Quantity	Rate	Amount
<u>ELEMENT 10 - GENERAL REQUIREMENTS AND FEE</u>			
General requirements and fee including: <ul style="list-style-type: none"> site access site accommodation site protection temporary utilities clean up equipment supervision winter conditions insurance's bonds permits head office overhead and fee miscellaneous 			
<u>TOTAL ELEMENT 10 - GENERAL REQUIREMENTS AND FEE</u>			

Description	Quantity	Rate	Amount
<u>ELEMENT 11 - SITE DEVELOPMENT</u>			
<u>SUB-ELEMENT 111 - GENERAL SITE DEVELOPMENT</u>			
<u>On Site Development</u>			
Playground equipment - EXCLUDED			
Garbage storage			
External Signage - EXCLUDED			
<u>TOTAL SUB-ELEMENT 111 - GENERAL SITE DEVELOPMENT</u>			



Description	Quantity	Rate	Amount
<u>ELEMENT 11 - SITE DEVELOPMENT</u>			
<u>SUB-ELEMENT 112 - MECHANICAL & ELECTRICAL SITE SERVICES</u>			
Nil			\$0
<u>TOTAL SUB-ELEMENT 112 - MECHANICAL & ELECTRICAL SITE SERVICES</u>			<u>\$0</u>

Description	Quantity	Rate	Amount
<u>ELEMENT 11 - SITE DEVELOPMENT</u>			
<u>SUB-ELEMENT 113 - ALTERATIONS</u>			
Nil			\$0
<u>TOTAL SUB-ELEMENT 113 - ALTERATIONS</u>			\$0

Description	Quantity	Rate	Amount
<u>ELEMENT 11 - SITE DEVELOPMENT</u>			
<u>SUB-ELEMENT 114 - DEMOLITION</u>			
Nil			\$0
<u>TOTAL SUB-ELEMENT 114 - DEMOLITION</u>			\$0

Description	Quantity	Rate	Amount
<u>ELEMENT 11 - SITE DEVELOPMENT</u>			
<u>SUB-ELEMENT 115 - GENERAL REQUIREMENTS AND FEE</u>			
General requirements and fee for Element 11			
<u>TOTAL SUB-ELEMENT 115 - GENERAL REQUIREMENTS AND FEE</u>			



Description	Quantity	Rate	Amount
<p><u>OFFSITE</u></p> <p>See Summary</p>			
TOTAL OFF-SITE			\$0