





**MARPOLE
OAKRIDGE
COMMUNITY
CENTRE**

Vancouver, BC

April 12, 2011

**Feasibility Study
Estimate #1 (Revision 1)**

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1.0 INTRODUCTION

The estimate presented in this report provides an assessment of the direct and indirect project costs for the proposed Community Center in the Marpole Oakridge area of Vancouver, BC.

The estimated costs contained in this report are based on Conceptual Design Stage drawings and other information prepared by Patkau Architects Inc. and their consulting engineers. The documents provided are not sufficiently detailed to allow the project to proceed to a fixed-price tender call. The estimate provides a reasonable cost envelope within which the project design can be developed. Further estimates based on more detailed design information may, however, vary from this baseline.

In order to maintain the budget parameters established in this report, BTY strongly recommends that further cost estimates be prepared at major design stage milestones to track and monitor the cost of the proposed design.

2.0 PROJECT DESCRIPTION

The proposed development comprises a 2-storey building that houses a gymnasium, a fitness/wellness room, a dance room, three music rooms, multipurpose rooms, pre-school and staff rooms.

The structure is a concrete frame supported by typical footing foundations, and steel roof decking on steel & glulam beams. The exterior cladding consists of prefinished metal cladding and aluminum curtain walls. The interior construction is similar to other community centres within City of Vancouver.

The proposed building has slope roofs with standing seam metal roofing.

The estimate covers LEED Gold requirements and certification.

3.0 EXECUTIVE SUMMARY

The current estimated project costs may be summarized as follows:

Item		Estimated Cost
		\$
A.	Land Cost	0
B.	Construction	14,087,900
C.	Allowances	2,183,600
D.	Professional Fees	2,278,000
E.	Municipal & Connection Fees	303,000
F.	Management & Overhead	238,000
G.	Project Contingency	141,000
H.	Furnishings, Fittings & Equipment	300,000
I.	Harmonized Sales Tax	0
Total Project Cost (2010 Dollars)		\$19,531,500
J.	Escalation Reserve	859,000
Escalated Project Cost (June 2013 Dollars)		\$20,390,500

Please note where zero dollar values are stated, BTY has excluded these costs and the values should be carried in a separate budget (if applicable).

4.0 AREAS

The gross floor area of the project measured in accordance with the guidelines established by the Canadian Institute of Quantity Surveyors is:

Location	Gross Floor Area
Lower Level	2,010 m ²
Entry Level	1,351 m ²
Total Gross Floor Area	3,361 m²

Note: The above total gross floor area includes optional program areas as follows:

- Daycare 213 m²
- Field House 93 m²

5.0 PROJECT COST ESTIMATE

The current estimated cost for the project is as follows:

Description	Total Cost
A. LAND COST (Excluded)	\$0
1 Land	0
2 Legal Fees	0
B. CONSTRUCTION	\$14,087,900
1 Building	12,817,100
2 Site Development (Allowance)	1,270,800
C. ALLOWANCES	\$2,183,600
1 Design Contingency (Design & Program Changes) (10%)	1,408,800
2 Post Tender Change Order Contingency (5%)	774,800
D. PROFESSIONAL FEES	\$2,278,000
E. MUNICIPAL & CONNECTION FEES	\$303,000
1 Development Cost Charges	237,000
2 Building Permits	66,000
F. MANAGEMENT & OVERHEAD	\$238,000
1 Project Management Fee (Excluded)	0
2 Owners Planning and Administrative Cost (Excluded)	0
3 Project Insurance (Excluded)	0
4 Allowance for Testing	75,000
5 Project Commissioning, Move-In	163,000
G. PROJECT CONTINGENCY (5% of Items D to F)	\$141,000
SUB-TOTAL	\$19,231,500
H. FURNISHINGS, FITTINGS & EQUIPMENT (Allowance)	\$300,000
SUB-TOTAL	\$19,531,500
I HARMONIZED SALES TAX (Excluded)	\$0
TOTAL PROJECT COST (March 2011 Dollars)	\$19,531,500
J ESCALATION RESERVE (4.4% of Item A to H)	\$859,000
ESCALATED PROJECT COST (June 2013 Dollars)	\$20,390,500

Note: Item B1 - Building construction cost in the above estimate includes cost allowances for optional program areas as follows:

- Daycare	\$572,000
- Field House	\$250,000

6.0 DEFINITIONS

The estimate for the project has been prepared and summarized in the following categories. The scope of work covered within each category is as follows:

A. Land Cost:

These costs include the acquisition of the site and associated fees, service obligations and property purchase tax.

B. Construction:

This category encompasses all direct and indirect construction costs including building(s), associated site development work and general contractor's general requirements and fee.

C. Allowances

Allowances for cost increases as the design is developed and/or the work is carried out on site.

D. Professional Fees:

Within this section professional fees have been estimated for the primary design team consultants including: the architect, structural, mechanical & electrical engineers, and the quantity surveyor. Other specialist consultants and an allowance for disbursements are also included. Where available, all consultant fees have been calculated based on the current schedule of recommended charges published by the professional associations.

E. Municipal & Connection Fees:

This section includes an estimate for all project related fees and charges required by the CITY OF VANCOUVER and other authorities having jurisdiction as part of the development. These costs include Development Cost Charges (DCC's), Building Permits, levies and associated legal and survey fees. These costs are based on current CITY OF VANCOUVER formulas and schedules.

F. Management & Overhead:

The project management fee is charged by a company or individual providing project management services. The Owner's Planning and Administrative cost covers the owner's project-related management costs. Provisions are also included for project insurance, commissioning the facility prior to handover and move-in costs.

G. Project Contingency:

This allowance is provided as an owner's contingency to cover changes to non-construction items.

H. Furnishings, Fittings & Equipment:

The Furnishings, Fittings & Equipment estimate for the project has been compiled using a combination of BTY Group's own historical cost data and information specific to this project.

I. Harmonized Sales Tax

The amount is adjusted to reflect rebates available to certain types of project.

7.0 CONSTRUCTION COST SUMMARY

The estimated construction cost of the project may be summarized as follows:

Description	Estimated Cost \$	Cost/GFA \$/m ²
Structural	2,695,700	802.05
Architectural	5,712,400	1,699.61
Mechanical	2,004,700	596.46
Electrical	1,031,000	306.75
General Requirements & Fee	1,373,300	408.60
Net Building Cost	\$12,817,100	\$3,813.48
Site Work	1,034,600	307.83
Ancillary Work	100,000	29.75
General Requirements & Fee	136,200	40.52
Net Construction Cost	\$14,087,900	\$4,191.58
Design Allowance	1,408,800	419.16
Construction Allowance	774,800	230.53
Total Construction Cost	\$16,271,500	\$4,841.27

8.0 SEPARATE PRICE ITEMS

The following separate-price items are not included in the base estimate:

Description	Estimated Cost \$
1. Demolition of the Existing Community Centre Building	351,600
2. Geothermal System	392,600
3. Solar Collectors	62,800
TOTAL SEPARATE PRICE ITEMS	\$807,000

Note: The above estimated costs include the markup for general requirements, fees, contingencies and all the non-construction costs.

9.0 EXCLUSIONS

The construction estimate **includes** all direct and indirect project costs identified in the drawings and other information provided by the Prime Consultant. The estimate specifically **excludes** the following:

- Land costs
- Project management fee
- Owner's planning, administrative and financing costs
- Legal fees and expenses
- Temporary facilities during construction (if any)
- Removal of hazardous materials
- Playground equipment
- Upgrading of existing site services
- Requirement for pre-loading/piling/structural fill
- Unforeseen ground conditions and associated extras
- Off-site works
- Phasing of the works and accelerated schedule
- Decanting & moving
- Erratic market conditions, such as lack of bidders, proprietary specifications
- Cost escalation past June 2013

10.0 TAXES

The estimate **excludes** the Harmonized Sales Tax (H.S.T.).

11.0 PROJECT SCHEDULE & ESCALATION

For the purpose of identifying and quantifying the escalation allowance for this project, BTY has assumed the following schedule:

Activity	Start	Finish	Duration Months
Construction	July 1, 2012	June 30, 2014	24

Based on the above schedule, the mid-point of construction for the project is projected to be **June 2013**, which is 28 months from the date of this estimate.

On this basis, BTY has calculated the escalation for this project to be 4.4%. Our current projected escalation rates are shown below. In the event that there is slippage in the schedule, further escalation based on the projected escalation rate per annum should be included in the estimate.

Current BTY Group Forecast	2011	2012	2013	2014
	1%	2%	3%	3%

12.0 PRICING

The estimate has been priced at current rates taking into account the size, location and nature of the project. The unit rates utilized are considered competitive for a project of this type, bid under a stipulated lump-sum form of tender in an open market, with a minimum of five (5) bids, supported by the requisite number of sub-contractors.

The estimate allows for labour, material, equipment and other input costs at current rates and levels of productivity. It does not take into account extraordinary market conditions, where bidders may be few and may include in their tenders disproportionate contingencies and profit margins.

13.0 RISK MITIGATION

In order to maintain the budget parameters established in this report, BTY strongly recommends that further cost estimates are prepared at major design stage milestones to track and monitor the cost of the proposed design as it evolves. The major milestone estimates are typically carried out at the Program, Schematic Design, Design Development, 50% Working Drawings, 75% Working Drawings and 95% Working Drawings stages.

14.0 CONTINGENCIES

Design Allowance

A design contingency of Ten Percent (10%) has been included in the estimate to cover modifications to the program, drawings and specifications during the design. This allowance should be re-considered as the design proceeds, being ultimately reduced to zero at the tender stage.

Construction Allowance

An allowance of Five Percent (5%) has been included in the estimate for changes occurring during construction period of the project. This amount may be expended during the construction phase if there are modifications to the drawings and specifications.

Project Contingency

An allowance of Five Percent (5%) of the soft costs has been included in the project cost plan to cover changes to non-construction items.



APPENDIX I
DOCUMENTATION



DOCUMENTATION

The following documentation was used as the basis for preparing this estimate:

Drawing	Description	Date
Architectural		
	Lower Level Plan	March 10, 2011
	Entry Level Plan	March 10, 2011
	Building Section 5	March 10, 2011
	Building Sections 1 - 4	March 3, 2011
	Building Elevations	March 3, 2011
	Site Plan	March 3, 2011
	Geotechnical Investigation Report	February 14, 2011
	Existing Community Centre Floor Plans	
	Patkau Architects' Email	April 12, 2011