

APPENDIX C

SEISMIC SCREENING FORM

SEISMIC SCREENING INVENTORY FORM

2020 Labieux - Public Works Purchasing and Stores Bldg.
City of Nanaimo. Bldg No. B25

Comments:

- Load bearing reinforced masonry walls
typical exterior walls to main bldg.
- 3 light wood frame additions to main
building
- 900 Dp wood trusses @ 600 mm $\%_c$ bear
on exterior walls complete with Tie down
clips.
- 2 Interior, wood, full height, partition
walls (drywall finish).

SEISMIC SCREENING FORM			p. 1 of 2	ITEM No.: 825
Address: 2020 Labieux Rd		Postal Code: V9T6J9		Bldg. Name: Purchasing
No. of storeys: 1/2	Total Floor Area: 575 m ²	Year Built: 1985	Design NBC: 1980	
Primary use (see list on p. 2): Office / Storage			Heritage Designation: N/A	
Inspector: GK	Date: April/13/2012		Checked by:	
See attached			See attached	
Sketch			Photo	

TYPE OF STRUCTURE (circle appropriate descriptors) see 4.3.2			BM	BUILDING IRREGULARITIES (circle appropriate descriptors) see 4.3.3	
Wood	WLF WPB	Wood Light Frame Wood, Post and Beam	90	1. Vertical Irregularity	Abrupt changes in plan dimensions over height (e.g. setback or building on hill)
Steel	SMF SBF SLF SCW SIW	Steel Moment Frame Steel Braced Frame Steel Light Frame Steel Frame with Concrete Shear Walls Steel Frame with Infill Masonry Shear Walls	90	2. Horizontal Irregularity (Torsion)	Irregular building shapes such as "L", "V", "E", "T", eccentric stiffness in plan (e.g. shear wall on only one side of building)
Concrete	CMF CSW CIW	Concrete Moment Frame Concrete Shear Walls Concrete Frame with Infill Masonry Shear Walls	85	3. Short Concrete Columns	Short columns restrained by partial storey height walls (structural or infill) or deep spandrels
	PCF PCW	Precast Concrete Frame Precast Concrete Walls		4. Soft Storey	Severe reduction of stiffness caused by discontinuous shear walls, openings, etc.
Masonry	RML	Reinforced Masonry Bearing Walls with Wood or Metal Deck Floors or Roofs	90	5. Pounding	Separation between buildings less than 20 Z _v x no. of storeys (in mm)
	RMC	Reinforced Masonry Bearing Walls with Concrete Diaphragms		6. Major Modifications	Any change in function, use or addition which results in significant increase in loading or weight
	URM	Unreinforced Masonry Bearing Wall Building		7. Deterioration	Structural elements are damaged, poor condition of building is apparent (corroded reinforcement or steel, rotted wood, poor concrete or masonry)
				8. None	None of the irregularities listed above is present.

NON - STRUCTURAL HAZARDS (Circle appropriate descriptors) see 4.3.4

F₁ Falling Hazards to Life:
 Exterior: Masonry chimneys, parapets, veneer or stone / precast panels, non-safety glass, or canopies over exits and walkways
 Interior: Heavy components; masonry partitions; non-safety glass in egress areas; storage shelves which may collapse onto areas of human occupancy

F₂ Hazards to Continuous Operation of Special Buildings: Equipment or lifelines required for continuous operation of special facilities. The owner or authority should provide a list of critical items needed for continuing operations.

SEISMIC SCREENING FORM										p. 2 of 2	ITEM No.: B 25					
SEISMIC PRIORITY INDEX: Circle appropriate value and enter each result on right side. Use asterisk (*) with uncertain values																
A	Seismicity	Design NBC	Effective Seismic Zone (Z_v , or $Z_v + 1$ if $Z_a > Z_v$)						A = 1.3							
			2	3	4	5	6									
		Pre - 65 65 - 84 Post - 85	1.0 1.0 1.0	1.5 1.0 1.0	2.0 1.3 1.0	3.0 1.5 1.0	4.0 2.0 1.0									
B	Soil Conditions	Design NBC	Soil Category					B = 1								
			Rock or Stiff Soil	Stiff Soil > 50 m	Soft Soil > 15 m	Very Soft or Liquefiable Soil	Unknown Soil									
		Pre - 65 Post - 65	1.0 1.0	1.3 1.0	1.5 1.0	2.0 1.5	1.5 1.5									
C	Type of Structure <small>(BM = Benchmark year, see p.1)</small>	Design NBC	Construction Type and Symbol (see p. 1)										C = 1.5			
			Wood		Steel			Concrete		Precast		Masonry Infill			Masonry	
		Pre - 70 70 - BM Post - BM	WLF 1.2 1.2 1.0	WPB 2.0 2.0 1.0	SLF 1.0 1.0 1.0	SMF 1.2 1.2 1.0	SBF 1.5 1.5 1.0	SCW 2.0 1.5 1.0	CMF 2.5 1.5 1.0	CSW 2.0 1.5 1.0	PCF 2.5 1.8 1.0	PCW 2.0 1.5 1.0			SIW, CIW 3.0 2.0 1.0	RML, RMC 2.5 1.5 1.0
D	Building Irregularities	Design NBC	1. Vertical	2. Horiz.	3. Short Concrete Columns	4. Soft Storey	5. Pounding	6. Modification	7. Deterioration	8. None	D = product of circled Numbers (Max of 4.0) = 1					
		Pre - 70 Post - 70	1.3 1.3	1.5 1.5	1.5 1.5	2.0 1.5	1.3 1.3	1.3 1.0	1.3 1.3	1.0 1.0						
		E = 1	Low Occupancy N < 10	Normal Occupancy N = 10 - 300	School, or High Occupancy N = 301 - 3000	Post Disaster, or Very High Occup. N > 3000	Special Operational Requirements									
E	N = Occupied Area x Occupancy Density x Duration Factor* = .. 57.5... x ... : 1... x ... : 5... = 28.8															
	Primary Use:	Occupancy Density Persons / m ²	Average Weekly Hours of Human Occupancy	* Duration Factor is equal to the average weekly hours of human occupancy divided by 100, not greater than 1.0												
	Assembly Mercantile, Personal service Offices, Institutional, Manufacturing Residential Storage	1 0.2 0.1 0.05 0.01 - 0.02	5 - 50 50 - 80 50 - 60 100 100													
SI	STRUCTURAL INDEX = A · B · C · D · E =										SI = 1.95					
F	NON - STRUCTURAL HAZARDS		Description (see p. 1)				None	Yes	Yes *	F = max (F ₁ , F ₂) = 2						
	F ₁	Falling Hazards to Life	storage shelves				Pre - 70 NBC Post - 70 NBC	1.0 1.0	3.0 2.0				6.0 3.0			
	F ₂	Hazards to Vital Operations					Any Year	1.0	3.0				6.0			
* applies only if one or more of the following descriptors on page 1 are circled: SMF, CMF, soft storey, torsion																
NSI	NON - STRUCTURAL INDEX = B · E · F =										NSI = 2					
SPI	SEISMIC PRIORITY INDEX = SI + NSI =										SPI = 3.95					
Comments: Low Priority																



NORTHWEST VIEW



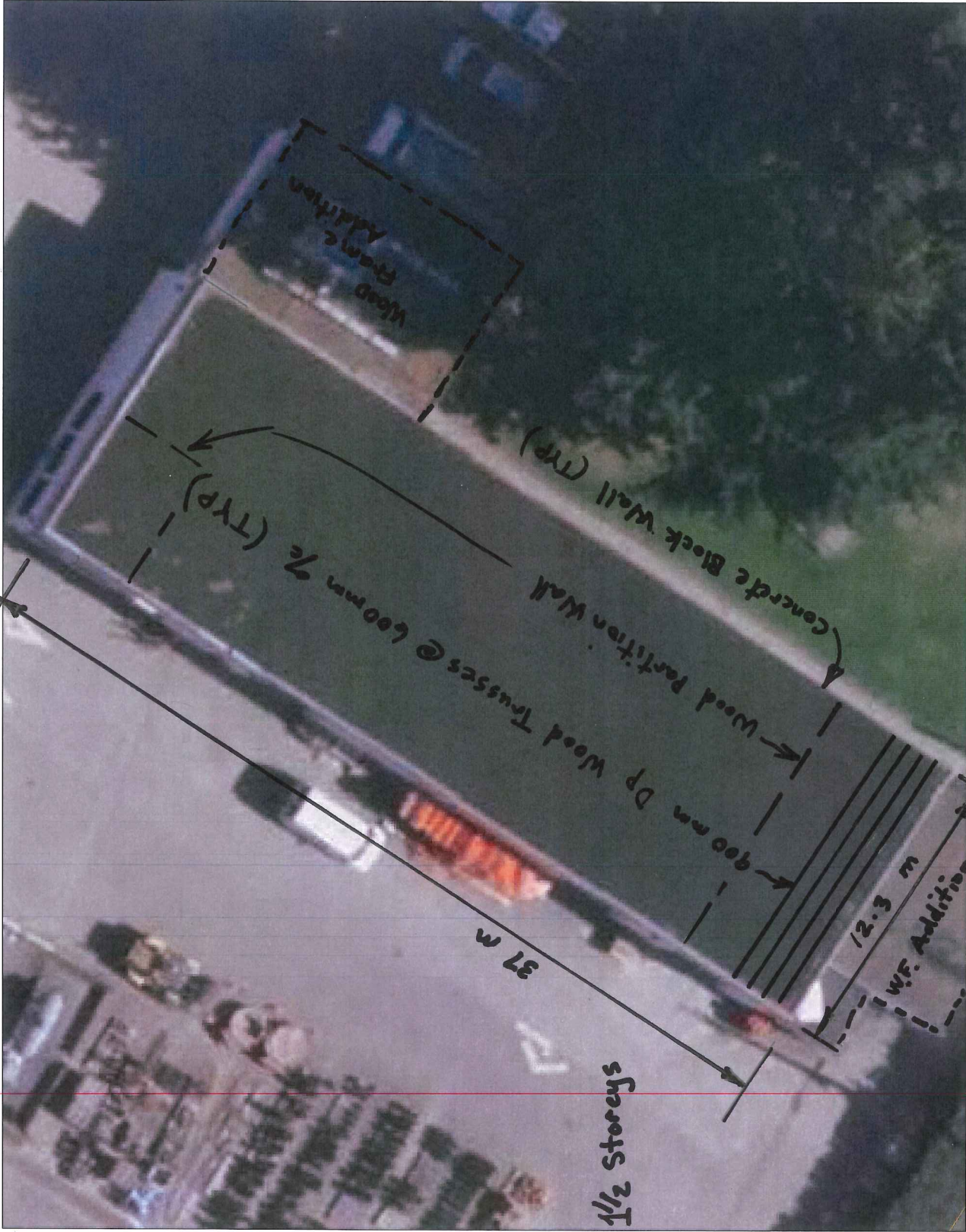
SOUTHWEST VIEW



NORTHEAST VIEW

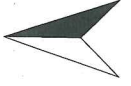
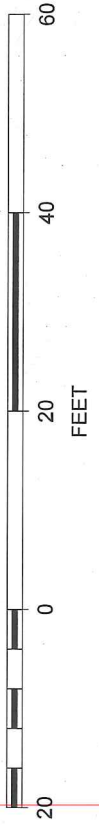


SOUTHEAST VIEW



SCALE 1 : 232

2020 Labieux PW Purchasing B25 N



**APPENDIX "G"
BUILDING COST ANALYSIS
CITY OF NANAIMO
PURCHASING & STORES BUILDING
2020 LABIEUX ROAD**



APPRAISAL BUILDING #: B25
GROSS FLOOR AREA: 6,186 FT²

CLASS: C & D

EFFECTIVE DATE: FEBRUARY 8, 2008
YEAR(S) BUILT: CIRCA 1985

BELOW GRADE ASSETS	CRN	CRNLD
EXCAVATION, BACKFILL AND SITE PREPARATION:	17,000	11,400
FOUNDATIONS:	23,900	16,000
ARCHITECTURAL OR ENGINEERING FEES:	3,400	2,300
TOTAL BELOW GRADE ASSETS:	44,300	29,700

ABOVE GRADE ASSETS		
BUILDING FRAMING:	15,300	10,200
FLOOR STRUCTURE:	42,700	28,700
INTERIOR CONSTRUCTION, MEZZANINES, STAIRS:	53,000	35,600
FLOOR AND CEILING FINISHES:	13,600	9,100
PLUMBING SYSTEM, FIXTURES, AND SEWERAGE:	17,000	11,400
HEATING, VENTILATION AND AIR CONDITIONING:	10,200	6,900
ELECTRICAL AND LIGHTING:	27,300	18,300
EXTERIOR WALL CONSTRUCTION, BALCONIES:	210,200	140,900
ROOF STRUCTURE, ROOF COVERING, AND CANOPIES:	80,200	53,800
FIRE PROTECTION:	-	-
ELEVATORS:	-	-
ADDITIONAL CONSTRUCTION:	-	-
ARCHITECTURAL OR ENGINEERING FEES:	32,500	21,800
TOTAL ABOVE GRADE ASSETS:	502,000	336,700

TOTAL BELOW AND ABOVE GRADE ASSETS:	546,300	366,400
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BUILDING CODES & BYLAWS		
PARKING SPACES	MEETS CODE	-
SPECIAL NEEDS ACCESS	MEETS CODE	-
FIRE PROTECTION	MEETS CODE	-
TOTAL BUILDING CODES & BYLAWS:		-

TOTAL YARD IMPROVEMENTS:	27,300	27,300
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TOTAL CRN COST:	573,600	393,700
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FOUNDATIONS:	REINFORCED CONCRETE FOUNDATIONS
FRAMING:	LOAD BEARING MASONRY & WD FRAME WALLS, PART STEEL
FLOOR STRUCTURE:	REINFORCED CONCRETE SLAB ON GRADE
INTERIOR CONSTRUCTION:	FRME & DRYWALL PARTITIONS, CARPET, HARDENER & SEALER
PLUMBING SYSTEM:	STANDARD FIXTURES & TYPICAL SERVICE FOR OCCUPANCY
H.V.A.C.:	ELECTRIC BASEBOARD WITH PART AIR CONDITIONING
ELECTRICAL AND LIGHTING:	STANDARD FIXTURES & TYPICAL SERVICE FOR OCCUPANCY
EXTERIOR WALLS:	PAINTED CONC. BLOCK, WOOD & VINYL SIDE ON WOOD FRAME
ROOF:	WOOD JOIST & WOOD DECK WITH BUILT-UP ROOFING
FIRE PROTECTION:	NO SPRINKLER SYSTEM - STANDARD FIRE DETECTION IN ELECTRICAL
ELEVATORS:	NIL
ADDITIONAL CONSTRUCTION:	NIL