

## Education Funding Department EDUC:EX

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**From:** Debby Sansome <DSansome@SD74.bc.ca>  
**Sent:** Friday, April 15, 2016 8:20 AM  
**To:** Woycheshin, John J EDUC:EX  
**Subject:** School Enhancement Program SD#53  
**Attachments:** School Enhancement Program - SD53.xlsx; VFA single page SESS Dust Collection.pdf; VFA Roof SESS.pdf; VFA Gang Shower SESS.pdf; SD #53 District Operations Woodshop- Sawdust Collection Syst Report & Estimate (Autosaved).pdf; Similkameen Elementary Secondary School - Shower Upgrade (April 14, 2016).pdf; Fixtures.pdf; SESS Ph.2 - Fan SCHEDULES.PDF; SESS Washrms-IFP-APRIL 11-14153-005.pdf; 14153-005-E1.pdf; SESSqot # 9456.doc; SOSS- Sawdust Collection Syst Report & Estimate.pdf; SO Secondary Woodshop Upgrade Estimate REVISED.pdf; Similkameen Elementary Secondary School Mechanical Assessment Report.pdf; Similkameen Elementary Secondary ESTIMATE.pdf

**Importance:** High

Good morning John

Please find attached the submission for School District #53 Okanagan Similkameen. Mechanical at SESS is still our largest outstanding item. We have been working on it bit by bit under our limited AFG but at this rate, it is going to take us another 20 years to get this done. It is our first priority.

Please let me know if you require anything further, or if I have missed anything.

Thank you

Deb

D. Sansome-CTech  
Director of Facilities  
SD#53(Okanagan Similkameen)  
SD#74(Gold Trail)  
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Requirement Name	Prime System	Category	Priority	Action Date	Cost
Domestic Water Heater - NG - Rheem Ruud Renewal	D2020-Domestic Water Distribution	Beyond Useful Life	3- Long Term	08/07/2017	9,278
Domestic Water Heaters - Gas Fired - Rheem Ruud - Sec. Gym Renewal	D2020-Domestic Water Distribution	Beyond Useful Life	3- Long Term	08/07/2020	47,913
Door Assembly - Double Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Long Term	08/07/2017	67,762
Door Assembly - Single Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Long Term	08/07/2017	33,663
DX Condensing Unit - Trane - Less Than 25 Tons Renewal	D3030-Cooling Generating Systems	Beyond Useful Life	3- Long Term	08/07/2015	14,230
Emergency Lighting - 1995 Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	3- Long Term	08/07/2018	11,582
Emergency Lighting Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	3- Long Term	08/07/2014	42,656
Epoxy (1995) Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Long Term	08/07/2017	20,330
Epoxy (2008) Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Long Term	08/07/2018	29,443
Exhaust System - Dust Collector Torit Renewal	D3040-Distribution Systems	Beyond Useful Life	3- Long Term	08/07/2017	15,871
Exhaust System - Fume Hood - Ductwork/Fan Renewal	D3040-Distribution Systems	Beyond Useful Life	3- Long Term	08/07/2015	14,066
Exhaust System - Garage Renewal	D3040-Distribution Systems	Beyond Useful Life	3- Long Term	08/07/2018	10,870
Exhaust System - General Building & Restroom Renewal	D3040-Distribution Systems	Beyond Useful Life	3- Long Term	08/07/2016	34,123
Exhaust System - Kitchen - Commercial Renewal	D3040-Distribution Systems	Beyond Useful Life	3- Long Term	08/07/2018	17,967
Exit Signs Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	3- Long Term	08/07/2018	36,911
Fire Alarm System Renewal	D5037-Fire Alarm Systems	Beyond Useful Life	3- Long Term	08/07/2014	162,175
Furnaces with AC - Lennox Gas Fired Residential Type - Mezz Renewal	D3050-Terminal and Package Units	Beyond Useful Life	3- Long Term	08/07/2020	16,716

The school is equipped with a security system which includes detection devices, key FOBs and keypads. The school also includes a CCTV system with 13 cameras.

**Other Electrical Systems**

The school is provided with emergency battery packs with both self-contained and remote heads.

Illuminated exit signs are provided over exit doors and in strategic positions in the corridors to indicate the direction to means of egress.

The secondary and elementary gyms are each equipped with an electronic scoreboard.

The exterior of the building contains an illuminated sign.

**REQUIREMENTS**

Requirement Name	Prime System	Category	Priority	Action Date	Cost
Built-Up-Roof (BUR) (1992) Renewal	B30-Roofing	Beyond Useful Life	1- Immediate	08/07/2012	318,754
DX Condensing Units - Lennox - Less Than 25 Tons Renewal	D3030-Cooling Generating Systems	Beyond Useful Life	1- Immediate	08/07/2012	23,111
Electrical Equipment - Storage in Front of Electrical Components	D5012-Low Tension Service and Dist.	Life Safety	1- Immediate	08/07/2012	423
Lighting - Exterior Renewal	D5022-Lighting Equipment	Beyond Useful Life	1- Immediate	08/07/2012	12,400
Rooftop Unitary Makeup Air - Eng Air - Heating Renewal	D3050-Terminal and Package Units	Beyond Useful Life	1- Immediate	08/07/2012	21,654
SBS Granulated Bitumen Membrane (1992) Renewal	B30-Roofing	Beyond Useful Life	1- Immediate	08/07/2012	424,420
Utility Sinks - Shops Renewal	D2010-Plumbing Fixtures	Beyond Useful Life	1- Immediate	08/07/2012	2,518
Walk-In Cooler/Freezer Renewal	D3050-Terminal and Package Units	Beyond Useful Life	1- Immediate	08/07/2012	36,425
Carpeting - Broadloom Renewal	C3020-Floor Finishes	Beyond Useful Life	2- Short Term	08/07/2013	24,913
Casework - Elementary School Renewal	E-Equipment and Furnishings	Beyond Useful Life	2- Short Term	08/07/2013	121,631
Casework - Secondary School Renewal	E-Equipment and Furnishings	Beyond Useful Life	2- Short Term	08/07/2013	140,188
Painted Finish (Exterior Walls) Renewal	B2010-Exterior Walls	Beyond Useful Life	2- Short Term	08/07/2013	67,750
Rooftop Unitary AC - Cooling w/Gas Heat - 1995 Renewal	D3050-Terminal and Package Units	Beyond Useful Life	2- Short Term	08/07/2013	35,624



(Drama) Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Long Term	08/07/2017	1,076
Potable Water Storage Tank - Steel - AO Smith Renewal	D2023-Domestic Water Supply Equipment	Beyond Useful Life	3- Long Term	08/07/2014	25,684
Public Address and Clock System Renewal	D5031-Public Address and Music Systems	Beyond Useful Life	3- Long Term	08/07/2014	199,141
Restroom Fixtures Renewal	D2010-Plumbing Fixtures	Beyond Useful Life	3- Long Term	08/07/2020	326,988
Roof Drainage - Gravity - Internal Leaders Renewal	D2040-Rain Water Drainage	Beyond Useful Life	3- Long Term	08/07/2017	251,150
Rooftop Unitary AC - Cooling w/Gas Heat - 2003 Renewal	D3050-Terminal and Package Units	Beyond Useful Life	3- Long Term	08/07/2018	195,930
Rooftop Unitary AC - Cooling w/Gas Heat - 2005 Renewal	D3050-Terminal and Package Units	Beyond Useful Life	3- Long Term	08/07/2020	40,206
Rubber Mats Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Long Term	08/07/2020	3,836
Sanitary Waste - Gravity Discharge - 1950 Renewal	D2030-Sanitary Waste	Beyond Useful Life	3- Long Term	08/07/2017	391,391
SBS Granulated Bitumen Membrane (2001) Renewal	B30-Roofing	Beyond Useful Life	3- Long Term	08/07/2021	81,347
Scoreboard Renewal	D5031-Public Address and Music Systems	Beyond Useful Life	3- Long Term	08/07/2014	21,370
Security System Renewal	D5038-Security and Detection Systems	Beyond Useful Life	3- Long Term	08/07/2014	92,598
Signage (Room Numbering and	C1035-Identifying				

# District Operations Wood Shop, 6057 Spartan Street, Oliver, BC School District No. 53 (Okanagan Similkameen) Sawdust Collection System Assessment Report 7 October 2015

## 1.0 Executive Summary

- 1) The comments in this report are based on a site survey dated **28 August, 2015**.
- 2) The dust collector is not adequately sized to service the wood shop machinery.
- 3) The duct system is severely undersized for the machinery in use.
- 4) Explosion prevention and mitigation devices are not in place.
- 5) The sawdust collection system does not meet code for filtered air or explosion prevention.
- 6) Six dust-generating machines are not currently connected to the collection system but must be connected to meet code.
- 7) A major upgrade of this system is necessary to meet code. The mechanical upgrade is **estimated at \$217,500**.

## 2.0 - Discussion of Existing Sawdust Collection System

### Dust Collector



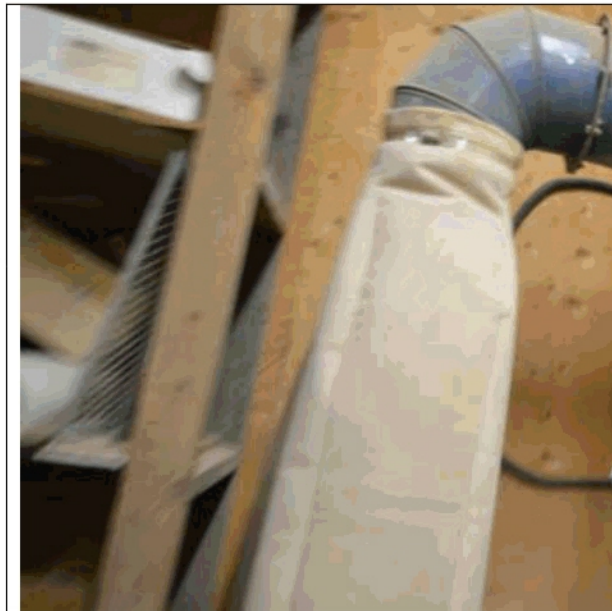
#### Observations:

- ◆ A Torit dust collector (Model 19-FB) is located in an interior room directly beside the woodshop.
- ◆ This unit can handle between **1,250 and 1,800** cubic feet per minute (cfm) of airflow.
- ◆ The dust-generating machinery in the woodshop requires a total airflow of **3,120 cfm**. This figure includes machinery that is **currently** connected and machinery that **should be** connected to the system.
- ◆ The dust collector is not adequately sized to service the machinery in the woodshop.

#### Recommendations:

- ◆ Replace the dust collector with an adequately sized model.

## Recirculated Air



### Observations:

- ◆ The dust collector returns filtered air to the woodshop through the filter bag shown at left.
- ◆ The collector is fitted with 1 filter bag totalling 25 sq. ft. of filter material. This gives an air-to-cloth ratio of approximately **72: 1**.
- ◆ For air returned to a woodshop, the required air-to-cloth ratio is 5: 1.

### Recommendations:

- ◆ Replace the dust collector with a larger unit with adequate filter media to meet the required air to filter cloth ratio of **5:1**.

## Explosion Ventilation Configuration



### Observations:




- ◆ The dust collector is not equipped with explosion relief panels.
- ◆ The main duct feeding the dust collector is not equipped with a blowback damper, nor is it equipped with a spark detection device.
- ◆ The room housing the dust collector is not equipped with explosion ducting.
- ◆ The collector room does not appear to have a fire rating of 1 hour.

### Recommendations:

- ◆ Replace the existing unit with an adequately sized collector that includes explosion panels.
- ◆ Install a main duct that includes a blowback prevention damper and a spark detection device.
- ◆ Install fire sprinklers on the return air duct.
- ◆ Install the new collector on the exterior of the building as shown in the **example** at left.



## Ducting

	<p>Observations:</p> <ul style="list-style-type: none"><li>♦ The main circular duct that feeds into the dust collector has a diameter of 6 inches. At the desired stream velocity, this duct can carry <b>800</b> cubic feet per minute (cfm). Current demand is <b>3,120</b> cfm. Current demand includes both equipment <i>currently</i> connected and equipment that <i>should be</i> connected.</li><li>♦ The main duct is severely undersized for the equipment in the woodshop.</li></ul> <p>Recommendations:</p> <ul style="list-style-type: none"><li>♦ Replace the main duct with an adequately sized duct.</li><li>♦ Include a blowback prevention damper and a spark detection device.</li></ul>
	<p>Observations:</p> <ul style="list-style-type: none"><li>♦ The chop saw, shown at top left, as well as the spindle sander and band saw, shown at bottom left are three of the six dust-generating machines in the shop that are not connected to the collection system.</li></ul> <p>Recommendations:</p> <ul style="list-style-type: none"><li>♦ Install a new dust collection system that includes the six unconnected dust-generating machines to meet code.</li></ul>
	

## Ducting (cont.)



### Observations:

- ◆ The photo at left shows an open duct plugged with a water bottle. The duct also includes a rubber or plastic fitting.
- ◆ The adjacent duct is sealed with foil tape.

### Recommendations:

- ◆ Remove the rubber or plastic fitting with a metallic alternative.
- ◆ If the duct can not be sealed by the knife gate above the water bottle, replace the knife gate to ensure a proper seal.
- ◆ Remove all foil tape and replace with duct sealant.



### Observations:

- ◆ The collection duct shown at left is sealed with duct tape and includes more than 2 feet of flexible ducting.
- ◆ Code limits the use of flexible ducting to 2 feet per connection.

### Recommendations:

- ◆ Remove duct tape wherever it is used and replace with duct sealant.
- ◆ Install rigid metallic ducting to replace flexible ducting.



### 3.0 - Housekeeping



#### Observations:

- ◆ Housekeeping was observed to be adequate on the day of our visit.

#### Recommendations:

- ◆ Adjust housekeeping practices to keep accumulations close to nil.
- ◆ Install a new dust collection system and connect the six un-connected machines to assist in housekeeping efforts.
- ◆ Reduce the amount of clutter in the shop to reduce time spent on housekeeping.



#### Observations:

- ◆ As shown in the photo at left, the table saw held sawdust accumulation.
- ◆ Thin strips of wood can fall into the collection box and then act to corrupt the flow of suction air.

#### Recommendations:

- ◆ Ensure that table saws are checked and cleaned on a regular basis.

## **4.0 - Considerations for Mechanical System Upgrade**

The sawdust collection system fails to meet codes and regulations on several points. We recommend a major upgrade of the system to rectify these failures. A major upgrade would involve the replacement of the existing dust collector and the existing duct system.

We recommend that a new overhead duct system designed to include all dust-generating machinery.

Explosion protection devices are needed to meet code. A blowback prevention damper and a spark detection device must be included in the upgrade.

It is recommended that that the new collector be installed on the exterior of the building to give complete explosion ventilation.

Guy Harding, P. Eng

**District Operations Woodshop, 6057 Spartan Street, Oliver, BC**

7-Oct-2015

**Sawdust Collection System Upgrade Estimate****TOTAL**

Demolition	2	man day	@	\$800	/man day	\$1,600
New Dust Collector	1	units	@	\$58,000	/units	\$58,000
Installation + Hoisting	1	units	@	\$10,000	/units	\$10,000
Chainlink Fence + Concrete Pad	0	units	@	\$5,000	/units	\$0
Blowback Prevention Damper	1	units	@	\$8,000	/units	\$8,000
Spark detection device.	1	units	@	\$4,000	/units	\$4,000
Explosion Venting	0	units	@	\$4,000	/units	\$0

**Safety Devices Required on Systems more than 5000 cfm**

Device 1	0	units	@	\$1,000	/units	\$0
Device 2	0	units	@	\$2,000	/units	\$0
Device 3	0	units	@	\$4,000	/units	\$0

New Equipment Pickup	10	pickup	@	\$1,500	/pickup	\$15,000
New Branch- Machine to Main	10	pickup	@	\$1,000	/pickup	\$10,000
New Main Duct	10	pickup	@	\$1,000	/pickup	\$10,000
Recirculation System	1	units	@	\$10,000	/units	\$10,000
Carpentry	1	allow	@	\$2,500	/allow	\$2,500
Roofing	0	allow	@	\$2,500	/allow	\$0
Electrical	1	units	@	\$5,000	/units	\$5,000

Subtotal						\$134,100	<b>\$134,100</b>
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Escalation (current US\$ exchange & travel time)	30%			\$40,300	\$40,300
Misc and Contingency	15%			\$20,200	\$20,200
Fees and Disbursements	12%			\$16,100	\$16,100
taxes (GST)	5%			\$6,800	\$6,800

**PROJECT TOTAL****\$217,500**

School Name:		School District #53 - Similkameen Elementary / Secondary School		
Project No:		#		
Project Description:		Renovation - Shower Upgrade		
A R E A - U N I T  R A T E	Allowable Site Area (ha)		0	
	Allowable Building Area (sqm)			
	Total Allowable Renovation Area		38	
	Less: Previously Existing Space		0	
	Add: Area to be Demolished		0	
	Area of New Space		0	
	Area of Neighbourhood Learning Centre		0	
	Allowable Area of Renovations		38	
	Unit Rate for Construction (\$/sqm) [based on 2nd Qtr, 2016 Unit Rates]			
	New		\$0.00	
Renovation		\$3,741.99		
E L I G I B L E  E X P E N D I T U R E S	<b>PROJECT BUDGET</b>			<b>Amounts Subject to Economic Adjustment</b>
	1 Site Acquisition		\$0	
	2 Site Development		\$0	\$0.00
	3 New Construction		\$0	\$0.00
	4 Renovation - Shower Upgrade		\$142,196	\$142,195.56
	5 Design Fees and Disbursements (16%)		\$22,751	\$22,751.29
	6 Construction Contingency (5%)		\$7,110	\$7,109.78
	7 Equipment		\$0	
	8 Municipal Permits, DCC's & Fees		\$1,194	
	<b>Documented Supplementary Items</b> (including fees and related costs)			
	9 Supplementary Site		\$0	\$0.00
	10 Supplementary Building		\$0	\$0.00
	11 Off-Site Costs		\$0	\$0.00
	12 List of Other Budget Items i. Feasibility Study and Completion Costs		\$0	
	ii. Phasing		\$0	
	13 Sub-Total		\$173,251	
	14 Rebated Taxes	4.40%	\$7,623	
	(A) Total Project Budget (excluding Reserve Items)		\$180,874	
	(B) Total Project Budget Eligible for Economic Adjustment			\$172,056.63
	<b>RESERVE ITEMS</b> (as per Schedule C - Reserve Items)			
1 Nil		\$0		
(C) Maximum "Not to Exceed" Contingency	Sub-Total	\$0		
(D) Estimated Economic Adjustment (from Location Factor as of 2nd Qtr, 2016 to Tender Close 3rd Qtr 2016 - 3% per year for 3 months)			\$1,720.57	
(E) Total Reserve Items		\$1,721	[=C+D]	
(F) MAXIMUM POTENTIAL PROJECT COST (including Reserve Items)		\$182,595	[=A+E]	
U N D E R S T O O D  S O U R C E	(G) Capital Plan [as per Capital Project Funding Agreement, subparagraph 3.01(a)]		\$180,874	
	(H) Ministry of Education Restricted Capital [as per paragraph 3.04]			
	(I) Borrowing [as per paragraph 3.05]			
	(J) Local Capital Reserve [as per subparagraph 4.02(e)]			
	(K) Annual Facility Grant [as per subparagraph 4.02(e)]			
	(L) Other (specify) [as per subparagraph 4.02(e)]			
	Sub-Total		\$180,874	[=A]
	(M) Capital Plan - Identified Risks [as per sub-paragraph 3.01(b)]		\$0	[=C]
	(N) Capital Plan - Estimated Economic Adjustment [as per subparagraph 3.01(c)]		\$1,721	[=D]
	Sub-Total		\$1,721	[=E]
(O) MAXIMUM POTENTIAL PROJECT FUNDING (includes Lines G, H, I, J, K, L, M and N)		\$182,595	[=F]	



School Name:

School District #53 - Similkameen Elementary / Secondary School

Project No:

#

Project Description:

Renovation - Shower Upgrade

**RENOVATIONS****Demolition comprising:**

Chop up existing slab on grade including disposal  
 Demolish existing concrete block walls including disposal  
 Remove existing door  
 Remove existing lockers  
 Remove existing locker base  
 Remove existing wall tile including disposal  
 Remove existing floor tile including disposal  
 Remove existing T-bar ceilings  
 Remove existing millwork vanity  
 Remove existing millwork benches  
 Remove existing hand dryer and washroom accessories and hand over to owner

8	m2	\$50.00	\$400
4	m2	\$40.00	\$160
1	No	\$40.00	\$40
19	No	\$15.00	\$285
7	m	\$50.00	\$350
21	m2	\$25.00	\$525
18	m2	\$25.00	\$450
38	m2	\$12.00	\$456
2	m	\$60.00	\$120
2	m	\$50.00	\$100
1	l/s	\$150.00	\$150

**Architectural comprising:**

Single door, hardware and finish  
 Waterproofing floor and wall surface to receive new finishes  
 Quarry floor tiles  
 Ceramic wall tiles  
 Concrete masonry walls  
 Painted drywall ceilings  
 Access ceiling hatch  
 Epoxy paint block walls  
 Remove and replace toilet partition end to allow for thickness and tiles  
 Vanity unit  
 Shower rod and curtain  
 Re-locate hand dryers  
 Mirrors  
 Re-located lockers  
 Folding shower bench  
 Folding shower seat  
 Shower bench  
 Miscellaneous rough carpentry  
 Miscellaneous metals  
 Saw cut, coring, patching, fire stopping, etc  
 Signage allowance

1	No	\$950.00	\$950
80	m2	\$40.00	\$3,200
18	m2	\$120.00	\$2,160
62	m2	\$120.00	\$7,440
22	m2	\$180.00	\$3,960
38	m2	\$65.00	\$2,470
1	No	\$750.00	\$750
160	m2	\$10.00	\$1,600
1	l/s	\$500.00	\$500
1.8	m	\$600.00	\$1,080
8	No	\$280.00	\$2,240
1	No	\$50.00	\$50
1	no	\$150.00	\$150
5	No	\$50.00	\$250
1	No	\$550.00	\$550
1	No	\$500.00	\$500
3	No	\$350.00	\$1,050
1	l/s	\$1,000.00	\$1,000
1	l/s	\$1,000.00	\$1,000
1	l/s	\$2,500.00	\$2,500
1	l/s	\$500.00	\$500

**Mechanical comprising:**

domestic shut-off valves  
 cold water  
 hot water  
 sanitary drain  
 vent pipework  
 clean-outs  
 floor / shower drains  
 lavatory  
 individual shower  
 mixing valve  
 remove existing plumbing  
 remove existing HVAC ductwork  
 fans, etc  
 ductwork  
 controls

10	No	\$75.00	\$750
30	m	\$90.00	\$2,700
25	m	\$95.00	\$2,375
25	m	\$115.00	\$2,875
21	m	\$85.00	\$1,785
5	No	\$100.00	\$500
5	No	\$300.00	\$1,500
2	No	\$1,100.00	\$2,200
4	No	\$1,500.00	\$6,000
4	No	\$500.00	\$2,000
1	l/s	\$1,500.00	\$1,500
1	l/s	\$1,000.00	\$1,000
1	No	\$1,000.00	\$1,000
38	m2	\$85.00	\$3,230
1	l/s	\$1,500.00	\$1,500



School Name:		School District #53 - Similkameen Elementary / Secondary School		
Project No:		#		
Project Description:		Renovation - Shower Upgrade		
site set-up, test & commission/balancing, manuals, etc		1 l/s	\$2,500.00	\$2,500
<b>Electrical comprising:</b>				
Remove existing lighting fixtures, and set aside for re-use		1 l/s	\$1,000.00	\$1,000
Permit & site set-up		1 l/s	\$1,000.00	\$1,000
Panel modifications		1 l/s	\$1,500.00	\$1,500
Grounding & bonding		1 l/s	\$750.00	\$750
Fixture type - washroom / general vanity		8 No	\$95.00	\$760
Fixture type - shower pot-lights		4 No	\$200.00	\$800
Fixture installation		12 No	\$75.00	\$900
Conduit & wire		12 No	\$175.00	\$2,100
Switches		4 No	\$85.00	\$340
Roof mounted receptacle		1 No	\$1,000.00	\$1,000
Occupancy sensors		2 No	\$350.00	\$700
Mechanical power supplies		1 l/s	\$1,500.00	\$1,500
Modifications to speakers and fire alarm		1 l/s	\$750.00	\$750
<b>Structural comprising:</b>				
150mm Concrete slab sloped to falls including dowels into existing		18 m2	\$150.00	\$2,700
Concrete foundation size 400mm x 200mm including excavation, concrete, formwork, reinforcement and backfill		7 m	\$500.00	\$3,500
Miscellaneous roof structural requirements for fan, roof mounted receptacle		1 l/s	\$1,500.00	\$1,500
<b>General Allowances comprising:</b>				
General Contractors Requirements and Fee		1 l/s		\$27,345
Design Contingencies (10%)		1 l/s		\$23,699
<b>Total Renovation Requirements</b>				<b>\$142,196</b>
<b>ECONOMIC ADJUSTMENT</b>				
Location Factor Date				2nd Quarter 2016
Anticipated Tender Close				3rd Quarter 2016
Interval				3 months
Projected Economic Adjustment				0.25% per month
Total Economic Adjustment Factor				0.75%
Total Project Budget Eligible for Economic Adjustment				\$172,057
<b>Estimated Economic Adjustment Amount</b>				<b>\$1,290</b>

Project: SESS Changeroom Upgrade  
Location: Keremeos, BC  
Engineer Firm: SMITH AND ANDERSEN  
Date: 08 April 2016

L-1



#### COUNTER MOUNTED SELF-RIMMING / DROP-IN BASIN ELECTRONIC FAUCET BELOW DECK MECHANICAL WATER MIXING VALVE

**Franke Commercial V1821 Series #OV1821/5/3 basin**, 3 holes, 4" (102 mm) center, 533 mm x 457 mm x 127 mm (21" x 18" x 5") high, oval, grade 18-10 18 GA. (1.2 mm) type 304 stainless steel, mirror finished rim, Self-rimming / Drop-in, rear overflow, back faucet ledge, undercoated to reduce condensation and resonance, mounting kit provided. **Provide basin rim sealant. Delta Tech #591T Series Electronic faucet**, chrome plated, 4" (102mm) centerset, cast brass, 1.9 LPM (0.5 GPM) aerator spray outlet, infrared sensor with screw adjustable range, undercounter filtered solenoid valve with serviceable strainer filter, module control assembly housed in splash proof junction box, four AA-size alkaline batteries (included). **Lawler #TMM-1070, Below Deck Mechanical Water Mixing Valve**, bronze body, temperature adjusting dial, 10 mm (3/8") inlets and outlet compression fittings, high temperature thermostatic limit stop, shut-off with automatic reset when temperature exceeds 120 °F (48.8 °C), integral checks, offer temperature range from full cold through 46 °C (114.8 °F). **Provide tee, adaptors and flex. copper tubing to suit installation. McGuire #155WC Offset Open Grid Drain**, cast brass one piece top, 17 GA. (1.5 mm) mm tubular 32 mm (1-1/4") tailpiece. **McGuire #LFH170BVRB, Faucet Supplies**, chrome plated polished brass, commercial duty 1/4 turn ball valve angle stops, 13 mm (1/2") I.D. Inlet x 127 mm (5") horizontal extension tubes, combination V.P. Loose key handles, escutcheon and stainless steel braided flexible risers. **McGuire #8872C P-Trap**, heavy cast brass adjustable body, with slip nut, 32 mm (1-1/4") size, shallow wall flange and seamless tubular wall bend. **McGuire PROWRAP #PW2000WC Sanitary Covering vandal-resistant**, flexible seamless moulded closed-cell PVC resin, formulated with anti-microbial additive to limit the growth of fungus and bacteria, to exposed piping (to protect against heat/contusions) as per local codes..

SH-1

#### SHOWER - BUILT-ON SITE - PUSH BUTTON ELECTRONIC SHOWER

**Delta Teck #860T1**, push button electronic shower system, SS cover with vandal-resistant mounting screws. **Delta institutional shower head**, cast brass, vandal-proof screws, integral mounting bracket, 30 degree spray angle, 5.7 LPM (1.5 GPM) maximum flow rate. Tempered water supplied by existing thermostatic mixing valve. Provide backing in wall to suit. Provide **Delta Teck**

**#060704A or 060772A** transformer for each group of fixtures as noted on drawings. **Watts #FD-100-C-A Floor Drain**, epoxy coated cast iron, anchor flange, 5" (127mm) adjustable round nickel bronze strainer, reversible clamping collar with primary & secondary weepholes. **Provide P-Trap**, same material as the connecting pipe drain.

## SH-2



### SHOWER - BUILT-ON SITE - HAND SHOWER - BARRIER-FREE DESIGN

**Delta Teck #860T1**, push button electronic shower system, SS cover with vandal-resistant mounting screws. Comply to local codes for Shower Control location and Trim Kit requirements. **Delta Commercial slide bar, 24" (610mm)**, 5.7 LPM (1.5 GPM) maximum flow rate, handheld spray head, 60" (1524mm) flexible metal hose, wall supply elbow with flange, in-line duo check. **Watts #FD-100-C-A Floor Drain**, epoxy coated cast iron, anchor flange, 5" (127mm) adjustable round nickel bronze strainer, reversible clamping collar with primary & secondary weepholes. **Provide P-Trap**, same material as the connecting pipe drain.

Similkameen Elementary Secondary Boys Shower Upgrade			
Fan Schedule			
Ident		EF - 111	EF - 111
Status		Existing	New
Location		Boys Change Room 111	Roof
Service		Boys Change Room 111	Boys Change Room 111
Description		Cabinet - In Line	Roof Mount - Spun Aluminum
Manufacturer		Greenheck	Cook
Model			100SRSH17D
Nominal Size			
Air Flow l/s		340	340
External Air Pressure Drop Pa		125	81
Width mm		0	30
Length mm		0	30
Height mm		0	24
Diameter mm		0	-
Weight kg		0	56
Motor W		0.0	124.5
Voltage/Phase		-	208/1

Accessories	-	<ul style="list-style-type: none"><li>• Direct Drive</li><li>• EC Motor With Factory Mounted Speed Control</li><li>• Down Blast</li><li>• Internal Vibration Isolation</li><li>• Low Leak Backdraft Damper</li><li>• Prewired Disconnect</li><li>• Local Control thru Controls Agent</li><li>• 350 mm Insulated Roof Curb</li><li>• Bolt Fan to Curb with 4 Lag Screws</li></ul>
Electrical Coordination	-	<ul style="list-style-type: none"><li>• HOA</li><li>• Control by Motion Detection</li></ul>





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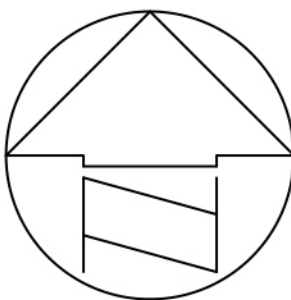


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1	2016/04/11	ISSUED FOR PRICING
2	-	-



PROJECT TITLE

Similkameen Elementary /  
Secondary School Upgrades,  
School District #53



Keremeos, B.C.

DRAWING TITLE

FOUNDATION & FLOOR  
PLANS - PLUMBING &  
DRAINAGE

DESIGNED BY: TK	DRAWN BY: JB
EOR: AS	REVIEWED BY:
SCALE: AS NOTED	DATE: APR, 2016
PROJECT NO.	DRAWING NO.

14153.005 M1.0

1  
M1.0  
BATHROOM FOUNDATION PLAN – PLUMBING & DRAINAGE  
1 : 50

2  
M1.0  
BATHROOM FLOOR PLAN – PLUMBING & DRAINAGE  
1 : 50

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	PIPE DROP OR FROM BELOW		COMBINATION BALANCING AND METERING VALVE		DOMESTIC COLD WATER (DCW)		NATURAL GAS
	PIPE UP OR FROM ABOVE		CONSTANT FLOW DEVICE		DOMESTIC HOT WATER (DHW)		NATURAL GAS VENT
	VALVE		CHECK VALVE		DOMESTIC HOT WATER RECIRCULATION (DHWRC)		PROPANE GAS
	SAFETY RELIEF VALVE		BACKFLOW PREVENTOR		TEMPERED DOMESTIC HOT WATER		COMPRESSED AIR
	UNION OR FLANGE FITTING		PRESSURE REDUCING VALVE		IRRIGATION SYSTEM PIPING		ACID VENT
	FLEXIBLE CONNECTION		STRAINER		SANITARY ABOVE GRADE OR FLOOR		ACID WASTE
	HOSE BIBB		REDUCERS		SANITARY BELOW GRADE OR FLOOR		SANITARY VENT
	PLUMBING FIXTURE (TYPE NOTED)		PUMP		STORM ABOVE GRADE OR FLOOR		GREASE INTERCEPTOR ABOVE GRADE
	WALL HYDRANT		VENT THROUGH ROOF		STORM BELOW GRADE OR FLOOR		GREASE INTERCEPTOR BELOW GRADE
	THERMOMETER		PRESSURE GAUGE		PUMP SANITARY DRAIN		INDIRECT DRAIN (CONDENSATE, ETC.)
	VACUUM BREAKER		FLOW SWITCH		PUMP STORM DRAIN		FOUNDATION DRAIN
	WATER TEMPERATURE SENSOR		PRESSURE SWITCH		NON-POTABLE WATER		COLD WATER IRRIGATION
	PRESSURE TEMPERATURE PLUG		COMPRESSED AIR OUTLET		IRRIGATION		HOT WATER IRRIGATION
	FLOOR DRAIN SIZE AS NOTED REFER TO SPECIFICATION FOR TYPES		FLOOR DRAIN FROM ABOVE WITH TRAP		SQUARE EXTERIOR AREA DRAIN		MANHOLE
	FUNNEL FLOOR DRAIN SIZE AS NOTED REFER TO SPECIFICATION FOR TYPES		UPTURNED CLEANOUT		CIRCULAR AREA DRAIN		MANHOLE CATCH BASIN
	HUB DRAIN SIZE AS NOTED REFER TO SPECIFICATION FOR TYPES		HORIZONTAL CLEANOUT		THRUST BLOCK		CATCH BASIN
	ROOF DRAIN SIZE AS NOTED REFER TO SPECIFICATION FOR TYPES		GAS TURRET		GAS METER		WATER METER

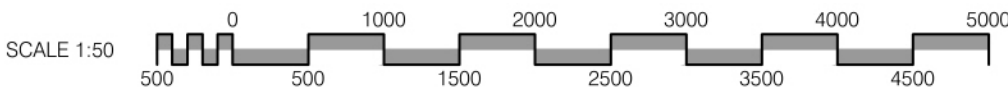
NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

3  
M1.0  
PLUMBING AND DRAINAGE SYMBOLS AND ABBREVIATIONS

4  
M1.0  
KEY  
N T S  
P L A N

DRAWING NOTES APPLY WHERE INDICATED:

1. BEAM OVER.
2. BULKHEAD OR FURRING.
3. CAP FOR FUTURE.
4. EXISTING TO REMAIN IN SERVICE.
5. EXISTING TO BE ABANDONED. REMOVE AS REQUIRED TO SUIT NEW CONSTRUCTION.
6. EXISTING TO BE RELOCATED.
7. EXISTING TO BE REMOVED.
8. CAP EXISTING IN THIS APPROXIMATE LOCATION.
9. CONNECT TO EXISTING IN THIS APPROXIMATE LOCATION.
10. REFER TO LARGE SCALE PLAN.
11. FOR CONTINUATION, SEE SITE SERVICES.
12. ROOF ACCESS.
13. CEILING ACCESS.
14. BUILDING GAS SERVICE AND METER.
15. CLEAN-OUT AT GRADE. REFER TO DETAIL.
16. RUN PIPE AT 2% SLOPE WHERE INDICATED BY DRAWING NOTE.
17. IRRIGATION WATER SERVICE.
18. ROUGH-IN HOT, COLD, WASTE AND VENT PIPING IN WALL FOR FUTURE FIXTURE.
19. PROVIDE 38mm TRAPPED WASTE AND 12mm VALVED HOT WATER SUPPLY TO SUIT DISHWASHER.
20. MOUNT ON STAND. DRAIN TO CUSTODIAN SINK.
21. GAS PRV (FROM 34kPa TO 3.5kPa) C/W ISOLATION VALVE. PROVIDE PRV VENT AS PER GAS CODE.
22. GAS SUPPLY UP TO ROOF MOUNTED EQUIPMENT. REFER TO DETAIL.
23. EXTEND DOMESTIC WATER SERVICE TO THIS POINT AND DISTRIBUTE HOT AND COLD SUPPLY TO EACH FIXTURE IN THE ROOM.
24. 75mm BUILDING VENT.
25. EXISTING TEMPERED MIXING VALVE.





SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	ELBOW DROPPING		CHECK VALVE
	ELBOW RISING		BACKFLOW PREVENTOR
	VALVE		STRAINER
	CONTROL VALVES		REDUCERS
	SAFETY RELIEF VALVE		PUMP
	UNION OR FLANGE FITTING		COMBINATION BALANCING AND METERING VALVE
	FLEXIBLE CONNECTION		CONSTANT FLOW DEVICE
	MANUAL AIR VENT		AUTOMATIC AIR VENT
	THERMOMETER		PRESSURE GAUGE
	FLOW SWITCH		AIR OR WATER FLOW IN L/S
	PRESSURE SWITCH		REFRIGERANT SIGHT GLASS
	WATER TEMPERATURE SENSOR		SQUARE ELBOW DUCT WITH TURNING VANE
	PRESSURE TEMPERATURE PLUG		FIRE DAMPER
	ELECTRIC THERMOSTAT/TEMPERATURE SENSOR		MOTOR OPERATED DAMPER
	VISUAL FLOW INDICATOR		BALANCING DAMPER
	SUPPLY OR OUTSIDE AIR DUCT UP OR FROM ABOVE		GRAVITY OR BACKDRAFT DAMPER
	SUPPLY DUCT OR OUTSIDE AIR DUCT DOWN OR FROM BELOW		ROUND SUPPLY DIFFUSER
	RETURN OR EXHAUST DUCT UP OR FROM ABOVE		DUCTED RETURN OR EXHAUST REGISTER OR GRILLE
	RETURN OR EXHAUST DUCT DOWN OR FROM BELOW		SQUARE OR RECTANGULAR DIFFUSER
	ROUND DUCT UP OR FROM ABOVE		NON DUCTED RETURN OR EXHAUST GRILLE
	ROUND DUCT DOWN OR FROM BELOW		NON DUCTED ROUND RETURN OR EXHAUST GRILLE
	ACOUSTIC LINED DUCT		SUPPLY AIR BOOT DIFFUSER C/W FLEXIBLE DUCT
	FLEXIBLE CONNECTION		DUCT MOUNTED SUPPLY OR RETURN GRILLE
	FLEXIBLE DUCTWORK		LINEAR SUPPLY OR RETURN GRILLE
	DOOR GRILLE		WALL FIN ELEMENT IN CONTINUOUS ENCLOSURE
	DIFFUSER GRILLE OR REGISTER TYPE		HEATING ELEMENT TAG
	NECK OR FACE SIZE (Inches or mm) 150# 300 AIR FLOW (CFM or L/s)	ENCLOSURE TYPE A 1200W 1844	HEATING CAPACITY ACTIVE ELEMENT LENGTH
	HWS HEATING WATER SUPPLY		HWCS HEAT PUMP WATER SUPPLY
	HWR HEATING WATER RETURN		HWCR HEAT PUMP WATER RETURN
	CHS CHILLED WATER SUPPLY		GSS GROUND SOURCE SUPPLY
	CHR CHILLED WATER RETURN		GSR GROUND SOURCE RETURN
	CDS CONDENSER WATER SUPPLY		RS REFRIGERATION SUCTION
	CDR CONDENSER WATER RETURN		RL REFRIGERATION LIQUID
	AIR SEPARATOR		HEAT TRACE

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

2 HVAC SYMBOLS AND ABBREVIATIONS

s.15

2 BATHROOM FLOOR PLAN – HVAC

1 : 50

DRAWING NOTES APPLY WHERE INDICATED:

1. BEAM OVER.

2. BULK-HEAD OR FURRING.

3. CAP FOR FUTURE.

4. EXISTING TO REMAIN IN SERVICE.

5. EXISTING TO BE ABANDONED. REMOVE AS REQUIRED TO SUIT NEW CONSTRUCTION.

6. EXISTING TO BE RELOCATED.

7. EXISTING TO BE REMOVED.

8. CAP EXISTING IN THIS APPROXIMATE LOCATION.

9. CONNECT TO EXISTING IN THIS APPROXIMATE LOCATION.

10. REFER TO LARGE SCALE PLAN.

11. FOR CONTINUATION, SEE SITE SERVICES.

12. ROOF ACCESS.

13. CEILING ACCESS.

14. DUCT IN JOIST SPACE.
15. DUCT TIGHT TO UNDERSIDE OF STRUCTURE IN CEILING SPACE.

16. ALL DUCT RUNOUTS TO DIFFUSERS ARE TO BE DIFFUSER NECK SIZE UNLESS OTHERWISE INDICATED.

17. PROVIDE MANUAL VOLUME DAMPER. PROVIDE ACCESS AS REQUIRED.

18. MOUNT GRILLE 200mm ABOVE FLOOR LEVEL.

19. DUCT UP TO GOOSENECK ON ROOF.

20. MOUNT AT HIGH LEVEL.

21. PROVIDE BACKDRAFT DAMPER AT BUILDING ENVELOPE PENETRATION. REFER TO SPEC.

22. PROVIDE TRANSITION FOR DUCT UNDER BEAM.

23. ELECTRIC HEAT BY OTHERS.

24. GRAVITY BACKDRAFT DAMPER.

25. PROVIDE FIRE DAMPER AT FIRE SEPARATION.

26. RE-BALANCE EXISTING GRILLE OR DIFFUSER TO NEW SPECIFIED AIR FLOW.



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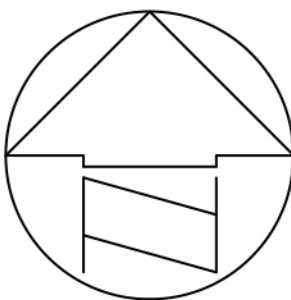
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PROJECT TITLE

Similkameen Elementary /  
Secondary School Upgrades,  
School District #53



Keremeos, B.C.

DRAWING TITLE

FLOOR PLAN - HVAC

DESIGNED BY: TK

DRAWN BY: JB

EOR:

AS

REVIEWED BY:

SCALE: AS NOTED

DATE: APR, 2016


PROJECT NO.

DRAWING NO.

14153.005

M2.0

3 KEY PLAN

- DRAWING NOTES APPLY WHERE INDICATED: 
1. BEAM OVER.

2. BULKHEAD OR FURRING.

3. CAP FOR FUTURE.

4. EXISTING TO REMAIN IN SERVICE.

5. EXISTING TO BE ABANDONED. REMOVE AS REQUIRED TO SUIT NEW CONSTRUCTION.

6. EXISTING TO BE RELOCATED.

7. EXISTING TO BE REMOVED.

8. CAP EXISTING IN THIS APPROXIMATE LOCATION.

9. CONNECT TO EXISTING IN THIS APPROXIMATE LOCATION.

10. REFER TO LARGE SCALE PLAN.

11. FOR CONTINUATION, SEE SITE SERVICES.

12. ROOF ACCESS.

13. CEILING ACCESS.

14. GOOSENECK ON ROOF.

15. GAS PRV (FROM 3/4"p TO 3/8"p) C/W ISOLATION VALVE. CONNECT TO ROOF TOP HEATING UNIT. REFER TO DETAIL.





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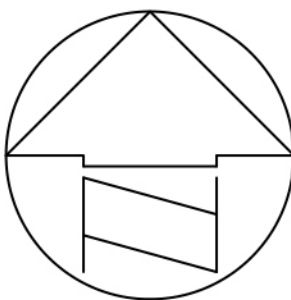
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School District #53



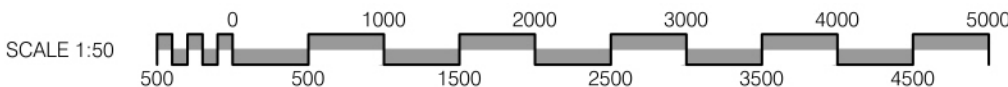
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PRELIMINARY ROOF PLAN

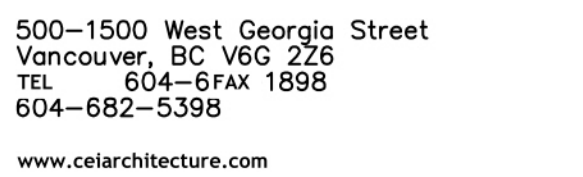
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SCALE: AS NOTED	DATE: APR, 2016

PROJECT NO. DRAWING NO.

14153.005 M2.1







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PROJECT TITLE

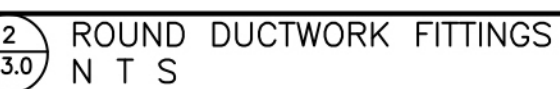
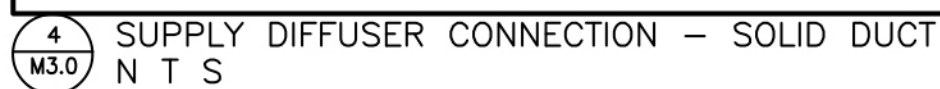
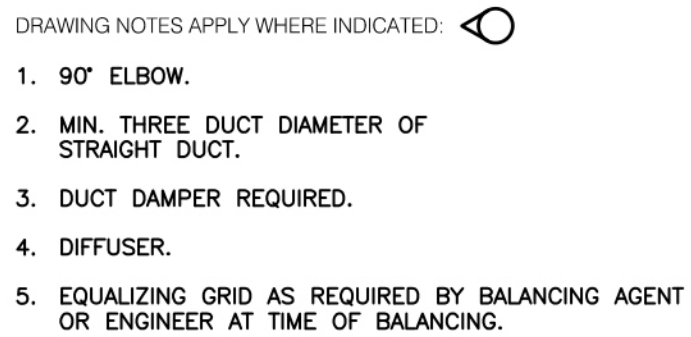
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EOR: AS	REVIEWED BY:
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PROJECT NO.	DRAWING NO.

14153.005 M3.0







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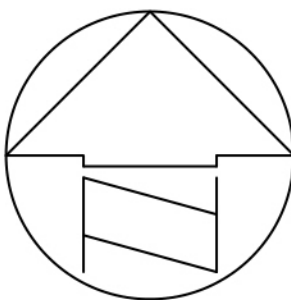
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PROJECT TITLE

Similkameen Elementary /  
Secondary School Upgrades,  
School District #53



Keremeos, B.C.

DRAWING TITLE

FOUNDATION & FLOOR  
PLANS - PLUMBING &  
DRAINAGE DEMOLITION

DESIGNED BY: TK      DRAWN BY: JB  
EOR: AS      REVIEWED BY:  
SCALE: AS NOTED      DATE: APR, 2016

PROJECT NO.      DRAWING NO.

14153.005      M4.0

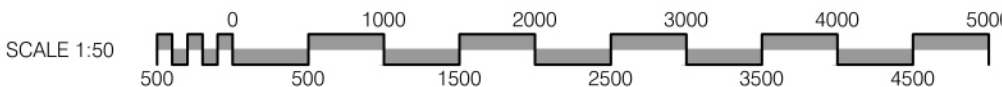
1  
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BATHROOM FOUNDATION PLAN – PLUMBING & DRAINAGE DEMOLITION  
1 : 50

2  
M4.0  
BATHROOM FLOOR PLAN – PLUMBING & DRAINAGE DEMOLITION  
1 : 50

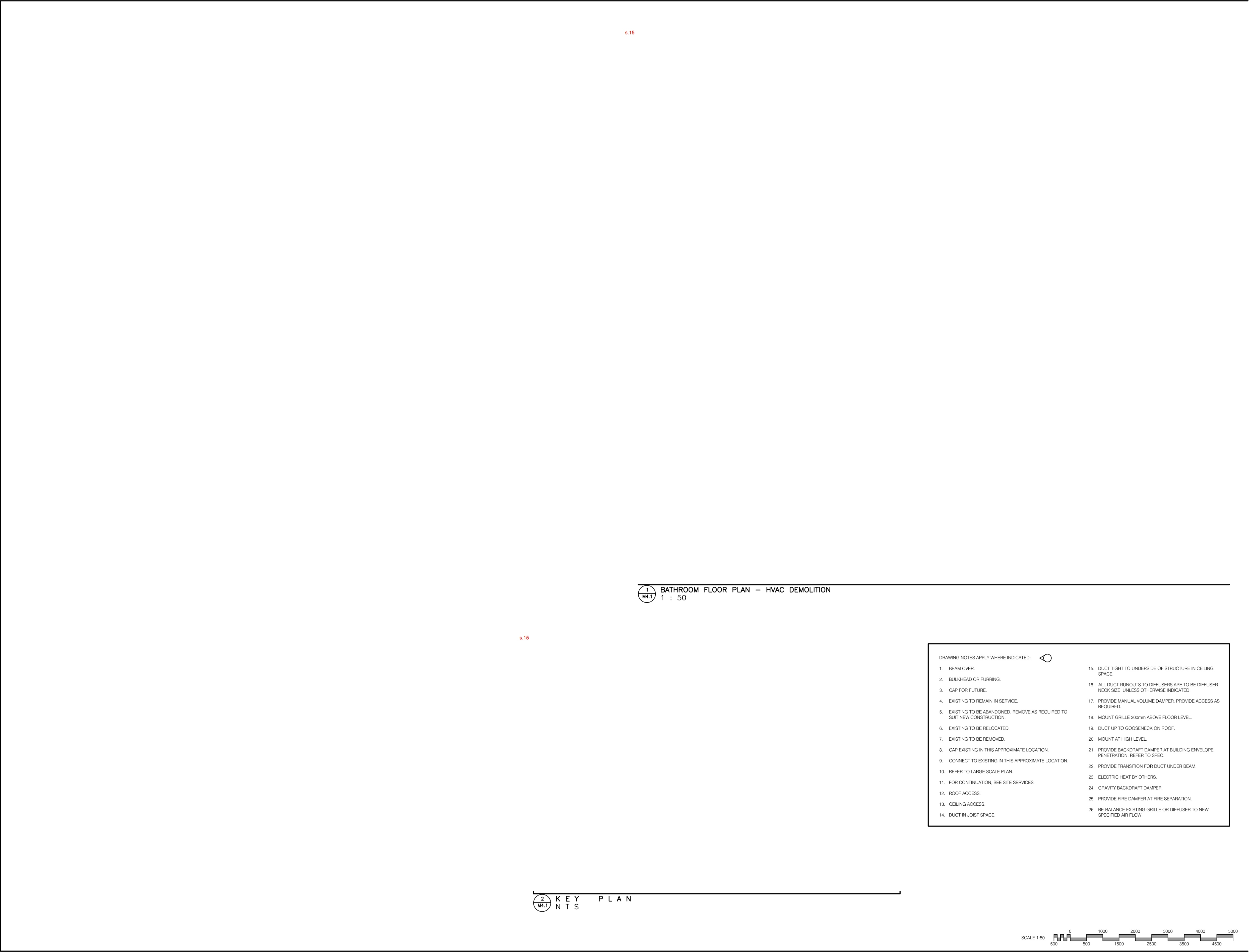
DRAWING NOTES APPLY WHERE INDICATED:

- |   |   |
|---|---|
| 1. BEAM OVER.   | 15. CLEAN-OUT AT GRADE. REFER TO DETAIL.  |
| 2. BULKHEAD OR FURRING.   | 16. RUN PIPE AT 2% SLOPE WHERE INDICATED BY DRAWING NOTE.   |
| 3. CAP FOR FUTURE.  | 17. IRRIGATION WATER SERVICE.   |
| 4. EXISTING TO REMAIN IN SERVICE.   | 18. ROUGH-IN HOT, COLD, WASTE AND VENT PIPING IN WALL FOR FUTURE FIXTURE.                                       |
| 5. EXISTING TO BE ABANDONED. REMOVE AS REQUIRED TO SUIT NEW CONSTRUCTION. | 19. PROVIDE 38mm TRAPPED WASTE AND 12mm VALVED HOT WATER SUPPLY TO SUIT DISHWASHER.                             |
| 6. EXISTING TO BE RELOCATED.  | 20. MOUNT ON STAND. DRAIN TO CUSTODIAN SINK.  |
| 7. EXISTING TO BE REMOVED.  | 21. GAS PRV (FROM 34kPa TO 3.5kPa) C/W ISOLATION VALVE. PROVIDE PRV VENT AS PER GAS CODE.                       |
| 8. CAP EXISTING IN THIS APPROXIMATE LOCATION.                             | 22. GAS SUPPLY UP TO ROOF MOUNTED EQUIPMENT. REFER TO DETAIL.   |
| 9. CONNECT TO EXISTING IN THIS APPROXIMATE LOCATION.                      | 23. EXTEND DOMESTIC WATER SERVICE TO THIS POINT AND DISTRIBUTE HOT AND COLD SUPPLY TO EACH FIXTURE IN THE ROOM. |
| 10. REFER TO LARGE SCALE PLAN.  | 24. 75mm BUILDING VENT.   |
| 11. FOR CONTINUATION, SEE SITE SERVICES.                                  | 25. EXISTING TEMPERED MIXING VALVE.   |
| 12. ROOF ACCESS.  |   |
| 13. CEILING ACCESS.   |   |
| 14. BUILDING GAS SERVICE AND METER.                                       |   |

3  
M4.0  
KEY  
N T S      P L A N







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TEL 604–682 1898  
604–682–5398  
www.ceiarchitecture.com

SEALS:

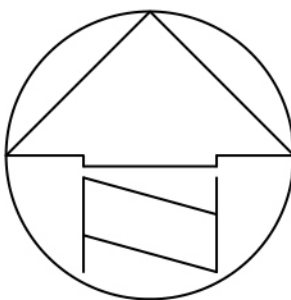
CONSULTANTS:



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ISSUED FOR		
NO.	DATE	DESCRIPTION
1	2016/04/11	ISSUED FOR PRICING
2	-	-



PROJECT TITLE

Similkameen Elementary /  
Secondary School Upgrades,  
School District #53

LEARNING TODAY  
FOR LIVING TOMORROW

Keremeos, B.C.

DRAWING TITLE

FLOOR PLAN - HVAC  
DEMOLITION

DESIGNED BY: TK	DRAWN BY: JB
EOR: AS	REVIEWED BY:
SCALE: AS NOTED	DATE: APR, 2016
PROJECT NO.	DRAWING NO.

14153.005 M4.1

## CONSULTANTS



210 - 1715 Dickson Avenue Kelowna British Columbia V1Y 9G8  
250 762 9993 f 250 861 3290 [smithhandandersen.com](http://smithhandandersen.com)

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NO.	DATE	DESCRIPTION
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[illegible]

# Similkameen Elementary Secondary School Boys Shower Upgrade



Keremeos, B.C.

## FLOOR PLANS

DRAWN: GW

DATE: APR 2016

DRAWING NO.

E-1

## 1 : 50

1 RE POSITION AND RE ROUTE CONDUIT AND JUNCTION BOXES IN THIS AREA, TO POSITION THE JUNCTION BOXES ABOVE THE ACCESS HATCH.

**2** ACCESS HATCH.

LUMINAIRE SCHEDULE							
TYPE	LUMINAIRE		LAMP				SEE NOTE
	MANUFACTURER	CATALOGUE NO.	VOLT	LUMENS	POWER	COLOUR	
A	KENALL	MLHA12-48-F-MW-CP-45L40K	120	4526	45W	4000K	-
B	KENALL	MLH5-48-F-MW-CP-45L40K-9500	120	4526	45W	4000K	1
C	LITHONIA	L3LED-T24-40PA-LED-4090CRI	120	650	10W	4000K	2

1. MOUNT TIGHT TO THE TOP OF MIRROR.

2. WET LISTED.

OCCUPANCY SENSOR SCHEDULE					
TYPE	MANUFACTURER	CATALOGUE NO.	VOLT	REMARKS	SEE NOTE
OS1	SENSORSWITCH	CMR9-PDT	120	DUAL TECHNOLOGY	1

1. SET FOR AUTO ON—AUTO OFF AFTER 20 MINUTES.

1 : 50

① RE POSITION SPEAKER AS REQUIRED

② RE POSITION BELL AS REQUIRED.

1. CONFIRM ALL CONDUITS ON SITE.

2. REPLACE BREAKER FOR HAND DRYER AS REQUIRED.
3. PROVIDE STAINLESS COVERPLATES. WHERE REQUIRED.

April 6, 2016

School District # 53  
35061-101<sup>st</sup> Street  
Oliver, BC  
Email: [bporteous@sd53.bc.ca](mailto:bporteous@sd53.bc.ca)

**Attention:** Mr. Bruce Porteous

**Re: Keremeos Elementary School – 13, 700 sq. ft. re-roofing budget price.**

Roofing Quote # 9456

Dear Mr. Porteous,

To tear off existing roofing and flashing and dispose of the same,

**SUPPLY AND INSTALLATION WILL INCLUDE:**

- a) 28 lb. fire protection sheet.
- b) 3/16 asphaltic board.
- c) Fully torch 180 SBS base sheet.
- d) Strip all perimeters and walls with 180 S.B.S. membrane, complete with necessary stripping membrane.
- e) Fully torch 180 S.B.S. granular cap sheet, complete with cap stripping.
- f) All new galvanized iron roof jacks.
- g) All new aluminum flashing for existing plumbing vent.
- h) Drains to be new spun copper.
- i) All new pre-finished metal flashing.
- j) \$5,000,000.00 Liability Insurance and WCB Clearance letters upon request.

---

<b>FOR THE BUDGET SUM OF</b>	<b>\$ 125, 000.00</b>	<b>Plus GST</b>
------------------------------	-----------------------	-----------------

---

**\*NOTE:** If required, rotted wood deck replacement at **\$3.00** per square foot.

Sincerely,

*Robert Nielsen*

NIELSEN ROOFING & SHEET METAL LTD.

**"Quality Roofing in the Okanagan Valley since 1946."**



# Southern Okanagan Secondary School , 6140 Gala Street, Oliver, BC School District No. 53 (Okanagan Similkameen) Sawdust Collection System Assessment Report

8 October 2015

## 1.0 Executive Summary

- 1) The comments in this report are based on a site survey dated **28 August, 2015**.
- 2) The dust collector is not adequately sized to service the wood shop machinery.
- 3) The duct system is undersized for the machinery in use.
- 4) Explosion prevention and mitigation devices are not in place.
- 5) The sawdust collection system does not meet code for filtered air or explosion prevention/mitigation.
- 6) A major upgrade of this system is necessary to meet code. The mechanical upgrade is **estimated** at **\$247,700**.



## 2.0 - Discussion of Existing Sawdust Collection System

### Dust Collector



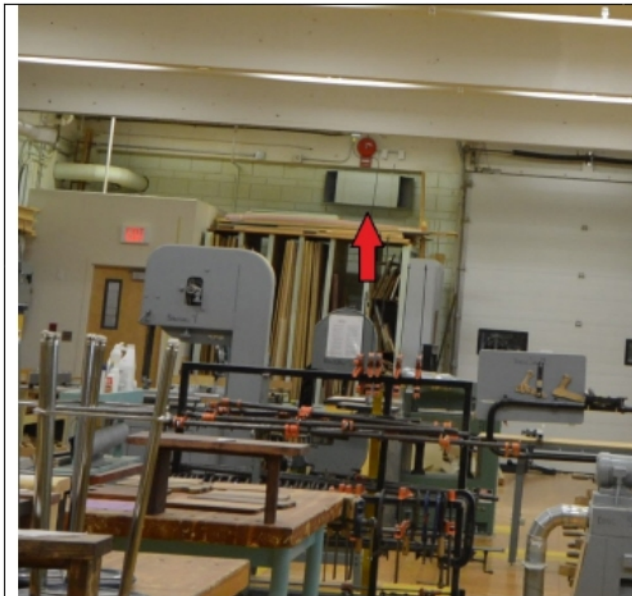
#### Observations:

- ◆ An N.R. Murphy dust collector (Model MKAW-536-4D) is located in an exterior room which is open to the atmosphere.
- ◆ This unit can handle **4,050** cubic feet per minute (cfm) of airflow.
- ◆ The dust-generating machinery in the woodshop requires a total airflow of **4,600** cfm. This figure includes machinery that is currently connected and machinery that should be connected to the system.
- ◆ The dust collector is not adequately sized to service the machinery in the woodshop.

#### Recommendations:

- ◆ Replace the dust collector with an adequately sized model or remove one to two machines from the woodshop to reduce the load on the dust collector.

## Recirculated Air



### Observations:

- ◆ The dust collector returns filtered air to the woodshop through the duct shown at left by the red arrow.
- ◆ At the design air flow of 4050 cfm, the unit has an air to filter cloth ratio of **7.2 : 1** which is above the desired ratio of **5 : 1** for air returned to a work area.

### Recommendations:

- ◆ Replace the dust collector with a larger unit with adequate filter media to meet the required air to filter cloth ratio of **5 : 1**.
- ◆ Install a spark detection device and ensure it is interlocked with the dust collector stop switch.

## Explosion Ventilation Configuration



### Observations:




- ◆ The dust collector is equipped with explosion relief panels.
- ◆ The main duct feeding the dust collector is not equipped with a blowback damper, nor is it equipped with a spark detection device.
- ◆ The location of the dust collector negates the need for explosion ducting.
- ◆ The return air duct is not equipped with an abort gate.

### Recommendations:

- ◆ Install a main duct that includes a blowback prevention damper and a spark detection device.
- ◆ Install an abort gate on the return air duct.



## Ducting

	<p>Observations:</p> <ul style="list-style-type: none"><li>♦ The main circular duct that feeds into the dust collector has a diameter of 10 inches. At the desired stream velocity, this duct can carry <b>2,200</b> cubic feet per minute (cfm). Current demand is <b>4,600</b> cfm.</li><li>♦ The main duct is undersized for the equipment in the woodshop.</li></ul> <p>Recommendations:</p> <ul style="list-style-type: none"><li>♦ Replace the main duct with an adequately sized duct.</li><li>♦ Include a blowback prevention damper and a spark detection device.</li></ul>
	<p>Observations:</p> <ul style="list-style-type: none"><li>♦ The spindle sander shown at left is not connected to the dust collection system.</li></ul> <p>Recommendations:</p> <ul style="list-style-type: none"><li>♦ Connect this machine to the dust collection system.</li></ul>
	<p>Observations:</p> <ul style="list-style-type: none"><li>♦ Foil tape has been used in several locations within the woodshop to seal collection ducts.</li></ul> <p>Recommendations:</p> <ul style="list-style-type: none"><li>♦ Remove foil tape and replace with duct sealant.</li></ul>

### **3.0 - Housekeeping**



#### **Observations:**

- ◆ Housekeeping in the shop was observed to be generally good on the day of our visit.

#### **Recommendations:**

- ◆ None

### **4.0 - Considerations for Mechanical System Upgrade**

The sawdust collection system fails to meet codes and regulations on several points. We recommend a major upgrade of the system to rectify these failures. A major upgrade would involve the replacement of the existing dust collector and the existing duct system.

Since it is a well-built machine, the existing N.R. Murphy dust collector could be relocated to another shop in the District that matches the specifications.

Explosion protection devices are needed to meet code. A blowback prevention damper, a spark detection device and an abort gate must be included in the upgrade.

A new duct system should be mounted from the ceiling with the existing sub-floor duct system abandoned in place to avoid the cost of removal.

Guy Harding, P. Eng

# Southern Okanagan Secondary School, 6140 Gala St., Oliver, BC

8-Oct-2015

## Sawdust Collection System Upgrade Estimate

TOTAL

Demolition	4	man day	@	\$800	/man day	\$3,200
New Dust Collector	1	units	@	\$58,000	/units	\$58,000
Installation + Hoisting	1	units	@	\$10,000	/units	\$10,000
Chainlink Fence + Concrete Pad	0	units	@	\$5,000	/units	\$0
Blowback Prevention Damper	1	units	@	\$8,000	/units	\$8,000
Spark detection device.	1	units	@	\$6,000	/units	\$6,000
Abort Gate	1	units	@	\$8,000	/units	\$8,000

### Safety Devices Required on Systems more than 5000 cfm

Device 1	0	units	@	\$1,000	/units	\$0
Device 2	0	units	@	\$2,000	/units	\$0
Device 3	0	units	@	\$4,000	/units	\$0

New Equipment Pickup	12	pickup	@	\$1,500	/pickup	\$18,000
New Branch- Machine to Main	12	pickup	@	\$1,000	/pickup	\$12,000
New Main Duct	12	pickup	@	\$1,000	/pickup	\$12,000
Recirculation System	1	units	@	\$10,000	/units	\$10,000
Carpentry	1	allow	@	\$2,500	/allow	\$2,500
Roofing	0	allow	@	\$2,500	/allow	\$0
Electrical	1	units	@	\$5,000	/units	\$5,000

Subtotal \$152,700 **\$152,700**

Escalation (current US\$ exchange & travel time)	30%	\$45,900	\$45,900
Misc and Contingency	15%	\$23,000	\$23,000
Fees and Disbursements	12%	\$18,400	\$18,400
taxes (GST)	5%	\$7,700	\$7,700

**PROJECT TOTAL \$247,700**

**Sawdust Collection System Upgrade Rev 1**

				TOTAL
Demolition	4 man day	@	\$800 /man day	\$3,200
New Dust Collector System (5,500 cfm)	1 units	@	\$58,000 /units	\$58,000
Blowback Prevention Damper	1 units		included	
Abort Gate	0 units		n/a	
Spark Detection System	0 units		n/a	
Silencer on dust collector outlet	1 units		included	
Safety Filter	0 units		n/a	
Commissioning	1 units		included	
Freight to Oliver	1 units		included	
Installation + Hoisting	1 units	@	\$10,000 /units	\$10,000
Concrete Slab	1 units	@	\$7,500 /units	\$7,500
Chainlink Enclosure	1 units	@	\$2,000 /units	\$2,000
New Equipment Pickup	12 pickup	@	\$1,500 /pickup	\$18,000
New Branch lines from Woodshop Equipment to Main	12 pickup	@	\$1,000 /pickup	\$12,000
New Main Duct	12 pickup	@	\$1,000 /pickup	\$12,000
Electrical Works	1 units	@	\$21,000 /units	\$21,000
Carpentry	2 allow	@	\$2,000 /allow	\$4,000
Roofing	0 allow	@	\$3,000 /allow	\$0
Subtotal				\$147,700
				<b>\$147,700</b>
Escalation	18%		\$26,600	<b>\$26,600</b>
Misc and Contingency	15%		\$22,200	<b>\$22,200</b>
Fees and Disbursements	12%		\$17,800	<b>\$17,800</b>
taxes (GST)	5%		\$7,400	<b>\$7,400</b>
<b>PROJECT TOTAL</b>				<b>\$221,700</b>



# Similkameen Elementary Secondary School

Keremeos, B.C.

## School District No. 53 (Okanagan Similkameen)

### Mechanical Systems Assessment Report

11 April 2016



## 1.0 Executive Summary

- The school appears to be well utilized and is well populated.
- The existing mechanical systems are in **FAIR to POOR** condition. Many systems are at the end of the service life.
- The existing mechanical systems are not **CONFIGURED** to good engineering practice.
- The existing mechanical systems cannot be **CONTROLLED** to match the loads.
- The existing mechanical systems are not configured for ease of **MAINTENANCE**, especially during the heating season.
- The existing mechanical systems use a disproportionate amount of **ENERGY**.
- The Building is a combustible construction but has not been provided with a fire protection system
- Significant upgrades to ventilation and plumbing systems are required to bring systems to good design practices, guidelines and standards.
- Phase 1: A partial mechanical upgrade is estimated at ..... **\$1,490,000.**
- Phase 2: A sprinkler upgrade is estimated at ..... **\$707,000.**
- The proposed partial mechanical upgrade will save over **17 Tonnes of CO<sub>2</sub>** and **\$4,496** per year.
- The simple payback as compared to a conventional rooftop unit upgrade is **5 years**.

## 2.0 Description of Existing Building

- Area of building: 6,157 m<sup>2</sup>
- Original buildings (started as two building) date: 1960's. Additions were in 1989, 1992, 1995, and 2007.
- Description of existing building: The building is single storey with combustible construction. There are a number of structural systems and building configurations.

## 3.0 Discussion of Existing Mechanical Systems

### Terminal Equipment

Terminal equipment for occupied areas are based on roof top units. The bulk of these systems were installed in 1989 addition. These systems are at the end of the service life.  The outside air is delivered to the zone through the unit but the unit cannot temper the air adequately without having draft complaints.	Terminal units will need to be upgraded.
Terminal units for unoccupied areas such as entry ways and perimeter ancillary are electric force flow, unit heater or baseboard heating systems.	Perimeter heating systems will need to be upgraded.
Many zones have high ceilings (10 feet and higher). Stratification (heat migrating to the ceiling in heating season) is an effect that causes cool conditions to occur in the occupied zone (cool complaints). As well, excessive energy usage occurs as the hot supply air is short-circuited to the return openings.	Duct system will need to be upgraded to include low level returns.
The zoning or temperature control is very poor for the building. Many zones are served by one unit or many units serve one zone.	Zone control will need to be upgraded so that one terminal unit serves one zone.

## Controls

The building is serviced by a current digital control system. This system will require minor reconfiguration to suit the upgrades proposed for other systems.	Control system will need to be modified to suit the upgrade.
The building has not been provided with carbon dioxide sensors in the occupied zones. Carbon dioxide sensors can be used to optimize and maintain appropriate outside air levels.	Control systems will need to be upgraded with CO <sub>2</sub> Sensors.
The electric heating systems are not controlled through the DDC. Energy can be saved by controlling these heating systems through DDC otherwise they will roll back to night setback temperatures with the remainder of the building.	Electric heated need to be upgraded to DDC System.

## Exhaust Air Systems

Finishing Booth – exhaust systems are not configured for VOC or spray based paints.	<b>The finishing room systems must be upgraded, however this is beyond the scope of the present report.</b>
Metal Shop - Forge area and welding area systems do not comply with current safety guidelines and good engineering practice. systems do not comply with current safety guidelines and good engineering practice	Metal shop exhaust systems need to be upgraded.
Automotive - Carbon monoxide and Parts cleaning tank exhaust systems do not comply with current safety guidelines and good engineering practice.	Automotive exhaust systems need to be upgraded.
Science Fume Hood – Fume hood and exhaust systems do comply with current ASHRAE 110, but they do meet the code the day that they were installed.	Science room fume hoods will need to be upgraded.
Art Room –Kiln exhaust systems do not comply with current guidelines and good engineering practice.	Art Room exhaust systems need to be upgraded.

## Plumbing Systems

The Domestic Hot Water heater is a gravity vented type. These systems are inefficient and waste energy due to excessive standby losses.	Provide new sealed combustion domestic hot water heaters.
---	---

## Safety and Environmental Protection Plumbing Systems

Emergency eyewashes and showers that are plumbed into the domestic water systems to meet current safety guidelines have not been provided except for the science area. The science area will require water tempering systems to meet the regulations.	Emergency eyewashes and showers will need to be upgraded for the science and shop areas.
Flammable storage cabinets in the finishing room, science prep room and art room have not been vented according to manufactures and WorkSafe guidelines.	Flammable storage cabinet and venting systems will need to be upgraded.

## Fire Protection Systems

Fire protection sprinkler systems have not been provided for this facility. This facility is the only school in Keremeos.	Fire protection systems should be considered for this facility.
---	---



## 4.0 Considerations for Mechanical System Upgrade

Caveat. This review is intended to provide a quick review of the conditions and configuration of the existing mechanical systems where they are apparent. The main purpose of this report is to identify and then develop budgets for upgrades to mechanical systems. If a condition exist but is not apparent, then it may not be addressed in this report. This report must be review by staff familiar with the building to indicate and address any conditions not presented here.

A mechanical upgrade to the existing mechanical system will improve the operation, comfort, energy consumption and maintenance of the facility. We recommend a roof top air source heat pump system that can be easily phased if necessary. New condensing domestic hot water heaters should also be installed. *Note that this application includes partial upgrades to the secondary wing only. The elementary wing will be considered in a future phase.*

Andrew Stringer P.Eng.

## Appendix A – Budgetary Guidance

SIMILKAMEEN ELEMENTARY SECONDARY												
												16-Apr-08
SECONODARY WING MECHANICAL SYSTEMS UPGRADE												
	qty			Equipment Unit Cost	Duct Unit Cost	Piping Unit Cost	Total Unit Cost		Equipment Cost	Duct Cost	Piping Cost	Total Cost
												TOTAL
Air Source Heat Pump with Economizer - 2½ ton	15	Unit	@	\$7,000	\$10,000	\$1,500	\$18,500	/Unit	\$105,000	\$150,000	\$22,500	\$277,500
Relief Air Gooseneck	1	Thing	@	\$2,000	\$3,000	\$0	\$5,000	/Thing	\$2,000	\$3,000	\$0	\$5,000
Large Single Zone Rooftop Unit with Economizer - 1000	1	Unit	@	\$71,000	\$54,000	\$1,500	\$126,500	/Unit	\$71,000	\$54,000	\$1,500	\$126,500
Large Single Zone Rooftop Unit with Economizer - 7000	2	Unit	@	\$54,000	\$41,000	\$1,500	\$96,500	/Unit	\$108,000	\$82,000	\$3,000	\$193,000
Kitchen Make Up Air Unit	1	Unit	@	\$17,000	\$2,000	\$1,500	\$20,500	/Unit	\$17,000	\$2,000	\$1,500	\$20,500
Kitchen Condensing Unit	1	Unit	@	\$4,000	\$0	\$1,000	\$5,000	/Unit	\$4,000	\$0	\$1,000	\$5,000
Acoustic Fire Rated Transfer Duct	15	Unit	@	\$0	\$1,000	\$0	\$1,000	/Unit	\$0	\$15,000	\$0	\$15,000
DHW Tank - Condensing Gas	2	Unit	@	\$9,000	\$0	\$2,000	\$11,000	/Unit	\$18,000	\$0	\$4,000	\$22,000
DHW Pump	1	Unit	@	\$250	\$0	\$250	\$500	/Unit	\$250	\$0	\$250	\$500
Range Hood - Residential	8	Unit	@	\$150	\$150		\$300	/Unit	\$1,200	\$1,200	\$0	\$2,400
Hood - Forge & Melting Crucible	1	Unit	@	\$12,000	\$12,000		\$24,000	/Unit	\$12,000	\$12,000	\$0	\$24,000
Industrial Vent Set - Roof Mount	1	Unit	@	\$4,000	\$4,000		\$8,000	/Unit	\$4,000	\$4,000	\$0	\$8,000
Square Panel - Roof Mount	2	Unit	@	\$800	\$800		\$1,600	/Unit	\$1,600	\$1,600	\$0	\$3,200
CO - Overhead Flexible	2	Unit	@	\$2,400	\$2,400		\$4,800	/Unit	\$4,800	\$4,800	\$0	\$9,600
Science Fume Hood (ASHRAE 110)	1	Unit	@	\$10,000	\$10,000	\$2,500	\$22,500	/Unit	\$10,000	\$10,000	\$2,500	\$22,500
Custodial Sink	1	Unit	@	\$1,000		\$1,500	\$2,500	/Unit	\$1,000	\$0	\$1,500	\$2,500
Eyewash/Show er and TMV	3	Unit	@	\$2,500		\$2,500	\$5,000	/Unit	\$7,500	\$0	\$7,500	\$15,000
Acid Neutralizer	1	Unit	@	\$7,000		\$5,000	\$12,000	/Unit	\$7,000	\$0	\$5,000	\$12,000
Controls - Typical Controls Devices	175	Point	@	\$600			\$600	/Point	\$105,000	\$0	\$0	\$105,000
Controls - CO2 Sensors or Motion Detectors	18	Point	@	\$1,200			\$1,200	/Point	\$21,600	\$0	\$0	\$21,600
Balancing	1	Unit	@				\$10,000	/Unit	\$0	\$0	\$0	\$10,000
<b>Mechanical Subtotal</b>									\$500,950	\$339,600	\$50,250	\$900,800
												<b>\$900,800</b>
Electric - Force Flow , Unit Heat	4	Unit	@				\$2,500	/Unit	\$0	\$0	\$0	\$10,000
Electric - Baseboard	4	Unit	@				\$1,500	/Unit	\$0	\$0	\$0	\$6,000
Electrical Connections	20	Unit	@				\$1,800	/Unit	\$0	\$0	\$0	\$36,000
Carpentry - Remove and Reinstall T-Bar Panels	1,500	Sq.m.	@				\$10	/Sq.m.	\$0	\$0	\$0	\$15,000
Carpentry - Curb and Support for Rooftop Unit or Small	20	Unit	@				\$1,000	/Unit	\$0	\$0	\$0	\$20,000
Roof Penetration	7	Unit	@				\$300	/Unit	\$0	\$0	\$0	\$2,100
Cutting and Patching	1	Allow.	@				\$3,000	/Allow.	\$0	\$0	\$0	\$3,000
Roofing - Roof Jack	23	Unit	@				\$350	/Unit	\$0	\$0	\$0	\$8,050
Roofing - Small Curb	20	Unit	@				\$1,200	/Unit	\$0	\$0	\$0	\$24,000
Roofing - Large Curb	3	Unit	@				\$2,500	/Unit	\$0	\$0	\$0	\$7,500
<b>Other Trades Subtotal</b>									\$0	\$0	\$0	\$131,650
												<b>\$131,650</b>
Demolition			1.5%									\$15,500
Misc (Mobilization, Bonding, Permits, Inspection Fees)			2%									\$20,700
Escalation (increases from typical Budgets or Location Factor)			10%									\$103,300
<b>General Subtotal</b>												\$139,500
												<b>\$139,500</b>
taxes			5%									\$58,600
<b>TOTAL CONSTRUCTION BUDGET</b>												<b>\$1,230,550</b>
Asbestos Allowance			1%									\$12,400
Contingency			10%									\$123,100
Fees and Disbursements			10%									\$123,100
<b>TOTAL PROJECT BUDGET</b>												<b>\$1,489,150</b>

SIMILKAMEEN ELEMENTARY SECONDARY												
											16-Apr-11	
FIRE PROTECTION UPGRADE												
	qty			Equipment Unit Cost	Duct Unit Cost	Piping Unit Cost	Total Unit Cost	Equipment Cost	Duct Cost	Piping Cost	Total Cost	TOTAL
Sprinkler Main Floor and Mezanines	6,800	Sq.m	@			\$35	\$35	/Sq.m	\$0	\$0	\$238,000	\$238,000
Sprinkler Crawl Space	6,700	Sq.m	@			\$25	\$25	/Sq.m	\$0	\$0	\$167,500	\$167,500
New Water Service	1	Unit	@			\$20,000	\$20,000	/Unit	\$0	\$0	\$20,000	\$20,000
New Sprinkler Service Inside Station	1	Unit	@			\$12,000	\$12,000	/Unit	\$0	\$0	\$12,000	\$12,000
Large DCVA	1	Unit	@	\$2,500		\$5,000	\$7,500	/Unit	\$2,500	\$0	\$5,000	\$7,500
Mechanical Subtotal								\$2,500	\$0	\$442,500	\$445,000	\$445,000
Other Trades Subtotal								\$0	\$0	\$0	\$0	\$0
Demolition			0.0%								\$0	
Misc (Mobilization, Bonding, Permits, Inspection Fees)			6%								\$26,700	
Escalation (increases from typical Budgets or Location Factor)			15%								\$66,800	
General Subtotal											\$93,500	\$93,500
taxes			5%								\$27,000	\$27,000
TOTAL CONSTRUCTION BUDGET												\$565,500
Asbestos Allowance			3%								\$17,000	\$17,000
Contingency			10%								\$56,600	\$56,600
Fees and Disbursements			12%								\$67,900	\$67,900
TOTAL PROJECT BUDGET												\$707,000

## Appendix B – Projected Energy Savings

SIMILKAMEEN ELEMENTARY SECONDARY (PARTIAL UPGRADE)									
1,301 sq m						8-Apr-16			
Consumption for Existing Configuration Based on 2011 to 2013 Data									
	GJ	kWhr	Tonne CO <sub>2</sub>	GJ/sq.m.	kWhr/sq.m	\$	\$/GJ	\$/kWhr	\$/sq.m
Natural Gas	542	150,508	26.9	0.42	116	\$8,398	\$15.50	\$0.056	\$6.45
Electricity	337	93,484	2.1	0.26	72	\$7,946	\$23.61	\$0.085	\$6.11
TOTAL	878	243,991	29.0	0.68	188	\$16,344	\$18.61	\$0.067	\$12.56
Anticipated Consumption after Heat Pump and Domestic Hot Water Upgrade									
	GJ	kWhr	Tonne CO <sub>2</sub>	GJ/sq.m.	kWhr/sq.m	\$	\$/GJ	\$/kWhr	\$/sq.m
Natural Gas	200	55,688	10.0	0.15	43	\$3,107	\$15.50	\$0.056	\$2.39
Electricity	370	102,832	2.3	0.28	79	\$8,741	\$23.61	\$0.085	\$6.72
TOTAL	571	158,520	12.2	0.44	122	\$11,848	\$20.76	\$0.075	\$9.11
Savings									
	GJ	kWhr	Tonne CO <sub>2</sub>	GJ/sq.m.	kWhr/sq.m	\$	\$/GJ	\$/kWhr	\$/sq.m
Natural Gas 63%	341	94,820	16.9	0.26	73	\$5,291	\$15.50	\$0.056	\$4.07
Electricity -10%	-34	-9,348	-0.2	-0.03	-7	-\$795	\$23.61	\$0.085	-\$0.61
TOTAL 35%	308	85,471	16.7	0.24	66	\$4,496	\$14.61	\$0.053	\$3.46
Addition Above Conventional Cost						\$22,500		\$/sq.m	\$17
Simple Payback in Years						5		\$/Ton	\$1,344



No: NAME: Similkameen Elementary Secondary (PARTIAL HVAC Type: RTU											
ID	Item	Comment	Qty	Location	Qty	Location	Qty	Location	Qty	Location	Qty Req'd
PRIMARY HVAC SYSTEMS											
	Relief Air Gooseneck		1	Roof							1 Unit
TERMINAL HVAC SYSTEMS											
	Roof Top Unit - Large - Heat/Cool PRE-PURCHASE		1	Gym	2	Shop	Theater				3 Unit
	Roof Top Unit - Large - Heat/Cool INSTALL		1	Gym	2	Shop	Theater				3 Unit
	Roof Top Unit - Large - Heat Only PRE-PURCHASE		0	Gym	0	Shop	1 Kitchen				1 Unit
	Roof Top Unit - Large - Heat Only INSTALL		0	Gym	0	Shop	1 Kitchen				1 Unit
	Roof Top Unit - Small PRE-PURCHASE		15	Class							15 Unit
	Roof Top Unit - Small INSTALL		15	Class							15 Unit
	Electric Heat - Force Flow, Unit Heat		4	Entry/Stair		Storage					4 Unit
	Split System AC		1	Class		Server					1 Unit
	Low Level Return		15	All							15 Unit
	Acoustic Transfer with Fire Damper		15	Class							15 Unit
DEDICATED EXHAUST PICKUP											
A	Small Ceiling Grille			Elect Rm		Dark Room	Storage - Sm.	8	W/R - Single		8 Unit
D	Hood - Forge & Melting Crucible		1	Metal							1 Unit
D	Slotted Back - Pick Up			Welding	1	Paint	1 Kiln				2 Unit
D	Articulating Arm		2	Welding		Solder					2 Unit
D	CO - Overhead Flexible		2	Auto							3 Unit
D	Science Fume Hood (ASHRAE 110)		1	Science		Prep					1 Unit
EXHAUST SYSTEMS											
B	Square Panel - Roof Mount		4	Roof							4 Unit
D	Industrial Vent Set - Roof Mount		4	Roof							4 Unit
EMERGENCY PLUMBING FIXTURES											
	Eyewash - New, TMV - New		1	Woodshop		Tech Ed	Electricity		Physics		1 Unit
	Eyewash/Shower - New, TMV - New		1	Metalsshop		Autoshop	1 Science	0	Chem Prep		2 Unit
CROSS CONTAMINATION											
	Large DCVA - Fire Protection Systems		1	Sprinkler		Premise	Irrigation				1 Unit
FLAMMABLE STORAGE CABINET											
	New Cabinet - New 2" Sched 40 Steel Vent Thru Roof		1	Chem Storage		Autoshop	1 Finishing	1	Art		3 Unit
	Cabinet OK - New 2" Sched 40 Steel Vent Thru Roof		1	Chem Storage		Autoshop	Finishing		Art		1 Unit
FIRE PROTECTION SYSTEMS											
	Water Entry		1	Sprinkler Station							1 Unit
	Sprinkler Remainder of Building		6700	All							6700 Sq.m.
	Sprinkler crawlspace		6700	All							6700 Sq.m.
	new service		1								1 allow
BUILDING ENVELOPE											
	Re and Re T-Bar										1125 Sq.m.
	asbestos		1								1 Unit
MISC											
	Permits & Inspection Fees										19 Unit
	Demolition										10% % of la
	Bonding										1% % of to
GRAND TOTAL											
Area:	1301	Sq.m.: (Secondary Wing)									
Zones:	19										

No: NAME: Similkameen EI		Itemized Unit Rate									
ID	Item	Equip. Cost	Duct Install	Pipe Install	Insul.	Bal. & Comm.	Control	Elect	Cut & Patch	Roof	Overall Unit Rate
PRIMARY HVAC SYSTEMS											
	Relief Air Gooseneck	\$2,000	\$2,000		\$1,000	\$200	\$500		\$500	\$500	\$6,700 /Unit
TERMINAL HVAC SYSTEMS											
	Roof Top Unit - Large - Heat	\$40,000									\$40,000 /Unit
	Roof Top Unit - Large - Heat	\$0	\$25,000	\$1,500	\$2,500	\$200	\$5,000	\$5,000	\$3,000	\$2,000	\$44,200 /Unit
	Roof Top Unit - Large - Heat	\$17,000									\$17,000 /Unit
	Roof Top Unit - Large - Heat	\$0	\$2,000	\$1,500	\$2,500	\$200	\$3,500	\$5,000	\$2,500	\$2,000	\$19,200 /Unit
	Roof Top Unit - Small PRE-P	\$7,000									\$7,000 /Unit
	Roof Top Unit - Small INSTA	\$0	\$0	\$1,000	\$1,500	\$200	\$3,500	\$1,500	\$1,000	\$1,500	\$10,200 /Unit
	Electric Heat - Force Flow, Ur						\$1,000	\$2,500			\$3,500 /Unit
	Split System AC	\$3,500	\$3,500	\$2,000	\$500		\$1,000	\$1,000			\$11,500 /Unit
	Low Level Return	\$250	\$500			\$25			\$500		\$1,275 /Unit
	Acoustic Transfer with Fire D	\$150	\$800						\$200		\$1,150 /Unit
DEDICATED EXHAUST PICKUP											
A	Small Ceiling Grille	\$50	\$50			\$25	\$500				\$625 /Unit
D	Hood - Forge & Melting Cruci	\$12,000	\$12,000			\$100	\$500	\$1,000	\$2,000		\$27,600 /Unit
D	Slotted Back - Pick Up	\$1,000	\$1,000			\$100	\$500				\$2,600 /Unit
D	Articulating Arm	\$1,200	\$1,200			\$100	\$500				\$3,000 /Unit
D	CO - Overhead Flexible	\$2,400	\$2,400			\$100	\$500				\$5,400 /Unit
D	Science Fume Hood (ASHRA	\$13,000	\$13,000			\$150		\$1,500	\$1,000		\$28,650 /Unit
EXHAUST SYSTEMS											
B	Square Panel - Roof Mount	\$600	\$600		\$500	\$100	\$500	\$750	\$250	\$500	\$3,800 /Unit
D	Industrial Vent Set - Roof Mo	\$3,500	\$3,500		\$500	\$100	\$500	\$1,500	\$1,000	\$1,000	\$11,600 /Unit
EMERGENCY PLUMBING FIXTURES											
	Eyewash - New, TMV - New	\$1,200		\$1,200							\$2,400 /Unit
	Eyewash/Shower - New, TMV	\$2,400		\$2,400							\$4,800 /Unit
CROSS CONTAMINATION											
	Large DCVA - Fire Protection	\$2,500		\$5,000							\$7,500 /Unit
FLAMMABLE STORAGE CABINET											
	New Cabinet - New 2" Sched	\$2,000		\$500					\$250	\$250	\$3,000 /Unit
	Cabinet OK - New 2" Sched 4			\$500					\$250	\$250	\$1,000 /Unit
FIRE PROTECTION SYSTEMS											
	Water Entry			\$15,000							\$15,000 /Unit
	Sprinkler Remainder of Buildi			\$35							\$35 /Sq.m.
	Sprinkler crawlspace			\$25							\$25 /Sq.m.
	new service			\$20,000							\$20,000 /allow
BUILDING ENVELOPE											
	Re and Re T-Bar								\$10		\$10 /Sq.m.
	asbestos								\$20,000		\$20,000 /Unit
MISC											
	Permits & Inspection Fees			\$500							
	Demolition	bour									
	Bonding	ital									
GRAND TOTAL											
Area:	1301										
Zones:	19										

NAME: Similkameen EI		Splits										Sub	15%	20%	10%	12%	5%	PROJECT	P H A S E	PHASE	PHASE
ID	Item	Equip. Cost	Duct Install	Pipe Install	Insul.	Bal.	Control	Elect	Cut & Patch	Roof	Total	Location Factor	Escalation	Contingency	Fee & Disb.	Taxes	TOTAL	1		2	
PRIMARY HVAC SYSTEMS		\$2,000	\$2,000	\$0	\$1,000	\$200	\$500	\$0	\$500	\$500	\$6,700	\$1,100	\$1,400	\$700	\$900	\$400	\$11,200		\$0	\$11,200	
	Relief Air Gooseneck	\$2,000	\$2,000	\$0	\$1,000	\$200	\$500	\$0	\$500	\$500	\$6,700	\$1,100	\$1,400	\$700	\$900	\$400	\$11,200	2	\$0	\$11,200	
TERMINAL HVAC SYSTEMS		\$251,500	\$100,000	\$23,000	\$33,000	\$4,175	\$76,000	\$53,500	\$37,000	\$30,500	\$608,675	\$91,600	\$122,000	\$61,200	\$73,400	\$30,800	\$987,675		\$392,300	\$595,375	
	Roof Top Unit - Large - Heat	\$120,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$120,000	\$18,000	\$24,000	\$12,000	\$14,400	\$6,000	\$194,400	1	\$194,400	\$0	
	Roof Top Unit - Large - Heat	\$0	\$75,000	\$4,500	\$7,500	\$600	\$15,000	\$15,000	\$9,000	\$6,000	\$132,600	\$19,900	\$26,600	\$13,300	\$16,000	\$6,700	\$215,100	2	\$0	\$215,100	
	Roof Top Unit - Large - Heat	\$17,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,000	\$2,600	\$3,400	\$1,700	\$2,100	\$900	\$27,700	1	\$27,700	\$0	
	Roof Top Unit - Large - Heat	\$0	\$2,000	\$1,500	\$2,500	\$200	\$3,500	\$5,000	\$2,500	\$2,000	\$19,200	\$2,900	\$3,900	\$2,000	\$2,400	\$1,000	\$31,400	2	\$0	\$31,400	
	Roof Top Unit - Small PRE-P	\$105,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105,000	\$15,800	\$21,000	\$10,500	\$12,600	\$5,300	\$170,200	1	\$170,200	\$0	
	Roof Top Unit - Small INSTA	\$0	\$0	\$15,000	\$22,500	\$3,000	\$52,500	\$22,500	\$15,000	\$22,500	\$153,000	\$23,000	\$30,600	\$15,300	\$18,400	\$7,700	\$248,000	2	\$0	\$248,000	
	Electric Heat - Force Flow, Ur	\$0	\$0	\$0	\$0	\$0	\$4,000	\$10,000	\$0	\$0	\$14,000	\$2,100	\$2,800	\$1,400	\$1,700	\$700	\$22,700	2	\$0	\$22,700	
	Split System AC	\$3,500	\$3,500	\$2,000	\$500	\$0	\$1,000	\$1,000	\$0	\$0	\$11,500	\$1,800	\$2,300	\$1,200	\$1,400	\$600	\$18,800	2	\$0	\$18,800	
	Low Level Return	\$3,750	\$7,500	\$0	\$0	\$375	\$0	\$0	\$7,500	\$0	\$19,125	\$2,900	\$3,900	\$2,000	\$2,300	\$1,000	\$31,225	2	\$0	\$31,225	
	Acoustic Transfer with Fire D	\$2,250	\$12,000	\$0	\$0	\$0	\$0	\$0	\$3,000	\$0	\$17,250	\$2,600	\$3,500	\$1,800	\$2,100	\$900	\$28,150	2	\$0	\$28,150	
DEDICATED EXHAUST PICKUP		\$37,000	\$37,000	\$0	\$0	\$1,150	\$8,000	\$2,500	\$3,000	\$0	\$88,650	\$13,500	\$18,000	\$9,100	\$11,000	\$4,700	\$144,950		\$0	\$144,950	
A	Small Ceiling Grille	\$400	\$400	\$0	\$0	\$200	\$4,000	\$0	\$0	\$0	\$5,000	\$800	\$1,000	\$500	\$600	\$300	\$8,200	2	\$0	\$8,200	
D	Hood - Forge & Melting Cruci	\$12,000	\$12,000	\$0	\$0	\$100	\$500	\$1,000	\$2,000	\$0	\$27,600	\$4,200	\$5,600	\$2,800	\$3,400	\$1,400	\$45,000	2	\$0	\$45,000	
D	Slotted Back - Pick Up	\$2,000	\$2,000	\$0	\$0	\$200	\$1,000	\$0	\$0	\$0	\$5,200	\$800	\$1,100	\$600	\$700	\$300	\$8,700	2	\$0	\$8,700	
D	Articulating Arm	\$2,400	\$2,400	\$0	\$0	\$200	\$1,000	\$0	\$0	\$0	\$6,000	\$900	\$1,200	\$600	\$800	\$300	\$9,800	2	\$0	\$9,800	
D	CO - Overhead Flexible	\$7,200	\$7,200	\$0	\$0	\$300	\$1,500	\$0	\$0	\$0	\$16,200	\$2,500	\$3,300	\$1,700	\$2,000	\$900	\$26,600	2	\$0	\$26,600	
D	Science Fume Hood (ASHRA	\$13,000	\$13,000	\$0	\$0	\$150	\$0	\$1,500	\$1,000	\$0	\$28,650	\$4,300	\$5,800	\$2,900	\$3,500	\$1,500	\$46,650	2	\$0	\$46,650	
EXHAUST SYSTEMS		\$16,400	\$16,400	\$0	\$4,000	\$800	\$4,000	\$9,000	\$5,000	\$6,000	\$61,600	\$9,300	\$12,400	\$6,300	\$7,500	\$3,200	\$100,300		\$0	\$100,300	
B	Square Panel - Roof Mount	\$2,400	\$2,400	\$0	\$2,000	\$400	\$2,000	\$3,000	\$1,000	\$2,000	\$15,200	\$2,300	\$3,100	\$1,600	\$1,900	\$800	\$24,900	2	\$0	\$24,900	
D	Industrial Vent Set - Roof Mo	\$14,000	\$14,000	\$0	\$2,000	\$400	\$2,000	\$6,000	\$4,000	\$4,000	\$46,400	\$7,000	\$9,300	\$4,700	\$5,600	\$2,400	\$75,400	2	\$0	\$75,400	
EMERGENCY PLUMBING FIXTURES		\$6,000	\$0	\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000	\$1,900	\$2,500	\$1,300	\$1,500	\$700	\$19,900		\$0	\$19,900	
	Eyewash - New, TMV - New	\$1,200	\$0	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$2,400	\$400	\$500	\$300	\$300	\$200	\$4,100	2	\$0	\$4,100	
	Eyewash/Shower - New, TMV	\$4,800	\$0	\$4,800	\$0	\$0	\$0	\$0	\$0	\$0	\$9,600	\$1,500	\$2,000	\$1,000	\$1,200	\$500	\$15,800	2	\$0	\$15,800	
CROSS CONTAMINATION		\$2,500	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$7,500	\$1,200	\$1,500	\$800	\$900	\$400	\$12,300		\$0	\$0	
	Large DCVA - Fire Protection	\$2,500	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$7,500	\$1,200	\$1,500	\$800	\$900	\$400	\$12,300	3	\$0	\$0	
FLAMMABLE STORAGE CABINET		\$6,000	\$0	\$2,000	\$0	\$0	\$0	\$0	\$1,000	\$1,000	\$10,000	\$1,600	\$2,000	\$1,000	\$1,300	\$600	\$16,500		\$0	\$16,500	
	New Cabinet - New 2" Sched	\$6,000	\$0	\$1,500	\$0	\$0	\$0	\$0	\$750	\$750	\$9,000	\$1,400	\$1,800	\$900	\$1,100	\$500	\$14,700	2	\$0	\$14,700	
	Cabinet OK - New 2" Sched 4	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$250	\$250	\$1,000	\$200	\$200	\$100	\$200	\$100	\$1,800	2	\$0	\$1,800	
FIRE PROTECTION SYSTEMS		\$0	\$0	\$437,000	\$0	\$0	\$0	\$0	\$0	\$0	\$437,000	\$65,700	\$87,400	\$43,800	\$52,500	\$22,000	\$708,400		\$0	\$0	
	Water Entry	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$2,300	\$3,000	\$1,500	\$1,800	\$800	\$24,400	3	\$0	\$0	
	Sprinkler Remainder of Buildi	\$0	\$0	\$234,500	\$0	\$0	\$0	\$0	\$0	\$0	\$234,500	\$35,200	\$46,900	\$23,500	\$28,200	\$11,800	\$380,100	3	\$0	\$0	
	Sprinkler crawspace	\$0	\$0	\$167,500	\$0	\$0	\$0	\$0	\$0	\$0	\$167,500	\$25,200	\$33,500	\$16,800	\$20,100	\$8,400	\$271,500	3	\$0	\$0	
	new service	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$20,000	\$3,000	\$4,000	\$2,000	\$2,400	\$1,000	\$32,400	3	\$0	\$0	
BUILDING ENVELOPE		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,250	\$0	\$31,250	\$4,700	\$6,300	\$3,200	\$3,800	\$1,600	\$50,850		\$0	\$50,850	
	Re and Re T-Bar	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,250	\$0	\$11,250	\$1,700	\$2,300	\$1,200	\$1,400	\$600	\$18,450	2	\$0	\$18,450	
	asbestos	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,000	\$0	\$20,000	\$3,000	\$4,000	\$2,000	\$2,400	\$1,000	\$32,400	2	\$0	\$32,400	
MISC		\$0	\$20,500	\$33,200	\$0	\$0	\$0	\$0	\$0	\$0	\$53,700	\$8,300	\$10,800	\$5,500	\$6,600	\$2,800	\$87,700		\$16,800	\$40,000	
	Permits & Inspection Fees			\$9,500							\$9,500	\$1,500	\$1,900	\$1,000	\$1,200	\$500	\$15,600	all	\$3,000	\$7,100	
	Demolition		\$7,800	\$23,700							\$31,500	\$4,800	\$6,300	\$3,200	\$3,800	\$1,600	\$51,200		\$9,800	\$23,400	
	Bonding		\$12,700								\$12,700	\$2,000	\$2,600	\$1,300	\$1,600	\$700	\$20,900		\$4,000	\$9,500	
GRAND TOTAL		\$321,400	\$175,900	\$506,200	\$38,000	\$6,325	\$88,500	\$65,000	\$77,750	\$38,000	\$1,317,075	\$198,900	\$264,300	\$132,900	\$159,400	\$67,200	\$2,139,775		\$409,100	\$979,075	
Area:	1301	\$247	\$135	\$389	\$29	\$5	\$68	\$50	\$60	\$29	\$1,012	\$153	\$203	\$102	\$123	\$52	\$1,645		\$314	\$753	
Zones:	19	\$16,916	\$9,258	\$26,642	\$2,000	\$333	\$4,658	\$3,421	\$4,092	\$2,000	\$69,320	\$10,468	\$13,911	\$6,995	\$8,389	\$3,537	\$112,620		\$21,532	\$51,530	

No:	NAME: Similkameen EI PHASE	
ID	Item	3
PRIMARY HVAC SYSTEMS		\$0
	Relief Air Gooseneck	\$0
TERMINAL HVAC SYSTEMS		\$0
	Roof Top Unit - Large - Heat	\$0
	Roof Top Unit - Large - Heat	\$0
	Roof Top Unit - Large - Heat	\$0
	Roof Top Unit - Large - Heat	\$0
	Roof Top Unit - Small PRE-P	\$0
	Roof Top Unit - Small INSTA	\$0
	Electric Heat - Force Flow, Ur	\$0
	Split System AC	\$0
	Low Level Retrurn	\$0
	Acoustic Transfer with Fire D	\$0
DEDICATED EXHAUST PICKUP		\$0
A	Small Ceiling Grille	\$0
D	Hood - Forge & Melting Cruci	\$0
D	Slotted Back - Pick Up	\$0
D	Articulating Arm	\$0
D	CO - Overhead Flexible	\$0
D	Science Fume Hood (ASHRA	\$0
EXHAUST SYSTEMS		\$0
B	Square Panel - Roof Mount	\$0
D	Industrial Vent Set - Roof Mo	\$0
EMERGENCY PLUMBING FIXTURES		\$0
	Eyewash - New, TMV - New	\$0
	Eyewash/Shower - New, TMV	\$0
CROSS CONTAMINATION		\$12,300
	Large DCVA - Fire Protection	\$12,300
FLAMMABLE STORAGE CABINET		\$0
	New Cabinet - New 2" Sched	\$0
	Cabinet OK - New 2" Sched 4	\$0
FIRE PROTECTION SYSTEMS		\$708,400
	Water Entry	\$24,400
	Sprinkler Remainder of Buildi	\$380,100
	Sprinkler crawlspace	\$271,500
	new service	\$32,400
BUILDING ENVELOPE		\$0
	Re and Re T-Bar	\$0
	asbestos	\$0
MISC		\$30,600
	Permits & Inspection Fees	\$5,400
	Demolition	\$17,900
	Bonding	\$7,300
GRAND TOTAL		\$751,300
Area:	1301	\$577
Zones:	19	\$39,542



## Education Funding Department EDUC:EX

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**From:** Woycheshin, John J EDUC:EX  
**Sent:** Tuesday, May 17, 2016 1:33 PM  
**To:** 'dsansome@sd53.bc.ca'  
**Cc:** 'lminnaba@sd53.bc.ca'  
**Subject:** CNCP versus SEP project funding

**Importance:** High

Hi Deb:

Does SD53 have a duplicated project funding request for Similkameen Elementary Secondary School, under both CNCP and SEP?

From the CNCP Project Data Sheet: "Remove existing gas fired roof top units and replace with air source heat pumps. Upgrade control systems. Add carbon dioxide sensors. This application includes partial upgrades for the secondary wing only."

From the SEP Project Proposal Data Sheet: "Phase 2 - Replace existing gas fired rooftop units with new dual fuel air source heat pumps. We have been upgrading piecemeal based on limited AFG funding available"

Hopefully, the second phase of the SEP project will entirely complete this particular MECHUP activity at the school, and you can save your available CNCP funds for another projects...

Please advise!

Thanks,

John Woycheshin  
Regional Director

250-217-8318

## Education Funding Department EDUC:EX

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**From:** Woycheshin, John J EDUC:EX  
**Sent:** Tuesday, May 17, 2016 1:54 PM  
**To:** 'Debby Sansome'  
**Subject:** RE: CNCP versus SEP project funding

This is what I thought as I've been seeing a couple of SD bet hedgers given the coincidental application processes for CNCP and SEP!

How much would it cost to complete this entire MECHUP project at SESS this year, using SEP Phase 2 funding: \$1,490,000 + \$206,000 = \$1,696,000; or \$1,747,000, if MED covers the SD's offer of a \$50,000 contribution?

John W.

---

**From:** Debby Sansome [<mailto:DSansome@SD74.bc.ca>]  
**Sent:** Tuesday, May 17, 2016 1:44 PM  
**To:** Woycheshin, John J EDUC:EX  
**Subject:** RE: CNCP versus SEP project funding

Yes, it is a smaller section of the bigger plan.

We have been working on SESS mechanical since before I arrived in 2014. We have not been successful in being awarded sufficient money to get the entire project done so we keep breaking it down into smaller chunks.

As I don't want to miss out on any opportunity for external funding, a small section was requested on CNCP but the larger project was put into SEP. I honestly didn't think we would receive anything under CNCP because we only have a very small amount of funding there for us so hedging my bets, I placed the project in SEP as well.

Trying to cover all the bases. This school has been under construction for so long the grads are making up special T shirts - under-construction Graduates☺  
Deb

---

**From:** Woycheshin, John J EDUC:EX [<mailto:John.Woycheshin@gov.bc.ca>]  
**Sent:** May-17-16 1:33 PM  
**To:** Debby Sansome; Debby Sansome  
**Cc:** [lminnaba@sd53.bc.ca](mailto:lminnaba@sd53.bc.ca)  
**Subject:** CNCP versus SEP project funding  
**Importance:** High

Hi Deb:

Does SD53 have a duplicated project funding request for Similkameen Elementary Secondary School, under both CNCP and SEP?

From the CNCP Project Data Sheet: "Remove existing gas fired roof top units and replace with air source heat pumps. Upgrade control systems. Add carbon dioxide sensors. This application includes partial upgrades for the secondary wing only."

From the SEP Project Proposal Data Sheet: "Phase 2 - Replace existing gas fired rooftop units with new dual fuel air source heat pumps. We have been upgrading piecemeal based on limited AFG funding available"

Hopefully, the second phase of the SEP project will entirely complete this particular MECHUP activity at the school, and you can save your available CNCP funds for another projects...

Please advise!

Thanks,

John Woycheshin  
Regional Director

250-217-8318

## Education Funding Department EDUC:EX

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**From:** Woycheshin, John J EDUC:EX  
**Sent:** Tuesday, May 17, 2016 2:58 PM  
**To:** Vijandre, Carlo EDUC:EX  
**Subject:** FW: CNCP versus SEP project funding

Your call...

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**From:** Debby Sansome [<mailto:DSansome@SD74.bc.ca>]  
**Sent:** Tuesday, May 17, 2016 2:57 PM  
**To:** Woycheshin, John J EDUC:EX  
**Subject:** RE: CNCP versus SEP project funding

If MED covered off \$2,000,000 for the SEP, the District could throw in \$197,000 and the entire project would be complete and it would disappear off the CNCP request list.

Deb

---

**From:** Woycheshin, John J EDUC:EX [<mailto:John.Woycheshin@gov.bc.ca>]  
**Sent:** May-17-16 1:54 PM  
**To:** Debby Sansome  
**Subject:** RE: CNCP versus SEP project funding

This is what I thought as I've been seeing a couple of SD bet hedgers given the coincidental application processes for CNCP and SEP!

How much would it cost to complete this entire MECHUP project at SESS this year, using SEP Phase 2 funding: \$1,490,000 + \$206,000 = \$1,696,000; or \$1,747,000, if MED covers the SD's offer of a \$50,000 contribution?

John W.

---

**From:** Debby Sansome [<mailto:DSansome@SD74.bc.ca>]  
**Sent:** Tuesday, May 17, 2016 1:44 PM  
**To:** Woycheshin, John J EDUC:EX  
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## Education Funding Department EDUC:EX

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**From:** Woycheshin, John J EDUC:EX  
**Sent:** Wednesday, May 18, 2016 8:51 AM  
**To:** Vijandre, Carlo EDUC:EX  
**Subject:** FW: CNCP versus SEP project funding

For further discussion, if it's not too late...

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**From:** Debby Sansome [<mailto:DSansome@SD74.bc.ca>]  
**Sent:** Wednesday, May 18, 2016 7:03 AM  
**To:** Woycheshin, John J EDUC:EX  
**Subject:** FW: CNCP versus SEP project funding

I know, too much. John as the CNCP request is actually a section from the larger request of SEP, I can do the Phase 1 of 2 for the \$1,490,000.00. The Phase 2 of the project is the sprinkler system, one doesn't exist at this school so it can be a stand-alone project.

I hope this helps in the decision making. SESS has been on the mechanical books for a long time. It would be great to get out of the school for a while and let the educators teach.

Deb

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**From:** Debby Sansome  
**Sent:** May-17-16 2:57 PM  
**To:** 'Woycheshin, John J EDUC:EX'  
**Subject:** RE: CNCP versus SEP project funding

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**To:** Debby Sansome  
**Subject:** RE: CNCP versus SEP project funding

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John W.

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**From:** Debby Sansome [<mailto:DSansome@SD74.bc.ca>]  
**Sent:** Tuesday, May 17, 2016 1:44 PM  
**To:** Woycheshin, John J EDUC:EX  
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**From:** Woycheshin, John J EDUC:EX [<mailto:John.Woycheshin@gov.bc.ca>]  
**Sent:** May-17-16 1:33 PM  
**To:** Debby Sansome; Debby Sansome  
**Cc:** [lminnaba@sd53.bc.ca](mailto:lminnaba@sd53.bc.ca)  
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Please advise!

Thanks,

John Woycheshin  
Regional Director

250-217-8318

## Education Funding Department EDUC:EX

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**From:** Debby Sansome <DSansome@SD74.bc.ca>  
**Sent:** Wednesday, May 18, 2016 3:00 PM  
**To:** Woycheshin, John J EDUC:EX  
**Subject:** Project Savings Routine Capital

**Importance:** High

Hi John

As per your request I have estimated savings in energy costs as follows:

Similkameen Elementary Secondary School Renovation Project ~\$200/year based on increased Building Envelope work, upgrade to electrical and mechanical for counselling/washrooms.

Oliver Elementary replacement roof will also provide increased insulation factors for the school and I would anticipate a reduction in heating/cooling costs @ ~\$150/yr depending on commodity cost per GJ.

It may not sound like much but when you take into consideration that energy savings was not the primary needs, it is an excellent by-product of the exercise. No more leaky roof and very happy students with their new washrooms./flooring and windows.

Deb

D. Sansome-CTech  
Director of Facilities  
SD#53(Okanagan Similkameen)  
SD#74(Gold Trail)  
(250)498-9090

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Deb

---

**From:** Woycheshin, John J EDUC:EX [<mailto:John.Woycheshin@gov.bc.ca>]

**Sent:** May-17-16 1:33 PM

**To:** Debby Sansome; Debby Sansome

**Cc:** [lminnaba@sd53.bc.ca](mailto:lminnaba@sd53.bc.ca)

**Subject:** CNCP versus SEP project funding

**Importance:** High

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Thanks,

John Woycheshin  
Regional Director

250-217-8318

## Education Funding Department EDUC:EX

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**From:** Woycheshin, John J EDUC:EX  
**Sent:** Wednesday, May 18, 2016 3:11 PM  
**To:** 'Debby Sansome'  
**Subject:** RE: Project Savings Routine Capital

Debby:

Thanks for this. It's a great help!

John W.

PS – And I promise not to call you again today!

---

**From:** Debby Sansome [<mailto:DSansome@SD74.bc.ca>]  
**Sent:** Wednesday, May 18, 2016 3:00 PM  
**To:** Woycheshin, John J EDUC:EX  
**Subject:** Project Savings Routine Capital  
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Deb

D. Sansome-CTech  
Director of Facilities  
SD#53(Okanagan Similkameen)  
SD#74(Gold Trail)  
(250)498-9090



## Education Funding Department EDUC:EX

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**From:** Education Funding Department EDUC:EX  
**Sent:** Tuesday, May 24, 2016 4:21 PM  
**To:** 'lminnaba@sd53.bc.ca'; 'byoung@sd53.bc.ca'  
**Cc:** Woycheshin, John J EDUC:EX  
**Subject:** 186886 Capital Plan | Approval letter (SD53)  
**Attachments:** SD53\_Okanagan Similkameen School District.pdf

Hello,

Thank you for your Capital Plan submitted November 2015. I am pleased to forward your approval letter from Renee Mounteney, Executive Director, Capital Delivery Branch. Please see the attached letter for more details.

Thank you,

Rosa Cutler, Administrative Coordinator

Ministry of Education | Planning & Major Projects Division | Resource Management Division  
5<sup>th</sup> Floor, 620 Superior Street, Victoria BC V8W 9H1 , 250-896-4816 - Mobile



Please consider the environment before printing this email.



May 24, 2016

Ref: 186886

To: Secretary-Treasurer and Superintendent  
School District No. 53 (Okanagan Similkameen)

**Re: Ministry Response to Annual Capital Plan Submission**

This letter is in response to the Board's Annual Capital Plan submission and provides direction as to the next steps for advancing capital projects that align with provincial capital priorities.

The Ministry reviewed all the 5-year Capital Plan submissions across the participating 60 school districts to determine priorities for available capital funding in the programs of:

- Seismic Mitigation & Safety,
- Expansion,
- Building Envelope,
- Carbon Neutral Capital,
- School Enhancement, and
- Buses

I am pleased to advise Ministry support for advancing project development or delivery of the following projects:

SCHOOL PROJECT(S)		
School Name	Project Type	Next Steps & Timing
Similkameen Elementary – Secondary	School Enhancement	Proceed to design, tender & construction and complete by March 2017
Similkameen Elementary/Secondary	Carbon Neutral Capital	Proceed to design, tender & construction and complete by March 2017

Follow-up meetings will be scheduled by your assigned Regional Director to confirm scope, schedule, budget and the terms of project approval for the projects listed above. **No works or expenditures can proceed without a signed project agreement or other signed authorization from the Ministry.**

.../2

As a brief follow-up from a recent correspondence, the Ministry has recently revised the procedures on the Bylaws and the Annual Capital Plan submission which are briefly summarized below;

1. The Ministry eliminated the requirement for the Boards of Education to pass Bylaws for each individual capital project. For additional information, please visit our website at:

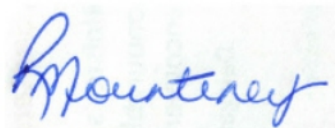
<http://www2.gov.bc.ca/gov/content/education-training/administration/resource-management/capital-planning/capital-bylaws>

2. The Annual Capital Plan submission deadline was initially revised to August 31, 2016, and based on recent feedback, the submission deadline will now be extended to September 9, 2016, to better align school district capital planning with government's fiscal cycle. The Capital Plan Instructions will be issued to you shortly with further details.

Should you have any questions regarding the Ministry's Capital Plan process, we would be more than happy to set-up a meeting with you to go over any questions you may have. At any time, please do not hesitate to contact your Regional Director, John Woycheshin at [John.Woycheshin@gov.bc.ca](mailto:John.Woycheshin@gov.bc.ca) to schedule a time to meet to discuss your inquiries.

Thank you for your dedication to the students of the Okanagan Similkameen School District.

Sincerely,



Renée Mounteney, MBA  
Executive Director, Capital Delivery Branch  
Planning and Major Projects Division

Cc: John Woycheshin, Regional Director, Capital Delivery Branch