

TO: Board of Directors
FROM: Liz Jamieson, Director of Capital Projects §
SUBJECT: Approval of SHS Draft Change Order No. 67 – Additional Cooling - \$268,810.00
DATE: December 6, 2022
TYPE: Action Needed

According to Board Policy No. 6957, construction Change Orders that exceed \$100,000.00 need Board approval.

Attached is a draft Change Order No. 67 for Stanwood High School - Additional Cooling, increasing the contract with Cornerstone General Contractors by the amount of \$268,810.00

The Change Order is for supplemental cooling capacity at two mechanical Dedicated Outside Air Units which serve the second and third floors of the main building. It is anticipated that this enhancement, in conjunction with utilizing early morning cool air to flush the building, will provide air tempering in early autumn and late spring on unseasonably warm days. This work did not include the addition of traditional air conditioning.

A budget has been established for Change Orders for each project currently underway and sufficient capacity is available to cover the added cost of this Change Order (CO) and other Construction Change Directives (CCD) and Change Order Proposals (COP) in process. This Change Order does not change the project completion date.

Please let us know if you have any questions.

Recommendation:

We recommend the board **move to approve SHS Draft Change Order No. 67 to the contract with Cornerstone General Contractors, Inc., in the amount of \$268,810.00, for the addition of cooling capacity to outside air units serving the second and third floors of the new Stanwood High School.**

Stanwood High School - Phase 2

Stanwood-Camano School District

CHANGE ORDER

Project: Stanwood High School - Phase 2 Architect's Project No.: 1426.000
Stanwood-Camano School District No. 401
 Architect: McGranahan Architects Change Order No.: 67
 Contractor: Cornerstone General Contractors Date: December 6, 2022

Per the General Conditions of the Contract for Construction, this Change Order shall constitute full settlement for all costs and time adjustments, including all delay and impact costs and direct and indirect damages, including consequential damages, regardless of cause, related to this change.

Plans and/or Specifications shall be changed as follows (refer to attachments for back-up information):

CI#	Description	Amount
632	CCD-218 Additional Cooling	\$268,810.00
Total Change Order Amount:		\$268,810.00

Original Contract Amount:	<u>\$91,445,901.00</u>	Original Date of Substantial Completion:	<u>August 26, 2021</u>
Previously Authorized Change Orders:	<u>\$5,584,562.00</u>	Previously Authorized Change Orders:	
Current Contract Amount:	<u>\$97,030,463.00</u>	Current Date of Substantial Completion:	<u>August 26, 2021</u>
Contract Amount will be:		The Contract Time Will be :	
Increased / Decreased/ Unchanged		Increased / Decreased / Unchanged	<u>by 0 Calendar Days.</u>
by this Change Order in the amount of:	<u>\$268,810.00</u>		
The Revised Contract Amount as a result of this Change Order therefor is:	<u>\$97,299,273.00</u>	The date of Substantial Completion as a result of this Change Order therefore is:	<u>August 26, 2021</u>

APPROVALS:

Steve Broback 	December 6, 2022
Architect: McGranahan Architects	Date
Contractor: Cornerston General Contractors	Date
Owner: Stanwood Camano SD	Date

Stanwood High School
Change Order Proposal (COP)



Date: 11/8/2022

Change Item: 632 - CCD-218 Additional Cooling

Comments

Costs associated with CCD #218. Cooling added to third floor. Roof units added, units added to mechanical mezzanine, and piping/electrical ran through the ceiling space above the third floor.

Self Perform Costs							
Description	Quantity	UOM	Labor		Mat/Equip		Total
			Unit Price	Total	Unit Price	Total	
Survey		HR	\$185.00		\$0.00		
Layout + Total Station		HR	\$93.18		\$30.00		
Cleanup/Protection	32	HR	\$80.75	\$2,584.00	\$0.00	\$0.00	\$2,584
Material Handling - Forklift	0	HR	\$80.75	\$0.00	\$45.00	\$0.00	\$0
Dumpster	1	EA	\$0.00	\$0.00	\$1,500.00	\$1,500.00	\$1,500
Procure	1	LS	\$0.00	\$0.00	\$200.00	\$200.00	\$200
Touch Up GWB/Paint		HR	\$80.75		\$0.00		
BIM Modeling/Detailing		HR	\$75.00		\$0.00		
Project Management		HR	\$115.00		\$0.00		
Project Engineer		HR	\$75.00		\$0.00		
Roof Patch	1	LS	\$0.00	\$0.00	\$1,810.00	\$1,810.00	\$1,810
Demo/Build Curbs/Load and Unload	40	HR	\$80.75	\$3,230.00	\$0.00	\$0.00	\$3,230
Site Investigation/Mobilization/Access	120	HR	\$80.75	\$9,690.00	\$0.00	\$0.00	\$9,690
Stow-It	1	LS	\$0.00	\$0.00	\$1,088.00	\$1,088.00	\$1,088
United Site Services	1	LS	\$0.00	\$0.00	\$261.25	\$261.25	\$261
United Site Services	1	LS	\$0.00	\$0.00	\$261.25	\$261.25	\$261
United Site Services	1	LS	\$0.00	\$0.00	\$306.26	\$306.26	\$306
Tacoma Screw	1	LS	\$0.00	\$0.00	\$217.79	\$217.79	\$218
Hytech	1	LS	\$0.00	\$0.00	\$1,809.60	\$1,809.60	\$1,810
Hydro Ninjas LLC	1	LS	\$0.00	\$0.00	\$671.92	\$671.92	\$672
DTG Recycle	1	LS	\$0.00	\$0.00	\$643.80	\$643.80	\$644
Subtotals:				\$15,504		\$8,770	\$24,274

Trade Contractor Costs	
Subcontractor/Supplier	Amount
Milne Electric, Inc.	\$12,993
Washington Best Finishes, LLC	\$2,328
Ramsett Mechanical Company	\$202,159
Spectrum Painting	\$1,768
Washington Best Finishes, LLC	\$985
Subtotal:	\$220,233

Stanwood High School
Change Order Proposal (COP)



Date: 11/8/2022

Change Item: 632 - CCD-218 Additional Cooling

Subtotal		\$244,507.00
	Self Perform 15.000%	\$3,641.00
	Subtier 8.000%	\$17,619.00
	Fee Compound Deduct Per Contract -0.860%	(\$1,894.00)
Subtotal		\$263,873.00
	General Liability Insurance 0.600%	\$1,583.00
	Perf. & Payment Bond 0.800%	\$2,111.00
	B&O State Tax 0.471%	\$1,243.00
*Total Direct Costs		\$268,810.00

We reserve our right for recovery of added costs and/or time resulting from the cumulative impact this change may have on cost and schedule as well as the potential unknown impacts this change may have on unchanged work.

Submitted By: *Kelsey Lewis*
Kelsey Lewis

Approved By: _____
Liz Jamieson (Date)

RAMSET MECHANICAL CO., INC.
2913 142nd Ave East, Suite 106
Sumner, WA 98390

October 4, 2022

CORNERSTONE GC
11805 N Creek Parkway South, #115
Bothell, WA. 98011

RE: STANWOOD H.S. PH. 2
PCO 217r1 for CCD 218r1
ADDITIONAL COOLING

Attn: Kelsey

Attached you will find our revised change proposal for the work associated with CCD 218r1. The total revised cost for this change to the work is \$202,159.00. Detailed backup is provided for review.

Ramsett will await written direction to proceed with this change to the work.

Please feel free to contact me to discuss this.

Sincerely,

John Bolstad, Project Manager
RAMSETT MECHANICAL COMPANY, INC.

Cc: Field
PCO 217r1

F:\1805\PCO 217r1

RAMSETT MECHANICAL COMPANY, INC.
 2913 142ND AVENUE EAST, SUITE 106
 SUMNER, WA 98390
 TEL (425) 251-9404 FAX (425) 251-3595

TO: CORNERSTONE GC

DATE: 27-Sep-22

REF: STANWOOD H.S. PH. 2

PR#: CCD-218R1

SUBJECT: Additional Cooling

RFI#:

1.00	LABOR HOURS - T&M	18,938.99	
2.00	PUNCHLIST/CLOSEOUT 3%	568.17	
	B TOTAL (L1+L2)		19,507.16
4.00	MATERIAL COST - T&M	23,080.32	
5.00	IN-HOUSE MISC MATERIAL	100.00	
6.00	DETAILING		
7.00	SUBCONTRACTORS	126,583.37	
8.00	SUBCONTRACTORS FEE	14,695.36	
9.00	SUB TOTAL (L4 - L8)		164,459.05
10.00	TOTALS (L3+L9)		183,966.21
11.00	FEE ON OWN WORK (12% OF L10-L7&L8)	5,122.50	
12.00	PROFIT ON SUBS (8% OF L7)	10,126.67	
13.00	SUB TOTAL (L11+L12)		15,249.17
14.00	BOND (N/A)		
15.00	LIABILITY INSURANCE (1.6% OF L10)	2,943.46	
16.00	SUB TOTAL (L14+L15)		2,943.46
17.00	TOTAL (L13+L16)		18,192.63
19.00	GRAND TOTALS (L10+L17)		202,159.00

SUBCONTRACTORS	DIRECT COST	FEE	TOTAL
SHEET METAL	***** \$80,714.29	***** \$9,685.71	\$90,400.00
BALANCE	***** \$7,487.34	***** \$806.39	\$8,293.73
CONTROLS	***** \$17,016.74	***** \$1,639.26	\$18,656.00
GEO LOOP	*****	*****	
INSULATION	***** \$21,365.00	***** \$2,564.00	\$23,929.00
MECH DEMO	*****	*****	
WELDING	*****	*****	
CHEMICAL TREATMENT	*****	*****	
PAINTING	*****	*****	
LEAK DETECTION	*****	*****	
ELECTRICAL	*****	*****	
CONCRETE POURING	*****	*****	
CONCRETE SAWING	*****	*****	
CONCRETE CORING	*****	*****	
EXCAVATION	*****	*****	
RENTAL EQUIPMENT	*****	*****	
SUBCONTRACT TOTAL	\$126,583.37	\$14,695.36	\$141,278.73



October 3, 2022

Ramsett Mechanical
2913 142nd Ave East, Suite 106
Sumner, WA 98390

Reference: **Stanwood High School**

Subject: CCD #218R1 – Additional Cooling System *Revision 2*

Attention: John Bolstad

John,

We have reviewed the above noted change. We find our cost for this change is Ninety Thousand Four Hundred Dollars, \$90,400.00.

The above noted cost is to add OCU-303, 304, associated refrigerant piping, coils and ductwork fittings per the direction issued in CCD #218R1. This has been revised to include the duct revisions necessary for the coil to be installed at DOAU-5 and add the Low Ambient control kits. Attached is Delta's material and labor breakdown. **This cost excludes all roofing/patching and equipment sleepers and flashing per M5.02 Detail 13, all work in DOAU-5, and all wiring and controls.**

These change orders do not include any amount for changes in the sequence of work, delays, disruption, rescheduling, extended overhead, acceleration, or impact costs, and Delta Technology is expressly reserving our right to make claim for any and all of these and related items of cost prior to final settlement of the contract.

Please let me know if you have any questions.

Sincerely,
DELTA TECHNOLOGY CORPORATION

A handwritten signature in black ink, appearing to read "Kyle Thomas".

Kyle Thomas
Project Manager

CHANGE ORDER PRICING

Stanwood High School

CCD #218R3

10/3/2022

a. LABOR COST

Labor Hours (see Contractor's breakdown):

263.70

Direct Labor Cost:

	<u>Hours</u>	<u>Hourly Rate</u>	
Detailer Foreman	0	113.42	-
Working Foreman	96	112.25	10,776.00
Journeyman	167.7	105.05	17,616.89
			-
			-

Total Hours 263.7

Direct Labor Rate 0.00

Direct Labor Cost 28392.89

Supervision 15.00% 0.00

Total Labor Cost \$ 28,392.89**b. SMALL TOOLS \$0.00****b. MATERIAL COSTS (see Contractor's Breakdown) \$52,321.40****c. EQUIPMENT COSTS (see Contractor's Breakdown) \$0.00****e. SUBCONTRACTORS**

Sub 1 - \$0.00

Sub 2 - \$0.00

Subcontractors Total **\$0.00****g. FEE**

On Contractor's Own Work \$80,714.29

Amount subject to Overhead Allowance

12.00% \$9,685.71

\$0.00

On Subcontractor's Work

7.00% \$0.00

\$0.00

Overhead Allowance Total **\$9,685.71****h. INSURANCE/BOND**

Warranty 0.00% \$90,400.00 \$0.00

Bond 0.00% \$90,400.00 \$0.00

Insurance/Bond Total **\$0.00****TOTAL CHANGE ORDER \$90,400.00**



PROPOSAL

Seattle - p. (206) 284-1476
2203 23rd Ave S. Seattle, WA 98144

CCD # 216

Date:	12/16/2021	Project Name:	Stanwood High School Phase 2
From:	Johnson Barrow / Trevor Grinzel	To:	Delta
Contact Info:	206-316-6302	Attention:	Kyle Thomas

LG - VRF Heat Pump Systems

Condensing Units

Tag	Model	Nominal Cooling Capacity	Description
OCU-303	ARUM144DTE5	12 Tons	Single Chassis Heat Pump 460v/3ph
ODU-304	ARUM121DTE5	10 Tons	Single Chassis Heat Pump 460v/3ph

EEV Kits

Qty.	Model	Nominal Cooling Capacity	Description
2	PRLK096A0	8-16 Tons	EEV Kit for 3 rd Party Cooling Coil

Included in Scope of Supply:

- AHU Communications Kit
- Startup
- Installation training and support
- 6-7 Week lead time
- (2) 58D42x45-7-4-W-H-R DX coils by RAE (10 weeks lead time)

Exclusions: *Smoke Detectors, Refrigerant piping, Line Sets, Digital Output Kits, Ball Valves, Secondary Drain Pan, Non-integral Condensate Pumps, External Refrigerant Trim Charges, Vibration Isolation, Wiring, Installation, Digital input kits, Dry Contacts, CO2 Sensors, Dampers, Low Ambient Kits, Seismic Calculation, Offloading, Storage, Access, Rigging, Installation, Extended Warranty, Any Other Options Not Listed Above, Special Construction, and Installation.*

Total NET Price, freight included

\$ 37,745.00

Thank you,
Shelby Spicer
sspicer@jbarrow.com
 206-572-0917

Continued next page...

Sales Quote



Document Date September 14, 2022
Sales Quote No. SQ01593

Johnson Barrow, Inc.
2024 21st Ave S
Seattle, WA 98144
206-284-1476
Parts Direct: 206-826-3200
Email: parts@jbarrow.com

Page 1 / 1

TO:
DELTA TECHNOLOGY, INC.
1223 VALENTINE AVE., S.E.
PACIFIC, WA 98047-2106
United States

SHIP TO:
DELTA TECHNOLOGY, INC.
DELTA TECHNOLOGY, INC.
1223 VALENTINE AVE., S.E.
PACIFIC, WA 98047-2106
United States

Salesperson	Quote Valid To	Payment Terms	Shipment Method
Jeremy Andrews	October 14, 2022	Net 30 days	Standard Ground Shipping

No.	Description	QTY	Unit	Unit Price	Amount
LGE-PRVC2	Low Ambient Control Kit for MV IV & 5	2	Each	319.40	638.80
FREIGHT	Freight	1	Each	35.00	35.00
				Subtotal	673.80
				Total Tax	0.00
				Total \$	673.80

Terms: Net 30 O.A.C., F.O.B. Factory, Freight is only an estimate at this time and is subject to change based off actual freight costs. Sales estimate is only valid for 30 days.

Please fax or email a copy of your purchase order when you're ready to order. If you do not have an open account with us, we take American Express, Visa or Mastercard. Fax# 206-832-4655.

Returns: If returns are coordinated through Johnson Barrow, Inc, credit may be issued. Returns are subject to a re-stocking fee and freight costs. NO RETURNS after 30 days.



Johnson Barrow inc

Proposal

Date:	09/21/2022	From:	Johnson Barrow
Project Name:	Stanwood HS-LG	To:	Delta Tech
Documents Acknowledged:		Attention:	Kyle Thomas

Stanwood HS-LG

Johnson Barrow Service to configured (Qty.2) Low Ambient Control Kits for LG systems. Followed by testing to ensure proper operation. To be billed on a T&M basis.

Exclusions:

- Any/All troubleshooting unrelated to the scope above
- Another proposal including labor and parts will be provided to address any components found to be faulty
- All Installation and Wiring of Low Ambient Control Kits.

Total NET Price

\$1,965.00

Please provide two weeks' notice

Any additional time over the above hours will be billed out per Johnson Barrows service rates, detailed below.

Johnson Barrow Service Rates
Standard Journeyman Rate \$185.00/per hr.
Overtime applies after 8 hours @ \$240.00/per hr.
After hours & Holiday rate @ \$315.00/per hr.
Truck/Fuel Charge Within Puget Sound Area (King/Pierce County) @ \$65.00
Truck/Fuel Charge Outside of Puget Sound Area @ \$115.00
Welding fee(\$15)/reclaim fee(\$40)/vacuum pump oil(\$18)

Date: 09/21/2022

THIS IS NOT AN INVOICEProject Name: **Stanwood HS-LG**
Project #:**Proposal****Description of work: Refer to scope on Pg.1**

Service call [10] hours @ \$185.00/per hr (estimated) *Travel time included* *Prevailing Wage accounted for* ***Parts and Materials not included	\$ 1,850.00
Other costs	\$
Overtime applies after 8 hours @ \$240.00/per hr	\$
After hours & Holiday rate @ \$315.00/per hr	\$
Truck/Fuel Charge Within Puget Sound Area (King/Pierce County) @ \$65.00	\$
Truck/Fuel Charge Outside of Puget Sound Area @ \$115.00	\$ 115.00
25lbs of Refrigerant	\$
Welding Fee (\$15) / Reclaim Fee (\$40) / Vacuum Pump Oil (\$18)	\$
TOTAL	\$ 1,965.00

TERMS:**Excluded sales taxes and shipping charges.*

- We offer to furnish the services and/or equipment specified herein at the prices stated and in accordance with Johnson-Barrows' standard terms and conditions. If you do not have a copy of or are not aware of these conditions please contact this office. Payment terms are Net 30 days, O.A.C.
- If you do not have an account with Johnson Barrow, VISA, MASTERCARD, & AMERICAN EXPRESS are accepted.
- **NOTE:** This proposal may be revised by Johnson Barrow if not accepted within 160 days.

Signature of Acceptance: _____ DATE: _____
Standard Johnson Barrow Terms and Conditions Apply

Thank you,

Dexter Charles
Service Sales Engineer
M: (206) 406-7603
E: Dcharles@jbarrow.com



Change Order Proposal Breakdown

DATE: November 19, 2021 JOB NO.: 19-1007-1 AIRTEST COP NO.: _____

JOB NAME: Stanwood High School CCD-218 CUSTOMER: Ramsett

SCOPE: CCD-218 Add additional cooling capacity. Rebalance DOAU-3 & 5, and chilled water system.

Supervisor/ Technician	W/E Date	Straight	OT	DT	Total Hours
TBD	TBD	24.00			24.00
TBD	TBD	24.00			24.00
					0.00
					0.00
					0.00
					0.00
					0.00
					0.00
					0.00
					0.00
Total:		48.00	0.00	0.00	48.00

I. LABOR RATES (Includes SS FICA/Med, FUI, SUI, L&I)

A. Field Straight Time (Technician):	24.00	Hours @	\$ 73.27	\$ 1,758.41
B. Field Overtime (Technician):	0.00	Hours @	\$ 109.90	\$ -
C. Field Doubletime (Technician):	0.00	Hours @	\$ 146.53	\$ -
D. Field Straight Time (Supervisor):	24.00	Hours @	\$ 79.84	\$ 1,916.08
E. Field Overtime (Supervisor):	0.00	Hours @	\$ 119.75	\$ -
F. Field Doubletime (Supervisor):	0.00	Hours @	\$ 159.67	\$ -
G. Commissioning Manager:	0.00	Hours @		\$ -
H. TAB Project Manager:	0.00	Hours @		\$ -
LABOR HOURS TOTAL:				\$ 3,674.49

II. LABOR BURDENS

A. Union Benefits	\$ 31.48	times Total Union Labor hours		\$ 1,511.04
B. Non Union Labor Burden	47.10%	of Total Non-Union Labor Rates		\$ -
C. Supervision:	15.00%	of Total Labor Rates		\$ 551.17
D. Safety Meetings:	1.25%	of Total Labor Rates		\$ 45.93
E. Warranty:	3.00%	of Total Labor Rates		\$ 110.23
LABOR BURDEN TOTAL:				\$ 2,218.38

III. INSTRUMENTATION & EQUIPMENT

A. Instrumentation:	\$ 20.00	x Total Labor Hours		\$ 960.00
B. Equipment (vehicles, ladders, etc.):	\$ 5.50	x Total Labor Hours		\$ 264.00
C. Consumables:	3.0%	of Total Union Labor Rates		\$ 110.23
D. Small Tools:	3.0%	of Total Union Labor Rates		\$ 110.23
INSTRUMENTATION & EQUIPMENT TOTAL:				\$ 1,444.47

IV. OTHER DIRECT COSTS

A. Other Direct Costs (sheaves, belts, bushings, etc.):				\$ 150.00
B. Travel/Parking / Per Diem: Prevailing Wage				\$ 150.00
OTHER DIRECT COSTS TOTAL:				\$ 150.00

V. SUBTOTAL (Items I through IV)

SUBTOTAL: \$ 7,487.34

VI. OVERHEAD & FEES

A. Fee	10.00%	x Subtotal		\$ 748.73
B. Bond (excluded from our scope):	0.00%	x Subtotal & Fee		\$ -
C. B & O Tax:	0.70%	x Subtotal, Fee, & Bond		\$ 57.65
OVERHEAD & FEES TOTAL:				\$ 806.39

TOTAL PROPOSED CHANGE AMOUNT FOR TAB / CX SERVICES: \$ 8,294

- Proceeding Per: _____
- Awaiting written direction to proceed with this work
- Work performed on expedited basis
- Work in Progress
- Work already completed
- Work performed during regular hours unless noted otherwise



NEBB Certification #3000
Change Order Proposal

Date: November 19, 2021

Company: Ramsett

Attention: Kathy Tatman

Project Name: Stanwood High School CCD-218

Project Description: Rebalance work required after cooling capacity changes made per CCD-218. Rebalance DOAU-3, 5, and chilled water system.

Cost to Perform Specified Services: \$ 8,294

Comments:

*See attached page for additional information.
Assumes daytime hours. Overtime or shift will be extra*

Brent K. Wyman
President

Please sign this proposal and include it in your purchase/change order.

Accepted By: _____

Date: _____



August 18, 2022

Attention: Heather Bolstad, Ramsett Mechanical

Project: Stanwood SD – Stanwood High School

Subject: COP-7 Additional Cooling (CCD-218 R1) – REV 1

Heather:

ATS Automation is prepared to execute the following scope of work as described below, for the above referenced project. Our proposal covers the following:

Scope Description:

- ATS will facilitate the addition of a new CHW cooling coil to DOAU-5 by providing a new 1.25" Belimo control valve (for installation by others) and wiring to the existing Alerton controller. The controller will be reprogrammed to operate the cooling coil in accordance with a revised sequence of operation.
- ATS will remove existing DOAU-5 control wiring to allow for the installation of the new coil cabinet, reinstall control wiring, and provide additional point-to-point and functional testing of existing controls to verify proper operation.
- ATS will facilitate the addition of (2) new DX coils to DOAU-2 by providing a new programmable controller, installing a discharge air temperature sensor for each coil, and wiring new condenser unit start/stop and status signals. The new coils will be programmed in accordance with a revised sequence of operation.
- ATS will provide point-to-point checkout and functional testing of the new controls.
- ATS will update control drawings and front-end graphics to reflect the changes.
- All original clarifications and exclusions apply.

Total Price – Additional Cooling: \$ 18,656 ADD

ATS requires approval before proceeding with the work described above. Please contact me at (425) 264-9321 if you have any questions.

Proposal Submitted:
ATS Automation, Inc.

Proposal Accepted:

By: Carson Fisco
Title: Sr. Sales Engineer

By: _____
Title: _____

ATS Contract Change Order

Job Name:	Stanwood High School	Additional Description:
ATS Job #:	1119003	<ul style="list-style-type: none"> Add cooling to DOAU-2, DOAU-5
Project Manager:	Austin Blake	
Sales Engineer:	Carson Fisco	
Date:	1/11/2022	
Reference:	CCD-218 R1	
Subject:	Additional Cooling	
ATS COP:	07 R1	

A. Labor - ATS Published Rates			
Description	Rate	Hours	Cost
Project Manager	\$140.00	16.00	\$2,240
Project Engineering	\$125.00	8.00	\$1,000
Project Technicians	\$105.00	24.00	\$2,520
Project Support	\$77.00	0.00	\$0
TOTAL LABOR COST: \$5,760			

Description	Overtime Rate	Hours	Cost
Project Management	\$210.00	0.0	\$0
Project Engineering	\$187.50	0.0	\$0
Project Technicians	\$142.50	0.0	\$0
Project Support	\$104.50	0.0	\$0

B. Material (General)		
Description		Cost
General Material	(See Attached)	\$104
	Freight @ 3%	\$3
	Warranty @ 3%	\$3
TOTAL MATERIAL (GENERAL) COST: \$110		

C. Material (Alerton, Belimo)		
Description		Cost
Alerton List Price	(See Attached)	\$1,708
Belimo List Price	(See Attached)	\$927
Net Alerton Price	Multiplier @ 0.45	\$769
Net Belimo Price	Multiplier @ 0.45	\$417
	Freight @ 3%	\$36
	Warranty @ 3%	\$36
TOTAL MATERIAL (ALERTON/BELIMO/PHOENIX) COST: \$1,257		

D. SUBCONTRACTS		
Description		Cost
Electrical Subcontractor		\$9,800
TOTAL SUBCONTRACTS COST: \$9,800		

E. Misc Costs / Direct Project Support		
Description	Rate	Cost
Labor Total (A)		\$5,760
Material Total (B & C)		\$1,367
Subtotal 1 (A, B, & C) \$7,127		
Markup on Direct Work	12%	\$855.26
TOTAL MISC/PROJECT SUPPORT COSTS: \$855		

F. OVERHEAD/FEE		
Description	Rate	Cost
Subcontracts Total (D)		\$9,800
Subtotal 1 (D) \$9,800		
Markup on Subcontractor	8.00%	\$784
TOTAL OVERHEAD/FEE: \$784		

G. TOTALS & BOND/TAX		
Description		Cost
A. Labor Total		\$5,760
B. Material (General) Total		\$110
C. Material (Alerton/Belimo) Total		\$1,257
D. Subcontracts Total		\$9,800
E. Misc Costs / Direct Project Support Total		\$855
F. Overhead/Fee Total		\$784
Subtotal 2 (A, B, C, D, E, & F) \$18,566		
B&O Tax (.484%) (Based on Subtotal 2)	0.484%	\$90
TOTAL: \$18,656		

Job Name:	Stanwood High School
ATS Job #:	1119003
Reference:	CCD-218 R1
ATS COP:	07 R1

ALERTON MATERIAL

MANUFACTURER	DESCRIPTION	MAN PART #	Price	Qty	Total
Alerton	VLC-853-E Programmable Controller	VL03-E	\$1,676.00	1	\$1,676.00
Alerton	Temp Sensor, Duct, 12"	TS-10B	\$32.00	1	\$32.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
Sub Total:					\$1,708.00

BELIMO MATERIAL

MANUFACTURER	DESCRIPTION	MAN PART #	Price	Qty	Total
Belimo	Characterized Control Valve, 1.25", 2-way	B231	\$927.00	1	\$927.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
Sub Total:					\$927.00



360-941-4754
Controls Fire Alarm Security

July 21, 2022

Austin Blake
ATS Automation
450 Shattuck Ave S# 100,
Renton, WA 98057

RE: Stanwood HS

We are happy to quote and propose the installation of the DDC control system on the above referenced project based on your proposal dated 6/6/21 as follows:

Scope of Work:

- Demo/Salvage Controls for DOAs 5 and Reinstall.
 - Add Conduit/Wire to Support New Cooling Add.
- Install a New Controller to Support Cooling for DOAU-2.
 - Install Control Wiring for (2) Duct Coils.
 - 24vs from Duct Coil.
 - MSTP from Nearest Source.
 - Cost for Interlock Wiring from Indoor/Outdoor Units Included.

Assumptions/Exclusions:

- All work is to be performed during normal working hours.
- All wiring is to be installed per local code.
- Work to be done on ladders. Does not include a ladders last safety project.
- Payment terms are (60) days after receipt of invoice.
- All control wiring is low voltage unless otherwise specified in points list or proposal.
- Engineering of control drawings is done by the control's contractor. Datskiy can assist in spotting discrepancies, but responsibility lies on engineering. Datskiy electric is the electrical contractor.
- Once approved control drawings are received, they are the basis of design for the project. All alterations to control drawings must be submitted to the acting project manager for approval before alterations to installed electrical work can commence.
- Datskiy electric is responsible for installation of the hired controls contractors DDC system. All other control systems (fire alarm, security, lighting, receptacle, metering, etc.) are excluded unless specified in proposal or points list.
- Exclusions: WSST, provision of devices or control devices, engineering, VFD installation or line/load wiring, painting, and patching.

Base Cost: \$ 9,800.00

Sincerely,

Larry Gerasimchuk
Larry.g@datskiyelectric.com
425-446-0907

To: Ramsett Mechanical Co

COP Subcontractor Breakdown Summary

Project Name:	Stanwood High School	COP No.	16
Project No.	2758	Source Documents:	CCD #218R1
Contractor:	Heckman, Inc	Contractor Ref. No.	1805
Description:	Additional Cooling. Revised 9/1/22: Add supply duct insulation Previously un-insulated ducts require insulation because the added CHW coils will have LAT's requiring insulation to prevent condensation. Price includes removal and replacing ceiling tile.		

1. CRAFT LABOR COSTS

Itemize all costs on attached COP Cost Breakdown form.

Direct Labor Costs:

a. crew (apprentices, journeymen, & laborers)	\$ 14,931.75
b. foreman	\$ -
c. lead foreman	\$ -
DIRECT LABOR SUBTOTAL	\$ 14,931.75

Labor Markups:

d. direct supervision (NTE 0% of 1a)	\$ -
e. safety (NTE 0% of lines 1a, b, & c)	\$ -

Supervision markup should be zero if any foreman time is included in direct labor costs.

1. CRAFT LABOR COSTS \$ 14,932.00

2. MATERIAL COSTS

a. material total from cost breakdown form	\$ 6,433.29
--	-------------

2. MATERIAL COSTS \$ 6,433.00

3. EQUIPMENT COSTS

a. equipment total from cost breakdown form	\$ -
---	------

3. EQUIPMENT COSTS \$ -

4. SMALL TOOLS

a. small tools (NTE 0% of 1a & b)	\$ -
-----------------------------------	------

4. SMALL TOOLS \$ -

SUBTOTAL 1 thru 4 \$ 21,365.00

5. OVERHEAD & PRORT

a. 12% portion of 1, 2, 3, & 4 up to \$50,000	\$ 2,563.80
b. NTE 10% portion of 1, 2, 3, & 4 in excess of \$50,000	\$ -

5. OVERHEAD & PRORT \$ 2,564.00

6. SUB-SUBCONTRACTORS

a. _____	_____
b. _____	_____
c. _____	_____
d. _____	_____
e. _____	_____
f. _____	_____

6. SUB-SUBCONTRACTORS \$ -

7. OVERHEAD & PRORT ON SUB-SUBCONTRACTORS

a. NTE 8% of Line 6 up to \$50,000 for each sub	\$ -
b. NTE 6% of Line 6 in excess of \$50,000 for each sub	\$ -

7. OVERHEAD & PRORT ON SUB-SUBCONTRACTORS \$ -

8. INSURANCE

a. payroll driven liability insurance	0.00 % of 1	\$ -	
b. volume driven liability insurance	0.00 % of 1-7	\$ -	

8. INSURANCE \$ -

9. BOND

a. Subguard on sub-subcontractors	1.00 % of 1-6	\$ -	
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9. BOND \$ -

TOTAL COST \$ 23,929.00

COP Cost Breakdown

Project Name: Stanwood High School

COP No. 16

Project No. 2758

To: Ramsett Mechanical Co

Date: 9/1/2022

Contractor: Heckman, Inc

Contractor Ref. No. 1805

Description	Quantity	Unit Type	Labor		Material		Equipment		Total Cost
			Unit \$	Cost	Unit \$	Cost	Unit \$	Cost	
Cooling 11/23/21				\$ -		\$ -		\$ -	\$ -
Journeyman Insulator Wages	59.75	hours	\$92.60	\$ 5,532.85		\$ -		\$ -	\$ 5,532.85
				\$ -		\$ -		\$ -	\$ -
3/4 x 1" fiberglass insulation	102	LF		\$ -	\$1.98	\$ 201.96		\$ -	\$ 201.96
2-1/2 x 1" fiberglass Insulation	66	LF		\$ -	\$3.04	\$ 200.64		\$ -	\$ 200.64
3/4 x 1" Armaflex Insulation	706	LF		\$ -	\$3.14	\$ 2,216.84		\$ -	\$ 2,216.84
#7 PVC fitting	11	each		\$ -	\$1.38	\$ 15.18		\$ -	\$ 15.18
#13 PVC fitting	13	each		\$ -	\$4.05	\$ 52.65		\$ -	\$ 52.65
2-1/2 x 1" PVC Jacket	66	LF		\$ -	\$3.57	\$ 235.62		\$ -	\$ 235.62
3/4 x 1" Aluminum Jacket	54	LF		\$ -	\$2.79	\$ 150.66		\$ -	\$ 150.66
3/4 x 1" Aluminum fitting	8	each		\$ -	\$6.90	\$ 55.20		\$ -	\$ 55.20
accessories	1	lot		\$ -	\$469.31	\$ 469.31		\$ -	\$ 469.31
				\$ -		\$ -		\$ -	\$ -
Supply Duct 9/1/22				\$ -		\$ -		\$ -	\$ -
Journeyman Insulator Wages	101.5	hours	\$92.60	\$ 9,398.90		\$ -		\$ -	\$ 9,398.90
				\$ -		\$ -		\$ -	\$ -
1-1/2" duct wrap	5027	SF		\$ -	\$0.47	\$ 2,362.69		\$ -	\$ 2,362.69
accessories	1	lot		\$ -	\$472.54	\$ 472.54		\$ -	\$ 472.54
				\$ -		\$ -		\$ -	\$ -
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				\$ -		\$ -		\$ -	\$ -
Subtotal				\$ 14,931.75		\$ 6,433.29		\$ -	\$ 21,365.04
		hrs		\$ -		\$ -		\$ -	\$ -
		hrs		\$ -		\$ -		\$ -	\$ -
Total	161.25	hrs		\$ -		\$ -		\$ -	\$ -
Total Cost of Work				\$ 14,931.75		\$ 6,433.29		\$ -	\$ 21,365.04

Report Selections:	Job: 1805	Job Status: Active
Phase: 09217	Phase Status: Active, Inactive, Complete	
Cost Type: L	Division: ALL	
Tran. Type: AP, EQ, GL, IC, JC, PR, OH	Customer: ALL	
Vendor: ALL	Draw Appl. #: ALL	
Employee: ALL	A/P Contract Labor Hours? No	
Inv. Item: ALL	Master Job? No	

RAMSETT MECHANICAL CO., INC.
Job Cost History Report From Inception To 08/26/22
Including P.O. Receipts and Payroll in Progress

UnPosted?

Unit of Measure

Date	Tran Type	Reference	Description	Additional Information	Hours	Quantity	Amount
Job: 1805 STANWOOD HS-PHASE II							
Phase: 09-217 Cost Type: L LABOR							
06/24/22	PR RUSERI		ERIC RUSSELL	Check# E26609	4.00		311.06
06/28/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26619	4.00		296.48
06/28/22	PR HAATHO		THOMAS HAAG	Check# E26628	4.00		381.56
07/19/22	PR HAATHO		THOMAS HAAG	Check# E26732	3.00		270.03
07/19/22	PR RUSERI		ERIC RUSSELL	Check# E26748	3.00		261.26
07/25/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26757	8.00		602.23
07/25/22	PR HAALUC		LUCAS HAAG	Check# E26765	8.00		544.10
07/25/22	PR HAATHO		THOMAS HAAG	Check# E26766	10.00		952.88
07/26/22	PR RUSERI		ERIC RUSSELL	Check# E26782	8.00		695.74
07/26/22	PR HAATHO		THOMAS HAAG	Check# E26766	2.00		190.58
07/27/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26757	8.00		602.23
07/27/22	PR HAATHO		THOMAS HAAG	Check# E26766	4.00		381.15
07/27/22	PR RUSERI		ERIC RUSSELL	Check# E26782	8.00		695.74
07/28/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26757	8.00		602.23
07/28/22	PR HAATHO		THOMAS HAAG	Check# E26766	2.00		190.54
07/28/22	PR RUSERI		ERIC RUSSELL	Check# E26782	8.00		695.74
07/29/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26757	8.00		526.96
07/29/22	PR RUSERI		ERIC RUSSELL	Check# E26782	7.00		526.96
08/01/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26791	8.00		695.75
08/01/22	PR HAATHO		THOMAS HAAG	Check# E26801	8.00		602.28
08/01/22	PR RUSERI		ERIC RUSSELL	Check# E26816	2.00		190.57
08/02/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26791	8.00		695.79
08/02/22	PR RUSERI		ERIC RUSSELL	Check# E26816	8.00		602.28
08/03/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26791	8.00		695.79
08/03/22	PR HAATHO		THOMAS HAAG	Check# E26801	2.00		190.57
08/04/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26791	8.00		695.79
08/04/22	PR HAATHO		THOMAS HAAG	Check# E26801	8.00		602.28
08/04/22	PR RUSERI		ERIC RUSSELL	Check# E26816	2.00		190.57
08/05/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26791	8.00		695.79
08/05/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26791	8.00		602.30

RAMSETT MECHANICAL CO., INC.
Job Cost History Report From Inception To 08/26/22
Including P. O. Receipts and Payroll in Progress

UnPosted?

Unit of Measure

Date	Tran Type	Reference	Description	Additional Information	Hours	Quantity	Amount
Job: 1805 STANWOOD HS-PHASE II							
Phase: 09-217 Cost Type: L LABOR							
08/05/22	PR RUSERI		ERIC RUSSELL	Check# E26816	8.00		695.79
08/08/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26825	10.00		752.83
08/08/22	PR RUSERI		ERIC RUSSELL	Check# E26851	10.00		869.74
08/09/22	PR ARMBRA		BRANDON ARMSTRONG	Check# E26825	5.00		376.42
08/09/22	PR HAATHO		THOMAS HAAG	Check# E26834	3.00		285.87
08/09/22	PR RUSERI		ERIC RUSSELL	Check# E26851	8.00		695.79
Subtotal for Phase: 09-217 Cost Type: L LABOR					229.00	0.00	18,938.99
Total for Job: 1805 STANWOOD HS-PHASE II					229.00	0.00	18,938.99

Hours Amount	LABOR	Total
09-217	229.00	229.00
	18,938.99	18,938.99
Total	229.00	229.00
	18,938.99	18,938.99



1012 132nd STREET SOUTHWEST
EVERETT, WA 98204-7328

Please contact with Questions: 425-742-4748

RAMSETT MECHANICAL CO INC
2913 142ND AVE E SUITE 106
SUMNER, WA 98390

INVOICE NUMBER	TOTAL DUE	CUSTOMER	PAGE
0329630	\$159.05	14150	1 of 1

PLEASE REFER TO INVOICE NUMBER WHEN
MAKING PAYMENT AND REMIT TO:

FERGUSON ENTERPRISES #3007
PO BOX 847411
DALLAS, TX 75284-7411



SHIP TO:

RAMSETT MECHANICAL CO INC
17405 SPRUCE WAY
C/O JEFF REES @ SPRUCE ELEM
LYNNWOOD, WA 98037

SHIP WHSE.	SELL WHSE.	TAX CODE	CUSTOMER ORDER NUMBER	SALESMAN	JOB NAME	INVOICE DATE	BATCH
3023	3023	WAE	1805-9217-1	KJS	1805 STANWOOD HS PHA	04/01/22	IO 454720

ORDERED	SHIPPED	ITEM NUMBER	DESCRIPTION	UNIT PRICE	UM	AMOUNT
2	2	VCD35920PE1	Come visit us at our newest Seattle location. 3440 6th Ave South 4X2-1/2 PTD GRV MECH TEE 920	64.976	EA	129.95
INVOICE SUB-TOTAL						129.95
FREIGHT						29.10

LEAD LAW WARNING: IT IS ILLEGAL TO INSTALL PRODUCTS THAT ARE NOT "LEAD FREE" IN ACCORDANCE WITH US FEDERAL OR OTHER APPLICABLE LAW IN POTABLE WATER SYSTEMS ANTICIPATED FOR HUMAN CONSUMPTION. PRODUCTS WITH *NP IN THE DESCRIPTION ARE NOT LEAD FREE AND CAN ONLY BE INSTALLED IN NON-POTABLE APPLICATIONS. BUYER IS SOLELY RESPONSIBLE FOR PRODUCT SELECTION.



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TERMS: NET 10TH PROX	ORIGINAL INVOICE	TOTAL DUE	\$159.05
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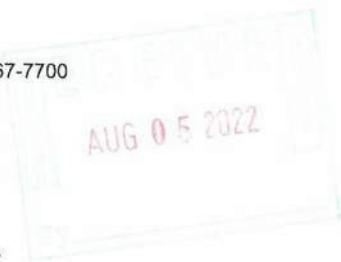
All past due amounts are subject to a service charge of 1.5% per month, or the maximum allowed by law, if lower. If Buyer fails to pay within terms, then in addition to other remedies, Buyer agrees to pay Seller all costs of collection, including reasonable attorney fees. Complete terms and conditions are available upon request or at <https://www.ferguson.com/content/website-info/terms-of-sale>, incorporated by reference. Seller may convert checks to ACH. *Any reference to or incorporation of Executive Order 14042 and/or the EO-implementing Federal clauses (FAR 52.223 -99 and/or DFARS 252.223-7999) is expressly rejected by Seller and shall not apply as Seller is a materials supplier and therefore exempt under the Executive Order.*



4100 WEST MARGINAL WAY SW
SEATTLE, WA 98106-1209

Please contact with Questions: 206-767-7700

RAMSETT MECHANICAL CO INC
2913 142ND AVE E SUITE 106
SUMNER, WA 98390



INVOICE NUMBER	TOTAL DUE	CUSTOMER	PAGE
0723166-1	\$11.82	14150	1 of 1

PLEASE REFER TO INVOICE NUMBER WHEN
MAKING PAYMENT AND REMIT TO:

FERGUSON ENTERPRISES #3007
PO BOX 847411
DALLAS, TX 75284-7411

SHIP TO:

SHIP WHSE.	SELL WHSE.	TAX CODE	CUSTOMER ORDER NUMBER	SALESMAN	JOB NAME	INVOICE DATE	BATCH
3007	3007	WA1726	1805-9217	KJS	STANWOOD	08/03/22	IO 465123

ORDERED	SHIPPED	ITEM NUMBER	DESCRIPTION	UNIT PRICE	UM	AMOUNT
1	1	M49560163	2-3/4 HOLE DOZER HOLE SAW	10.715	EA	10.72
INVOICE SUB-TOTAL						10.72
TAX						1.10
Seattle						

LEAD LAW WARNING: IT IS ILLEGAL TO INSTALL PRODUCTS THAT ARE NOT "LEAD FREE" IN ACCORDANCE WITH US FEDERAL OR OTHER APPLICABLE LAW IN POTABLE WATER SYSTEMS ANTICIPATED FOR HUMAN CONSUMPTION. PRODUCTS WITH *NP IN THE DESCRIPTION ARE NOT LEAD FREE AND CAN ONLY BE INSTALLED IN NON-POTABLE APPLICATIONS. BUYER IS SOLELY RESPONSIBLE FOR PRODUCT SELECTION.



9217

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Log in to **Ferguson.com** and request access to Online Bill Pay.

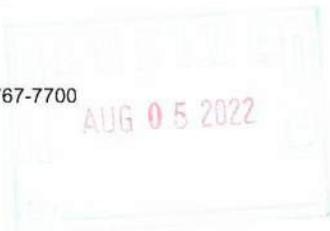


TERMS: NET 10TH PROX	ORIGINAL INVOICE	TOTAL DUE	\$11.82
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All past due amounts are subject to a service charge of 1.5% per month, or the maximum allowed by law, if lower. If Buyer fails to pay within terms, then in addition to other remedies, Buyer agrees to pay Seller all costs of collection, including reasonable attorney fees. Complete terms and conditions are available upon request or at <https://www.ferguson.com/content/website-info/terms-of-sale>, incorporated by reference. Seller may convert checks to ACH. *Any reference to or incorporation of Executive Order 14042 and/or the EO-implementing Federal clauses (FAR 52.223 -99 and/or DFARS 252.223-7999) is expressly rejected by Seller and shall not apply as Seller is a materials supplier and therefore exempt under the Executive Order.*

FERGUSON
 4100 WEST MARGINAL WAY SW
 SEATTLE, WA 98106-1209

Please contact with Questions: 206-767-7700



INVOICE NUMBER	TOTAL DUE	CUSTOMER	PAGE
0723266	\$48.56	14150	1 of 1

**PLEASE REFER TO INVOICE NUMBER WHEN
 MAKING PAYMENT AND REMIT TO:**

FERGUSON ENTERPRISES #3007
 PO BOX 847411
 DALLAS, TX 75284-7411

SHIP TO:

RAMSETT MECHANICAL CO INC
 2913 142ND AVE E SUITE 106
 SUMNER, WA 98390

COUNTER PICK UP
 4100 WEST MARGINAL WAY SW
 SEATTLE, WA 98106-1209

SHIP WHSE.	SELL WHSE.	TAX CODE	CUSTOMER ORDER NUMBER	SALESMAN	JOB NAME	INVOICE DATE	BATCH
3007	3007	WAE	1805-9217	KJS	TOM	08/03/22	IO 465123
ORDERED	SHIPPED	ITEM NUMBER	DESCRIPTION		UNIT PRICE	UM	AMOUNT
2		2 PFXMMHFFN	LF 3/4 MIP X 3/4 MHT BRS HOSE ADPT		4.408	EA	8.82
2		2 PFGG100K	2 GAS TEST GA ASSY 0-100#		19.870	EA	39.74
INVOICE SUB-TOTAL							48.56
<p>LEAD LAW WARNING: IT IS ILLEGAL TO INSTALL PRODUCTS THAT ARE NOT "LEAD FREE" IN ACCORDANCE WITH US FEDERAL OR OTHER APPLICABLE LAW IN POTABLE WATER SYSTEMS ANTICIPATED FOR HUMAN CONSUMPTION. PRODUCTS WITH *NP IN THE DESCRIPTION ARE NOT LEAD FREE AND CAN ONLY BE INSTALLED IN NON-POTABLE APPLICATIONS. BUYER IS SOLELY RESPONSIBLE FOR PRODUCT SELECTION.</p>							
<p>Looking for a more convenient way to pay your bill?</p> <p>Log in to Ferguson.com and request access to Online Bill Pay.</p>							



9217



TERMS: NET 10TH PROX	ORIGINAL INVOICE	TOTAL DUE	\$48.56
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All past due amounts are subject to a service charge of 1.5% per month, or the maximum allowed by law, if lower. If Buyer fails to pay within terms, then in addition to other remedies, Buyer agrees to pay Seller all costs of collection, including reasonable attorney fees. Complete terms and conditions are available upon request or at <https://www.ferguson.com/content/website-info/terms-of-sale>, incorporated by reference. Seller may convert checks to ACH. *Any reference to or incorporation of Executive Order 14042 and/or the EO-implementing Federal clauses (FAR 52.223 -99 and/or DFARS 252.223-7999) is expressly rejected by Seller and shall not apply as Seller is a materials supplier and therefore exempt under the Executive Order.*

FERGUSON
 4100 WEST MARGINAL WAY SW
 SEATTLE, WA 98106-1209

INVOICE NUMBER	TOTAL DUE	CUSTOMER	PAGE
0723166	\$55.81	14150	1 of 1

**PLEASE REFER TO INVOICE NUMBER WHEN
 MAKING PAYMENT AND REMIT TO:**

FERGUSON ENTERPRISES #3007
 PO BOX 847411
 DALLAS, TX 75284-7411

Please contact with Questions: 206-767-7700



SHIP TO:

RAMSETT MECHANICAL CO INC
 2913 142ND AVE E SUITE 106
 SUMNER, WA 98390

SHIP WHSE.	SELL WHSE.	TAX CODE	CUSTOMER ORDER NUMBER	SALESMAN	JOB NAME	INVOICE DATE	BATCH
3007	3007	WAE	1805-9217	KJS	STANWOOD	08/03/22	IO 465123
ORDERED	SHIPPED	ITEM NUMBER	DESCRIPTION		UNIT PRICE	UM	AMOUNT
1	0	M49560163	2-3/4 HOLE DOZER HOLE SAW			EA	0.00
2	2	PFXMFHFFN	LF 3/4 MIP X 3/4 FHT BRS HOSE ADPT		8.033	EA	16.07
2	2	PFGG100K	2 GAS TEST GA ASSY 0-100#		19.870	EA	39.74
INVOICE SUB-TOTAL							55.81
<p>LEAD LAW WARNING: IT IS ILLEGAL TO INSTALL PRODUCTS THAT ARE NOT "LEAD FREE" IN ACCORDANCE WITH US FEDERAL OR OTHER APPLICABLE LAW IN POTABLE WATER SYSTEMS ANTICIPATED FOR HUMAN CONSUMPTION. PRODUCTS WITH *NP IN THE DESCRIPTION ARE NOT LEAD FREE AND CAN ONLY BE INSTALLED IN NON-POTABLE APPLICATIONS. BUYER IS SOLELY RESPONSIBLE FOR PRODUCT SELECTION.</p>							



9217

Looking for a more convenient way to pay your bill?

Log in to **Ferguson.com** and request access to Online Bill Pay.



TERMS: NET 10TH PROX	ORIGINAL INVOICE	TOTAL DUE	\$55.81
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All past due amounts are subject to a service charge of 1.5% per month, or the maximum allowed by law, if lower. If Buyer fails to pay within terms, then in addition to other remedies, Buyer agrees to pay Seller all costs of collection, including reasonable attorney fees. Complete terms and conditions are available upon request or at <https://www.ferguson.com/content/website-info/terms-of-sale>, incorporated by reference. Seller may convert checks to ACH. *Any reference to or incorporation of Executive Order 14042 and/or the EO-implementing Federal clauses (FAR 52.223 -99 and/or DFARS 252.223-7999) is expressly rejected by Seller and shall not apply as Seller is a materials supplier and therefore exempt under the Executive Order.*

Invoice INV00174

July 21, 2022
Page 1 / 1



RAMSETT MECHANICAL CO., INC.
MARY LEISCHOW
2913 142nd Ave E Ste 106
STE. 106
Sumner, WA 98390-9504
United States

Ship-to Address
Ramsett Mechanical
2913 142ND AVE E
SUMNER, WA 98390-9504
United States

Johnson Barrow, Inc.
2024 21st Ave S
Seattle, WA 98144

Customer PO No.
1805-9217

Due Date
August 20, 2022

Payment Terms
Net 30 days

Description	Shipment Date	Quantity	Unit	Unit Price	Line Amount
DOAS-5 CW coil & box	06/15/22	1	Each	13,970.00	13,970.00
				Subtotal	13,970.00
				Total Tax	0.00
				Total \$	13,970.00

Remit Check Payment To:
Johnson Barrow, Inc.
2024 – 21st Ave S
Seattle, WA 98144

Remit ACH Payment To:
Bank: Washington Trust
Routing: 125100089
Account: 1000675965
Remittance: remittance@jbarrow.com

9217

Home Page
www.jbarrow.com

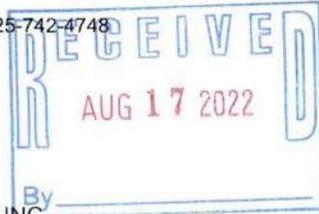
Phone No.
206-284-1476

Email



1012 132nd STREET SOUTHWEST
EVERETT, WA 98204-7328

Please contact with Questions: 425-742-4748



RAMSETT MECHANICAL CO INC
2913 142ND AVE E SUITE 106
SUMNER, WA 98390

INVOICE NUMBER	TOTAL DUE	CUSTOMER	PAGE
0731556-1	\$6.43	14150	1 of 1

**PLEASE REFER TO INVOICE NUMBER WHEN
MAKING PAYMENT AND REMIT TO:**

FERGUSON ENTERPRISES #3007
PO BOX 847411
DALLAS, TX 75284-7411

SHIP TO:

COUNTER PICK UP
1012 132ND STREET SOUTHWEST
EVERETT, WA 98204-7328

SHIP WHSE.	SELL WHSE.	TAX CODE	CUSTOMER ORDER NUMBER	SALESMAN	JOB NAME	INVOICE DATE	BATCH
3023	3023	WAE	1805-9217	KJS	1805 STANWOOD HS PHA	08/15/22	IO 466193

ORDERED	SHIPPED	ITEM NUMBER	DESCRIPTION	UNIT PRICE	UM	AMOUNT
1	1	M49560082	1-1/2 IN *HOLEDO BMTL HOLE SAW	6.430	EA	6.43
INVOICE SUB-TOTAL						6.43

LEAD LAW WARNING: IT IS ILLEGAL TO INSTALL PRODUCTS THAT ARE NOT "LEAD FREE" IN ACCORDANCE WITH US FEDERAL OR OTHER APPLICABLE LAW IN POTABLE WATER SYSTEMS ANTICIPATED FOR HUMAN CONSUMPTION. PRODUCTS WITH *NP IN THE DESCRIPTION ARE NOT LEAD FREE AND CAN ONLY BE INSTALLED IN NON-POTABLE APPLICATIONS. BUYER IS SOLELY RESPONSIBLE FOR PRODUCT SELECTION.



9217

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Log in to **Ferguson.com** and request access to Online Bill Pay.



TERMS: NET 10TH PROX	ORIGINAL INVOICE	TOTAL DUE	\$6.43
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All past due amounts are subject to a service charge of 1.5% per month, or the maximum allowed by law, if lower. If Buyer fails to pay within terms, then in addition to other remedies, Buyer agrees to pay Seller all costs of collection, including reasonable attorney fees. Complete terms and conditions are available upon request or at <https://www.ferguson.com/content/website-info/terms-of-sale>, incorporated by reference. Seller may convert checks to ACH. *Any reference to or incorporation of Executive Order 14042 and/or the EO-implementing Federal clauses (FAR 52.223 -99 and/or DFARS 252.223-7999) is expressly rejected by Seller and shall not apply as Seller is a materials supplier and therefore exempt under the Executive Order.*

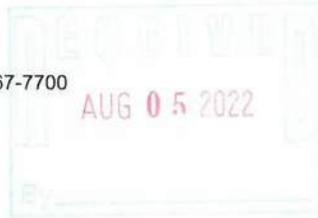
FERGUSON
 4100 WEST MARGINAL WAY SW
 SEATTLE, WA 98106-1209

INVOICE NUMBER	TOTAL DUE	CUSTOMER	PAGE
0710752-2	\$391.85	14150	1 of 1

**PLEASE REFER TO INVOICE NUMBER WHEN
 MAKING PAYMENT AND REMIT TO:**

FERGUSON ENTERPRISES #3007
 PO BOX 847411
 DALLAS, TX 75284-7411

Please contact with Questions: 206-767-7700



SHIP TO:

RAMSETT MECHANICAL
 7400 272ND ST NW
 STANWOOD, WA 98292

RAMSETT MECHANICAL CO INC
 2913 142ND AVE E SUITE 106
 SUMNER, WA 98390

SHIP WHSE.	SELL WHSE.	TAX CODE	CUSTOMER ORDER NUMBER	SALESMAN	JOB NAME	INVOICE DATE	BATCH
3007	3007	WAE	1805-9217	KJS		08/03/22	IO 465123
ORDERED	SHIPPED	ITEM NUMBER	DESCRIPTION	UNIT PRICE	UM	AMOUNT	
2		VCD35920PE0	4X2-1/2 PTD FIP MECH TEE 920	70.790	EA	141.58	
2		GBRNLU	LF 2-1/2X6 BRS NIP GBL	63.777	EA	127.55	
2		GBRNLP	LF 2-1/2X4 BRS NIP GBL	45.829	EA	91.66	
INVOICE SUB-TOTAL						360.79	
FREIGHT						31.06	
<p>LEAD LAW WARNING: IT IS ILLEGAL TO INSTALL PRODUCTS THAT ARE NOT "LEAD FREE" IN ACCORDANCE WITH US FEDERAL OR OTHER APPLICABLE LAW IN POTABLE WATER SYSTEMS ANTICIPATED FOR HUMAN CONSUMPTION. PRODUCTS WITH *NP IN THE DESCRIPTION ARE NOT LEAD FREE AND CAN ONLY BE INSTALLED IN NON-POTABLE APPLICATIONS. BUYER IS SOLELY RESPONSIBLE FOR PRODUCT SELECTION.</p>							

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TERMS: NET 10TH PROX	ORIGINAL INVOICE	TOTAL DUE	\$391.85
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1012 132nd STREET SOUTHWEST
EVERETT, WA 98204-7328

Please contact with Questions: 425-742-4748



INVOICE NUMBER	TOTAL DUE	CUSTOMER	PAGE
0731556	\$508.94	14150	1 of 1

**PLEASE REFER TO INVOICE NUMBER WHEN
MAKING PAYMENT AND REMIT TO:**

FERGUSON ENTERPRISES #3007
PO BOX 847411
DALLAS, TX 75284-7411

SHIP TO:

RAMSETT MECHANICAL CO INC
2913 142ND AVE E SUITE 106
SUMNER, WA 98390

COUNTER PICK UP
1012 132ND STREET SOUTHWEST
EVERETT, WA 98204-7328

SHIP WHSE.	SELL WHSE.	TAX CODE	CUSTOMER ORDER NUMBER	SALESMAN	JOB NAME	INVOICE DATE	BATCH
3023	3023	WAE	1805-9217	KJS	1805 STANWOOD HS PHA	08/05/22	IO 465438

ORDERED	SHIPPED	ITEM NUMBER	DESCRIPTION	UNIT PRICE	UM	AMOUNT
4		4 PF500F	3/4 COP CLAD 2H STRP	0.233	EA	0.93
100	100	JT26250	1/4 ID X 3/8 OD X 100 TUBE VINYL	0.337	FT	33.70
2	2	FNW7010EP0100	1 EPOX PLTD ADJ SWVL RNG HGR	0.708	EA	1.42
20	20	LHARDF10	3/4 X 10 L HARD COP TUBE	393.420	C	78.68
40	40	LHARDG10	1 X 10 L HARD COP TUBE	561.040	C	224.42
2	2	PFXMHBBBN	LF 1/4 ID X 1/4 MIP BRS HOSE BARB	2.147	EA	4.29
1	1	PSCTBV	7-1/2 BLAC PROSELECT C/TIE 100PK	9.989	PK	9.99
1	0	M49560082	1-1/2 IN *HOLEDO BMTL HOLE SAW		EA	0.00
2	2	IBRLFBB	LF 3/4X1/4 BRS BUSH	3.343	EA	6.69
12	12	NPC607LDG	LF 1 PXP 90 ELL LD	6.594	EA	79.13
3	3	NPC600DSLGD	LF 1 PXP LD COUP W/ ST	5.588	EA	16.76
1	1	NPC611LDG	LF 1 PXPXP TEE LD	9.997	EA	10.00
2	2	NPC603LDG	LF 1X1 PXF ADPT LD	8.951	EA	17.90
1	1	NPC611LDF	LF 3/4 PXPXP TEE LD	5.441	EA	5.44
3	3	NPC6072LDF	LF 3/4 FTGXP 90 ELL LD	3.414	EA	10.24
2	2	NPC603LDF	LF 3/4X3/4 PXF ADPT LD	4.674	EA	9.35
INVOICE SUB-TOTAL						508.94

LEAD LAW WARNING: IT IS ILLEGAL TO INSTALL PRODUCTS THAT ARE NOT "LEAD FREE" IN ACCORDANCE WITH US FEDERAL OR OTHER APPLICABLE LAW IN POTABLE WATER SYSTEMS ANTICIPATED FOR HUMAN CONSUMPTION. PRODUCTS WITH *NP IN THE DESCRIPTION ARE NOT LEAD FREE AND CAN ONLY BE INSTALLED IN NON-POTABLE APPLICATIONS. BUYER IS SOLELY RESPONSIBLE FOR PRODUCT SELECTION.



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TERMS: NET 10TH PROX	ORIGINAL INVOICE	TOTAL DUE	\$508.94
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4100 WEST MARGINAL WAY SW
SEATTLE, WA 98106-1209

Please contact with Questions: 206-767-7700



RAMSETT MECHANICAL CO INC
2913 142ND AVE E SUITE 106
SUMNER, WA 98390

INVOICE NUMBER	TOTAL DUE	CUSTOMER	PAGE
0710752-1	\$46.34	14150	1 of 1

**PLEASE REFER TO INVOICE NUMBER WHEN
MAKING PAYMENT AND REMIT TO:**

FERGUSON ENTERPRISES #3007
PO BOX 847411
DALLAS, TX 75284-7411

SHIP TO:

RAMSETT MECHANICAL
7400 272ND ST NW
STANWOOD, WA 98292

SHIP WHSE.	SELL WHSE.	TAX CODE	CUSTOMER ORDER NUMBER	SALESMAN	JOB NAME	INVOICE DATE	BATCH
3007	3007	WAE	1805-9217	KJS	.	08/01/22	IO 464970
ORDERED	SHIPPED	ITEM NUMBER	DESCRIPTION		UNIT PRICE	UM	AMOUNT
2	0	VCD35920PE0	4X2-1/2 PTD FIP MECH TEE 920			EA	0.00
1	1	CS4L	2-1/2 WROT FTGXC ST 45 ELL		46.343	EA	46.34
INVOICE SUB-TOTAL							46.34
<p>LEAD LAW WARNING: IT IS ILLEGAL TO INSTALL PRODUCTS THAT ARE NOT "LEAD FREE" IN ACCORDANCE WITH US FEDERAL OR OTHER APPLICABLE LAW IN POTABLE WATER SYSTEMS ANTICIPATED FOR HUMAN CONSUMPTION. PRODUCTS WITH *NP IN THE DESCRIPTION ARE NOT LEAD FREE AND CAN ONLY BE INSTALLED IN NON-POTABLE APPLICATIONS. BUYER IS SOLELY RESPONSIBLE FOR PRODUCT SELECTION.</p>							

9217



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TERMS: NET 10TH PROX	ORIGINAL INVOICE	TOTAL DUE	\$46.34
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All past due amounts are subject to a service charge of 1.5% per month, or the maximum allowed by law, if lower. If Buyer fails to pay within terms, then in addition to other remedies, Buyer agrees to pay Seller all costs of collection, including reasonable attorney fees. Complete terms and conditions are available upon request or at <https://www.ferguson.com/content/website-info/terms-of-sale>, incorporated by reference. Seller may convert checks to ACH. *Any reference to or incorporation of Executive Order 14042 and/or the EO-implementing Federal clauses (FAR 52.223-99 and/or DFARS 252.223-7999) is expressly rejected by Seller and shall not apply as Seller is a materials supplier and therefore exempt under the Executive Order.*

Remit To:

STAR RENTALS INC
PO BOX 3875
SEATTLE, WA 98124-3875
www.starrentals.com

Invoice

Closed	Invoice#
Thu 7/28/2022	631213-38

8/1/2022
TH SH

Bill to:

Customer #: 146088

RAMSETT MECHANICAL CO INC
2913 142ND AVE E STE 106

PO #: 1805-9217
Job No: 1805-9217
Date Out Mon 7/25/2022

SUMNER, WA 98390

Terms	Aging Date
Net 10th	Thu 7/28/2022

Ordered By: TOM HAAG

Delivery Mon 7/25/2022 7:00AM - 9:00AM

Pickup Mon 8/ 1/2022 7:00AM - 9:00AM

TOM 206-288-9318
STANWOOD HIGH SCHOOL
7400 272ND N W ST
STANWOOD, WA 98292

TOM 206-288-9318
STANWOOD HIGH SCHOOL
7400 272ND N W ST
STANWOOD, WA 98292

Qty	Key	Items	Ser#	Disc%	Returned Date	Price
1	150-0100#R5130	FORKLIFT, 55'10000# 4WD JLG 10054	0160112810		Wed 7/27/2022 8:00AM	\$840.00
		Meter Out: 98.0 1day \$420.00 1week \$1,520.00 4weeks \$2,315.00	Meter In: 99.0	Total hours on meter: 1.0		
1	MISC-38	DELIVERY CHARGE				\$200.00

FILED

Current Net 10th
Please pay from this invoice.

Rental and Sales:	WA HERT:	STANWOOD:
\$1,040.00	\$10.50	\$96.72
Total Amount:	Total Paid	Total Due
\$1,147.22	\$0.00	\$1,147.22

360-255-2020

www.starrentals.com

360-384-9039

Open Monday through Friday 7:00 am to 5:00 PM, Closed Saturday + Sunday
Printed On: 7/28/2022 5:15:15AM

Software By: Point-of-Renta Software www.point-of-rental.com

Modification #3
Copyright Param's SQL (21/1/0)

FERGUSON
 1012 132nd STREET SOUTHWEST
 EVERETT, WA 98204-7328

INVOICE NUMBER	TOTAL DUE	CUSTOMER	PAGE
0711358	\$24.28	14150	1 of 1

PLEASE REFER TO INVOICE NUMBER WHEN
 MAKING PAYMENT AND REMIT TO:

FERGUSON ENTERPRISES #3007
 PO BOX 847411
 DALLAS, TX 75284-7411

Please contact with Questions: 425-742-4748

07/01/2022

SHIP TO:

COUNTER PICK UP
 1012 132ND STREET SOUTHWEST
 EVERETT, WA 98204-7328

RAMSETT MECHANICAL CO INC
 2913 142ND AVE E SUITE 106
 SUMNER, WA 98390

SHIP WHSE.	SELL WHSE.	TAX CODE	CUSTOMER ORDER NUMBER	SALESMAN	JOB NAME	INVOICE DATE	BATCH
3023	3023	WA3131	9-DAOU5	KJS	STANWOOD	07/29/22	IO 464761

ORDERED	SHIPPED	ITEM NUMBER	DESCRIPTION	UNIT PRICE	UM	AMOUNT
1	1	M48390539	24 TPI COMP B/SAW BLD 3 PK	21.970	PK	21.97
INVOICE SUB-TOTAL						21.97
TAX						2.31

LEAD LAW WARNING: IT IS ILLEGAL TO INSTALL PRODUCTS THAT ARE NOT "LEAD FREE" IN ACCORDANCE WITH US FEDERAL OR OTHER APPLICABLE LAW IN POTABLE WATER SYSTEMS ANTICIPATED FOR HUMAN CONSUMPTION. PRODUCTS WITH "NP" IN THE DESCRIPTION ARE NOT LEAD FREE AND CAN ONLY BE INSTALLED IN NON-POTABLE APPLICATIONS. BUYER IS SOLELY RESPONSIBLE FOR PRODUCT SELECTION.

44291
9217

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TERMS: NET 10TH PROX	ORIGINAL INVOICE	TOTAL DUE	\$24.28
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4100 WEST MARGINAL WAY SW
SEATTLE, WA 98106-1209

Please contact with Questions: 206-767-7700

INVOICE NUMBER	TOTAL DUE	CUSTOMER	PAGE
0710752	\$3,369.17	14150	1 of 1

PLEASE REFER TO INVOICE NUMBER WHEN
MAKING PAYMENT AND REMIT TO:

FERGUSON ENTERPRISES #3007
PO BOX 847411
DALLAS, TX 75284-7411

SHIP TO:

RAMSETT MECHANICAL
7400 272ND ST NW
STANWOOD, WA 98292

RAMSETT MECHANICAL CO INC
2913 142ND AVE E SUITE 106
SUMNER, WA 98390

SHIP WHSE.	SELL WHSE.	TAX CODE	CUSTOMER ORDER NUMBER	SALESMAN	JOB NAME	INVOICE DATE	BATCH
3007	3007	WAE	1805-9217	KJS		07/29/22	IO 464689
ORDERED	SHIPPED	ITEM NUMBER	DESCRIPTION	UNIT PRICE	UM	AMOUNT	
2	0	VCD35920PE0	4X2-1/2 PTD FIP MECH TEE 920		EA	0.00	
1	1	NT58570HCF	*NP 3/4 BRZ 600# THRD FP BV CC	41.758	EA	41.76	
5	5	N672L	LF 2-1/2 125/150# COP 2PC COMP FLG	98.316	EA	491.58	
2	2	VF024647CGT-NR	2-1/2X6 GRV X THRD DIELEC NIP 647	98.414	EA	196.83	
2	2	FNWLBBZ1L	2-1/2 ZN 150# DBL SIDE LUG BFV BLT	6.029	EA	12.06	
40	40	LHARDL20	2-1/2 X 20 L HARD COP TUBE	2328.701	C	931.48	
2	2	HBRGT61	STAY SAFE BRIDGIT 1/8 X 11.8 SPL	47.050	EA	94.10	
4	4	CS9L	2-1/2 WROT FTGXC ST 90 ELL	45.116	EA	184.46	
1	1	CTL	2-1/2 WROT CXCXC TIE 2-5/8 OD	62.798	EA	62.80	
1	1	CFRGF	1X3/4 WROT FTGXC RED	4.039	EA	4.04	
4	4	CCL	2-1/2 WROT CXC COUP 2-5/8 OD	18.812	EA	75.25	
3	3	CMAK	2 WROT CXM ADPT	25.071	EA	75.21	
2	2	CFAL	2-1/2 WROT CXF ADPT	89.082	EA	178.16	
3	3	CRCLK	2-1/2X2 WROT CXC RED COUP	29.585	EA	88.76	
6	6	C4L	2-1/2 WROT CXC 45 ELL 2-5/8 OD	34.852	EA	209.11	
4	3	CS4L	2-1/2 WROT FTGXC ST 45 ELL	46.343	EA	139.03	
1	1	CFMAF	LF 3/4 WROT FTG X M ADPT	11.543	EA	11.54	
4	4	FNWR1FFGAL	2-1/2 RR 1/8 FF 150# GSKT	2.306	EA	9.22	
4	4	BP150A307AL	2-1/2 150# BLT KIT 4 5/8X3 IMP	4.936	EA	19.74	
2	2	FNW7873Z0400	4 IPS PLTD RIGID STRUT CLMP	4.070	EA	8.14	
1	1	VP00000000-NR	QT VIC LUB	80.438	EA	80.44	
12	12	C9L	2-1/2 WROT CXC 90 ELL 2-5/8 OD	35.255	EA	423.06	
1	1	CFRLG	2-1/2X1 WROT FTGXC RED	32.395	EA	32.40	
INVOICE SUB-TOTAL							3369.17

LEAD LAW WARNING: IT IS ILLEGAL TO INSTALL PRODUCTS THAT ARE NOT "LEAD FREE" IN ACCORDANCE WITH US FEDERAL OR OTHER APPLICABLE LAW IN POTABLE WATER SYSTEMS ANTICIPATED FOR HUMAN CONSUMPTION. PRODUCTS WITH *NP IN THE DESCRIPTION ARE NOT LEAD FREE AND CAN ONLY BE INSTALLED IN NON-POTABLE APPLICATIONS. BUYER IS SOLELY RESPONSIBLE FOR PRODUCT SELECTION.

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TERMS: NET 10TH PROX ORIGINAL INVOICE TOTAL DUE \$3,369.17

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Chemical Products Company
 29516 82nd Avenue Court South
 Roy, WA 98580



Invoice

Date	Invoice #
8/25/2022	3433

Phone # 253-229-7449 Fax # 253-215-0082

Bill To
Ramsett Mechanical 2913 142nd Ave E Suite 106 Sumner, WA 98390

Ship To
Stanwood High School

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
1805-9217	Net 30	TD	8/25/2022	Job Site		

Quantity	Item Code	Description	Price Each	Amount
1	Service Call	Service Call completed on August 10, 2022 Glycol pumping in CWS Testing HWS inhibitor Additional inhibitor for HWS	2,450.00	2,450.00

Sales Tax (0.0%)	\$0.00
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Thank you for your business.	Total	\$2,450.00
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1805-9217



LOWE'S HOME CENTERS, LLC
3300 169TH PLACE NE
ARLINGTON, VA 98223 (360) 653-7405

- SALE -

SALES#: S0061KH1 1748558 TRANS#: 95762499 07-25-22

227199 32-GAL BH ROUND TRASH CAN	195.84
# 8 24.48	
605331 FXN 5/8-IN X 50-FT HD HSE	22.90
SUBTOTAL:	219.22
TAX:	20.95
INVOICE 28808 TOTAL:	239.17
M/C:	239.17

M/C: XXXXXXXXXXXX5173 AMOUNT: 239.17 AUTHCD: 615670

CHIP REF ID: 006128080336 07/25/22 08:19:18

CUSTOMER CODE: 9217

APL: Mastercard TUR: 000008000

AID: A000000041010 TSI: E800

STORE: 61 TERMINAL: 28 07/25/22 08:21:39

OF ITEMS PURCHASED: 9
EXCLUDES FEES, SERVICES AND SPECIAL PRICES

1805-9217



LOWE'S HOME CENTERS, LLC
3300 169TH PLACE NE
ARLINGTON, VA 98223 (360) 653-7405

- SALE -

SALES#: S0061KH1 1748558 TRANS#: 95762909 07-25-22

121B1 185109	115.92
* 33/8 CAT FIB SHEATHING	
# 4 @ 26.96	
* ITEMS MUST BE PICKED UP TODAY	

SUBTOTAL:	115.92
TAX:	10.78
INVOICE 28814 TOTAL:	126.70
M/C:	126.70

M/C: XXXXXXXXXXXX5173 AMOUNT: 126.70 AUTHCD: 684753

CHIP REF ID: 006128080342 07/25/22 08:28:21

CUSTOMER CODE: 9217

APL: Mastercard TUR: 000008000

AID: A000000041010 TSI: E800

STORE: 61 TERMINAL: 28 07/25/22 08:28:29

OF ITEMS PURCHASED: 4



LOWE'S HOME CENTERS, LLC
 3300 169TH PLACE NE
 ARLINGTON, WA 98223 (360) 653-7405

- SALE -

SALES#: FSTLANE1 13 TRANSH: 14047775 07-28-22

1095664 LNX 3-5/8-IN NON-ARBRD HO 20.98
 1215586 WEDGE 3/8 X 3-3/4 15CT (1) 14.78

SUBTOTAL: 35.76
 TAX: 3.33
 INVOICE 19550 TOTAL: 39.09
 H/C: 39.09

H/C: XXXXXXXXXXXX4262 AMOUNT: 39.09 AUTHCD: 663425
 CHIP REFID: 006119066412 07/28/22 15:36:02
 CUSTOMER CODE: STANWOOD HS
 APL: Mastercard TVR: 0000008000
 AID: A0000000041010 TSI: E800
 STORE: 61 TERMINAL: 19 07/28/22 15:36:15
 # OF ITEMS PURCHASED: 2
 EXCLUDES FEES, SERVICES AND SPECIAL ORDER ITEMS

1805-9217
RBOR FREIGHT
QUALITY TOOLS LOWEST PRICES
 MARYSVILLE WA #02928
 11401 STATE AVENUE
 MARYSVILLE, WA 98271
 Telephone: (360) 939-1718

SALE

63317 1/10 HP TRANSFER PUMP \$64.99
 If opened return via HFTPumpRtn.com

Subtotal \$64.99
 Sales Tax 9.400% \$6.11
Total \$71.10

MasterCard \$71.10
 Card No. XXXXXXXXXXXX4262
 Expiration Date XX/XX
 Auth. No. 692737
 Mastercard
 Contactless
 Signature Verified
 Mode: Issuer
 AID: A0000000041010
 TVR: 0000008000

1805-9217

THANK YOU FOR SHOPPING ACET
 STANWOOD ACE HARDWARE
 (360) 926-8711

08/01/22 10:06AM DSM 590 SALE

2339851	2 EA	\$4.59 EA
CUTOFF WHL 4.5X.040X7/8		\$9.18
4295580	1 EA	\$17.99 EA
MEGALOC THRD SEALANT 8OZ		\$17.99
9269862	1 EA	.30 EA *N
CMN or Charity Donations		\$.30
SUB-TOTAL: \$ 27.47 TAX: \$ 2.53		
TOTAL: \$ 30.00		
BC AMT: \$ 30.00		

BK CARD#: XXXXXXXXXXXX4262
 MID: *****6881 TID: ***5176
 AUTH: APPROVED AMT: \$ 30.00
 Host reference #: 903534 Bat#

Authorizing Network: MASTERCARD

Contactless
 CARD TYPE: MASTERCARD EXPR: XXXX
 AID: A0000000041010
 TVR: 0400008001
 IAD: 0110A000012200000000000000000000

1805-9217

THANK YOU FOR SHOPPING ACET
STANWOOD ACE HARDWARE
(360) 926-8711

08/08/22 10:06AM DSM	590	SALE	

4504585	3 EA	\$4.99 EA	
HOSE BARB MENDR1/4" LF		\$14.97	
4027488	80 EA	.79 EA	
VINYL TUBNG PVC 1/4X3/8"		\$63.20	

SUB-TOTAL:\$	78.17	TAX: \$	7.27
		TOTAL: \$	85.44
	BC AMT: \$		85.44

BK CARD#: XXXXXXXXXXXX4262
 MID:*****6881 TID:***5176
 AUTH: 660100 AMT: \$ 85.44
 Host reference #:905911 Bat#

Authorizing Network: MASTERCARD

Contactless
 CARD TYPE:MASTERCARD EXPR: XXXX
 AID : A0000000041010
 TVR : 0400008001
 IAD : 0110A000012200000000000000000000

1805-9217

THANK YOU FOR SHOPPING ACET
STANWOOD ACE HARDWARE
(360) 926-8711

08/01/22 10:18AM DSM	590	SALE	

56	10 EA	.40 EA	
FASTENERS		\$4.00	
56	10 EA	.35 EA	
FASTENERS		\$3.50	

SUB-TOTAL:\$	7.50	TAX: \$.70
		TOTAL: \$	8.20
	BC AMT: \$		8.20

BK CARD#: XXXXXXXXXXXX4262
 MID:*****6881 TID:***5176
 AUTH: 681255 AMT: \$ 8.20
 Host reference #:903543 Bat#

Authorizing Network: MASTERCARD

Contactless
 CARD TYPE:MASTERCARD EXPR: XXXX
 AID : A0000000041010
 TVR : 0400008001
 IAD : 0110A000012200000000000000000000
 TST :

1805-9217

THANK YOU FOR SHOPPING ACET
STANWOOD ACE HARDWARE
(360) 926-8711

08/04/22 8:23AM TAC	590	SALE	

3004687	1 EA	\$4.59 EA	
CABLE TIES 11" 75# BLK		\$4.59	
47039	1 EA	\$6.99 EA	
HOSE ADAPTR 3/4X3/4"BRS		\$6.99	
49022	1 EA	\$6.99 EA	
NIPPLE 3/4"XCLOSE BRS		\$6.99	
74129	1 EA	\$3.59 EA	
WASHR HOSE RUBBR 10/PK		\$3.59	
4061370	1 EA	\$19.99 EA	
SPLY WASH MACH3/4X3/4X60		\$19.99	
4789707	1 EA	\$15.99 EA	
DRILL POWER UTILITY PUMP		\$15.99	
4505483	1 EA	\$9.99 EA	
ELBOW 90DEG 3/4"FPT LF		\$9.99	

SUB-TOTAL:\$	68.13	TAX: \$	6.34
		TOTAL: \$	74.47
	BC AMT: \$		74.47

BK CARD#: XXXXXXXXXXXX4262
 MID:*****6881 TID:***5176
 AUTH: 631094 AMT: \$ 74.47
 Host reference #:904516 Bat#

Authorizing Network: MASTERCARD

1805-9217

RBOR FREIGHT
ITY TOOLS LOWEST PRICES

MARYSVILLE WA #02928
11401 STATE AVENUE
MARYSVILLE, WA 98271
Telephone: (360) 939-1718

SALE

63317 1/10 HP TRANSFER PUMP \$64.99
If opened return via HFTPumpRtn.com
Subtotal \$64.99
Sales Tax 9.400% \$6.11
Total \$71.10

MasterCard \$71.10
Card No XXXXXXXXXXXX4262
Expiration Date XX/XX
Auth No 692737
Mastercard
Contactless
Signature Verified
Mode: Issuer
AID: A0000000041010
TVR: 0000008000

1805-9217

THANK YOU FOR SHOPPING ACE1
STANWOOD ACE HARDWARE
(360) 926-8711

08/01/22 10:06AM DSM 590 SALE
2339851 2 EA \$4.59 EA
CUTOFF W/ 4.5X.040X7/8 \$9.18
4295586 1 EA \$17.99 EA
MEGALOC THRD SEALANT 60Z \$17.99
9269862 1 EA 30 EA *N
CMN of Charity Donations \$ 30

SUB-TOTAL: \$ 27.47 TAX: \$ 2.53
TOTAL: \$ 30.00
BC AMT: \$ 30.00

BK CARD#: XXXXXXXXXXXX4262
MID: *****6661 TID: ***5176
AUTH: APPROVED AMT \$ 30.00
Host reference #: 903534 Bat#

Authorizing Network: MASTERCARD

Contactless
CARD TYPE: MASTERCARD EXPR: XXXX
041010
911
312200000000000000000000

1805-9217

THANK YOU FOR SHOPPING ACE1
STANWOOD ACE HARDWARE
(360) 926-8711

08/08/22 10:06AM DSM 590 SALE
4504585 3 EA \$4.99 EA
HOSE BARB NENDR1/4" LI \$14.97
4027468 6 EA 79 EA
VINYL TUBING PVC 1/4X3/8 \$6.320

SUB-TOTAL: \$ 78.17 TAX: \$ 7.27
TOTAL: \$ 85.44
BC AMT: \$ 85.44

BK CARD#: XXXXXXXXXXXX4262
MID: *****66881 TID: ***5176
AUTH: 660100 AMT: \$ 85.44
Host reference #: 905911 Bat#

Authorizing Network: MASTERCARD

Contactless
CARD TYPE: MASTERCARD EXPR: XXXX
AID: A0000000041010
TVR: 0400008001
312200000000000000000000

1805-9217

THANK YOU FOR SHOPPING ACET
STANDARD ACE HARDWARE
(360) 926-8711

08/24/22 8:23AM TAC 530 SALE

3004687	1 EA	\$4.59 EA
CABLE TIES 11 75# BIK		\$4.59
47039	1 EA	\$6.99 EA
HOSE ADAPTER 3/4X3/4 BRS		\$6.99
49022	1 EA	\$6.99 EA
NIPPLE 3/4 X CLOSE BRS		\$6.99
74129	1 EA	\$3.59 EA
WASHER HOSE RUBBER TUB/PR		\$3.59
4061370	1 EA	\$19.99 EA
SPLY WASH MACH3/4X3/4X60		\$19.99
4789707	1 EA	\$15.99 EA
DRILL POWER UTILITY PUMP		\$15.99
4505483	1 EA	\$9.99 EA
ELBOW 90DEG 3/4" FPT LF		\$9.99

SUB-TOTAL \$ 68.13 TAX \$ 6.34
TOTAL \$ 74.47
BC AMT \$ 74.47

BK CARD#: XXXXXXXXXXXX4262
MID:*****6801 TID:***517b
AUTH: 631094 AMT: \$ 74.47
Host reference #:904516 Bal#

Authorizing Network: MASTERCARD

21007-640



How doers
get more done.

11616 AURORA AVE. N., SEATTLE, WA 98133
STORE MGR JAARON LAUTERBACH 206-361-9600

4706 00051 33244 08/29/22 09:28 AM
SALE SELF CHECKOUT

02700914518 DWOR75 <A> 11.47
DRAIN DISH ORG 750Z

0005-167-221 BAG FEE 08 <B,U> 0.08
BAG FEE - 8 CENTS

021709370553 32OZ BOTTLE <A>
PRO SPRAYER BOTTLE 32OZ
393.48 10.44
MAX REFUND VALUE \$8.35/3

-----Instant Vol Savings-----
10.44 Instant Vol Savings -2.09

MUST RETURN ALL ITEMS FOR A FULL REFUND

SUBTOTAL	19.90
SALES TAX	2.04
TOTAL	\$21.94

XXXXXXXXXXXX4262 MASTERCARD
USDS 21.94

AUTH CODE 692373/6510022 TA
Chip Read
AID A0000000041010 Mastercard

P.O #/JOB NAME: PIPE TESTING 8-29
<A> - NON-DISCOUNTABLE ITEM

4706 08/29/22 09:28 AM



4706 51 33244 08/29/2022 4506

RETURN POLICY DEFINITIONS		
POLICY ID	DAYS	POLICY EXPIRES ON
A	1	90 11/27/2022
B	2	- NO REFUNDS

DID WE NAIL IT?
Take a short survey for a chance TO WIN
A \$5,000 HOME DEPOT GIFT CARD

Opine en español
www.homedepot.com/survey

User ID: H89 71483 66828
PASSWORD: 22429 66777

Entries must be completed within 14 days
of purchase Entrants must be 18 or
older to enter See complete rules on
website No purchase necessary



How doers get more done.

11616 AURORA AVE. N., SEATTLE, WA 98133
STORE MGR. JAARON LAUTERBACH 206-361-9600

4705 00051 19102 08/25/22 10:10 AM
SALE SELF CHECKOUT

706511500950 95KEYSCHLAGE <A>
95 KEY SCHLAGE 6.54
283.27

SUBTOTAL 6.54
SALES TAX 0.67
TOTAL \$7.21

XXXXXXXXXX4262 MASTERCARD

USDS 7.21
AUTH CODE 605021/0515231 TA
Chip Read
AID A0000000041010 Mastercard

P.O. #/JOB NAME: 21007

1805-9217

TRANSACTION REPORT
08/25/22 10:10 AM

DATE	TIME	AMOUNT	TAX	TOTAL
08/25/22	10:10 AM	6.54	0.67	7.21
TOTAL				

DEBIT CARD # 5011 0101 0000 0000 0000 0000
CARD # 5011 0101 0000 0000 0000 0000
AID A0000000041010
CARD # 5011 0101 0000 0000 0000 0000

Transaction Report: 08/25/22

Card Type: Mastercard
AID: A0000000041010
EXP: 08/25/22
AID: A0000000041010



Change Order Proposal

Project Name: Stanwood High School Sheet # 1

To: Cornerstone General Contractors
 Att: [Kelsey Lewis](#)

Project No. 18-009 Source Documents: Proposal MEI - COP - # 106
Date 10/4/2022

Description: Power for added cooling system

1. Labor Cost SUBTOTAL 1 a. & 1 b. \$ 8,003.39

a. DIRECT LABOR SUBTOTAL from Cost Breakdown Sheet 2 \$ 8,003.39
 Labor Markups
 b. safety Inc. in fee \$ -

2. MATERIAL COST (from Material Labor Hours Sheet 2) \$ 2,960.89

3. EQUIPMENT COST (from Equipment Rates Sheet 4) \$ 408.84

4. SMALL TOOLS (Incl. in fee) \$ -

SUBTOTAL 1 thru 4 \$ 11,373.00

5. OVERHEAD & PROFIT \$ 1,364.76
 NTE12% portion of 1, 2, 3, & 4

6. SUB-TIER SUBCONTRACTORS \$ -

a.					
b.					
c.			\$	-	
d.			\$	-	
e.			\$	-	
f.			\$	-	

7. OVERHEAD & PROFIT ON SUB-TIER SUBCONTRACTORS \$ -
 a. NTE 8% each sub \$ -

Bonds/Insurances - (Incl. in M/U) \$ 254.76

COST (From Above)	\$	12,993.00
COST (Deductive Cost Sheets)	\$	-
TOTAL COST	\$	12,993.00

Scope of Work Exclusions:

Excludes cutting, patching, painting, any damage to existing finishes. Excludes permit costs.

Time Extension Request in Days: 0.0

This change order pricing is valid for TEN (10) calendar days only. If not accepted within 10 calendar days, price is void. Pricing subject to material/labor/rental price increases after 10 calendar days. All other scopes of work excluded in not listed/addressed above. Pricing is based solely on the specific information received from the Architect/Owner on the change proposal document issued.



Labor Cost

Project Name: Stanwood High School

Sheet # 3

Rates Through 05/31/21

ALL CHANGE ORDER WORK LABOR IS BEING PRICED AT NECA 2 DUE TO CURRENT LABOR AVAILABILITY ALL RATES ARE PER CURRENT IBEW LOCAL 191 UNION SCALE. IF NEW INCREASED RATES ARE RATIFIED THEN THESE RATES WILL BE ADJUSTED TO CONFORM TO THE INCREASE IN UNION SCALE

		General Foreman (Classification)			Foreman (Classification)		
		ST	T 1/2	DT	ST	T 1/2	DT
Base Wage		\$ 58.03	\$ 87.05	\$ 116.06	\$ 52.75	\$ 79.13	\$ 105.50
Union Fringes	Varies	\$ 26.98	\$ 27.85	\$ 28.72	\$ 26.82	\$ 27.61	\$ 28.41
PFML/SL		\$ 1.53	\$ 2.31	\$ 3.07	\$ 1.40	\$ 2.09	\$ 2.79
FUTA	0.60%	\$ 0.35	\$ 0.52	\$ 0.70	\$ 0.32	\$ 0.47	\$ 0.63
FICA	6.20%	\$ 3.60	\$ 5.40	\$ 7.20	\$ 3.27	\$ 4.91	\$ 6.54
Medicare	1.45%	\$ 0.84	\$ 1.26	\$ 1.68	\$ 0.76	\$ 1.15	\$ 1.53
SUTA	2.23%	\$ 1.13	\$ 1.69	\$ 2.25	\$ 1.02	\$ 1.54	\$ 2.05
Workers Comp.	Varies	\$ 0.93	\$ 0.93	\$ 0.93	\$ 0.93	\$ 0.93	\$ 0.93
Liability Ins.	1.2583%	\$ 0.73	\$ 1.10	\$ 1.46	\$ 0.66	\$ 1.00	\$ 1.33
	Base Rate	\$ 94.12	\$ 128.10	\$ 162.07	\$ 87.94	\$ 118.82	\$ 149.71
HRS		0.0	0.0	0.0	76.0	0.0	0.0
Total		\$ 3.00	\$ -	\$ -	\$ 6,683.25	\$ -	\$ -

		Journeyman (Classification)			Apprentice (Classification)		
		ST	T 1/2	DT	ST	T 1/2	DT
Base Wage		\$ 47.95	\$ 71.93	\$ 95.90	\$ 42.07	\$ 63.11	\$ 84.14
Union Fringes	Varies	\$ 26.68	\$ 27.40	\$ 28.12	\$ 23.10	\$ 23.73	\$ 24.36
PFML/SL		\$ 1.27	\$ 1.89	\$ 2.54	\$ 1.11	\$ 1.68	\$ 2.24
FUTA	0.60%	\$ 0.29	\$ 0.43	\$ 0.58	\$ 0.25	\$ 0.38	\$ 0.50
FICA	6.20%	\$ 2.97	\$ 4.46	\$ 5.95	\$ 2.61	\$ 3.91	\$ 5.22
Medicare	1.45%	\$ 0.70	\$ 1.04	\$ 1.39	\$ 0.61	\$ 0.92	\$ 1.22
SUTA	3.21%	\$ 0.93	\$ 1.40	\$ 1.86	\$ 0.82	\$ 1.22	\$ 1.63
Workers Comp.	Varies	\$ 0.93	\$ 0.93	\$ 0.93	\$ 0.93	\$ 0.93	\$ 0.93
Liability Ins.	1.2583%	\$ 0.60	\$ 0.91	\$ 1.21	\$ 0.53	\$ 0.79	\$ 1.06
	Base Rate	\$ 82.32	\$ 110.39	\$ 138.47	\$ 72.03	\$ 96.67	\$ 121.30
HRS		16.00	0.0	0.0	0.0	0.0	0.0
Total		\$ 1,317.14	\$ -	\$ -	\$ -	\$ -	\$ -

Summary Sheet 1
Total cost \$ 8,003.39

Total Hours Entered Above **92**
 Estimated Hours **92**
 Delta **(0.49)**



Equipment Rate Sheet

Project Name: Stanwood High School

Sheet #

4

Category	Page No.	Equipment Description	Qty.	Per	Rate	Total
	36	Pickup 1/2 ton (jobsite pickup)	0.4	Month	\$ 1,022.11	408.84
	36	Pickup 4X4 3/4 ton	0.0	Month	\$ 1,460.18	0.00
	36	Van 12'	0.0	Month	\$ 1,747.43	0.00
	2	Large Gang Box - On Casters	0.0	Month	\$ 91.24	0.00
	3	Semi Trailer (Conex)	0.0	Month	\$ 246.82	0.00
	25	EMT Hydraulic Bender - 1 1/2HP Powe	0.0	Month	\$ 855.49	0.00
	9	Electric Scissor Lift (up to 24')	0.0	Month	\$ 1,514.01	0.00
	10	Gas/LP/Diesel Snorkel Lift (45')	0.0	Month	\$ 2,874.03	0.00
Total						\$ 408.84

In lieu of RS Means due to specialised electrical equipment we are using the "NECA 2017-2018 Tool & Equipment Rental Schedule" not all items are listed above but can be added

Washington Best Finishes LLC

COP Subcontractor Breakdown Summary

Project Name:	Stanwood HS	COP No.	WBF 95	
Project No.	Source Documents:	ACT Ceiling Work	Date:	9/6/2022
General Contractor:	Cornerstone General Cotractors	Contractor Ref. No.		

Description: Additional work to demo ACT ceiling in 4 rooms in total and along the hallway to allow space for electricians and HVAC to run their ducting/wiring as needed. Installation of ACT grid with wire for added support and installation of ceiling tiles.

Itemize all costs on attached COP Cost Breakdown form.

1. CRAFT LABOR COSTS

Direct Labor Costs:

a. crew (apprentices, journeymen, & laborers)	\$	1,886.28
b. foreman	\$	-
c. lead foreman		
DIRECT LABOR SUBTOTAL		\$ 1,886.28

Supervision:

d. direct supervision (NTE 15% of 1a)	\$	-
e. safety (NTE 2% of lines 1a, b, & c)	\$	37.73

1. CRAFT LABOR COSTS \$ 1,924.00

2. MATERIAL COSTS

a. material costs	\$	-
b. freight costs (itemize)		

2. MATERIAL COSTS \$ -

3. EQUIPMENT COSTS

a. owned equipment (per spec approved source)	\$	-
b. rental equipment	\$	-

3. EQUIPMENT COSTS \$ -

4. SMALL TOOLS

a. small tools (NTE 2% of 1a & b)	\$	37.73
-----------------------------------	----	-------

4. SMALL TOOLS \$ 38.00

SUBTOTAL 1 thru 4 \$ 1,962.00

5. OVERHEAD & PROFIT

a. Overhead & Profit 15 % Portion of 1,2,3 & 4	\$	294.30
--	----	--------

5. OVERHEAD & PROFIT \$ 294.00

6. INSURANCE

a. payroll driven liability insurance	3.75 % of 1	\$ 72.15
b. volume driven liability insurance	% of 1-7	\$ -

6. INSURANCE \$ 72.00

7. BOND

a. Bond	1.55 % of 1-6	
---------	---------------	--

7. BOND \$ -

TOTAL COST \$ 2,328.00

Washington Best Finishes LLC

COP Cost Breakdown

Project Name: **Stanwood HS**

Project No.

Contractor: **Cornerstone General Contractors**

COP No. **WBF 94**

Date: **9/6/2022**

Contractor Ref. No.

	Quantity	Unit Type	Labor		Material		Equipment		Total Cost
			Unit \$	Cost	Unit \$	Cost	Unit \$	Cost	
Material									
Labor									
2 Framers, 11 hours each	22	m/hr	\$85.74	\$ 1,886.28					\$ 1,886.28
2 mobilizations, material reused, demolition of ACT grid and ceiling tiles to allow space for HVAC/Electricitans to run wire/ducting, re-installation of wire to support ACT grid and installation of ACT tiles, clean up work area.									
Labor Subtotal				\$ 1,886.28					
Foreman									
Equipment									
Total Cost of Work				\$ 1,886.28		\$ -		\$ -	\$ 1,886.28

COP Wage Rates

Project Name: Stanwood HS
Project No: _____
Contractor: Washinton Best Finishes LLC

Trade & Position		Drywall Installer	Drywall Finisher	Drywall Foreman	Finsher Foreman						
Rate Schedule Date*											
1. Hourly Wage Rate		\$ 50.15	\$ 48.46	\$ 55.17	\$ 53.31						
2. Hourly Benefits		\$ 20.86	\$ 22.15	\$ 20.86	\$ 22.15						
SUBTOTAL		\$ 71.01	\$ 70.61	\$ 76.03	\$ 75.46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Rate										
3. FUTA % of 1	0.80%	\$ 0.40	\$ 0.39	\$ 0.44	\$ 0.43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4. FICA % of 1	6.20%	\$ 3.11	\$ 3.00	\$ 3.42	\$ 3.31	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5. MEDICARE % of 1	1.45%	\$ 0.73	\$ 0.70	\$ 0.80	\$ 0.77	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6. SUI % of 1 (insert correct % to right)	0.37%	\$ 0.19	\$ 0.18	\$ 0.19	\$ 0.20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7. LNI		\$ 3.26	\$ 3.26	\$ 3.26	\$ 3.26						
8. Sick leave		\$ 1.25	\$ 1.21	\$ 1.38	\$ 1.33						
9. FMLA	0.40%	\$ 0.20	\$ 0.19	\$ 0.22	\$ 0.21						
TOTAL (incl. payroll taxes)		\$ 80.15	\$ 79.55	\$ 85.74	\$ 84.97	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Normal 1.5x Overtime Rates Calculate Automatically											
OT Wage Rate @ 1.5x		\$ 75.23	\$ 72.69	\$ 82.76	\$ 79.97	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Benefits		\$ 20.86	\$ 22.15	\$ 20.86	\$ 22.15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal		\$ 96.09	\$ 94.84	\$ 103.62	\$ 102.12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Taxes: Lines 3-6		\$ 6.63	\$ 6.41	\$ 7.28	\$ 7.05	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
L&I: WC Premium		\$ 3.26	\$ 3.26	\$ 3.26	\$ 3.26	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Overtime Rate		\$ 105.98	\$ 104.51	\$ 114.15	\$ 112.43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Premium Portion Only		\$ 25.83	\$ 24.96	\$ 28.41	\$ 27.46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

- NOTES:**
- * Rate schedule date is the date of the Dept. of Labor & Industries Prevailing Wage Rate used or the Union Agreement.
 - a. for items 3 thru 5, the Federal rates do not vary by firm, and the percentages are already locked into this form.
 - b. for item 6, the actual rate is determined by the State Employment Security Dept. and varies by firm. It shall be verified by the contractor at the start of the project.
 - c. for item 7, the rate is based on L & I classification. The hourly dollar amount is specific to the firm/trade and shall be verified by the contractor at the start of the project.
 - d. definitions
 - 1. items 1 & 2 are basic wages and benefits (see general conditions 7.02 B.7.a(1))
 - 2. item 3, FUI is Federal Unemployment Tax Act (see general conditions 7.02 B.7.a(3))
 - 3. item 4, FICA is Federal Insurance Compensation Act/Social Security (see general conditions 7.02B.7(3))
 - 4. item 5, Medicare is FICA medical aid (see general conditions 7.02 B.7.a(3))
 - 5. item 6, SUI is State Unemployment Compensation Act (see general conditions 7.02 B.7.a(3))
 - 6. item 7, WC is industrial insurance/workers' compensation (see general conditions 7.02 B.7.a(2))

Washington Best Finishes LLC

COP Subcontractor Breakdown Summary

Project Name:	Stanwood HS	COP No.:	WBF 94
Project No.:		Source Documents:	T&M #05
General Contractor:	Cornerstone General Cotractors	Date:	8/30/2022
		Contractor Ref. No.:	

Description: Drywall finishing with level 4 finish provided. First coat of mud, sand, final coat of mud and final sand, clean up work area.

Itemize all costs on attached COP Cost Breakdown form.

1. CRAFT LABOR COSTS			
Direct Labor Costs:			
a. crew (apprentices, journeymen, & laborers)	\$	771.66	
b. foreman	\$	-	
c. lead foreman			
		DIRECT LABOR SUBTOTAL	\$ 771.66
Supervision:			
d. direct supervision (NTE 15% of 1a)	\$	-	
e. safety (NTE 2% of lines 1a, b, & c)	\$	15.43	
2. MATERIAL COSTS			
a. material costs	\$	28.17	
b. freight costs (itemize)			
3. EQUIPMENT COSTS			
a. owned equipment (per spec approved source)	\$	-	
b. rental equipment	\$	-	
4. SMALL TOOLS			
a. small tools (NTE 2% of 1a & b)	\$	15.43	
5. OVERHEAD & PROFIT			
a. Overhead & Profit 15 % Portion of 1,2,3 & 4	\$	124.50	
6. INSURANCE			
a. payroll driven liability insurance	3.75 % of 1	\$	29.51
b. volume driven liability insurance	% of 1-7	\$	-
7. BOND			
a. Bond	1.55 % of 1-6		
		1. CRAFT LABOR COSTS	\$ 787.00
		2. MATERIAL COSTS	\$ 28.00
		3. EQUIPMENT COSTS	\$ -
		4. SMALL TOOLS	\$ 15.00
		SUBTOTAL 1 thru 4	\$ 830.00
		5. OVERHEAD & PROFIT	\$ 125.00
		6. INSURANCE	\$ 30.00
		7. BOND	\$ -
		TOTAL COST	\$ 985.00

Washington Best Finishes LLC

COP Cost Breakdown

Project Name: **Stanwood HS**

Project No. _____

Contractor: **Cornerstone General Contractors**

COP No. **WBF 94**

Date: **8/30/2022**

Contractor Ref. No. _____

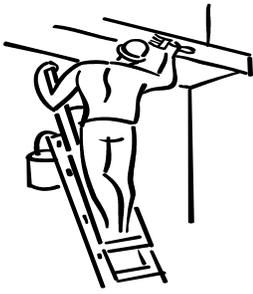
		Quantity	Unit Type	Labor		Material		Equipment		Total Cost
				Unit \$	Cost	Unit \$	Cost	Unit \$	Cost	
Material										
	Taping Mud	1	box			\$10.56	\$ 10.56			\$ 10.56
	Mesh Tape	1	roll			\$7.05	\$ 7.05			\$ 7.05
	Hot Mud	1	bag			\$10.56	\$ 10.56			\$ 10.56
Labor										
T&M #5	1 Finisher Foreman	9	m/hr	\$85.74	\$ 771.66					\$ 771.66
	Mobilization, , protecct existing finishes, finish taping. First coat of mud, sand, second coat of mud, final sand clean up work area.									
	Labor Subtotal				\$ 771.66					
	Foreman									
Equipment										
Total Cost of Work					\$ 771.66		\$ 28.17		\$ -	\$ 799.83

COP Wage Rates

Project Name: Stanwood HS
Project No: _____
Contractor: Washinton Best Finishes LLC

Trade & Position		Drywall Installer	Drywall Finisher	Drywall Foreman	Finsher Foreman						
Rate Schedule Date*											
1. Hourly Wage Rate		\$ 50.15	\$ 48.46	\$ 55.17	\$ 53.31						
2. Hourly Benefits		\$ 20.86	\$ 22.15	\$ 20.86	\$ 22.15						
SUBTOTAL		\$ 71.01	\$ 70.61	\$ 76.03	\$ 75.46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Rate										
3. FUTA % of 1	0.80%	\$ 0.40	\$ 0.39	\$ 0.44	\$ 0.43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4. FICA % of 1	6.20%	\$ 3.11	\$ 3.00	\$ 3.42	\$ 3.31	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5. MEDICARE % of 1	1.45%	\$ 0.73	\$ 0.70	\$ 0.80	\$ 0.77	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6. SUI % of 1 (insert correct % to right)	0.37%	\$ 0.19	\$ 0.18	\$ 0.19	\$ 0.20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7. LNI		\$ 3.26	\$ 3.26	\$ 3.26	\$ 3.26						
8. Sick leave		\$ 1.25	\$ 1.21	\$ 1.38	\$ 1.33						
9. FMLA	0.40%	\$ 0.20	\$ 0.19	\$ 0.22	\$ 0.21						
TOTAL (incl. payroll taxes)		\$ 80.15	\$ 79.55	\$ 85.74	\$ 84.97	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Normal 1.5x Overtime Rates Calculate Automatically											
OT Wage Rate @ 1.5x		\$ 75.23	\$ 72.69	\$ 82.76	\$ 79.97	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Benefits		\$ 20.86	\$ 22.15	\$ 20.86	\$ 22.15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal		\$ 96.09	\$ 94.84	\$ 103.62	\$ 102.12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Taxes: Lines 3-6		\$ 6.63	\$ 6.41	\$ 7.28	\$ 7.05	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
L&I: WC Premium		\$ 3.26	\$ 3.26	\$ 3.26	\$ 3.26	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Overtime Rate		\$ 105.98	\$ 104.51	\$ 114.15	\$ 112.43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Premium Portion Only		\$ 25.83	\$ 24.96	\$ 28.41	\$ 27.46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

- NOTES:**
- * Rate schedule date is the date of the Dept. of Labor & Industries Prevailing Wage Rate used or the Union Agreement.
 - a. for items 3 thru 5, the Federal rates do not vary by firm, and the percentages are already locked into this form.
 - b. for item 6, the actual rate is determined by the State Employment Security Dept. and varies by firm. It shall be verified by the contractor at the start of the project.
 - c. for item 7, the rate is based on L & I classification. The hourly dollar amount is specific to the firm/trade and shall be verified by the contractor at the start of the project.
 - d. definitions
 - 1. items 1 & 2 are basic wages and benefits (see general conditions 7.02 B.7.a(1))
 - 2. item 3, FUI is Federal Unemployment Tax Act (see general conditions 7.02 B.7.a(3))
 - 3. item 4, FICA is Federal Insurance Compensation Act/Social Security (see general conditions 7.02B.7(3))
 - 4. item 5, Medicare is FICA medical aid (see general conditions 7.02 B.7.a(3))
 - 5. item 6, SUI is State Unemployment Compensation Act (see general conditions 7.02 B.7.a(3))
 - 6. item 7, WC is industrial insurance/workers' compensation (see general conditions 7.02 B.7.a(2))



Bid submittal

Spectrum Painting

845 Givens Ave.
Darrington WA. 98241

LIC# SPECTP053J8
Phone 425-268-3401
Fax 425-610-4652
e-mail; spectrumpainting@comcast.net

Date; 09/14/2022

Project

Stanwood High Reaint and touch up hand rails 3rd floor

	SQ feet	sq.ft per gl	gal	\$ per gl	Total
include,09900		0	0	7 \$ 26.30	\$ 184.10
Paint				0 \$ 24.00	\$ -
thinner				0 \$ 41.21	\$ -
primer				0 \$ 9.70	\$ -
Cleaner				0 \$ 33.20	\$ -
Shipping					\$ 184.10

	Days/hrs	Rate	hrs	lift	paint
			0		
man hours	20	\$ 69.70			
man lift 40 electric ft boom	0	\$ 140.00			
Material and supply	0	0			
Total					
12% overhead /profit		0.12			
Grand Total					

Submitted by,
Patrick Parson

STOW-IT[®]

Po Box 669
Ferndale, WA 98248
360-734-1112

Date	Invoice #
7/25/2022	91840

Bill To
Cornerstone General Contractors 11805 N Creek Pkwy S #115 Bothell, WA 98011

Ship To
Stanwood High School 7400 272nd St NW Stanwood, WA 98292-7410

P.O. Number	Terms	Rep	Ship	Project
	ON RECEIPT		7/25/2022	

Quantity	Item Code	Description	Price Each	Amount
----------	-----------	-------------	------------	--------

1	STL_PLT	Steel Plate(s), Stg, 07/25/22 - 08/24/22	1,000.00	1,000.00
---	---------	--	----------	----------

1901/997632/M/08.08.22/SA

Subtotal	\$1,000.00
Sales or Use Tax (8.80%)	\$88.00
Total	\$1,088.00

DO NOT MAIL PAYMENTS TO THIS ADDRESS



UNITED SITE SERVICES
P.O. BOX 1870
ASHLAND, VA 23005-4870



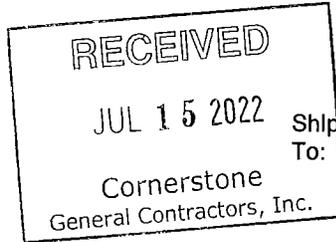
Page: 1

INVOICE

United Site Services of Nevada, Inc. Customer Service: 1-800-859-6883

Customer ID: USS-1470118
Invoice No: 114-13212689
Terms: Due Upon Receipt
P.O. No:
Our Order No: 0-2022335
Invoice Date: 06/30/22

CORNERSTONE GENERAL CONTRACTOR
11805 N CREEK PKWY S STE 115
BOTHELL, WA 98011



Stanwood HS
7400 272nd NW
STANWOOD, WA 98292

Item / Description	Quantity	Term	From / Thru	Unit Price	Total Price
STD Standard Restroom	1 Each	1	06/01/22 06/30/22	35.00	35.00
REG-STD Weekly Service	1 Each	1	06/01/22 06/30/22	92.50	92.50
XSVC-STD Additional Weekly Service - 2	1 Each	1	06/01/22 06/30/22	98.75	98.75
<p>Paying your invoices at USS is easy! With consolidated charges and online bill pay, our invoices are designed to make it easier to do business with us. To learn more about the recent change to the line-item charges on your invoice visit UnitedSiteServices.com/ExplanationOfCharges.</p>					
HS Hand Sanitizer	1 Each	1	06/01/22 06/30/22	35.00	35.00



DO NOT MAIL PAYMENTS TO THIS ADDRESS

UNITED SITE SERVICES
P.O. BOX 1870
ASHLAND, VA 23005-4870



INVOICE

United Site Services of Nevada, Inc. Customer Service: 1-800-859-6883

Customer ID: USS-1470118
Invoice No: 114-13212689
Terms: Due Upon Receipt
P.O. No:
Our Order No: 0-2022335
Invoice Date: 06/30/22

Bill To: CORNERSTONE GENERAL CONTRACTOR
11805 N CREEK PKWY S STE 115
BOTHELL, WA 98011

Ship To: Stanwood HS
7400 272nd NW
STANWOOD, WA 98292

1901/997632/M/07.22.22/SA

Total: 261.25

Pay Your Invoices Online at www.UnitedSiteServices.com/BillPay

Please detach this coupon and include with your payment in the enclosed envelope.
See Reverse for Terms & Conditions, which are part of this Agreement
wherein United Site Services of Nevada, Inc. is referred to as "Company"

CORNERSTONE GENERAL CONTRACTOR

Customer ID: USS-1470118
Invoice Number: 114-13212689
Our Order No: 0-2022335

Subject to Tax Exempt from Tax
0.00 261.25

Total: 261.25

Amount Paid:

[Empty box for Amount Paid]

Check this box if you would like to pay by credit card, change your address or decline damage waiver, and you have completed the necessary form(s) on the reverse.

7805100.2022070120701.01246

Please Remit to: UNITED SITE SERVICES
PO BOX 660475
DALLAS TX 75266-0475



00000000114-1321268900000261258

DO NOT MAIL PAYMENTS TO THIS ADDRESS



UNITED SITE SERVICES
P.O. BOX 1870
ASHLAND, VA 23005-4870



INVOICE

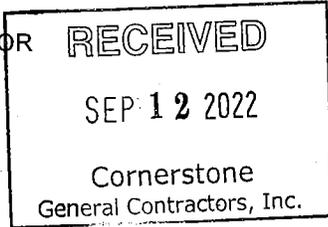
United Site Services of Nevada, Inc. Customer Service: 1-800-859-6883

Customer ID: USS-1470118
Invoice No: 114-13331009
Terms: Due Upon Receipt
P.O. No:
Our Order No: 0-2022335
Invoice Date: 08/31/22

737



CORNERSTONE GENERAL CONTRACTOR
11805 N CREEK PKWY S STE 115
BOTHELL WA 98011-8803



Ship To:

Stanwood HS
7400 272nd NW
STANWOOD, WA 98292

Item / Description	Quantity	Term	From / Thru	Unit Price	Total Price
STD Standard Restroom	1 Each	Final	08/01/22 09/01/22	1.16667	37.33
REG-STD Weekly Service	1 Each	Final	08/01/22 09/01/22	3.08333	98.67
XSVC-STD Additional Weekly Service - 2	1 Each	Final	08/01/22 09/01/22	3.29167	105.33
HS Hand Sanitizer	1 Each	Final	08/01/22 09/01/22	1.16667	37.33
FSC Fuel & Inflation Surcharge					27.60

Effective 8/1/22, you will notice a Fuel & Inflation Surcharge on your USS sanitation invoice(s). To learn more about the line-item charges on your invoice visit UnitedSiteServices.com/ExplanationOfCharges

DO NOT MAIL PAYMENTS TO THIS ADDRESS

UNITED SITE SERVICES
P.O. BOX 1870
ASHLAND, VA 23005-4870



Page: 2

INVOICE

United Site Services of Nevada, Inc. Customer Service: 1-800-859-6883

Customer ID: USS-1470118
Invoice No: 114-13331009
Terms: Due Upon Receipt
P.O. No:
Our Order No: 0-2022335
Invoice Date: 08/31/22

Bill To: CORNERSTONE GENERAL CONTRACTOR
11805 N CREEK PKWY S STE 115
BOTHELL, WA 98011

Ship To: Stanwood HS
7400 272nd NW
STANWOOD, WA 98292

1901/997632/M/09.15.22/SA

Total: 306.26

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See Reverse for Terms & Conditions, which are part of this Agreement
wherein United Site Services of Nevada, Inc. is referred to as "Company"**

CORNERSTONE GENERAL CONTRACTOR

Customer ID: USS-1470118
Invoice Number: 114-13331009
Our Order No: 0-2022335

Subject to Tax Exempt from Tax
0.00 306.26

Total: 306.26

Amount Paid:

[Empty box for Amount Paid]

Check this box if you would like to pay by credit card, change your address or decline damage waiver, and you have completed the necessary form(s) on the reverse.

7805100.2022090105301.00737

Please Remit to: UNITED SITE SERVICES
PO BOX 660475
DALLAS TX 75266-0475



00000000114-1333100900000306269

DO NOT MAIL PAYMENTS TO THIS ADDRESS



UNITED SITE SERVICES
P.O. BOX 1870
ASHLAND, VA 23005-4870



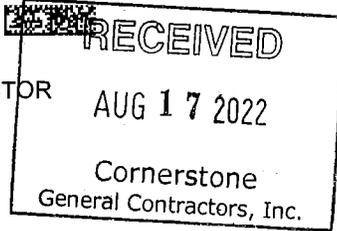
Page: 1

INVOICE

United Site Services of Nevada, Inc. Customer Service: 1-800-859-6883

Customer ID: USS-1470118
Invoice No: 114-13276130
Terms: Due Upon Receipt
P.O. No:
Our Order No: 0-2022335
Invoice Date: 07/31/22

582



CORNERSTONE GENERAL CONTRACTOR
11805 N CREEK PKWY S STE 115
BOTHELL WA 98011-8803

Ship To:

Stanwood HS
7400 272nd NW
STANWOOD, WA 98292

Item / Description	Quantity	Term	From / Thru	Unit Price	Total Price
STD Standard Restroom	1 Each	1	07/01/22 07/31/22	35.00	35.00
REG-STD Weekly Service	1 Each	1	07/01/22 07/31/22	92.50	92.50
X SVC-STD Additional Weekly Service - 2	1 Each	1	07/01/22 07/31/22	98.75	98.75
HS Hand Sanitizer	1 Each	1	07/01/22 07/31/22	35.00	35.00

1901/997632/M/09.06.22/SA

Total: 261.25

Pay Your Invoices Online at www.UnitedSiteServices.com/BillPay

**Please detach this coupon and include with your payment in the enclosed envelope.
See Reverse for Terms & Conditions, which are part of this Agreement
wherein United Site Services of Nevada, Inc. is referred to as "Company"**

CORNERSTONE GENERAL CONTRACTOR

Customer ID: USS-1470118
Invoice Number: 114-13276130
Our Order No: 0-2022335

Subject to Tax Exempt from Tax
0.00 261.25

Total: 261.25

Amount Paid:

[Empty box for Amount Paid]

Check this box if you would like to pay by credit card, change your address or decline damage waiver, and you have completed the necessary form(s) on the reverse.

Please Remit to: UNITED SITE SERVICES
PO BOX 660475
DALLAS TX 75266-0475



00000000114-1327613000000261253

INVOICE

Customer #	Invoice Date	Invoice #
125812	12/27/21	260025981-00
Pmnt Terms	PO #	Page #
Net30	1901	1
Ship Via	Freight Terms	
WC Burlington		
Reference	Written By	Delivery Rep

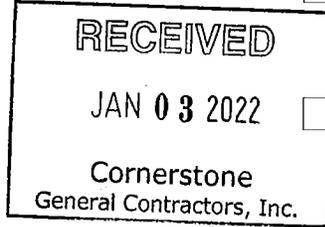


Remit To TACOMA SCREW PRODUCTS INC
ATTENTION ACCOUNTS RECEIVABLE
2001 CENTER ST
TACOMA, WA 98409-7821

Pick Up Address BURLINGTON
TACOMA SCREW PRODUCTS INC
1075 GOLDENROD RD
BURLINGTON, WA 98233-3403
(360)757-1075/

Bill To CORNERSTONE GENERAL CONTRACTOR
ATTN: ACCOUNTS PAYABLE
11805 N CREEK PKWY S STE 115
BOTHELL, WA 98011-8803

Ship To CORNERSTONE GENERAL CONTRACTOR
ATTN: RECEIVING
11805 N CREEK PKWY S STE 115
BOTHELL, WA 98011-8803



Ln #	Product # And Description	Quantity Ordered	Quantity Shipped	Quantity Backordered	Unit Price	UM	Amount (Net)
1	305-311 Bosch 1" SDS-plus Bulldog Xtreme Rotary Hammer	1	1	0	199.95	EA	199.95
2	305-711 3/4"x 10" Flat Chisel SDS-Plus Hammer Steel	1	1	0	17.83570	EA	17.84
2	Lines Total	Qty Shipped Total		2			Total 217.79
							Taxes 0.00
							Invoice Total 217.79

1901/997632/M/01.10.22/SA

Thank you for your order. Please note that all sales are subject to Tacoma Screw Products Inc.'s Terms of Sale and Condition of Sale. If there should be any questions, or if we be of further service, please call (253) 572-3444 or (800) 562-8192. We appreciate and value your continued business.

Picked Up By

Cash Discount 0.00 If Paid By 12/27/21



HYTECH

PHONE: (360) 354-4335
 FAX: (360) 354-1335
 LICENSE: HYTECRI106P5

BILL TO: 89151
 Cornerstone Construction
 11805 North Creek Parkway S
 Bothell, WA 98011

REMIT PAYMENT TO: HyTech Roofing, Inc.
 7381 Guide Meridian Rd.
 Lynden, WA 98264

INVOICE #	CLIENT PO#	JOB	TERMS	DATE	DATE DUE	PM
23828		WO #5425	Net 30 Days	08/22/2022	09/21/2022	ML

JOB SITE:

Stanwood High School, 7400 272nd Street Northwest Stanwood, WA 98292

- Main Area

WORK PERFORMED:

- Sealed up (6) sleepers
- (2) 6x6 curbs
- Existing Soprorema PVC roof.

Subtotal \$1,809.60

Tax \$0.00

BALANCE DUE	\$1,809.60
--------------------	-------------------

A service charge of 18.00% per annum will be charged on all amounts 30 days overdue.

Cash or Check is an acceptable form of payment

THANK YOU FOR YOUR PROMPT PAYMENT!



ESTIMATE

EST-000060

Estimate Date: Aug 08, 2022

Expiry Date: Sep 19, 2022

FROM:

Hydro Ninjas LLC

License: 604852651

EIN # 87-4744029

8433 Vernon Road

Lake Stevens, WA, 98258

Email: hydroninjasllc@gmail.com

Phone: (360) 926-2838

TO:

Cornerstone General Contractors

Attn: Pieter V

7400 272nd Street Northwest

Stanwood, WA, 98292

Phone: (360) 348-3596

JOB LOCATION:

Cornerstone General Contractors

7400 272nd Street Northwest

Stanwood, WA, 98292

Phone: (360) 348-3596

JOB:

#	Services	Sq ft	Tax (%)	Total
1	Pressure Surface Cleaning	2459.00	\$57.17 (9.3%)	\$671.92
Service Description: If growth is abundant on surface, surface will be pre-treated to kill organic growth. Selected surface area will then be pressure washed at high PSI determined by type of material. Aggregate concrete driveways will generally always be pre-treated as then need to be washed at lower PSI to avoid damage.				
			Subtotal (without tax)	\$614.75
			Taxes	\$57.17
			Grand Total (\$)	\$671.92

Accepted payment methods

Credit Card, Check, Cash

Message

PLEASE LIST ANY PREFERRED DATE/S AND TIME/S FOR THE APPOINTMENT ON THE ACCEPTANCE PAGE IN THE MESSAGE BOX AND WE WILL TRY TO INCORPORATE THAT INTO OUR SCHEDULE AS

BEST WE CAN.

We would be happy to have an opportunity to work with you.

Terms

By signing a contract you are signing a legally binding contract for work to be performed.

Services. Upon acceptance, we will perform the services described in this estimate. Any additional services requested by you and not included in this estimate may incur additional charges.

Schedule. The services will be completed and will be made in accordance with the schedule agreed upon.

Changes. Changes in the specifications, quantities, or other aspects of the services that are requested or approved by you do not become binding unless accepted in writing. Any such changes may result in additional or increased charges, and you agree to pay such increased charges.

Taxes. You will be responsible for payment of all applicable federal, state and local taxes.

Payment Terms. All invoices for services covered by the estimate are payable upon completion of work or date stated on the invoice.

We abide to all of the state stated on this estimate - Service Terms and Conditions.

If applicable, client agrees to authorize us on their property for the purposes of performing the services stated on this estimate. Client understands that although we try our best to provide you with an accurate timeframe, there is no set timeframe for the completion of services and several visits to the property may be required. The time stated on your appointment is just an arrival window, we will be sure to contact you when we are on our way. Client agrees to allow us to utilize any photos, descriptions, reviews, quotes, texts or videos of the property for marketing purposes.

By inquiring about our services or doing business with us, you are giving your consent to receive notifications and messages (e-mail or text) regarding our promotions or services.

Again, we appreciate you agreeing to these terms and conditions as we only set them in place to ensure everyone's safety and satisfaction. If you have any questions regarding these Terms and Conditions, please reach out to us.

You can be confident, that our goal is to provide you with the highest quality of service! We look forward to working with you!

DTG Recycle - DBA
Hungry Buzzard Recovery/Rolloff
Recyclers



PO Box 14203
Mill Creek,
Washington 98082,
United States
P.: 425 489 9235
E.: accounting@dtgrecycle.com

Invoice Submitted To:

Cornerstone General Contractors

11805 N Creek Parkway S Suite 115
Bothell, WA 98011 United States,
Washington
United States
P.: 425.481.7460

INVOICE	
Invoice #	29412A
Invoice Date	18-Apr-2022
Terms	Net 30

Job Code	Job Address
29412	Stanwood High School, 7400 272nd ST NW, Washington, Stanwood, 98292, United States

Description	Qty	Unit Price (\$)	Tax (\$)	Sub Total (\$)
40 F	1.00	305.00	0.00	305.00
Mixed (per ton)	3.08	110.00	0.00	338.80
Total				\$ 643.80
(+ Tax)				\$ 0.00
Grand Total				\$ 643.80
Amount Paid				\$ 0.00
Amount Due				\$ 643.80

Job Notes : **RO** 1st AM APT made. Final pick up of 40 Pieter 360-348-3596
4/14/22 F-40/10 WT-WOO16112 3.08

Invoice Notes :

1901/997632/M/05.13.22/SA

PAYMENT STUB

DTG Recycle - DBA
Recovery/Rolloff Recyclers
PO Box 14203
Mill Creek,
Washington 98082,
United States
P.: 425 489 9235
E.: accounting@dtgrecycle.com

Hungry Buzzard

Client
Client Phone
Invoice #
Invoice Date
Amount Paid
Amount Due
Amount Enclosed

Cornerstone General
Contractors
425.481.7460
29412A
18-Apr-2022
0.00
\$ 643.80

Stanwood High School Phase 2

Stanwood - Camano School District No. 401

1606-12

CONSTRUCTION CHANGE DIRECTIVE: CCD-218R1 ADDITIONAL COOLING SYSTEM

CONTRACT MODIFICATION:

The Contractor is hereby directed to make the following minor change(s) to the Work:

Provide adding additional cooling in Stanwood High School. Scope is to include providing a new hydronic cooling coil to be installed in DOAU-5. New coil to be connected to existing hydronic system. Two new DX cased coils to be installed on 3rd floor branches of DOAU-2 ductwork serving the 3rd floor. Additional controls to be added per drawing revisions on sheets M6.04 and M6.05. Corresponding outdoor condensing units be installed on the roof. COP cost to include programming, sensor, wiring, conduit, devices and ALL appurtenances as required for a complete & operational system.

Reference: M0.03, M0.04, M1.33, M1.35, M2.35, M2.41, M2.77, M6.04, M6.05, E3.43, E6.11, E6.33

Attachments: M0.03, M0.04, M1.33, M1.35, M2.35, M2.41, M2.77, M6.04, M6.05, E3.43, E6.11, E6.33

PROPOSED CONTRACT ADJUSTMENTS:

The Contract Sum will be adjusted on following basis:

- Lump Sum (increase) (decrease) of :
- As provided in Article 7 of the General Conditions or,
- As follows: Time and Materials:

The Contract Time will:

- Remain unchanged;
- (Increase) (Decrease) by ___ days or;
- Be adjusted as provided in Article 8 of the General Conditions.

When issued by the Architect and approved by the Owner, this document shall serve as authorization to proceed with the Work as described above. The Contractor shall proceed IMMEDIATELY. When the actual adjustments to the Contract Sum and/or Contract Time are agreed to by the Architect, Owner and Contractor, this Work shall be added to the Contract by Change Order.

Issued By: Steve Broback
McGranahan Architects

Date: 11/19/21

Approved By: Liz Jamieson
Owner

Date: 11/19/21

Signature below indicates the Contractor's acknowledgement of the direction to proceed with the Work immediately.

The Contractor (agrees) (disagrees) with the proposed method of adjustment in the Contract Sum and Contract Time.

Accepted By: _____
Contractor

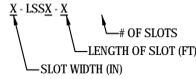
Date: _____

UNIT NO.	DESCRIPTION	MFR.	MODEL	CFM	AIR PATTERN	MOUNTING	FACE SIZE	NECK SIZE	COLOR	REMARKS
CD-1	CEILING DIFFUSER	TITUS	TDC-1	PER PLANS	1 WAY	T-BAR	2 3/4"x2 3/4"	PER PLANS	WHITE	FRAME 3
CD-2	CEILING DIFFUSER	TITUS	TDC-2	PER PLANS	2 WAY	T-BAR	2 3/4"x2 3/4"	PER PLANS	WHITE	FRAME 3
CD-3	CEILING DIFFUSER	TITUS	TDC-3	PER PLANS	3 WAY	T-BAR	2 3/4"x2 3/4"	PER PLANS	WHITE	FRAME 3
CD-4	CEILING DIFFUSER	TITUS	TDC-4	PER PLANS	4 WAY	T-BAR	2 3/4"x2 3/4"	PER PLANS	WHITE	FRAME 3
CDH-	CEILING DIFFUSER	TITUS	(1)	PER PLANS	(1)	SURFACE	NECK SIZE + 5 3/4" TOTAL	PER PLANS	WHITE	(2) FRAME 6
X-ISSX-X	LINEAR SLOT SUPPLY DIFFUSER	TITUS	FL	PER PLANS	2 WAY	SURFACE	5 3/4" HIGH	PER PLANS	AS SELECT. BY ARCH.	(5)
RD	ROUND DUCT DIFFUSER	TITUS	TMRA	PER PLANS	Ø	SURFACE		PER PLANS	WHITE	
DS	DRUM SUPPLY DIFFUSER	TITUS	DL	PER PLANS	VARIABLE	WALL/DUCT	NECK SIZE + 2 1/2" TOTAL	PER PLANS	AS SELECT. BY ARCH.	
SDS	SIDEWALL SUPPLY DIFFUSER	TITUS	300RL	PER PLANS	DBL.DEFLECTION	SURFACE	NECK SIZE + 1 3/4" TOTAL	PER PLANS	WHITE	(2) (3)
RG	RETURN/RELIEF GRILLE	TITUS	50F-A	PER PLANS	-	T-BAR	NECK SIZE + 1" TOTAL	PER PLANS	WHITE	
RGH	RETURN/RELIEF GRILLE	TITUS	50F-A	PER PLANS	-	SURFACE	NECK SIZE + 1 3/4" TOTAL	PER PLANS	WHITE	(2)
RGS	SIDEWALL RETURN /RELIEF GRILLE	TITUS	350 RL	PER PLANS	-	SURFACE	NECK SIZE + 1 3/4" TOTAL	PER PLANS	WHITE	(2) (3)
EG	EXHAUST GRILLE	TITUS	50F-A	PER PLANS	-	T-BAR	NECK SIZE + 1" TOTAL	PER PLANS	WHITE	
EGS	SIDEWALL RETURN /EXHAUST GRILLE	TITUS	350 RL	PER PLANS	-	SURFACE	NECK SIZE + 1 3/4" TOTAL	PER PLANS	WHITE	(2) (3)
EGH	EXHAUST GRILLE	TITUS	50F-A	PER PLANS	-	SURFACE	NECK SIZE + 1 3/4" TOTAL	PER PLANS	WHITE	(2)
TG	TRANSFER GRILLE	TITUS	50F-A	PER PLANS	-	T-BAR	NECK SIZE + 1" TOTAL	PER PLANS	WHITE	
TGS	SIDEWALL TRANSFER GRILLE	TITUS	350 RL	PER PLANS	-	SURFACE	NECK SIZE + 1 3/4" TOTAL	PER DETAIL	WHITE	(3)
TGH	TRANSFER GRILLE	TITUS	50F-A	PER PLANS	-	SURFACE	NECK SIZE + 1 3/4" TOTAL	PER PLANS	WHITE	
HDR	HEAVY DUTY RETURN/RELIEF	TITUS	30R	PER PLANS	-	SURFACE	NECK SIZE + 1 3/4" TOTAL	PER PLANS	WHITE	(3) (4) BLADE SETTING Ø.
TF	TURBO NOZZLE	SEHO	NT	PER PLANS	ADJUSTABLE	SURFACE	PER PLANS	PER PLANS	ANODIZED ALUMINUM	

NOTES FOR GRILLES, REGISTERS, DIFFUSERS SCHEDULE:

- MODEL No. & AIR PATTERN SHALL BE SAME AS CD-1 THRU CD-4, EXCEPT PROVIDE FOR MOUNTING INDICATED
- FURNISH WITH "OPPOSED BLADE DAMPER"(ØBD).
- FURNISH WITH HORIZONTAL FRONT BLADES.
- FACE PLATE SHALL BE 14 GA. STEEL 1/8"x1/2" HORIZONTAL BLADES ON 6" CENTERS WITH EACH BLADE WELDED TO 1/4 GA. STEEL SLEEVE, COUNTERSUNK SCREW HOLES ON 8" CENTERS.
- PROVIDE WITH INSULATED PLENUM BOXES.

SLOT DIFFUSER CALLOUT



UNIT NO.	MFR.	MODEL	CONFIGURATION	AREA SERVED	BHP	HP	FAN CFM	EX. S.P.	CONTROLLED BY OR INTERLOCKED WITH	ELECTRICAL VOLTS	STARTER FURN. BY	DISCONNECT FURN. BY	REMARKS
BF-101	FANTECH	DBF-4XLT-705	DRYER BOOSTER	CULINARY ARTS 174	0.04	1/10	150	0.2	DRYER OPERATION	115	MFR	EC	(1)
BF-102	FANTECH	DBF-4XLT-705	DRYER BOOSTER	SHOWER 138	0.04	1/10	150	0.2	DRYER OPERATION	115	MFR	EC	(1)
BF-103	FANTECH	FKD10	DRYER BOOSTER	LAUNDRY 116	0.04	1/2	810	0.5	DRYER OPERATION	115	MFR	EC	(1) ⚠
BF-201	FANTECH	DBF-4XLT-705	DRYER BOOSTER	TRIAGE 240	0.04	1/10	150	0.2	DRYER OPERATION	115	MFR	EC	(1)

NOTES FOR BOOSTER FAN SCHEDULE:

- FAN TO BE PROVIDED WITH PRESSURE SENSING CIRCUIT, LED INDICATOR DISPLAY PANEL, AND TEMPERATURE LIMIT DEVICE. CC TO WIRE AND INSTALL LED INDICATOR DISPLAY.

UNIT NO.	MFR.	MODEL	LOCATION	WEIGHT (LBS.)	ELECTRICAL WATTS	VOLTS	Ø	AMPS	REMARKS
DF-1	AIRIUS	25-EC	COMMONS 131	10	30	115	1	15	(1) (2)
DF-2	AIRIUS	25-EC	COMMONS 131	10	30	115	1	15	(1) (2)
DF-3	AIRIUS	25-EC	COMMONS 131	10	30	115	1	15	(1) (2)
DF-4	AIRIUS	25-EC	COMMONS 131	10	30	115	1	15	(1) (2)

NOTES FOR DESTRATIFICATION FAN SCHEDULE:

- PROVIDE WITH 0-10V DC CONTROL MODULE.
- CONTROLLED BY BUILDING MANAGEMENT SYSTEM. SEE SEQUENCE IN CONTROLS DRAWINGS.

UNIT NO.	MFR.	MODEL	LOCATION	WEIGHT (LBS.)	ELECTRICAL WATTS	VOLTS	Ø	AMPS	REMARKS
KF-101	SKUITT	ENVIROVENT2	KILN 181A	20	1.4	115	1	15	(1)
KF-102	SKUITT	ENVIROVENT2	KILN 181A	20	1.4	115	1	15	(1)

NOTES FOR KILN FAN SCHEDULE:

- PROVIDE WITH ENVIROLINK AUTOMATIC FAN OPERATION SYSTEM. INTERLOCK WITH KILN OPERATION.

23 64 00 AIR COOLED WATER CHILLER SCHEDULE

UNIT NO.	MFR.	MODEL	LOCATION	PERFORMANCE					ELECTRICAL				STARTER FURN. BY	DISCONNECT FURN. BY	NOTES			
				TONS	GPM	E.W.T.	L.W.T.	PD (FT WATER)	EER	IPLV	WEIGHT (LBS.)	MCA				MOCP	VOLTS	Ø
CH-1	CARRIER	30XV160H	SERVICE YARD	153.9	376.6	54	44	19.3	11.4	20.13	13.000	291.9	350	460	3	MFR	EC	(1) (2) (3) (4)

NOTES FOR AIR COOLED WATER CHILLER SCHEDULE:

- UNIT PERFORMANCE BASED ON 20% GLYCOL.
- RATED AT 55°F AIR ENTERING CONDENSER AND 44°F LEAVING WATER TEMPERATURE.
- CHILLER EFFICIENCY SHALL BE AT LEAST 15% BETTER THAN WSEC REQUIREMENTS.
- EC TO PROVIDE A SEPARATE 120V 40 AMP CIRCUIT FOR CHILLER CONTROLS AND EVAPORATOR HEATER.

23 52 33 GAS-FIRED BOILER SCHEDULE

UNIT NO.	MFR.	MODEL	LOCATION	INPUT (MBH)	OUTPUT (MBH)	EFFICIENCY %	TYPE	PRESSURE	WATER FLOW @ 20°F V (GPM)	WATER PD (FT)	WET WEIGHT (LBS)	ELECTRICAL			STARTER FURN. BY	DISCONNECT FURN. BY	NOTES
												FLA	VOLTS	Ø			
B-1	KN	16	MECH ROOM 209	1600	1483	93	NG	7.00	148	2.0	2500	6.6	208	1	MFR	EC	(1) (2) (3) (4) (5)
B-2	KN	16	MECH ROOM 209	1600	1483	93	NG	7.00	148	2.0	2500	6.6	208	1	MFR	EC	(1) (2) (3) (4) (5)
B-3	KN	16	MECH ROOM 209	1600	1483	93	NG	7.00	148	2.0	2500	6.6	208	1	MFR	EC	(1) (2) (3) (4) (5)

NOTES FOR GAS-FIRED BOILER SCHEDULE:

- PROVIDE FULLY MODULATING BURNERS, 5:1 MINIMUM TURN DOWN.
- EC TO PROVIDE REMOTE SHUT-OFF BUTTON AT EACH EXIT DOOR FROM THE BOILER ROOM.
- BOILER OUTPUT BASED ON 100°F ENT AT FULL FIRE.
- PROVIDE WITH CONDENSATE DRAIN AND NEUTRALIZING KIT.
- BOILER EFFICIENCY SHALL BE AT LEAST 15% BETTER THAN WSEC REQUIREMENTS.

23 11 23 HYDRONIC PUMPS SCHEDULE

UNIT NO.	MFR.	MODEL	LOCATION		MOTOR		FLOW (GPM)	HEAD (FT)	ELECTRICAL		STARTER FURN. BY	DISCONNECT FURN. BY	NOTES
			NAME	Ø	HP	RPM			VOLTS	Ø			
HCP 1	TACO	FH011C	MECH	209	25	1760	667	97	460	3	VFD	EC	(1)(4)
HCP 2	TACO	FH011C	MECH	209	25	1760	667	97	460	3	VFD	EC	(1)(4)
BCP 1	TACO	VR-25	MECH	209	1-1/2	3500	148	15	230	1	MFR.	EC	(1)(2)
BCP 2	TACO	VR-25	MECH	209	1-1/2	3500	148	15	230	1	MFR.	EC	(1)(2)
BCP 3	TACO	VR-25	MECH	209	1-1/2	3500	148	15	230	1	MFR.	EC	(1)(2)
CCP 1	TACO	FB011D	MECH	209	15	1760	416	69	460	3	VFD	EC	(3)(4)
CCP 2	TACO	FB011D	MECH	209	15	1760	416	69	460	3	VFD	EC	(3)(4)

NOTES FOR HYDRONIC PUMPS SCHEDULE:

- PUMP CAPACITY BASED ON WATER, NO GLYCOL.
- PUMPS PROVIDED WITH EC MOTOR WITH INTEGRAL SPEED CONTROL AND BACNET INTERFACE.
- PUMP CAPACITY BASED ON 20% GLYCOL.
- PROVIDE WITH VFD.

23 81 26 OUTDOOR UNIT SPLIT SYSTEM SCHEDULE

UNIT NO.	MFR.	MODEL	LOCATION	UNITS SERVED	WEIGHT	ELECTRICAL DATA			STARTER FURN. BY	DISCONNECT FURN. BY	NOTES
						MCA	VOLTS	Ø			
OCU 101	MTSUBISHI	PUY-A24NHA7	ROOFTOP	ICU-101	160	19	208	1	MFR.	EC	(1) (2) (3) (4)
OCU 102	MTSUBISHI	PUY-A24NHA7	ROOFTOP	ICU-102	160	19	208	1	MFR.	EC	(1) (2) (3) (4)
OCU 201	MTSUBISHI	PUY-A12NKA7	ROOFTOP	ICU-201	100	11	208	1	MFR.	EC	(1) (2) (3) (4)
OCU 202	MTSUBISHI	PUZ-A12NKA7	ROOFTOP	ICU-202	100	11	208	1	MFR.	EC	(1) (2) (3) (4)
OCU 301	MTSUBISHI	PUMY-P36NKMU1	ROOFTOP	ICU-301, 303	300	31	208	1	MFR.	EC	(1) (2) (3)
OCU 302	MTSUBISHI	PUMY-P36NKMU1	ROOFTOP	ICU-302, 304	300	31	208	1	MFR.	EC	(1) (2) (3)
OCU 303	LG	ARUM096DTE	ROOFTOP	DC-1	550	16.4	460	3	MFR.	EC	(1) (2) (3)
OCU 304	LG	ARUM096DTE	ROOFTOP	DC-2	550	16.4	460	3	MFR.	EC	(1) (2) (3)

NOTES FOR OUTDOOR UNIT SPLIT SYSTEM SCHEDULE:

- COOLING CAPACITY 104 @ 95°F D.B. & 67°F W.B. OUTDOOR, 57°F D.B. INDOOR.
- PROVIDE SECTION WITH SINGLE POINT POWER CONNECTION. CC TO INSTALL CONTROL WIRING BETWEEN UNITS.
- PROVIDE WITH R-410A REFRIGERANT ONLY.
- EC TO PROVIDE POWER WIRING FROM ASSOCIATED OUTDOOR UNIT

23 81 26 INDOOR SPLIT SYSTEM COOLING UNIT SCHEDULE

UNIT NO.	MFR.	MODEL	AREA SERVED	SEER	COP (6)	COOLING TOTAL MBH	HEATING TOTAL MBH	WEIGHT	ELECTRICAL DATA			NOTES
									MCA	VOLTS	Ø	
ICU 101	MTSUBISHI	PKA-A24KA7	ELEV MACH 144	21.4	NA	24	NA	50	1	208	1	(1) (2) (3) (4) (6)
ICU 102	MTSUBISHI	PKA-A24KA7	ELEV MACH 121	21.4	NA	24	NA	50	1	208	1	(1) (2) (3) (4) (6)
ICU 103	MTSUBISHI	PKFY-P12NHMU	MECHANICAL 176	21.0	3.9	12	13.5	30	1	208	1	(1) (2) (3) (4)
ICU 201	MTSUBISHI	PKA-A12HA7	MDP 213A	20.8	NA	12	NA	30	1	208	1	(1) (2) (3) (4) (6)
ICU 202	MTSUBISHI	PKA-A12HA7	KENNELS 258A	20.8	4.3	12	14	30	1	208	1	(1) (2) (3) (4) (6)
ICU 301	MTSUBISHI	PKFY-P12NHMU	IDF 334	21.0	3.9	12	13.5	30	1	208	1	(1) (2) (3) (4)
ICU 302	MTSUBISHI	PKFY-P12NHMU	IDF P2	21.0	3.9	12	13.5	30	1	208	1	(1) (2) (3) (4)
ICU 303	MTSUBISHI	PKFY-P12NHMU	DIMMER ROOM 350	21.0	3.9	12	13.5	30	1	208	1	(1) (2) (3) (4)

NOTES FOR INDOOR UNIT SPLIT SYSTEM SCHEDULE:

- PROVIDE SECTION WITH SINGLE POINT POWER CONNECTIONS.
- MANUFACTURER TO PROVIDE 24V THERMOSTAT. CC TO INSTALL AND WIRE.
- PROVIDE WITH R-410A REFRIGERANT ONLY.
- PROVIDE WITH CONDENSATE PUMP.
- CCP BASED ON 47°F
- EC TO PROVIDE POWER WIRING FROM ASSOCIATED OUTDOOR UNIT.

23 82 39 ELECTRIC WALL HEATER SCHEDULE

UNIT NO.	MFR.	MODEL	LOCATION	WEIGHT (LBS.)	ELECTRICAL			NOTES
					WATTS	VOLTS	Ø	
EWH 101	KING	PAW1215	FIRE RISER 109	750	120	1	(1) (2)	
EWH 102	KING	PAW1215	MECHANICAL 176	750	120	1	(1) (2)	
EWH 103	KING	PAW1215	STORAGE 119	750	120	1	(1) (2)	
EWH 104	KING	PAW1215	STAIR ST09	750	120	1	(1) (2) (3)	
EWH 105	KING	PAW1215	PUMPHOUSE	1250	120	1	(1) (2) (3)	
EWH 201	KING	PAW1215	MECH RM 209	750	120	1	(1) (2)	

NOTES FOR ELECTRIC WALL HEATER SCHEDULE:

- PROVIDE WITH INTEGRAL THERMOSTAT KIT. SET THERMOSTAT TO 55°F.
- RECESS MOUNT HEATER 12" ABOVE FINISHED FLOOR.
- PROVIDE WITH STAINLESS STEEL GRILLE.

UNIT NO.	MFR.	MODEL	CONFIGURATION	LOCATION	AREA SERVED	CFM	MAX. OSA	DEMAND CONTROL VENTILATION (DCV) MIN. OSA	SUPPLY FAN DATA (12)				HYDRONIC HEATING COIL (11)							HYDRONIC COOLING COIL (11)							ELECTRICAL				STARTER FURN. BY	DISCONNECT FURN. BY	DUCT SMOKE DETECTOR FURN. BY	NOTES				
									HP (13)	E.S.P.	BHP	ROWS	FACE VEL.	GPM	TOTAL MBH	E.A.T. (°F)	L.A.T. (°F)	W.P.D.	ROWS	FACE VEL.	GPM	SENS MBH	TOTAL MBH	E.A.T. (°F)	L.A.T. (°F)	W.P.D.	WEIGHT (LBS)	FILTERS	VOLTS	Ø					MCA			
																																				HP (13)	E.S.P.	BHP
AHU-1	AAON	M2	HORIZONTAL	MECHANICAL PLATFORM	GYMNASIUM 110	20000	N/A	N/A	30	1.25	22.7	2	555	90	659	70	91.3	5.4	8	8	555	140	494	627	75	63	54.7	52.9	12.3	6400	(3)	460	3	50	MFR	EC	(1)	(4) (5) (6) (7) (10) (9)
AHU-2	AAON	H3	HORIZONTAL	MECHANICAL PLATFORM	AUXILIARY GYM 201	8600	N/A	N/A	2 @ 8	1.3	2 @ 3.4	1	500	25	197.8	70	91.3	5.4	8	8	500	50	218.4	283.5	75	63	53.3	52.0	16.4	1000	(3)	460	3	19	MFR	EC	(1)	(4) (5) (6) (8) (10) (9)
AHU-3	AAON	H3	HORIZONTAL	MECHANICAL PLATFORM	AUXILIARY GYM 202	8600	N/A	N/A	2 @ 8	1.3	2 @ 3.4	1	500	25	197.8	70	91.3	5.4	8	8	500	50	218.4	283.5	75	63	53.3	52.0	16.4	1000	(3)	460	3	19	MFR	EC	(1)	(4) (5) (6) (8) (10) (9)
AHU-4	AAON	M2	HORIZONTAL	MECHANICAL PLATFORM	COMMONS 131	11000	6335	800	15	1.2	8.9	2	502	50	400.3	67	100	2.3	8	8	502	61	271.7	336.9	75	63	52.2	52.1	12.6	4800	(3)	460	3	26	MFR	EC	(1)	(2) (4) (5) (6) (8) (9) (10)
AHU-5	AAON	M2	HORIZONTAL	MECHANICAL PLATFORM	THEATRE 159 & 160	10640	6160	900	15	1.3	9.3	2	486.3	50	396	66	100	2.3	8	8	486.3	61	265.3	330.3	75	63	54.2	52.8	12.6	4800	(3)	460	3	26	MFR	EC	(1)	(2) (4) (5) (6) (7) (9) (10)
AHU-6	AAON	H3	HORIZONTAL	MECHANICAL PLATFORM	STAGE 160	1920	660	240	2.3	1.1	1.6	2	542	10	54	70	96	3.6	8	8	542	15	45.6	53.6	75	63	55.5	54.1	4.9	1000	(3)	460	3	3	MFR	EC	N/A	(2) (4) (5) (6) (8) (9) (10)
AHU-7	AAON	H3	HORIZONTAL	MECHANICAL PLATFORM	UPPER LOBBY 243 & LOWER LOBBY 158	3200	800	300	8	1.2	2.2	2	443	10	88	70	95.5	7.2	8	8	443	15	79.6	98.4	75	63	53.8	52.7	3.7	1000	(3)	460	3	10	MFR	EC	(1)	(2) (4) (5) (6) (8) (9) (10)

- NOTES FOR AIR HANDLING UNIT SCHEDULE:
- M.C. TO COORDINATE WITH E.C. ON LOCATION OF ALL SMOKE DETECTORS PRIOR TO INSTALLATION. MC TO MOUNT ON SUPPLY AND RETURN DUCTS. EC TO FURNISH AND CONNECT.
 - UNIT TO BE CAPABLE OF 100% ECONOMIZER COOLING.
 - 2" MERV 13 FINAL FILTER. FILTERS TO BE STANDARD SIZE.
 - PROVIDE WITH EC MOTORS.
 - E.S.P. DOES NOT INCLUDE AN ALLOWANCE FOR FILTERS.
 - PROVIDE WITH SINGLE POINT POWER CONNECTION.
 - UNIT TO BE PROVIDED WITH 3 WAY CONTROL VALVES BY CC.
 - UNIT TO BE PROVIDED WITH 2 WAY CONTROL VALVES BY CC.
 - CC TO PROVIDE DAMPER AND CONTROL VALVE ACTUATORS.
 - UNIT TO BE PROVIDED ON MANUFACTURER 6" BASE RAIL. SEE PLANS FOR EXACT UNIT ORIENTATION AND ACCESS SIDE.
 - HEATING WATER COIL PERFORMANCE BASED ON E.W.T. 140 °F AND L.W.T. 120 °F. CHILLED WATER COIL PERFORMANCE BASED ON E.W.T. 44 °F AND L.W.T. 54 °F WITH 20% GLYCOL.
 - FANS SHALL HAVE A FAN EFFICIENCY GRADE OF 71 OR HIGHER BASED ON MANUFACTURER'S CERTIFIED DATA, AS DEFINED BY AMCA 205.
 - FAN HP TO BE MANUFACTURER NEXT SIZE ABOVE BRAKE HORSE POWER.

UNIT NO.	MFR.	MODEL	LOCATION	AREA SERVED	SUPPLY FAN (8)				EXHAUST FAN (8)				ENTHALPY WHEEL HEAT EXCHANGER												HEATING COIL (6)							COOLING COIL (6)								WEIGHT LBS	FILTERS	ELECTRICAL				STARTER FURN. BY	DISCONNECT FURN. BY	DUCT SMOKE DETECTOR FURN. BY	REMARKS		
					CFM	RPM	EXT. S.P.	BHP	HP (10)	CFM	RPM	EXT. S.P.	BHP	HP (10)	SUMMER CONDITIONS						WINTER CONDITIONS						ROWS	FACE VEL.	GPM	W.P.D. (°F)	MBH	E.A.T. (°F)	L.A.T. (°F)	CONTROL VALVE	ROWS	FACE VEL.	GPM	W.P.D. (°F)	MBH SENS			MBH LATENT	E.A.T. (°F)	L.A.T. (°F)	EWT (°F)					LWT (°F)	CONTROL VALVE
															EDB	EWB	LDB	LWB	EDB	EWB	LDB	LWB	EDB	EWB	LDB	LWB																									
DOAU-1	AAON	V3	MECHANICAL 176	FIRST FLOOR WEST	6435	2240	2.6	2 @ 3.9	2 @ 8	6340	1970	2.6	2 @ 2.7	2 @ 8	79	63	76.4	62.8	75	63	23	18.9	52.1	45.5	70	58.5	1	366.3	20	0.8	274.2	52.1	90	(3)	1800	(7)	36	40	460	3	MFR.	EC	(1)	(2) (5) (9) (11)							
DOAU-2	AAON	M3	MECHANICAL 176	2ND AND 3RD FLOOR WEST	20130	1660	2.5	2 @ 13	2 @ 15	18360	1345	2.3	2 @ 8.3	2 @ 15	79	63	76.4	62.9	75	63	23	18.9	51.8	45.4	70	58.5	1	524	75	5.7	891	51.8	91.6	(4)	13000	(7)	92	110	460	3	MFR.	EC	(1)	(2) (5) (11)							
DOAU-3	AAON	M2	MECHANICAL ROOM 209	FIRST FLOOR EAST	12555	1400	2.3	14.1	20	14570	1420	2.3	14.3	20	79	63	76.1	62.9	75	63	23	18.9	56.7	49.1	70	58.5	1	609	35	7.0	416.7	51.6	93.2	(3)	7500	(7)	62	80	460	3	MFR.	EC	(1)	(2) (5) (11)							
DOAU-4	AAON	M2	MECH. PLATFORM	GYMNASIUM 110, 201, & 202	12000	1170	1.0	8.0	15	10500	1020	1.0	5.4	15	79	63	76.8	63.0	75	63	23	18.9	48.9	42.7	70	58.5	1	448	59	2.5	570.6	48.9	92.8	(3)	8500	(7)	48	60	460	3	MFR.	EC	(1)	(2) (5) (9) (11)							
DOAU-5	AAON	M2	MECH. PLATFORM	2ND AND 3RD FLOOR EAST	10880	1640	2.5	11.7	15	9695	1610	2.55	10.2	15	79	63	77.3	63.0	75	63	23	18.9	42.7	37.6	70	58.5	1	495	50	2.3	532.3	42.7	88.5	(3)	7500	(7)	41	60	460	3	MFR.	EC	(1)	(2) (5) (9) (11)							
DOAU-6	AAON	V3	MECH. PLATFORM	SECOND FLOOR ADMIN	1060	2335	2.2	1.45	2.3	570	1990	2.1	0.75	2.3	79	63	77.0	62.9	75	63	23	18.9	45.3	40.2	70	58.5	1	314	10	0.5	62.9	45.3	96.5	(3)	1800	(7)	6	15	460	3	MFR.	EC	N/A	(2) (5) (9) (11)							

- NOTES FOR AIR HANDLING UNIT SCHEDULE:
- M.C. TO COORDINATE WITH E.C. ON LOCATION OF ALL SMOKE DETECTORS PRIOR TO INSTALLATION. MC TO MOUNT ON SUPPLY AND RETURN DUCTS. EC TO FURNISH AND CONNECT.
 - EQUIPMENT TAGGING PER SPEC.
 - PROVIDE WITH 2-WAY VALVE, VALVE AND ACTUATOR BY CC.
 - PROVIDE WITH 3-WAY VALVE, VALVE AND ACTUATOR BY CC.
 - PROVIDE WITH VFD OR ECM FOR ALL SUPPLY AND EXHAUST FANS.
 - HEATING COIL PERFORMANCE BASED ON E.W.T. 140 °F AND L.W.T. 120 °F.
 - PROVIDE UNIT WITH MERV 8 PRE-FILTER AND MERV 13 FINAL FILTER. FILTERS TO BE STANDARD SIZE.
 - FANS SHALL HAVE A FAN EFFICIENCY GRADE OF 71 OR HIGHER BASED ON MANUFACTURER'S CERTIFIED DATA, AS DEFINED BY AMCA 205.
 - ENTHALPY WHEEL TO BE SIZED FOR 25% INCREASED AIRFLOW.
 - FAN HP TO BE MANUFACTURER NEXT SIZE ABOVE BRAKE HORSE POWER.
 - UNIT TO BE PROVIDED ON MANUFACTURER 6" BASE RAIL. SEE PLANS FOR EXACT UNIT ORIENTATION AND ACCESS SIDE.

22 15 00 AIR COMPRESSOR SCHEDULE(3)														
UNIT NO.	MFR.	MODEL	LOCATION	TYPE	MOTOR		P (PSI/2)	TANK (GAL)	ELECTRICAL			STARTER	DISCONNECT FURN. BY	NOTES
					HP	RPM			FLA	VOLTS	Ø			
AC-1	INGERSOLL RAND	7.5-1X100	MECHANICAL 176	ROTARY SCREW	10	4630	100	120	41.8	208	3	MFR	E.C.	(1)

- NOTES FOR AIR COMPRESSOR SCHEDULE:
- E.C. TO PROVIDE A MANUAL STARTER AND DISCONNECT. M.C. TO PROVIDE AND INSTALL A MOTOR RATED RELAY FOR CONTROLS INTERLOCK.
 - RATED DISCHARGE PRESSURE.
 - SEE DETAIL 1 ON M5.04 FOR INSTALLATION DETAILS.

EXPANSION TANK SCHEDULE(4)										
UNIT NO.	MFR.	MODEL	CONFIGURATION	TYPE	SERVICE	PRESSURE (PSI)	VOLUME (GAL)		WEIGHT (LBS)	REMARKS
							TOTAL	ACCEPTANCE		
ET-1	AMTROL	ST-20V-C	FREE STANDING	DIAPHRAGM	KITCHEN 103	55	8	4	100	(1) (3)
ET-2	AMTROL	ST-12V-C	FREE STANDING	DIAPHRAGM	WEST POTABLE WATER	55	6.4	3	100	(1) (3)
ET-3	AMTROL	ST-20V-C	FREE STANDING	DIAPHRAGM	EAST NON-POTABLE WATER	55	8	4	100	(1) (3)
ET-4	AMTROL	ST-20V-C	FREE STANDING	DIAPHRAGM	EAST POTABLE WATER	55	8	4	100	(1) (3)
ET-5	AMTROL	AX-280V	FREE STANDING	BLADDER	HEATING WATER LOOP	25	211	84	2000	(1) (2)
ET-6	AMTROL	AX-80V	FREE STANDING	BLADDER	CHILLER WATER LOOP	25	44.4	22.6	800	(1) (2)

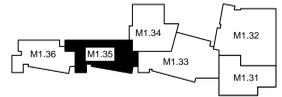
- NOTES FOR EXPANSION TANK SCHEDULE:
- CONTRACTOR TO SET AIR PRESSURES IN FIELD.
 - HYDRONIC WATER MAXIMUM PRESSURE RATING OF 125 PSL PROVIDE ASME RATED EXPANSION TANK.
 - DOMESTIC WATER MAXIMUM PRESSURE RATING OF 150 PSL PROVIDE ASME RATED EXPANSION TANK.
 - SEE DETAIL 10 ON M5.01 FOR INSTALLATION DETAILS.

DUCT COIL SCHEDULE												
UNIT NO.	MFR.	MODEL	AREA SERVED	CFM	AIR PD (")	FIN SIZE	COOLING TOTAL MBH	COOLING SENSIBLE MBH	E.A.T. (°F)	L.A.T. (°F)	WEIGHT	NOTES
DC 2	RAE	SB942X45	3RD FLOOR SOUTH	3840	0.2	42X45	131	94	80	57.5	200	(1)

- NOTES FOR INDOOR UNIT SPLIT SYSTEM SCHEDULE:
- PROVIDE WITH R-410A REFRIGERANT ONLY.

EXHAUST FAN SCHEDULE																			
UNIT NO.	MFR.	MODEL	CONFIGURATION	AREA SERVED	BHP	HP	PERFORMANCE			DAMPER	SPEED CONTROL	CONTROLLED BY OR INTERLOCKED WITH	WEIGHT	ELECTRICAL		STARTER FURN. BY	DISCONNECT FURN. BY	REMARKS	
							CFM	EX. S.P.	RPM					VOLTS	Ø				
EF-101	GREENHECK	SQ-120-VG	INLINE	KILN 181A	0.26	1/2	1375	0.4	1435	YES	ECM	T-STAT	65	115	1	(3)	(3)	(1) (2) (4) (5)	
EF-102	GREENHECK	SQ-85-VG	INLINE	MECHANICAL 176	0.05	1/10	265	0.4	1450	YES	ECM	T-STAT	60	115	1	(3)	(3)	(1) (2) (4) (5)	
EF-103	GREENHECK	G-099-VG	ROOFTOP DOWNBLAST	CULINARY ARTS 174 TYPE II HOOD	0.19	1/4	525	1.0	1590	YES	ECM	DISHWASHER	130	115	1	(3)	(3)	(1) (2) (4) (5)	
EF-104	GREENHECK	CUBE-200HP	UPBLAST ROOFTOP	KITCHEN 103 - TYPE I HOOD	1.54	2	3262	1.5	1245	NO	NO	KITCHEN HOOD	150	460	3	(6)	(6)	(1) (2) (5) (7)	
EF-105	GREENHECK	CUBE-180HP	UPBLAST ROOFTOP	KITCHEN 103 - TYPE I HOOD	0.82	1	1916	1.5	1225	NO	NO	KITCHEN HOOD	130	460	3	(6)	(6)	(1) (2) (5) (7)	
EF-106	GREENHECK	G-099-VG	ROOFTOP DOWNBLAST	KITCHEN 103 - TYPE II HOOD	0.19	1/4	600	1.0	1590	YES	ECM	DISHWASHER	40	115	1	(3)	(3)	(1) (2) (4) (5)	
EF-107	GREENHECK	SQ-99-VG	INLINE	DRYING ROOM 114B	0.15	1/4	500	0.5	1420	YES	ECM	SWITCH	60	115	1	(3)	(3)	(1) (2) (4) (5)	
EF-108	GREENHECK	CUBE-300HP	UPBLAST ROOFTOP	CULINARY ARTS 174 - TYPE I HOOD	4.79	5	8800	1.6	1011	NO	NO	KITCHEN HOOD	300	460	3	(6)	(6)	(1) (2) (7) (9)	
EF-109	GREENHECK	CUBE-200-20	UPBLAST ROOFTOP	CULINARY ARTS 174 - TYPE I HOOD	1.62	2	2954	1.6	1147	NO	NO	KITCHEN HOOD	200	460	3	(6)	(6)	(1) (2) (7) (9)	
EF-110	GREENHECK	SQ-120-VG	INLINE	STORAGE	0.26	1/2	1375	0.4	1435	YES	ECM	SCHEDULE	65	115	1	(3)	(3)	(1) (2) (4) (5) (8)	
EF-201	GREENHECK	BSQ-80-5	INLINE	LAB HOOD SCIENCE LAB 262	0.36	1/2	580	0.75	1970	YES	YES	HOOD	95	115	1	(3)	(3)	(1) (2) (5)	
EF-202	GREENHECK	SQ-120-VG	INLINE	ELECTRICAL 208	0.32	1/2	1480	0.45	1540	YES	ECM	T-STAT	65	115	1	(3)	(3)	(1) (2) (4) (5)	
EF-203	GREENHECK	BSQ-																	

KEY PLAN



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 PLA DESEN
 sports fields engineer
 DA HOGAN
 hazardous materials
 EHS-INTERNATIONAL INC.

project
 STANWOOD HIGH SCHOOL - PHASE 2
 client
 STANWOOD-CAMANO SCHOOL
 DISTRICT NO. 401
 location
 STANWOOD, WA

Project No. 1426
PARTIAL THIRD FLOOR PLUMBING PLAN

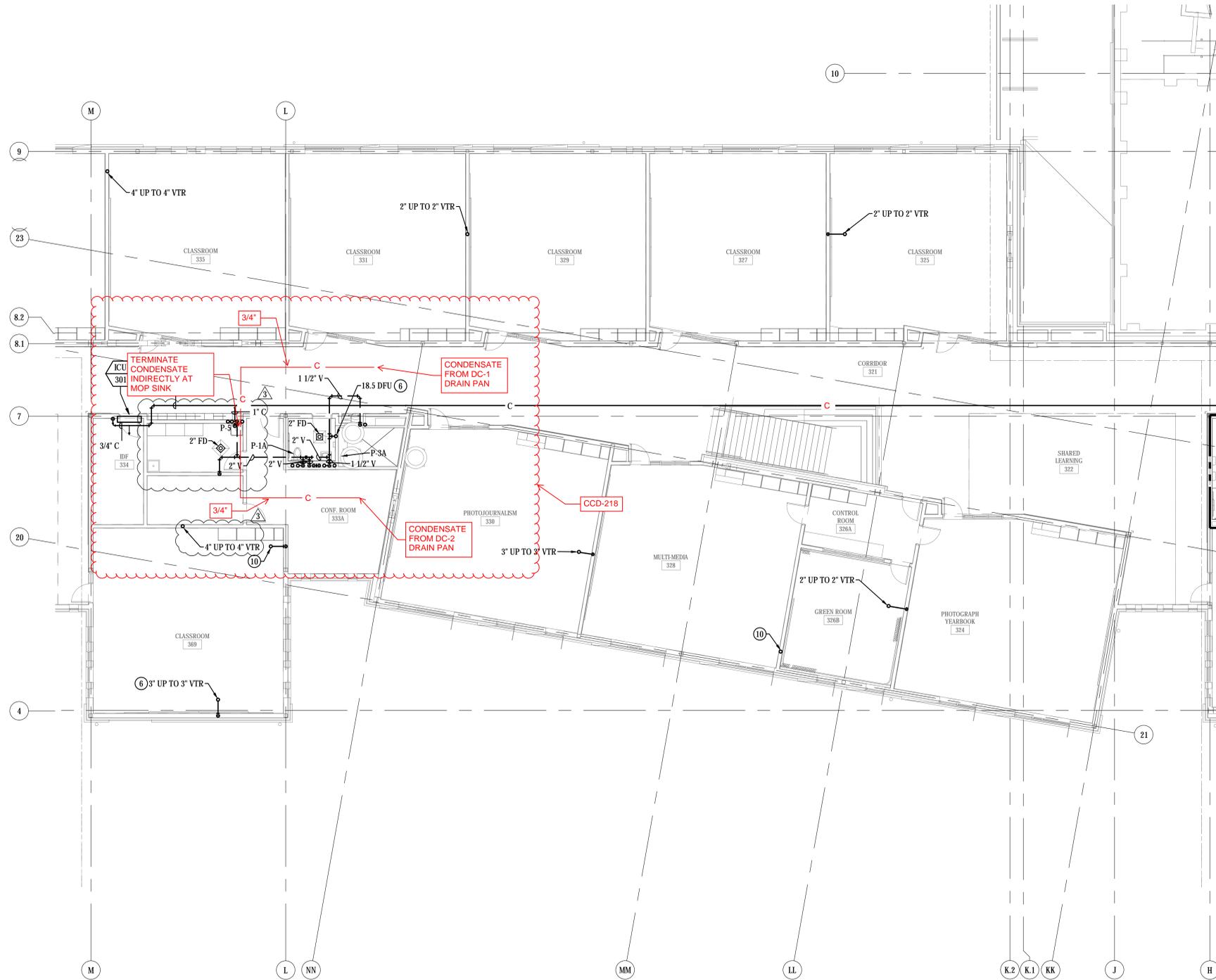
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 BID SET 12 DEC 18
 CONFORMED SET
 revision
 CCD 218 05 NOV 21

drawn
 AC, DS
 checked
 JJ, SZ

sheet
M1.35

GENERAL NOTES

1. PIPING MAY BE SHOWN OFFSET FOR CLARITY. PROVIDE ADDITIONAL OFFSETS AS REQUIRED TO FACILITATE PIPE INSTALLATION.
2. FOR NOTE DESCRIPTIONS SEE SHEET M1.31.



PARTIAL THIRD FLOOR PLUMBING PLAN

Scale: 1/8" = 1'-0"



KEY PLAN



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WEISMAN DESIGN GROUP

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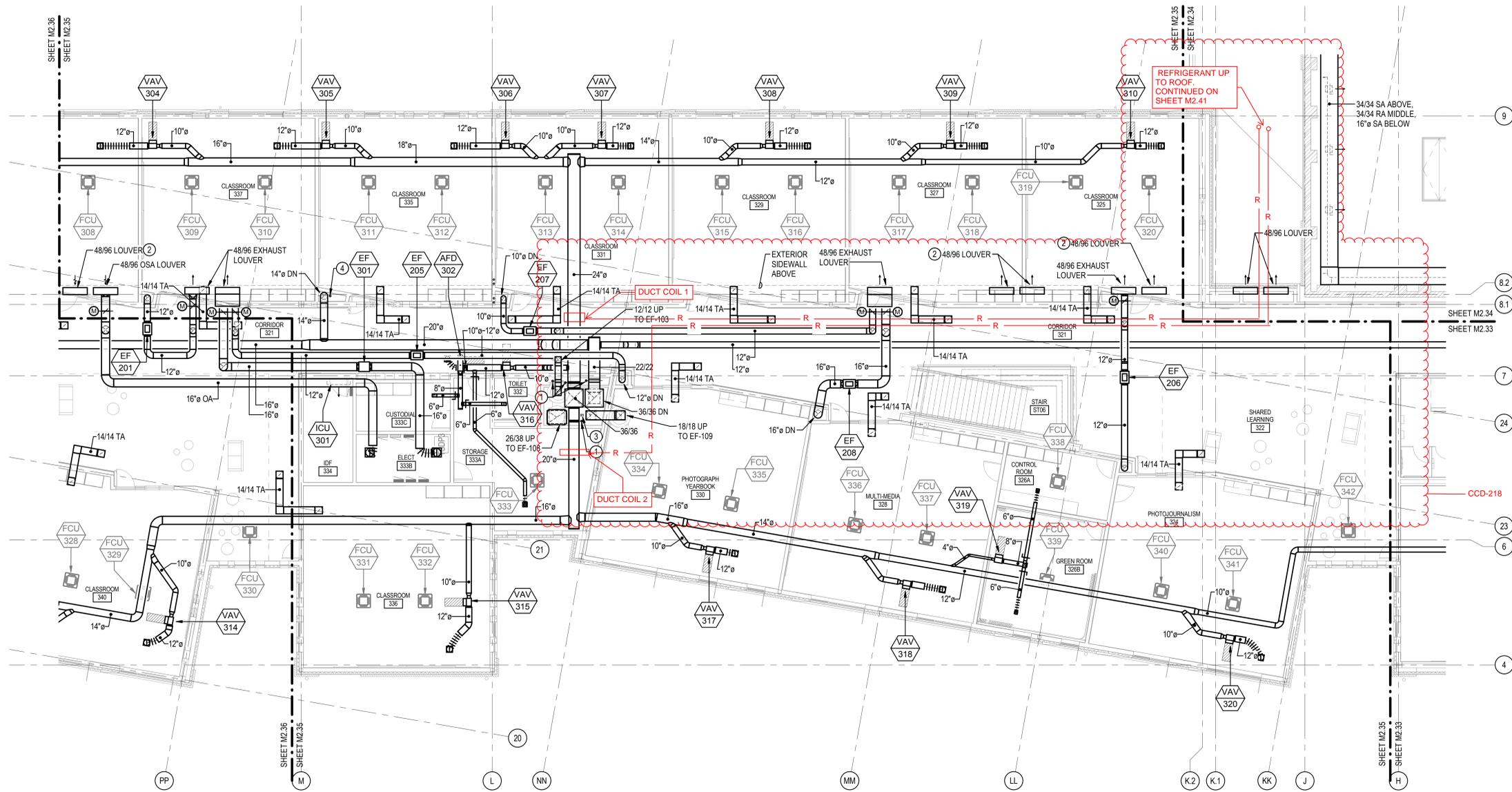
hazardous materials.
EHS-INTERNATIONAL INC.

GENERAL NOTES

- ALL DUCTWORK SHALL BE CONSTRUCTED & SEALED PER IMC. ALL DUCTWORK IS LOW-PRESSURE & SHALL BE CONSTRUCTED TO 2" W.G. PRESSURE CLASS.
- ALL OSA DUCTWORK TO MEET WSEC C402.5 LEAKAGE REQUIREMENTS & VAPOR RETARDER REQUIREMENTS.
- CEILING SPACE ABOVE THE CORRIDORS ARE USED AS AN EXHAUST AIR PLENUM. ALL MATERIALS SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED AND LABELED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50.
- SEE SHEETS M5.01 TO M5.03 FOR INSTALLATION DETAILS.

CONSTRUCTION NOTES

- PROVIDE FIRE DAMPER AT CHASE PENETRATION. SEE INSTALLATION DETAIL ON SHEET M5.02.
- PROVIDE SHEET METAL BLANK-OFF OF LOUVER AND INSULATE PER WSEC.
- 6" MAKE UP AIR UNIT FLUE TO ROOF.
- PROVIDE FIRE DAMPER AT SCAB PENETRATION.



PARTIAL THIRD FLOOR HVAC PLAN

1/8" = 1'-0"



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CONSTRUCTION NOTES

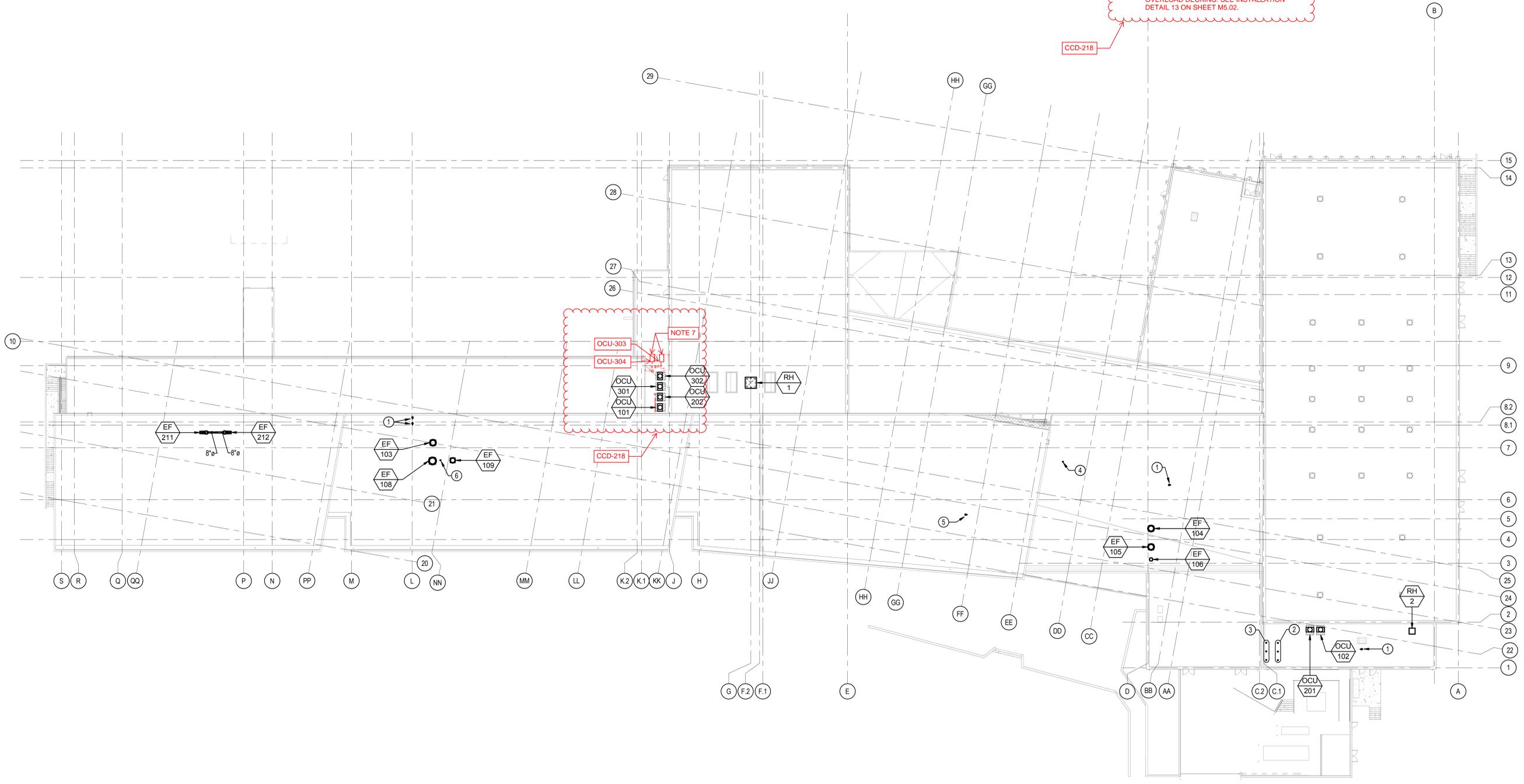
- 1 4" CONCENTRIC FLUE ROOF PENETRATION. SEE INSTALLATION DETAIL ON SHEET M5.02.
- 2 8" BOILER COMBUSTION AIR ROOF PENETRATION. CAP PER MANUFACTURERS RECOMMENDATIONS.
- 3 6" BOILER FLUE ROOF PENETRATION. CAP PER MANUFACTURERS RECOMMENDATIONS.
- 4 6" ROOF CAP FOR RANGE HOOD EXHAUST.
- 5 4" DRYER VENT ROOF CAP.
- 6 6" FLUE FROM MUA-1. PROVIDE WITH ROOF CAP AND INSTALL PER MANUFACTURER'S INSTRUCTIONS.
- 7 **INSTALL OUTDOOR CONDENSING UNIT CENTERED ON BEAM BELOW TO NOT OVERLOAD DECKING. SEE INSTALLATION DETAIL 13 ON SHEET M5.02.**

GENERAL NOTES

- 1. SEE SHEETS M5.01 TO M5.03 FOR INSTALLATION DETAILS.

INSTALL OUTDOOR CONDENSING UNIT CENTERED ON BEAM BELOW TO NOT OVERLOAD DECKING. SEE INSTALLATION DETAIL 13 ON SHEET M5.02.

CCD-218



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 DISTRICT NO. 401
 location.
 STANWOOD, WA

Project No. 1426
**OVERALL ROOF
 MECHANICAL
 PLAN**

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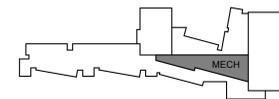
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ROOF MECHANICAL PLAN



3/64" = 1'-0"

KEY PLAN



GENERAL NOTES

1. SINGLE LINE REFRIGERANT LINE (R) SHOWN ON PLANS DESIGNATES THE PROPOSED ROUTING AND REPRESENTS ALL THE REQUIRED PIPING RUNS FOR THE SPLIT SYSTEM.

CONSTRUCTION NOTES

- 1 6" HWR/HWS, 6" CWS/CWR.
- 2 3" HWR/HWS, 4" CWS/CWR DOWN TO AHU-1.
- 3 2-1/2" HWR/HWS, 2-1/2" CWS/CWR DOWN TO AHU-4.
- 4 1-1/2" HWR/HWS, 1-1/2" CWS/CWR DOWN TO AHU-7.
- 5 REFRIGERANT PIPING CONTINUES ON THIRD FLOOR HYDRONIC PLANS.
- 6 PROVIDE DIFFERENTIAL PRESSURE SENSOR.

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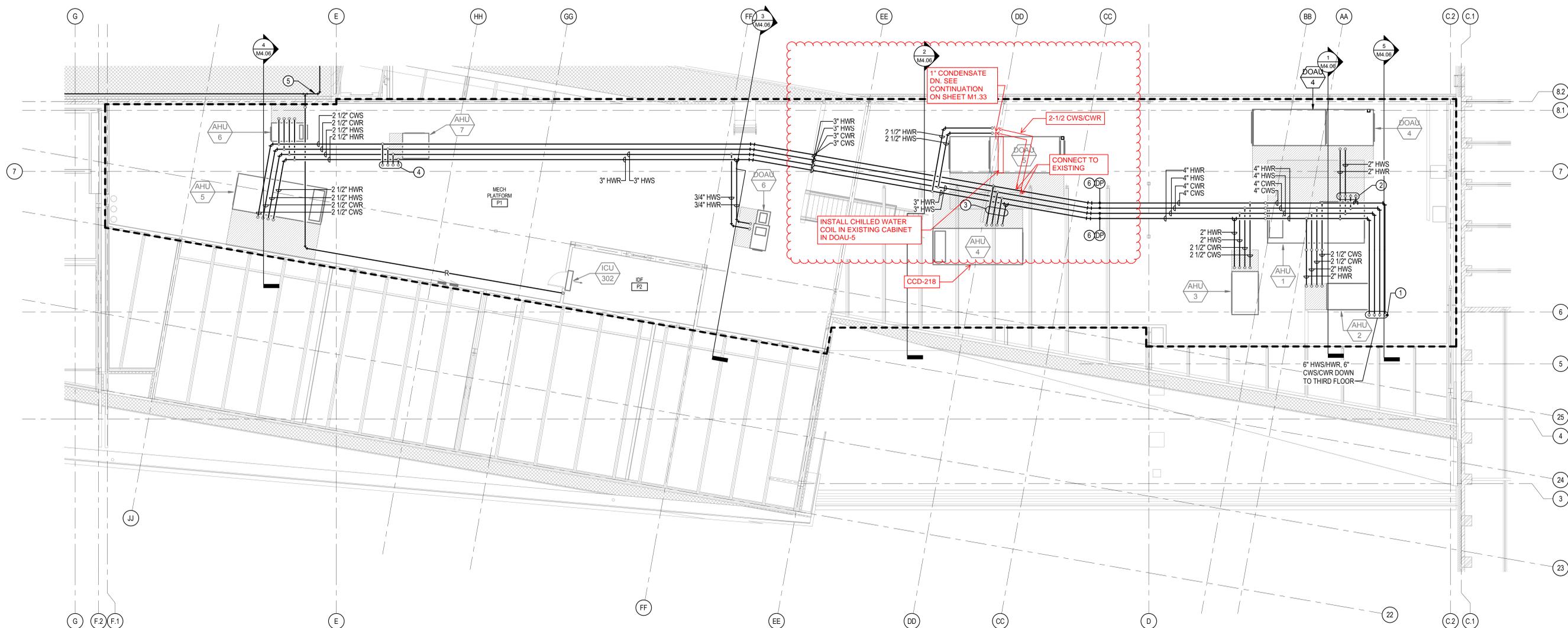
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Project No. 1426
EQUIPMENT FLOOR HYDRONIC PLAN

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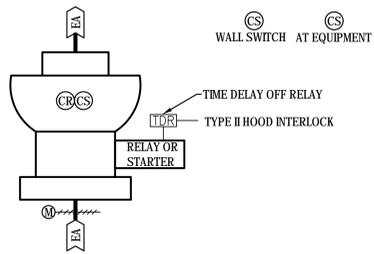
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PARTIAL EQUIPMENT FLOOR HYDRONIC PLAN

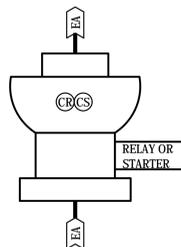
1/8" = 1'-0"





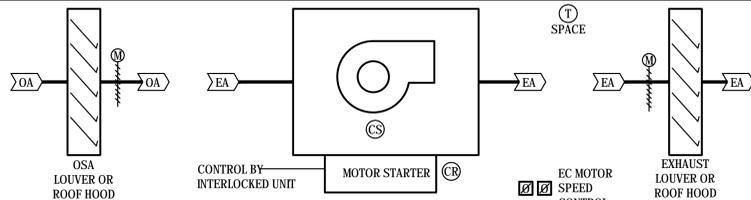
TYPE II EXHAUST FAN SEQUENCE (EF 103, 106)

- A. GENERAL**
 - EXHAUST FAN CONTROL SHALL BE INTERLOCKED WITH THE ASSOCIATED HOOD AND WALL SWITCH VIA TIME DELAY RELAYS. DAMPER SHALL OPEN AND EXHAUST FAN SHALL OPERATE VIA CURRENT SENSOR WHILE INTERLOCKED EQUIPMENT OPERATES OR SWITCH IS ENABLED AND SHALL CONTINUE OPERATING FOR 5 MINUTES (VAR) AFTER THE INTERLOCKED EQUIPMENT SHUTS OFF. DAMPER SHALL FAIL CLOSED. EMCS SYSTEM TO MONITOR.
- B. INFORMATION TERMINAL**
 - FAN ON/OFF POWER
 - FAN RUNTIME
 - FAN FAILURE ALARM (I.E. NO CURRENT ON WHEN EF OR ASSOCIATED UNIT COMMANDED ON)
 - RANGE ON/OFF STATUS (BY CURRENT SENSING RELAY)
 - DAMPER POSITION



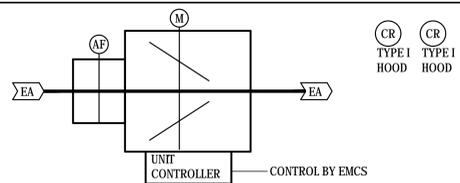
TYPE I EXHAUST FAN SEQUENCE (EF 104, 105, 108, & 109)

- A. GENERAL**
 - EXHAUST FAN CONTROL SHALL BE VIA STAND ALONE CONTROLLER PROVIDED WITH THE TYPE I KITCHEN HOOD SYSTEM. SEE FS DRAWINGS FOR DETAILS. EMCS SYSTEM TO MONITOR FAN OPERATION.
- B. INFORMATION TERMINAL**
 - FAN ON/OFF STATUS (BY CURRENT SENSING RELAY)
 - FAN RUNTIME
 - FAN FAILURE ALARM (I.E. NO CURRENT WHEN COMMANDED ON)



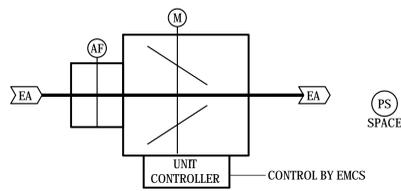
T-STAT INTERLOCKED EXHAUST FAN CONTROL SEQUENCE (EF 101, 102, 202, 208, 210, 301)

- A. GENERAL**
 - EXHAUST FAN IS CONTROLLED BY SPACE TEMPERATURE.
 - DAMPERS SHALL OPEN UPON ACTIVATION AND FAN SHALL START VIA DAMPER END SWITCH. DAMPERS SHALL FAIL CLOSED.
- B. OCCUPIED/UNOCCUPIED MODES:**
 - THE DAMPERS SHALL OPEN AND FAN SHALL START UPON SENSING A SPACE TEMPERATURE 5°F ABOVE SETPOINT (VAR). FAN SHALL STOP UPON SENSING A SPACE TEMPERATURE 5°F BELOW SETPOINT (VAR). INITIAL SPACE SETPOINT SHALL BE 88°F.
- C. INFORMATION AT TERMINAL**
 - FAN ON/OFF STATUS (BY CURRENT SENSING RELAY)
 - FAN RUNTIME
 - FAN FAILURE ALARM (I.E. NO CURRENT WHEN COMMANDED ON)
 - DAMPER POSITIONS (% COMMANDED OPEN)
 - DAMPER END SWITCH STATUS
 - SPACE TEMPERATURE (°F)
 - SPACE TEMPERATURE SETPOINT (°F)



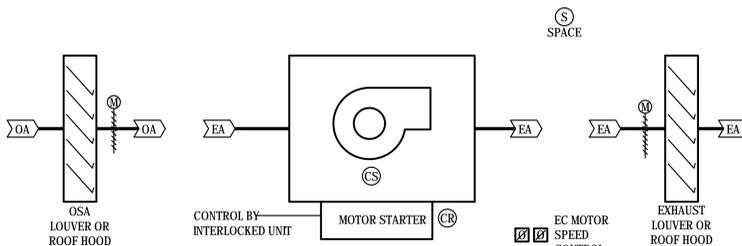
CULINARY ARTS AND KITCHEN EXHAUST VAV TERMINAL BOX (AFD 109 & 114)

- A. GENERAL**
 - THE TERMINAL UNIT SHALL BE CONTROLLED AND ENERGIZED AS SCHEDULED BY THE BUILDING DDC SYSTEM.
- B. OCCUPIED MODE**
 - THE UNIT SHALL BE CONSIDERED AS RUNNING CONTINUOUSLY AND AIRFLOW DAMPER SHALL MODULATE TO MAINTAIN MAXIMUM SCHEDULED EXHAUST CFM.
 - WHEN INTERLOCKED FUME HOOD IS IN OPERATION, AIRFLOW DAMPER SHALL CLOSE.
- C. UNOCCUPIED MODE**
 - THE AIRFLOW DAMPER SHALL BE CLOSED.
- D. INFORMATION AT TERMINAL:**
 - UNIT COMMANDED MODE (OCCUPIED/UNOCCUPIED)
 - DAMPER POSITION (% COMMANDED OPEN)
 - AIRFLOW CFM
 - FUME HOOD STATUS



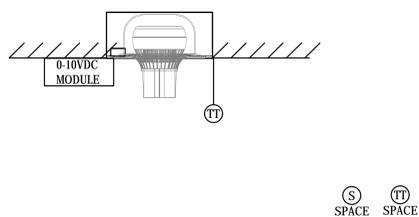
VARIABLE EXHAUST VAV TERMINAL BOX

- A. GENERAL**
 - THE TERMINAL UNIT SHALL BE CONTROLLED AND ENERGIZED AS SCHEDULED BY THE BUILDING DDC SYSTEM.
- B. OCCUPIED MODE**
 - THE UNIT SHALL BE CONSIDERED AS RUNNING CONTINUOUSLY AND AIRFLOW DAMPER SHALL MODULATE TO MAINTAIN A SPACE PRESSURE SETPOINT OF 0.02" WC (VAR).
- C. UNOCCUPIED MODE**
 - THE AIRFLOW DAMPER SHALL BE CLOSED.
- D. INFORMATION AT TERMINAL:**
 - UNIT COMMANDED MODE (OCCUPIED/UNOCCUPIED)
 - DAMPER POSITION (% COMMANDED OPEN)
 - AIRFLOW CFM
 - STATIC PRESSURE SETPOINT
 - STATIC PRESSURE



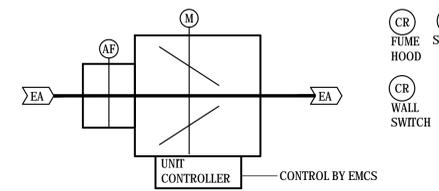
T-STAT PUSHBUTTON EXHAUST FAN CONTROL SEQUENCE (EF 107, 209)

- A. GENERAL**
 - EXHAUST FAN IS CONTROLLED BY PUSHBUTTON SWITCH.
 - DAMPERS SHALL OPEN UPON ACTIVATION AND FAN SHALL START VIA DAMPER END SWITCH. DAMPERS SHALL FAIL CLOSED.
- B. OCCUPIED/UNOCCUPIED MODES:**
 - THE DAMPERS SHALL OPEN AND FAN SHALL START UPON SENSING PUSHBUTTON SWITCH OPERATION. EXHAUST FAN TO OPERATION 60 MINUTES (VAR).
- C. INFORMATION AT TERMINAL**
 - FAN ON/OFF STATUS (BY CURRENT SENSING RELAY)
 - FAN RUNTIME
 - FAN FAILURE ALARM (I.E. NO CURRENT WHEN COMMANDED ON)
 - DAMPER POSITIONS (% COMMANDED OPEN)
 - DAMPER END SWITCH STATUS



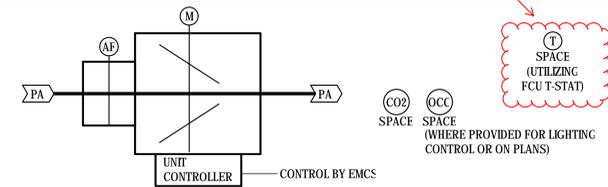
DESTRATIFICATION FAN (DF)

- A. GENERAL**
 - FAN OPERATION:
 - FAN TO OPERATE WHEN CEILING TEMPERATURE VARIES FROM SPACE TEMPERATURE BY MORE THAN 5°F (VAR).
 - FAN SHALL STOP DURING UNOCCUPIED HOURS.
 - WALL SWITCH OVERRIDE FOR MANUAL OPERATION
 - CEILING FAN SPEED:
 - START FAN SPEED AT 30% AND INCREMENT 10% EVERY 5 MINUTES WHILE CONDITIONS 1A EXISTS. MAINTAIN SPEED ONCE ACTIVATION CONDITIONS ARE SATISFIED. AFTER 30 MINUTES (VAR) OF CONTINUOUS OPERATION FAN TO OFF.
 - WALL CONTROLLER
 - INSTALLATION AND WIRING FROM WALL CONTROLLER TO FAN BY CONTROLS CONTRACTOR.
- INFORMATION AT THE TERMINAL:**
 - PEOPLE ZONE TEMPERATURE (FROM EMCS T-STAT)
 - HIGH SPACE ZONE TEMPERATURE
 - FAN ON/OFF



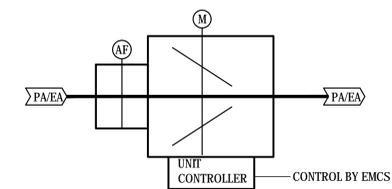
SCIENCE ROOM VARIABLE EXHAUST VAV TERMINAL BOX

- A. GENERAL**
 - THE TERMINAL UNIT SHALL BE CONTROLLED AND ENERGIZED AS SCHEDULED BY THE BUILDING DDC SYSTEM.
- B. OCCUPIED MODE**
 - THE UNIT SHALL BE CONSIDERED AS RUNNING CONTINUOUSLY AND AIRFLOW DAMPER SHALL MODULATE TO MAINTAIN MAXIMUM SCHEDULED EXHAUST CFM.
 - WHEN INTERLOCKED FUME HOOD IS IN OPERATION, AIRFLOW DAMPER SHALL MODULATE TO MAINTAIN MINIMUM SCHEDULED EXHAUST CFM.
 - WHEN "MAXIMUM EXHAUST" PUSHBUTTON IS DEPRESSED, AIRFLOW DAMPER SHALL MODULATE TO MAINTAIN MAXIMUM SCHEDULED EXHAUST CFM, REGARDLESS OF FUME HOOD STATUS.
- C. UNOCCUPIED MODE**
 - THE AIRFLOW DAMPER SHALL BE CLOSED.
- D. OCCUPANCY SENSORS**
 - CC TO WIRE TO AUXILIARY CONTACT. CLOSE AIRFLOW DAMPER WHEN ROOM IS UNOCCUPIED. RESUME CO2 CONTROL AFTER THE SPACE HAS BEEN REOCCUPIED FOR 5 CONSECUTIVE MINUTES (VAR).
- E. INFORMATION AT TERMINAL:**
 - UNIT COMMANDED MODE (OCCUPIED/UNOCCUPIED)
 - DAMPER POSITION (% COMMANDED OPEN)
 - AIRFLOW CFM
 - FUME HOOD STATUS
 - PUSH BUTTON STATUS



VARIABLE SUPPLY VAV TERMINAL BOX

- A. GENERAL**
 - THE TERMINAL UNIT SHALL BE CONTROLLED AND ENERGIZED AS SCHEDULED BY THE BUILDING DDC SYSTEM.
- B. OCCUPIED MODE**
 - THE UNIT SHALL BE CONSIDERED AS RUNNING CONTINUOUSLY AND AIRFLOW DAMPER SHALL MODULATE TO MAINTAIN MINIMUM CFM AS INDICATED ON THE EQUIPMENT SCHEDULE.
- C. UNOCCUPIED MODE**
 - THE AIRFLOW DAMPER SHALL BE CLOSED.
- D. COOLING MODE (VAV 216, 219-225, 301-315, 317-337)**
 - THE UNIT SHALL BE CONSIDERED AS RUNNING CONTINUOUSLY AND MAINTAIN SPACE TEMPERATURE COOLING SETPOINT BY MODULATING PRIMARY AIR DAMPER FROM LISTED MINIMUM AIRFLOW TO MAXIMUM LISTED AIRFLOW AS INDICATED ON THE EQUIPMENT SCHEDULE. COOLING MODE OVERRIDES CO2 DAMPER MODULATION.
- E. CO2 SENSORS**
 - MODULATE CFM SETPOINT FROM SCHEDULED MINIMUM CFM TO MAXIMUM CFM TO MAINTAIN SPACE CO2 SETPOINT OF 1000 PPM (VAR). GENERATE ALARM IF CO2 RISES 10% ABOVE SETPOINT (VAR).
- F. OCCUPANCY SENSORS**
 - CC TO WIRE TO AUXILIARY CONTACT. CLOSE AIRFLOW DAMPER WHEN ROOM IS UNOCCUPIED. RESUME CO2 CONTROL AFTER THE SPACE HAS BEEN REOCCUPIED FOR 5 CONSECUTIVE MINUTES (VAR).
- G. BUILDING PRESSURIZATION**
 - SEE MISCELLANEOUS CONTROLS - BUILDING PRESSURIZATION AND DEMAND CONTROL VENTILATION.
- H. INFORMATION AT TERMINAL:**
 - UNIT COMMANDED MODE (OCCUPIED/UNOCCUPIED)
 - DAMPER POSITION (% COMMANDED OPEN)
 - AIRFLOW CFM
 - CO2 LEVEL
 - CO2 SETPOINT
 - CO2 ALARM
 - OCCUPANCY SENSOR
 - COMMONS LUNCH MODE SCHEDULE



CONSTANT SUPPLY/EXHAUST VAV TERMINAL BOX

- A. GENERAL**
 - THE TERMINAL UNIT SHALL BE CONTROLLED AND ENERGIZED AS SCHEDULED BY THE BUILDING DDC SYSTEM.
- B. OCCUPIED MODE**
 - THE UNIT SHALL BE CONSIDERED AS RUNNING CONTINUOUSLY AND AIRFLOW DAMPER SHALL MODULATE TO MAINTAIN AIRFLOW CFM AS INDICATED ON THE EQUIPMENT SCHEDULE.
- C. UNOCCUPIED MODE**
 - THE AIRFLOW DAMPER SHALL BE CLOSED.
- D. INFORMATION AT TERMINAL:**
 - UNIT COMMANDED MODE (OCCUPIED/UNOCCUPIED)
 - DAMPER POSITION (% COMMANDED OPEN)
 - AIRFLOW CFM

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EHS-INTERNATIONAL INC.

project
STANWOOD HIGH SCHOOL - PHASE 2
client
STANWOOD-CAMANO SCHOOL DISTRICT NO. 401
location
STANWOOD, WA

Project No. 1426
MECHANICAL CONTROLS II

issued
24 AUG 18
permit
01 NOV 18
CONFORMED SET
12 DEC 18
permit RESUB
19 FEB 19

revision
4 CCD 218
05 NOV 21

drawn
AC.DS
checked
JJ.SZ

sheet
M6.04

architect
MGRANAHAN ARCHITECTS

civil engineer
COUGHLIN PORTER LUNDEEN

landscape architect
WEISMAN DESIGN GROUP

structural engineer
PCS STRUCTURAL SOLUTIONS

mechanical engineer
BCE ENGINEERS

electrical engineer
BCE ENGINEERS

food service
HOLIDAY ASSOCIATES

theater design
PLA DESIGN

sports fields engineer
DA HOGAN

hazardous materials
EHS-INTERNATIONAL INC.

project
STANWOOD HIGH SCHOOL - PHASE 2

client
STANWOOD-CAMANO SCHOOL DISTRICT NO. 401

location
STANWOOD, WA

Project No. 1426
MECHANICAL CONTROLS III

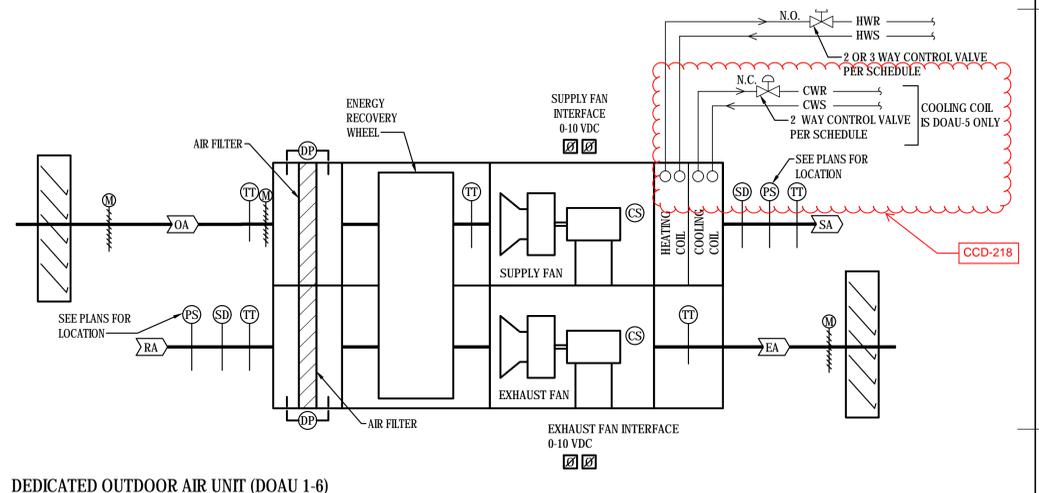
issued	24 AUG 18
PERMIT	01 NOV 18
CONFORMED SET	12 DEC 18
PERMIT RESUB	19 FEB 19

revision	28 NOV 18
ADDENDUM 3	05 NOV 21
CCD-218	

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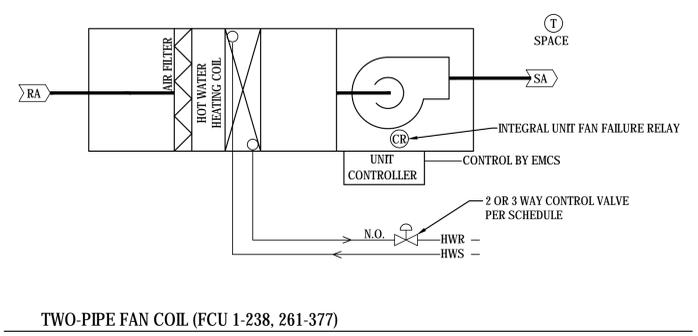
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M6.05

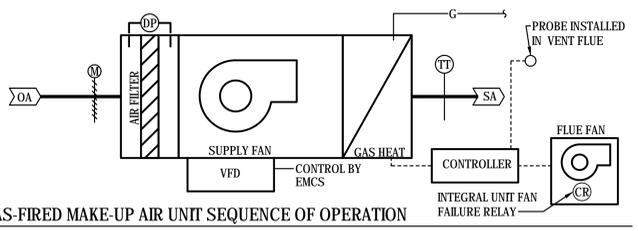


- A. GENERAL**
- ZONE SPACE TEMPERATURE SENSORS SHALL BE EQUIPPED WITH PUSHBUTTONS TO PROVIDE UNOCCUPIED OVERRIDE REQUEST. OVERRIDE RUNTIME SHALL BE 2 HOURS (ADJUSTABLE).
 - UNIT SHALL BE PROGRAMMED FOR START/STOP THROUGH THE DDC SYSTEM BASED ON DESIGNED OCCUPIED MODES WITH WEEKDAY, WEEKEND AND HOLIDAY SCHEDULES.
- B. SUPPLY FAN**
- SUPPLY FAN SHALL START VIA A SCHEDULE (ADJUSTABLE) OR OVERRIDE COMMAND (ADJUSTABLE). OVERRIDE COMMAND CAN BE TRIGGERED BY A ZONE SPACE TEMPERATURE SENSOR UNOCCUPIED OVERRIDE REQUEST OR BY EMCS USER INTERFACE.
 - OUTSIDE AIR DAMPER SHALL OPEN UPON ACTIVATION AND FAN SHALL START VIA DAMPER END SWITCH. DAMPER SHALL FAIL CLOSED.
 - FAN ALARMS:
 - FAN ALARM ACTIVATES IF FAN STATUS FAILS TO ACTIVATE AFTER FAN HAS BEEN STARTED. EMCS RECORDS FAN ALARM.
 - HARDWIRED FAN SHUTDOWN UPON ACTIVATION OF FIRE/SMOKE ALARM. EMCS RECORDS FIRE/SMOKE ALARM.
 - SUPPLY FAN SPEED VARIES TO MAINTAIN DUCT PRESSURE SETPOINT. SETPOINT SHALL RANGE FROM 0.5" W.C. TO 0.9" W.C. (ADJUSTABLE) TO MAINTAIN THE MAXIMUM VAV PRIMARY AIR DAMPER POSITION AT 90% (ADJUSTABLE). AIR BALANCER TO SELECT FINAL SETPOINTS. SEE PLANS FOR DUCT PRESSURE SENSOR LOCATION. THE EMCS OPERATOR SHALL MODIFY, ADD AND DELETE A LIST OF VAV PRIMARY AIR DAMPERS AT THE OPERATOR WORKSTATION THAT SHALL BE USED FOR THE MAXIMUM VAV PRIMARY AIR DAMPER CALCULATION.
- C. EXHAUST FAN**
- EXHAUST FAN OPERATES WHENEVER THE SUPPLY FAN IS PROVEN ON.
 - EXHAUST DAMPER SHALL OPEN UPON ACTIVATION AND FAN SHALL START VIA DAMPER END SWITCH. DAMPERS SHALL FAIL CLOSED.
 - EXHAUST FAN SPEED VARIES TO MAINTAIN DUCT PRESSURE SETPOINT. SETPOINT SHALL RANGE FROM 0.3" W.C. TO 1.0" W.C. (VAR) BASED ON EXHAUST VAV DAMPER POSITIONS. AIR BALANCER TO SELECT FINAL SETPOINTS.
 - DECREMENT DUCT PRESSURE SETPOINT 0.1" W.C. (VAR) EVERY 5 MINUTES (VAR) UNTIL ALL VAV DAMPERS ARE NO MORE THAN 90% (VAR) OPEN.
 - INCREMENT DUCT PRESSURE SETPOINT 0.1" W.C. (VAR) EVERY 5 MINUTES (VAR) TO MAINTAIN AT LEAST ONE VAV DAMPER NO LESS THAN 85% (VAR) OPEN.
 - FAN ALARMS:
 - FAN ALARM ACTIVATES IF FAN STATUS FAILS TO ACTIVATE AFTER FAN HAS BEEN STARTED. EMCS RECORDS FAN ALARM.
 - HARDWIRED FAN SHUTDOWN UPON ACTIVATION OF FIRE/SMOKE ALARM. EMCS RECORDS FIRE/SMOKE ALARM.
 - HARDWIRED FAN SHUTDOWN UPON HIGH DUCT PRESSURE ALARM ACTIVATION. EMCS RECORDS HIGH PRESSURE ALARM.
- D. HYDRONIC HEATING COIL**
- HEATING VALVE SPRINGS NORMALLY OPEN TO THE COIL AND IS CLOSED WHEN FAN IS OFF.
 - HEATING VALVE MODULATES TO MAINTAIN DISCHARGE AIR TEMPERATURE SETPOINT (VAR).
- E. HYDRONIC COOLING COIL (DOAU-5 ONLY)**
- COOLING VALVE SPRINGS IS CLOSED WHEN FAN IS OFF.
 - COOLING VALVES MODULATES TO MAINTAIN DISCHARGE TEMPERATURE SET POINT.
 - COOLING VALVE TO REMAIN CLOSED IF HYDRONIC WATER TEMPERATURE IS GREATER THAN 70°F.
- F. DISCHARGE AIR TEMPERATURE SETPOINT**
- DISCHARGE AIR TEMPERATURE (DAT) SETPOINT RANGE IS 55°F (ADD) TO 78°F (ADD). AT THE START OF EACH MORNING, THE DAT SETPOINT SHALL START AT 68°F (VAR).
 - INCREMENT THE DAT BY 2°F EVERY 10 MINUTES (VAR) WHILE MAJORITY OF ASSOCIATED SPACE HEATING VALVES REMAIN OPEN.
 - DECREMENT THE DAT BY 2°F EVERY 10 MINUTES (VAR) WHILE MAJORITY OF ASSOCIATED SPACE TEMPERATURES ARE GREATER THAN 75°F (VAR).
 - DAT SHALL REMAIN UNCHANGED WHEN MAJORITY OF ASSOCIATED ZONES ARE IN DEADBAND MODE.
- G. ENERGY RECOVERY WHEEL**
- THE ENERGY RECOVERY WHEEL SHALL START WHEN THE SUPPLY FAN STATUS IS ON OUTSIDE AIR AND RETURN AIR DIFFERENTIAL IS GREATER THAN 8°F (ADD).
 - THE ENERGY RECOVERY WHEEL SHALL STOP WHEN THE SUPPLY FAN STATUS IS OFF.
 - THE ENERGY RECOVERY WHEEL SHALL STOP FOR ECONOMIZER OPERATION WHEN OUTSIDE AIR TEMP IS LESS THAN RETURN AIR TEMP AND THE COOLING VALVE IS OPEN.
- H. FIRE ALARM SHUTDOWN**
- UPON A GENERAL FIRE ALARM ALL AIR HANDLING EQUIPMENT SHALL SHUTDOWN. THE AIR HANDLERS HAVE SMOKE DETECTORS THAT SHUTDOWN THAT SPECIFIC UNIT IF SMOKE IS SENSED IN THE DUCTWORK AND THE DDC SYSTEM SHALL COMMAND A SOFTWARE SHUTDOWN OF ALL AIR HANDLING EQUIPMENT.
- I. INFORMATION AT THE TERMINAL**
- UNIT OPERATING MODE (OCCUPIED/UNOCCUPIED)
 - TEMPERATURES (°F): ENTERING, OUTSIDE AIR,
 - LEAVING OUTSIDE AIR, ENTERING EXHAUST AIR,
 - LEAVING EXHAUST AIR AND LEAVING ENERGY RECOVERY WHEEL AIR,
 - ENERGY RECOVERY WHEEL ENABLE/DISABLE
 - ENERGY RECOVERY WHEEL STATUS
 - DUCT PRESSURE (IN. W.G.)
 - DUCT PRESSURE SETPOINT (IN. W.G.)
 - CHILLED WATER CONTROL VALVE POSITION
 - HOT WATER CONTROL VALVE POSITION
 - ALL DAMPER POSITIONS (% COMMANDED OPEN)
 - SUPPLY AND EXHAUST FAN START/STOP, POWER, ALARM, SPEED, RUNTIME
 - ALL FILTER DIFFERENTIAL PRESSURES (IN. W.G.)
 - OVERRIDE STATUS
 - ALL EMCS GENERATED ALARMS
 - ALL SETPOINTS AND RANGES

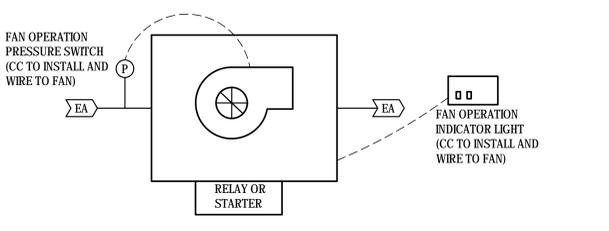
- E. HYDRONIC COOLING COIL (DOAU-5 ONLY)**
- COOLING VALVE SPRINGS IS CLOSED WHEN FAN IS OFF.
 - COOLING VALVES MODULATES TO MAINTAIN DISCHARGE TEMPERATURE SET POINT.
 - COOLING VALVE TO REMAIN CLOSED IF HYDRONIC WATER TEMPERATURE IS GREATER THAN 70°F.
- F. DISCHARGE AIR TEMPERATURE SETPOINT**
- DISCHARGE AIR TEMPERATURE (DAT) SETPOINT RANGE IS 55°F (ADD) TO 78°F (ADD). AT THE START OF EACH MORNING, THE DAT SETPOINT SHALL START AT 68°F (VAR).
 - INCREMENT THE DAT BY 2°F EVERY 10 MINUTES (VAR) WHILE MAJORITY OF ASSOCIATED SPACE HEATING VALVES REMAIN OPEN.
 - DECREMENT THE DAT BY 2°F EVERY 10 MINUTES (VAR) WHILE MAJORITY OF ASSOCIATED SPACE TEMPERATURES ARE GREATER THAN 75°F (VAR).
 - DAT SHALL REMAIN UNCHANGED WHEN MAJORITY OF ASSOCIATED ZONES ARE IN DEADBAND MODE.
- G. ENERGY RECOVERY WHEEL**
- THE ENERGY RECOVERY WHEEL SHALL START WHEN THE SUPPLY FAN STATUS IS ON OUTSIDE AIR AND RETURN AIR DIFFERENTIAL IS GREATER THAN 8°F (ADD).
 - THE ENERGY RECOVERY WHEEL SHALL STOP WHEN THE SUPPLY FAN STATUS IS OFF.
 - THE ENERGY RECOVERY WHEEL SHALL STOP FOR ECONOMIZER OPERATION WHEN OUTSIDE AIR TEMP IS LESS THAN RETURN AIR TEMP AND THE COOLING VALVE IS OPEN.
- H. FIRE ALARM SHUTDOWN**
- UPON A GENERAL FIRE ALARM ALL AIR HANDLING EQUIPMENT SHALL SHUTDOWN. THE AIR HANDLERS HAVE SMOKE DETECTORS THAT SHUTDOWN THAT SPECIFIC UNIT IF SMOKE IS SENSED IN THE DUCTWORK AND THE DDC SYSTEM SHALL COMMAND A SOFTWARE SHUTDOWN OF ALL AIR HANDLING EQUIPMENT.
- I. INFORMATION AT THE TERMINAL**
- UNIT OPERATING MODE (OCCUPIED/UNOCCUPIED)
 - TEMPERATURES (°F): ENTERING, OUTSIDE AIR,
 - LEAVING OUTSIDE AIR, ENTERING EXHAUST AIR,
 - LEAVING EXHAUST AIR AND LEAVING ENERGY RECOVERY WHEEL AIR,
 - ENERGY RECOVERY WHEEL ENABLE/DISABLE
 - ENERGY RECOVERY WHEEL STATUS
 - DUCT PRESSURE (IN. W.G.)
 - DUCT PRESSURE SETPOINT (IN. W.G.)
 - CHILLED WATER CONTROL VALVE POSITION
 - HOT WATER CONTROL VALVE POSITION
 - ALL DAMPER POSITIONS (% COMMANDED OPEN)
 - SUPPLY AND EXHAUST FAN START/STOP, POWER, ALARM, SPEED, RUNTIME
 - ALL FILTER DIFFERENTIAL PRESSURES (IN. W.G.)
 - OVERRIDE STATUS
 - ALL EMCS GENERATED ALARMS
 - ALL SETPOINTS AND RANGES



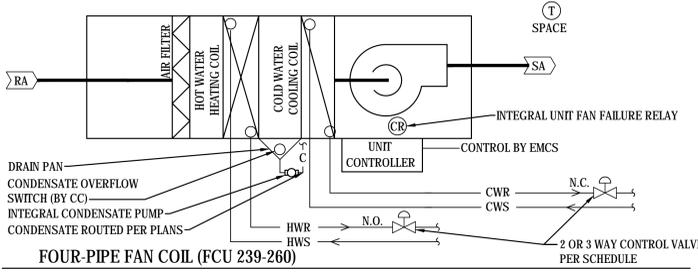
- GENERAL**
- SPACE TEMPERATURE SENSORS EQUIPPED WITH PUSHBUTTONS TO PROVIDE UNOCCUPIED OVERRIDE REQUEST AND SPACE TEMPERATURE SETPOINT ADJUSTMENT AS REQUIRED.
 - VALVES ARE TWO OR THREE WAY PER MECHANICAL SCHEDULE & DETAILS.
- FCU SUPPLY FANS**
- SUPPLY FAN START VIA A SCHEDULE (VAR) OR OVERRIDE COMMAND (VAR). OVERRIDE COMMAND CAN BE TRIGGERED BY SPACE TEMPERATURE SENSOR UNOCCUPIED OVERRIDE REQUEST, SPACE TEMPERATURE SENSOR IN UNOCCUPIED HEATING MODE, OR BY EMCS USER INTERFACE.
- 2. FAN ALARMS**
- FAN ALARM ACTIVATES IF FAN STATUS FAILS TO ACTIVATE AFTER FAN HAS BEEN STARTED. EMCS RECORDS FAN ALARM.
- HYDRONIC HEATING COIL**
- HEATING VALVE SPRINGS NORMALLY OPEN TO THE COIL AND IS CLOSED WHEN FAN IS OFF.
 - HEATING VALVE OPENS TO MAINTAIN HEATING TEMPERATURE SETPOINT (VAR).
- HYDRONIC COOLING COIL**
- COOLING VALVE SPRINGS NORMALLY CLOSED TO THE COIL AND IS CLOSED WHEN FAN IS OFF.
 - COOLING VALVE OPENS TO MAINTAIN COOLING TEMPERATURE SETPOINT (VAR).
- AIR TEMPERATURE SETPOINT**
- HEATING TEMPERATURE SET POINT 68°F (VAR)
- INFORMATION AT THE TERMINAL:**
 ZONE TEMPERATURE (FROM EMCS T-STAT)
 ZONE TEMPERATURE SETPOINT (FROM EMCS T-STAT)
 UNIT COMMANDED MODE (OCCUPIED/UNOCCUPIED, HEATING)
 HEATING COIL VALVE POSITION (FROM EMCS)
 FAN ON/OFF
 FAN FAILURE ALARM



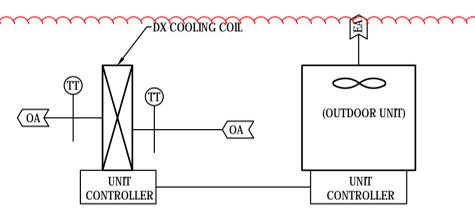
- A. SUPPLY FAN**
- SUPPLY FAN SHALL BE CONTROLLED BY THE KITCHEN HOOD MANUFACTURERS CONTROLS (REFER TO FS DRAWINGS).
- HEATING SECTION (GAS FURNACE)**
- HEATING SECTION SHALL BE ENABLED WHEN SUPPLY FAN IS "ON" AND BE OPERATED TO MAINTAIN SUPPLY AIR TEMPERATURE OF 68°F (VAR).
 - HEAT SECTION SHALL BE DISABLE ON HIGH TEMP ALARM AND REMAIN OFF UNTIL ALARM IS MANUALLY CLEARED.
- INFORMATION AT THE TERMINAL**
- UNIT STATUS (ON/OFF)
 - TEMPERATURES (°F): OUTSIDE AND SUPPLY AIR,
 - OSA DAMPER POSITION
 - FILTER DIFFERENTIAL PRESSURE (IN. W.G.)
 - GAS HEATING SIGNAL
 - FLUE FAN STATUS (ON/OFF)
- ALARMS**
- SUPPLY FAN FAILURE TO OPERATE ON COMMAND.
 - SUPPLY TEMPERATURE OUT OF TOLERANCE FOR 10MINUTES (NOT WITHIN 5°F OF SETPOINT).
 - FLUE FAN FAILURE TO OPERATE ON COMMAND.



- EXHAUST FAN TO OPERATE WHEN ASSOCIATED DRYER IS RUNNING VIA DUCT MOUNTED PRESSURE SWITCH.
- FAN NOT CONNECTED TO OR MONITORED BY THE EMCS.
- INSTALL AND WIRE DRYER BOOSTER FAN INDICATOR LIGHT IN WALL ADJACENT TO DRYER.



- GENERAL**
- SPACE TEMPERATURE SENSORS EQUIPPED WITH PUSHBUTTONS TO PROVIDE UNOCCUPIED OVERRIDE REQUEST AND SPACE TEMPERATURE SETPOINT ADJUSTMENT AS REQUIRED.
 - VALVES ARE TWO OR THREE WAY PER MECHANICAL SCHEDULE & DETAILS.
- FCU SUPPLY FANS**
- SUPPLY FAN START VIA A SCHEDULE (VAR) OR OVERRIDE COMMAND (VAR). OVERRIDE COMMAND CAN BE TRIGGERED BY SPACE TEMPERATURE SENSOR UNOCCUPIED OVERRIDE REQUEST, SPACE TEMPERATURE SENSOR IN UNOCCUPIED HEATING MODE, OR BY EMCS USER INTERFACE.
- 2. FAN ALARMS**
- FAN ALARM ACTIVATES IF FAN STATUS FAILS TO ACTIVATE AFTER FAN HAS BEEN STARTED. EMCS RECORDS FAN ALARM.
- HYDRONIC HEATING COIL**
- HEATING VALVE SPRINGS NORMALLY OPEN TO THE COIL AND IS CLOSED WHEN FAN IS OFF.
 - HEATING VALVE OPENS TO MAINTAIN HEATING TEMPERATURE SETPOINT (VAR).
- HYDRONIC COOLING COIL**
- COOLING VALVE SPRINGS NORMALLY CLOSED TO THE COIL AND IS CLOSED WHEN FAN IS OFF.
 - COOLING VALVE OPENS TO MAINTAIN COOLING TEMPERATURE SETPOINT (VAR).
- AIR TEMPERATURE SETPOINT**
- HEATING TEMPERATURE SET POINT 68°F (VAR)
 - COOLING TEMPERATURE SET POINT 78°F (VAR)
- CONDENSATE OVERFLOW SAFETY SWITCH**
- UPON DETECTION OF WATER BY THE CONDENSATE OVERFLOW SAFETY SWITCH, THE EMCS SHALL SEND AN ALARM, DISABLE THE FAN, AND CLOSE THE CONTROL VALVE.
- INFORMATION AT THE TERMINAL:**
 ZONE TEMPERATURE (FROM EMCS T-STAT)
 ZONE TEMPERATURE SETPOINT (FROM EMCS T-STAT)
 UNIT COMMANDED MODE (OCCUPIED/UNOCCUPIED, HEATING/COOLING)
 COOLING COIL VALVE POSITION (FROM EMCS)
 HEATING COIL VALVE POSITION (FROM EMCS)
 FAN ON/OFF
 FAILURE ALARM (CONDENSATE PUMP/FAN)
 CONDENSATE OVERFLOW ALARM

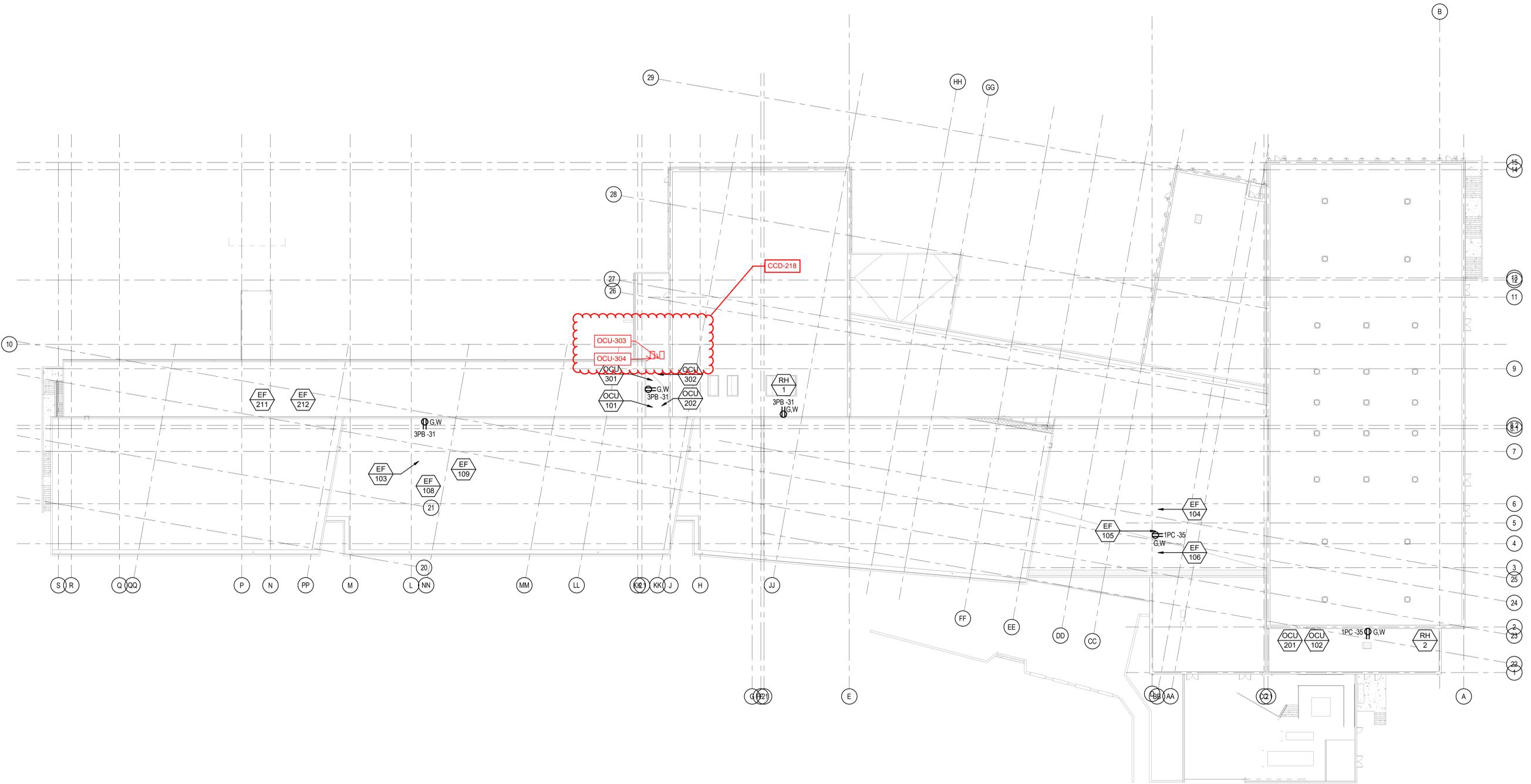


- SYSTEM OPERATION:**
- A. SYSTEM OPERATION**
- DC-1 AND DC-2 TO BE ENABLED WHEN DOAU-2 IS ON.
- B. DX COOLING COIL**
- COMPRESSOR IS OFF WHEN DOAU-2 IS OFF
 - COMPRESSOR MODULATES TO MAINTAIN DISCHARGE TEMPERATURE SET POINT.
- C. DX HEATING COIL**
- HEATING IS DISABLED AT THE DUCT COIL.
- D. DISCHARGE AIR TEMPERATURE SETPOINT**
- DC-1 TO BE ASSOCIATED WITH FCU 301/302, 303/304, 305/306, 307/308, 309/310, 311/312, 313/314, 315/316, 317/318, & 319/320.
 - DC-2 TO BE ASSOCIATED WITH FCU 321/322, 324/325, 326/327, 328/329, 331/332, 334/335, 336/337, 338, 339, 340/341 & 343/344.
 - DISCHARGE AIR TEMPERATURE (DAT) SETPOINT RANGE IS 55°F (ADD) TO 78°F (ADD). AT THE START OF EACH MORNING, THE DAT SETPOINT SHALL START AT 68°F (VAR).
 - INCREMENT THE DAT BY 2°F EVERY 10 MINUTES (VAR) WHILE MAJORITY OF ASSOCIATED SPACE HEATING VALVES REMAIN OPEN.
 - DECREMENT THE DAT BY 2°F EVERY 10 MINUTES (VAR) WHILE MAJORITY OF ASSOCIATED SPACE TEMPERATURES ARE GREATER THAN 75°F (VAR).
 - DAT SHALL REMAIN UNCHANGED WHEN MAJORITY OF ASSOCIATED ZONES ARE IN DEADBAND MODE.
- E. INFORMATION AT THE TERMINAL:**
- DISCHARGE AIR TEMPERATURE SET POINT
 - ASSOCIATED ZONES GREATER THAN 75°F
 - ASSOCIATED ZONES HEATING VALVES OPEN
 - DUCT COIL STATUS
 - DISCHARGE AIR TEMPERATURE
 - ENTERING AIR TEMPERATURE

architect.
 MCGRAHAN ARCHITECTS
 civil engineer.
 COUGHLIN PORTER LUNDEEN
 landscape architect.
 WEISMAN DESIGN GROUP
 structural engineer.
 PCS STRUCTURAL SOLUTIONS
 mechanical engineer.
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 theater design.
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 STANWOOD HIGH SCHOOL - PHASE 2
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 STANWOOD-CAMANO SCHOOL
 DISTRICT NO. 401
 location.
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Project No. 1426
ROOF POWER PLAN



issued	24 AUG 18
PERMIT	1 NOV 18
BID SET	12 DEC 18
CONFORMED SET	19 FEB 19
PERMIT RESUB	

revision.

drawn.

NH

checked.

BH

sheet.

E3.43

ROOF POWER PLAN

3/64" = 1'-0"



PANEL: MDB PHASE: 3 VOLTAGE: 480Y/277V FEED TYPE: 3000 A MCB GFI													
LOCATION: ELECT RM 208				MOUNT: Surface		WIRE: 4		FEED TYPE: 3000 A BUS		43,417 AIC...			
TYPE: Type 1		POLES: 54		SF MAINS: No		C		Poles Trip		Circuit Description # LC			
L	1	HLA	100	3	14358 VA	69778 VA	18006 VA	69559 VA	3	225	MH1	2	Motor: D
	3	--	--	--	--	--	--	--	--	--	--	4	--
	5	--	--	--	--	--	--	--	--	--	--	6	--
H	7	CH-1	400	3	80330 VA	82154 VA	80330 VA	83435 VA	3	800	SDB1 VIA TSD81	8	Motor: R
	9	--	--	--	--	--	--	--	--	--	--	10	--
	11	--	--	--	--	--	80330 VA	79228 VA	--	--	--	12	--
K	13	HGI	100	3	18158 VA	96036 VA	18158 VA	92962 VA	3	500	SDP2 VIA TSD82	14	Motor: R
	15	--	--	--	--	--	--	--	--	--	--	16	--
	17	--	--	--	--	--	18158 VA	86022 VA	--	--	--	18	--
Motor	19	MH2	225	3	47644 VA	8788 VA	47644 VA	7490 VA	3	100	1LB	20	L
	21	--	--	--	--	--	--	--	--	--	--	22	--
	23	--	--	--	--	--	47644 VA	6708 VA	--	--	--	24	--
L	25	1LC	100	3	1716 VA	88714 VA	1716 VA	82114 VA	3	400	MH3	26	Motor: D
	27	--	--	--	--	--	4038 VA	92114 VA	--	--	--	28	--
	29	--	--	--	--	--	--	--	--	--	--	30	--
Motor: R	31	SDP3 VIA TSD83	400	3	79940 VA	11090 VA	70100 VA	11090 VA	3	100	ELEVATOR-02	32	Motor
	33	--	--	--	--	--	67080 VA	11090 VA	--	--	--	34	--
	35	--	--	--	--	--	67080 VA	11090 VA	--	--	--	36	--
Motor	37	ELEVATOR-01	100	3	11080 VA	18211 VA	11080 VA	14435 VA	3	100	E1 VIA ATS-E	38	Other: D, L
	39	--	--	--	--	--	11080 VA	14824 VA	--	--	--	40	--
	41	--	--	--	--	--	11080 VA	11435 VA	--	--	--	42	--
Motor: R	43	H3 VIA ATS-S	150	3	37905 VA	0 VA	37905 VA	0 VA	3	225	SPARE	44	--
	45	--	--	--	--	--	38051 VA	0 VA	--	--	--	46	--
	47	--	--	--	--	--	29636 VA	0 VA	--	--	--	48	--
	49	SPARE	100	3	0 VA	0 VA	0 VA	0 VA	3	60	SPD	50	--
	51	--	--	--	--	--	0 VA	0 VA	--	--	--	52	--
	53	--	--	--	--	--	0 VA	0 VA	--	--	--	54	--

PANEL: 1LA PHASE: 3 VOLTAGE: 480Y/277V FEED TYPE: Bottom 100 A MLO													
LOCATION: ELECT RM 208				MOUNT: Surface		WIRE: 4		FEED TYPE: 100 A BUS		225 A BUS		39,901 AIC...	
TYPE: Type 1		POLES: 42		SF MAINS: No		C		Poles Trip		Circuit Description # LC			
L	1	L Room 107, 108A, 105A, 106A, 106C, 108...	20	1	2727 VA	1612 VA	2727 VA	1612 VA	1	20	L Room 211, 213A, 215, 214, ST09-2, 208...	2	L
L	3	L GYMNASIUM 110	20	1	2190 VA	2190 VA	2190 VA	2190 VA	1	20	L AUX GYM 202	4	L
L	5	L GYMNASIUM 110	20	1	2190 VA	2190 VA	2628 VA	2190 VA	1	20	L AUX GYM 201	6	L
L	7	L GYMNASIUM 110	20	1	2190 VA	326 VA	2190 VA	326 VA	1	20	L Room 200, 217, 230, ST03-3, S302-1...	8	L
L	9	L Room 111, 117, 113, 114, 113C, 114C...	20	1	2712 VA	2190 VA	2712 VA	2190 VA	1	20	L AUX GYM 201	10	L
L	11	L Room 120, 116A, 123, 122, ST03-1	20	1	2190 VA	2190 VA	2190 VA	2190 VA	1	20	L AUX GYM 201	12	L
L	13	L Room 100A, 100, 131, S223, 103, ST03-2	20	1	465 VA	1794 VA	465 VA	1794 VA	1	20	L Room 255A, 203, 205B, 204, 207, 206, 205	14	L
L	15	L Room 101, 102, 113E-1, 103B, 103A, 103...	20	1	1897 VA	256 VA	1897 VA	256 VA	1	20	L Room 200B, 230, 131	16	L
L	17	L Room 158, 136, 135, 130A, 133, 134, 156...	20	1	597 VA	1237 VA	597 VA	1237 VA	1	20	L Room 219, 243, 243B, 256A, 230A, 230...	18	L
L	19	L Room 143, 153, 152, 151, 140B, 141B, 13...	20	1	2728 VA	60 VA	2728 VA	60 VA	1	20	L Room 200, 213, S101-2	20	L
L	21	L Room 315, 314, 313, 312, 311, 310, 309	20	1	2292 VA	2686 VA	2292 VA	2686 VA	1	20	SITE LIGHTING - SOUTH	22	L
L	23	L Room 300, ST13-1, 307, 308	20	1	128 VA	3135 VA	128 VA	3135 VA	1	20	SITE LIGHTING - NORTH - EAST	24	L
L	25	L Room 302, 302A, 302B, 332B	20	1	2456 VA	0 VA	2456 VA	0 VA	1	20	SPARE	26	--
L	27	L Room 306, 305, 304, 303	20	1	1593 VA	0 VA	1593 VA	0 VA	1	20	SPARE	28	--
	29	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	30	--
	31	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	32	--
	33	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	34	--
	35	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	36	--
	37	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	3	30	SPD	38	--
	39	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	--	--	--	40	--
	41	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	--	--	--	42	--

PANEL: 1LB PHASE: 3 VOLTAGE: 480Y/277V FEED TYPE: Bottom 100 A MLO													
LOCATION: ELECT 255				MOUNT: Surface		WIRE: 4		FEED TYPE: 100 A BUS		225 A BUS		10,000 AIC...	
TYPE: Type 1		POLES: 42		SF MAINS: No		C		Poles Trip		Circuit Description # LC			
L	1	L Room 162-1, 159, 146A, 160, 161, 163D...	20	1	220 VA	3430 VA	220 VA	3430 VA	1	20	L Room 241A, 242, 241, 239, 240B, 240A...	2	L
L	3	L Room 165A, 161A, 165B, 163B, 163...	20	1	1991 VA	13 VA	1991 VA	13 VA	1	20	L Room 250, 252, 230, 245, ST0B-2	4	L
L	5	L Room 165C, 165	20	1	1804 VA	0 VA	1804 VA	0 VA	1	20	SPACE	6	--
L	7	L Room 177, 178, 179, 174, 174A, 181, 174...	20	1	2811 VA	0 VA	2811 VA	0 VA	1	20	L Room 261, 257, 253, 261A, 256, 255, 250...	8	L
L	9	L Room 164, 166, 167, 168, 169, 170, 176...	20	1	2741 VA	2745 VA	2741 VA	2745 VA	1	20	L Room 267, 266A, 266B, 266, 265, 264...	10	L
L	11	SITE LIGHTING - NORTH - WEST	20	1	0 VA	0 VA	0 VA	0 VA	1	20	L Room 254, 262, 262A, 258A, 258, 254A...	12	L
	13	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	14	--
	15	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	16	--
	17	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	18	--
	19	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	20	--
	21	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	22	--
	23	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	24	--
	25	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	26	--
	27	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	28	--
	29	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	30	--
	31	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	32	--
	33	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	34	--
	35	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	36	--
	37	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	38	--
	39	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	40	--
	41	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	42	--

PANEL: 1LC PHASE: 3 VOLTAGE: 480Y/277V FEED TYPE: Bottom 100 A MLO													
LOCATION: ELECT 333B				MOUNT: Surface		WIRE: 4		FEED TYPE: 100 A BUS		225 A BUS		10,000 AIC...	
TYPE: Type 1		POLES: 42		SF MAINS: No		C		Poles Trip		Circuit Description # LC			
L	3	L Room 345, 343, 341, 339, 337, 335, 331...	20	1	3510 VA	0 VA	3510 VA	0 VA	1	20	SPARE	18	--
L	5	L Room 344, 333, 338, 332, 326A, 349, 342...	20	1	16 VA	0 VA	16 VA	0 VA	1	20	SPARE	19	--
L	7	L Room 321, 322, S106-1, 300	20	1	528 VA	0 VA	528 VA	0 VA	1	20	SPARE	20	--
L	9	L Room 321A, 320, 319, 300, 323, 318, 317...	20	1	1198 VA	0 VA	1198 VA	0 VA	1	20	SPARE	21	--
L	11	L Room 321A, 320, 319, 323, 318, 317, 316	20	1	1700 VA	0 VA	1700 VA	0 VA	1	20	SPARE	22	--
L	13	L Room P2, P1	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	23	--
	15	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	24	--
	17	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	25	--
	19	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	26	--
	21	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	27	--
	23	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	28	--
	25	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	29	--
	27	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	30	--
	29	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	31	--
	31	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	32	--
	33	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	33	--
	35	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	34	--
	37	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	35	--
	39	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	36	--
	41	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	37	--

PANEL: MH1 PHASE: 3 VOLTAGE: 480Y/277V FEED TYPE: Bottom 400 A MCB													
LOCATION: MECHANICAL 176				MOUNT: Surface		WIRE: 4		FEED TYPE: 400 A BUS		225 A BUS		10,000 AIC...	
TYPE: Type 1		POLES: 42		SF MAINS: No		C		Poles Trip		Circuit Description # LC			
Motor	1	DOAU-1	60	3	12188 VA	25484 VA	12188 VA	25484 VA	3	125	DOAU-2	2	Motor
	3	--	--	--	--	--	--	--	--	--	--	4	--
	5	--	--	--	--	--	--	--	--	--	--	6	--
D	7	WAREWASHER - RM 174A	20	3	2608 VA	2833 VA	2608 VA	2833 VA	3	20	BOOSTER HEATER - RM 174A	8	D
	9	--	--	--	--	--	--	--	--	--	--	10	--
	11	--	--	--	--	--	--	--	--	--	--	12	--
	13	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	14	--
	15	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	16	--
	17	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	18	--
	19	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	19	--
	21	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	20	--
	23	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	21	--
	25	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	22	--
	27	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	23	--
	29	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	24	--
	31	SPARE	20	1	0 VA	0 VA	0 VA	0 VA	1	20	SPARE	25	--

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PLA DESIGN
sports fields engineer
DA HOGAN

project
STANWOOD HIGH SCHOOL - PHASE 2
client
STANWOOD-CAMANO SCHOOL
DISTRICT NO. 401
location
STANWOOD, WA

Project No. 1426
**MECHANICAL
ELECTRICAL
CONNECTION
SCHEDULE**

issued
PERMIT 24 AUG 18
BID SET 1 NOV 18
CONFORMED SET 12 DEC 18
PERMIT RESUB 19 FEB 19

revision
drawn
NH
checked
BH

MECHANICAL EQUIPMENT ELEC CONNECTION SCHEDULE

UNIT NO.	LOAD PROPERTIES		CIRCUIT PROPERTIES			RUN PROPERTIES						CONNECTION AND PROTECTION					DCT SMK DETECTOR FURN. BY	REMARKS
	MCA	PANEL	CKT#	VOLTS	Ø	LOAD TO PANEL	# OF RUNS	C.	WIRE PROPERTIES			STARTER TYPE/FURNISHED BY		DISCONNECT		VFD		
									AWG-CU	HOT	NEU	GR	MANUAL	MAGNETIC	FURNISHED BY			
FCU 301	1	ML4	25	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR	MAGNETIC	EC			
FCU 302	1	ML4	25	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 303	1	ML4	25	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 304	1	ML4	25	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 305	1	ML4	25	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 306	1	ML4	25	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 307	1	ML4	25	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 308	1	ML4	25	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 309	1	ML4	25	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 310	1	ML4	25	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 311	1	ML4	26	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 312	1	ML4	26	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 313	1	ML4	26	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 314	1	ML4	26	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 315	1	ML4	26	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 316	1	ML4	26	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 317	1	ML4	26	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 318	1	ML4	26	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 319	1	ML4	26	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 320	1	ML4	26	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 321	1	ML4	27	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 322	1	ML4	27	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 323	1	ML4	27	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 324	1	ML4	27	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 325	1	ML4	27	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 326	1	ML4	27	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 327	1	ML4	27	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 328	1	ML4	27	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 329	1	ML4	27	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 330	1	ML4	27	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 331	1	ML4	28	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 332	1	ML4	28	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 333	1	ML4	28	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 334	1	ML4	28	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 335	1	ML4	28	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 336	1	ML4	28	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 337	1	ML4	28	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 338	1	ML4	28	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 339	1	ML4	28	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 340	1	ML4	29	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 341	1	ML4	29	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 342	1	ML4	29	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 343	1	ML4	29	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 344	1	ML4	29	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 345	1	ML4	29	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 346	1	ML4	29	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 347	1	ML4	29	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 348	1	ML4	30	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 349	1	ML4	30	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 350	1	ML4	30	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 351	1	ML4	30	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 352	1	ML4	30	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 353	1	ML4	30	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 354	1	ML4	30	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 355	1	ML4	30	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 356	1	ML4	30	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 357	1	ML4	31	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 358	1	ML4	31	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 359	1	ML4	31	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 360	1	ML4	31	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 361	1	ML4	31	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 362	1	ML4	31	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 363	1	ML4	32	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 364	1	ML4	32	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 365	1	ML4	32	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 366	1	ML4	32	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 367	1	ML4	32	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 368	1	ML4	32	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 369	1	ML4	32	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 370	1	ML4	32	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 371	1	ML4	33	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 372	1	ML4	33	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 373	1	ML4	33	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 374	1	ML4	33	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 375	1	ML4	33	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 376	1	ML4	33	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
FCU 377	1	ML4	33	120	1	120 VA	1	3/4"	#12 CU & #12 GND	1	1	1	MFR		EC			
OCU 303	16.4	1LC 2,4,6		480	3		1	3/4"	#12CU & #12 CU GND	3	1	1	MFR		EC			
OCU 303	16.4	1LC 8,10,12		480	3		1	3/4"	#12CU & #12 CU GND	3	1	1	MFR		EC			

CCD-218

OCU 303 16.4 1LC 2,4,6 480 3 1 3/4" #12CU & #12 CU GND 3 1 1 MFR EC
OCU 303 16.4 1LC 8,10,12 480 3 1 3/4" #12CU & #12 CU GND 3 1 1 MFR EC

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